University of Alaska Anchorage

1994-1995
Course
Catalog

Anchorage Kodiak Matanuska - Susitna Kenai Peninsula







UNIVERSITY OF ALASKA ANCHORAGE

3211 Providence Drive, Anchorage, Alaska 99508

Enrollment Services **907-786-1480**

Cover photography:
Inset photos - Laurie Marchesani
Mt. Foraker, AK. - ©Ken Graham/Ken Graham Agency

CATALOG 1994-95

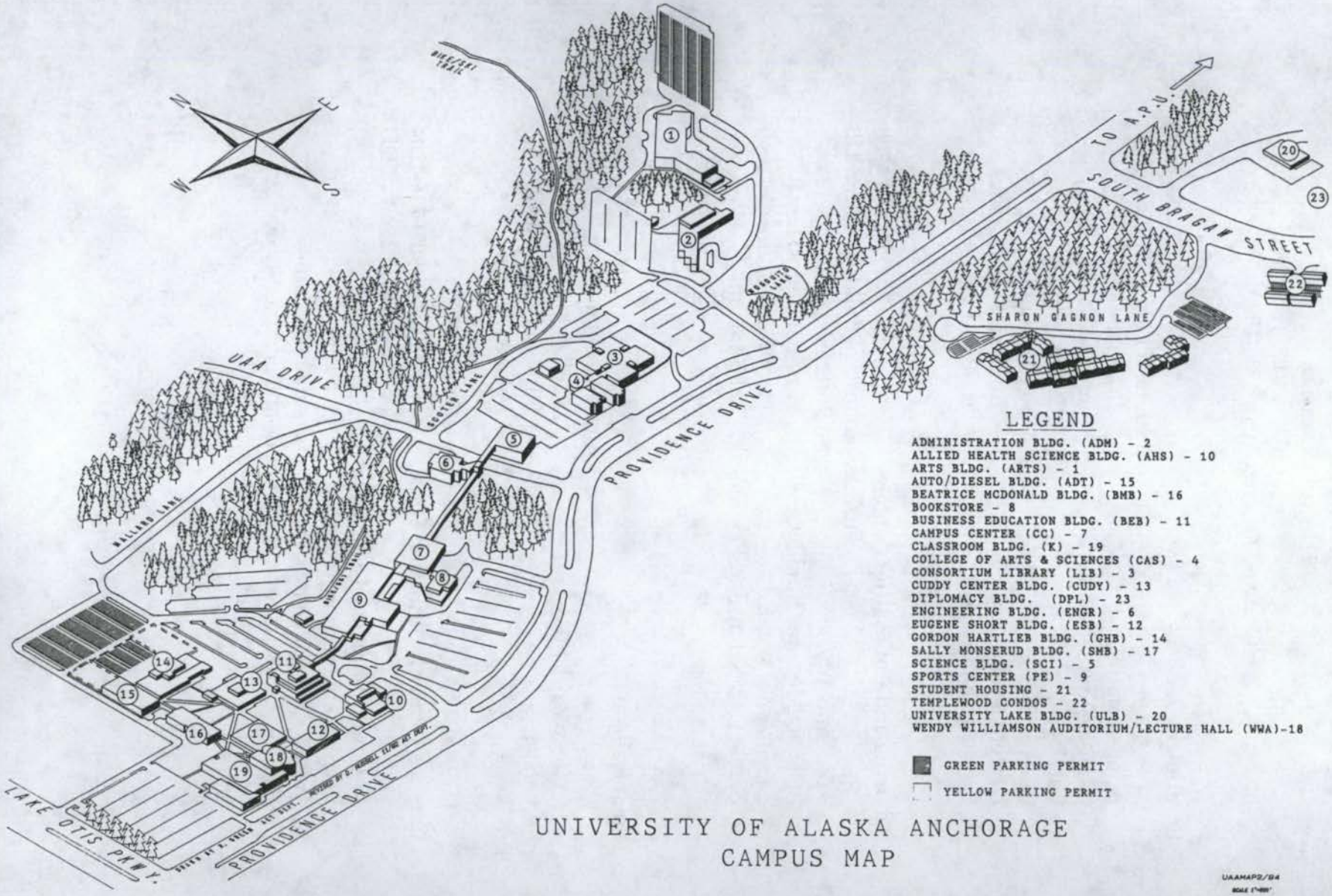
University of Alaska
Anchorage

3211 Providence Drive
Anchorage, Alaska 99508

CONTENTS

Chapter		Page
1.	Welcome to UAA	11
2.	Enrollment Services	17
3.	Tuition, Fees and Financial Aid	23
4.	Advising, Learning Assistance, and Placement	31
5.	Student Life	35
6.	Community and Continuing Education	45
7.	Centers and Institutes	49
8.	Academic Policies	53
9.	Undergraduate Admission and Degree Programs	63
	College of Arts and Science	73
	School of Business	102
	College of Career and Vocational Education	113
	School of Education	142
	School of Engineering	147
	School of Nursing and Health Sciences	150
	School of Public Affairs	155
10.	Graduate Admission and Degree Programs	159
	College of Arts and Science	165
	School of Business	169
	College of Career and Vocational Education	171
	School of Education	172
	School of Engineering	176
	School of Nursing and Health Sciences	179
	School of Public Affairs	181
11.	Course Descriptions	183
12.	Directory	299
13.	Index	313

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



LEGEND

ADMINISTRATION BLDG. (ADM) - 2
ALLIED HEALTH SCIENCE BLDG. (AHS) - 10
ARTS BLDG. (ARTS) - 1
AUTO/DIESEL BLDG. (ADT) - 15
BEATRICE MCDONALD BLDG. (BMB) - 16
BOOKSTORE - 8
BUSINESS EDUCATION BLDG. (BEB) - 11
CAMPUS CENTER (CC) - 7
CLASSROOM BLDG. (K) - 19
COLLEGE OF ARTS & SCIENCES (CAS) - 4
CONSORTIUM LIBRARY (LIB) - 3
CUDDY CENTER BLDG. (CUDY) - 13
DIPLOMACY BLDG. (DPL) - 23
ENGINEERING BLDG. (ENGR) - 6
EUGENE SHORT BLDG. (ESB) - 12
GORDON HARTLIEB BLDG. (GHB) - 14
SALLY MONSERUD BLDG. (SMB) - 17
SCIENCE BLDG. (SCI) - 5
SPORTS CENTER (PE) - 9
STUDENT HOUSING - 21
TEMPLEWOOD CONDOS - 22
UNIVERSITY LAKE BLDG. (ULB) - 20
WENDY WILLIAMSON AUDITORIUM/LECTURE HALL (WWA)-18

GREEN PARKING PERMIT

YELLOW PARKING PERMIT

UNIVERSITY OF ALASKA ANCHORAGE
CAMPUS MAP

UAAMAP2/84

SOURCES OF INFORMATION

ANCHORAGE CAMPUS
3211 PROVIDENCE DR.
ANCHORAGE, AK 99508
CAMPUS DIRECTORY: (907) 786-1800

Enrollment Services **(907) 786-1480**
Administration Building Lobby

- Admissions
- Campus Tours
- Catalogs
- Class Schedules
- Degree Certification
- Exchange Programs
- Graduation
- International Students
- Orientation
- Registration
- Transcripts and Grades
- Transfer Evaluations

Advising and Counseling Center **(907) 786-4500**
Business Education Building, Room 115

- Academic Advising
  - Undeclared Students
  - A.A. Degrees
- Career Counseling and Planning
- Internships
- Personal Counseling
- Placement Services
- Recruitment
- Testing

Financial Aid **(907) 786-1586**
Administration Building Lobby

- College Work Study
- Grants
- Loans
- Scholarships
- Student Employment
- Veteran Affairs

Campus Center Information Desk **(907) 786-1204**
Campus Center, Room 233 V/TDD

- ID Cards - Students, Faculty, Staff
- Recreation Equipment Rentals
- Tickets - UAA athletics, theatre, and student activities
  Carrs Tix for many campus and community events

SOURCES OF INFORMATION

ANCHORAGE CAMPUS (CON'T)

Schools and Colleges

College of Arts and Sciences **(907) 786-1707**
Dean's Office
CAS Building, Room 335

College of Career and Vocational Education **(907) 786-4676**
Dean's Office
Eugene Short Building, Room 130

College of Community and Continuing Education **(907) 786-6760**
Dean's Office
Diplomacy Building, Suite 530

School of Business **(907) 786-4100**
Dean's Office
Business Education Building, Room 301

School of Education **(907) 786-1993**
Dean's Office
Classroom Building (K), Room 216

School of Engineering **(907) 786-1900**
Dean's Office
Engineering Building, Room 201

School of Nursing and Health Sciences **(907) 786-1267**
Dean's Office
Administration Building, Room 279

School of Public Affairs **(907) 786-1770**
Dean's Office
Library Building, Room 208

SOURCES OF INFORMATION

ANCHORAGE CAMPUS

QUICK REFERENCE ALPHABETIC DIRECTORY

Admissions 786-1480
Enrollment Services
Administration Building Lobby

Advising 786-1570
General and Undeclared Majors
Advising and Counseling Center
Business Education Building, Room 115

Declared Majors varies
Contact Department of Major

Enrollment 786-1480
Enrollment Services
Administration Building Lobby

International Students 786-1558
Enrollment Services
Administration Building Lobby

Community Education 786-6751
Diplomacy Building, Suite 501

Counseling Services 786-1570
Personal Counseling
Advising and Counseling Center
Business Education Building, Room 115

Personal Psychological
Counseling and Therapy 786-1795
Psychological Services Center
CAS Building, Room 264

Disabled Student Services 786-1406
Business Education Building, Room 105 V/TDD

Educational Opportunity Center 274-5522
Enrollment Services
Administration Building Lobby
and
500 "L" Street, Suite 501

Facilities Scheduling 786-1209
Enrollment Services
Administration Building Lobby

Food Services 786-1487
College of Career and Vocational Education

Library 786-1871
Library Building

National Student Exchange Program 786-1558
Enrollment Services
Administration Building Lobby

Non-Credit, CEU, Special Interest Courses 786-6721
College of Community and Continuing Education
Diplomacy Building, Suite 501

Public Safety 786-1120
Public Safety Department
Eugene Short Building, Room 114

Registration 786-1480
Enrollment Services
Administration Building Lobby

Residence Life 786-4838
University Lake Building

Student Clubs and Organizations 786-1371
Student Leadership Office
Campus Center, Room 218

Student Health Center 786-6010
Business Education Center

Student Acitivites and Programs 786-1219
Student Union Programs and Services Office
Campus Center, Room 224

Study Abroad Programs 786-1480
Enrollment Services
Administration Building, Room 158

Tuition and Fees 786-1428
Accounting Office
Administration Building Lobby

Veteran Affairs 786-1528
Student Financial Aid and Veterans Affairs Office
Administration Building, Room 146

SOURCES OF INFORMATION

Extended Campuses, Sites and Military Programs

EXTENDED COLLEGES

Chugiak/Eagle River Campus 694-3313 or 694-3172
Dennis Clark, Director FAX 694-1491
10928 Eagle River Road, Suite 2228
Eagle River, Alaska 99577

Kenai Peninsula College 262-5801
Ginger Steffy, Director FAX 262-9280
34820 College Drive
Soldotna, Alaska 99669

Kachemak Bay Branch 235-7743
Carol Schwartz, Director FAX 235-6376
533 Pioneer Avenue
Homer, Alaska 99603

Kodiak College 486-4161
Carol Hagel, Director FAX 486-4166
117 Benny Benson Drive
Kodiak, Alaska 99615

Matanuska-Susitna 745-9774
(Mat-Su) College FAX 745-9711
Glenn Massay, Director
P.O. Box 2889
Palmer, Alaska 99645

AFFILIATE COLLEGE

Prince William Sound 835-2723
Community College FAX 835-2593
JoAnn McDowell
P.O. Box 97
Valdez, Alaska 99686
with
Centers at Cordova and Copper Basin

MILITARY EDUCATION SERVICES

Director of Statewide 753-7119
Military Education FAX 753-8390
Eleanor Schaff
21 MSSQ/MSE Bldg. 21-590
Elmendorf AFB, Alaska 99506

ALEUTIAN AREA MILITARY EDUCATION SERVICES

Adak Education Center 592-3253
Edgar (Foxy) Hanners, Director FAX 592-2568
Adak, PSC 486, Box 1336
Naval Air Station Intra-Alaska
FPO-AP 96506-1336

Eareckson/Shemya Education Center 392-3350
Edgar (Foxy) Hanners, Director FAX 392-3585
c/o Adak, PSC 486, Box 1336
Naval Air Station Intra-Alaska
FPO-AP 96506-1336

ANCHORAGE AREA MILITARY EDUCATION SERVICES

Elmendorf Air Force Base 753-0204 or 753-3124
Dean Terencio, Director FAX 753-8390
Building 21-590, Lemon Street
Elmendorf AFB, Alaska 99506

Fort Richardson Army Post 428-1228 or 428-0042
Dean Terencio, Director FAX 428-1002
Kiska Hall, Building 658
Fort Richardson Army Post, Alaska 99505

NORTHERN ALASKA MILITARY EDUCATION SERVICES

Fort Wainwright Education Center 356-3763
Bud Rager, Director FAX 356-3762
Building 2110, Room 8, Montgomery Road
Fort Wainwright Army Post, Alaska 99703

Clear Education Center 356-3763
Bud Rager, Director FAX 356-3762
c/o Building 2110, Room 8, Montgomery Road
Fort Wainwright Army Post, Alaska 99703

Eielson Education Center 372-3484
Bud Rager, Director FAX 372-3492
Building 2258, Room 313, Central Drive
Eielson AFB, Alaska 99702

Fort Greely Education Center 869-3070
Dr. Charles Blood, Director FAX 869-3079
P.O. Box 412
Delta Junction, AK 99737

CERTIFICATES AND DEGREES

CERTIFICATES

Architectural Drafting (AI)
Automotive Technology (AI)
Aviation Maintenance Technology (AI)
Bookkeeping (KO)
Business Communications (AI)
Civil Engineering Drafting (AI)
Dental Assisting (AI)
Diesel Technology (AI)
Early Childhood Development (AI)
Electronics Technology (AI, MA)
Fashion Merchandising (AI)
General Clerical (AI, KO, KP, MA)
Legal Secretary (AI, MA)
Mechanical and Electrical Drafting (AI)
Mechanical Technology (KP)
Paralegal Studies (AI)
Petroleum Technology (KP)
Refrigeration and Heating Technology (MA)
Small Business Management (KP)
Structural Drafting (AI)
Welding Technology (KP)
Word/Information Processing (AI, KO, KP, MA)

DEGREE PROGRAMS

Associate Degrees

Associate of Arts (AI, KO, KP, MA, MP)

Associate of Applied Science

Accounting (AI, MA)
Agriculture (MA)
Air Traffic Control (AI)
Architectural and Engineering Technology (AI)
Automotive Technology (AI)
Aviation Administration (AI)
Aviation Maintenance Technology (AI)
Business Computer Information Systems (AI)
Computer Electronics (KP)
Dental Assisting (AI)
Dental Hygiene (AI)
Diesel Technology (AI)
Early Childhood Development (AI)
Electronics Technology (AI, MA)
Fire Service Administration (AI, MA)
Foodservice Technology (AI)
Forest Technology (KP)
General Business (KO)
Home Economics (AI)
Human Services (AI, MA)
Industrial Process Instrumentation (KP)
Medical Assisting (AI)
Medical Laboratory Technology (AI)
Nursing (AI)
Office Management and Technology (AI, KO, KP, MA)
Paramedic Technology (AI)
Petroleum Engineering Aide (KP)
Petroleum Technology (KP)
Professional Piloting (AI)
Refrigeration and Heating Technology (MA)
Small Business Administration (AI, KP, MA)
Surveying and Mapping (AI)
Welding Technology (AI)

Baccalaureate Degrees

Bachelor of Arts

Anthropology (AI)
Art (AI)
Biological Sciences (AI)
Computer Science (AI)
Economics (AI)
English (AI)
History (AI)
Interdisciplinary Studies (AI)
Journalism and Public Communications (AI)
Justice (AI)
Mathematics (AI)
Music (AI)
Political Science (AI)
Psychology (AI)
Sociology (AI)
Theatre (AI)

Bachelor of Business Administration

Accounting (AI)
Economics (AI)
Finance (AI)
Management (AI)
Management Information Systems (AI)
Marketing (AI)

Bachelor of Education

Elementary Education (AI)
Physical Education (AI)
Secondary Education (AI)

Bachelor of Fine Arts

Art (AI)

Bachelor of Music

Elementary Education (AI)
Secondary Education (AI)
Performance (AI)

Bachelor of Science

Anthropology (AI)
Biological Sciences (AI)
Chemistry (AI)
Civil Engineering (AI)
Computer Science (AI)
Health Science (AI)
Interdisciplinary Studies (AI)
Mathematics (AI)
Natural Sciences (AI)
Nursing Science (AI)
Psychology (AI)
Sociology (AI)
Surveying and Mapping (AI)
Technology (AI)

Bachelor of Social Work

Social Work (AI)

Minors

Accounting (AI)
Anthropology (AI)
Applied Statistics (AI)
Art (AI)
Biological Sciences (AI)
Business Administration (AI)
Canadian Studies (AI)
Chemistry (AI)
Computer Science (AI)
Economics (AI)
Education (AI)
English (AI)
Foreign Languages (AI)
Geology (AI)
Health Science (AI)
History (AI)
Journalism and Public Communications (AI)
Justice (AI)
Mathematics (AI)
Music (AI)
Philosophy (AI)
Physical Education (AI)
Political Science (AI)
Psychology (AI)
Sociology (AI)
Special Education (AI)
Theatre (AI)
Women's Studies (AI)

Master's Degrees

Master of Arts

English (AI)
Interdisciplinary Studies (AI)

Master of Arts in Teaching

Education (AI)
English (AI)

Master of Business Administration

Business Administration (AI)

Master of Civil Engineering

Civil Engineering (AI)

Master of Education

Adult Education (AI)
Counseling and Guidance (AI)
Master Teacher (AI)
Public School Administration (AI)
Special Education (AI)

Master of Fine Arts

Creative Writing (AI)

Master of Public Administration

Public Administration (AI)

Master of Science

Arctic Engineering (AI)
Biological Sciences (AI)
Civil Engineering (AI)
Clinical Psychology (AI)
Engineering Management (AI)
Environmental Quality Engineering (AI)
Environmental Quality Science (AI
Interdisciplinary Studies (AI)
Nursing Science (AI)
Science Management (AI)
Vocational Education (AI)

AI - Programs offered through Anchorage
KO - Programs offered through Kodiak
KP - Programs offered through Kenai
MA - Programs offered through Mat-Su
MP - Programs offered through Statewide Military

It is the responsibility of the individual student to become familiar with the policies and regulations of UAA printed in this catalog. The responsibility for meeting all graduation requirements rests with the student. Every effort is made to ensure the accuracy of the information contained in this catalog. However, the University of Alaska Anchorage Catalog is not a contract but rather a guide for the convenience of students. The University reserves the right to change or withdraw courses; to change the fees, rules, and calendar for admission, registration, instruction, and graduation; and to change other regulations affecting the student body at any time. The University of Alaska Anchorage includes the units of Anchorage, Kenai, Kodiak, and Matanuska-Susitna.

1994-1995 ACADEMIC CALENDAR

Fall Semester 1994

March 14
Class schedules distributed

March 28
Registration begins

August 22
Late registration begins

August 29
Instruction begins

September 5
Holiday (Labor Day).
UAA closed

September 5,6
No classes

November 23-26
No classes

November 24, 25
Holidays (Thanksgiving).
UAA closed

December 12-17
Final exam week

December 17
Instruction ends

December 21
Grades due

Spring Semester 1995

October 17
Class schedules distributed

October 31
Registration begins

January 9
Late registration begins

January 16
Instruction begins

March 13-18
Spring Break. No classes

March 17
Holiday (Spring Break).
UAA closed

May 1-6
Final exam week

May 6
Instruction ends

May 7 (tentative - check Spring 95 Schedule)
Commencement

May 10
Grades due

Summer Session 1995

March 13
Class schedules distributed

March 27
Registration begins

May 16
Late registration begins

May 22
Instruction (full session) begins

May 22
Instruction (first session) begins

May 29
Holiday (Memorial Day).
UAA closed

June 26
Instruction (first session) ends

July 3, 4
Holidays (Independence Day).
UAA closed

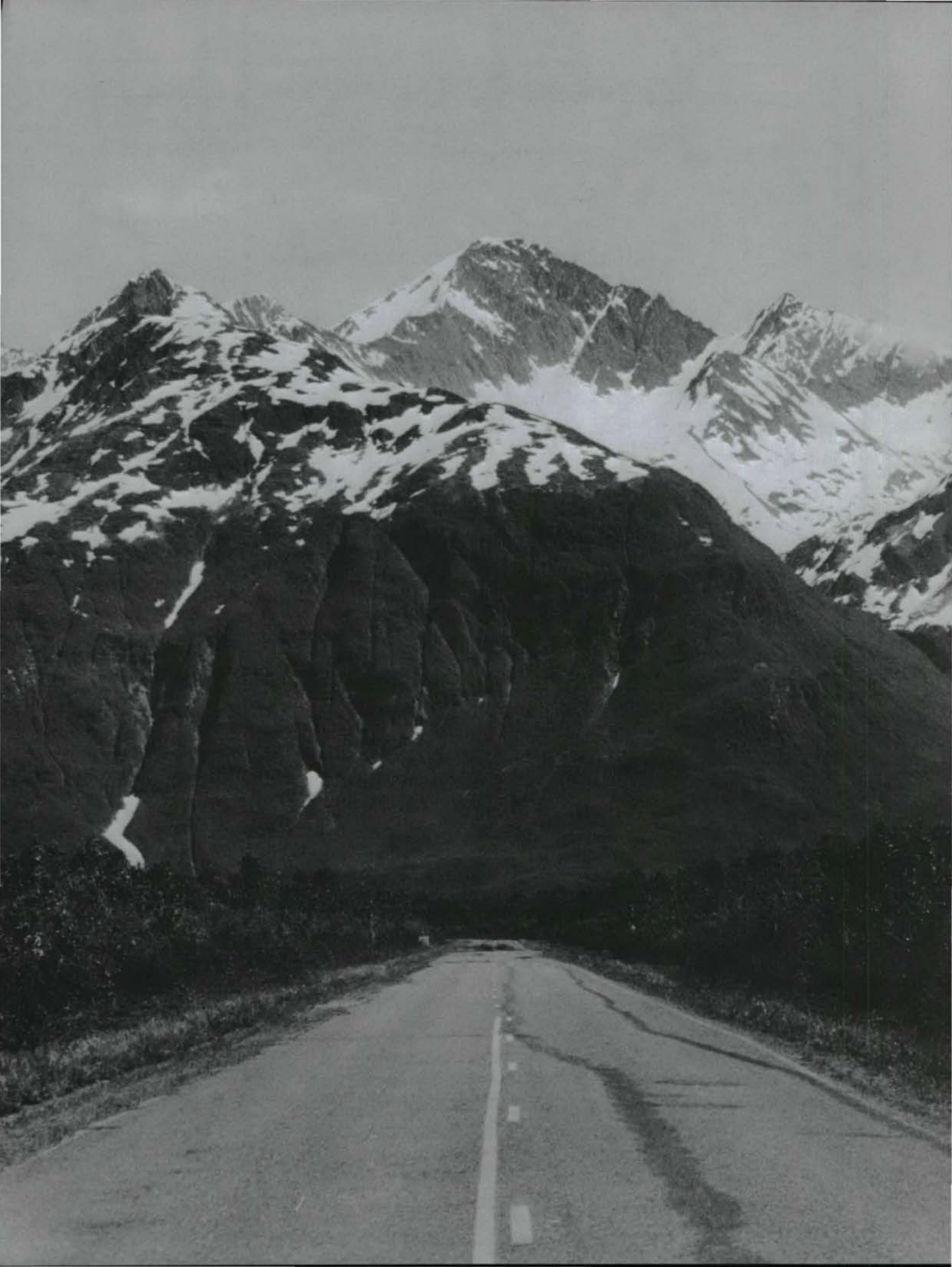
July 5
Instruction
(second session) begins

August 8
Instruction
(second session) ends

August 8
Instruction (full session) ends

August 11
Grades due

This calendar is subject to change by the university administration and/or Board of Regents. The academic calendar printed in the semester class schedules will contain detailed and updated information.



CHAPTER 1

WELCOME TO UAA

Welcome to UAA
Anchorage Campus
Kenai Peninsula College
Kodiak College
Matanuska-Susitna College
Administrative Organization
International Studies
Mission
Affirmative Action
Sexual Harassment
Safety
Accreditation

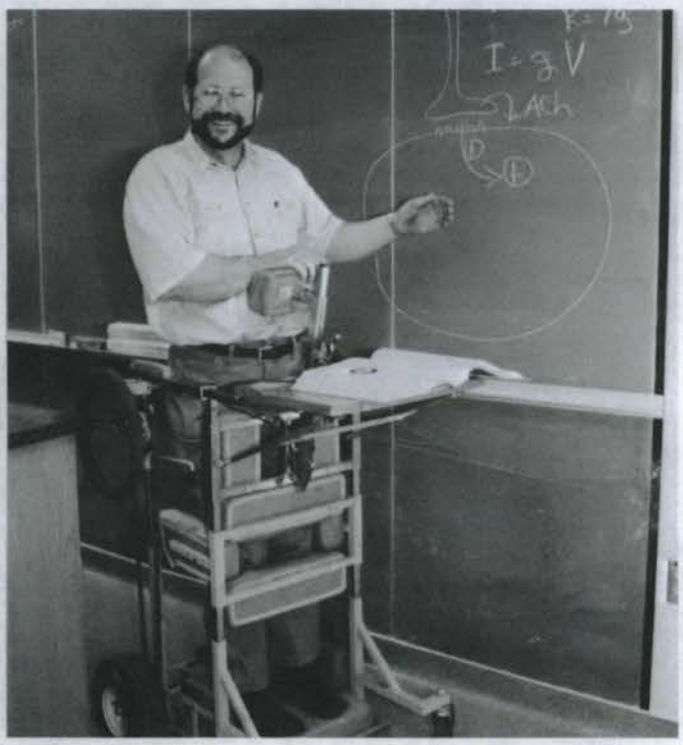
WELCOME TO UAA

The University of Alaska Anchorage is the state's largest, most comprehensive university serving over 20,000 students from all campuses of UAA. It is dedicated to fulfilling its mission by serving the people of Alaska through instruction, research, and public service. As part of the University of Alaska public system of higher education, UAA has four primary campuses and offers instruction at numerous other sites in southcentral Alaska and the Aleutian Chain. In addition to the largest campus in Anchorage, the campuses of Kenai Peninsula College, Kodiak College, and Matanuska-Susitna College are an integral part of the University of Alaska Anchorage. The University of Alaska Anchorage also has a special relationship with Prince William Sound Community College in Valdez, Alaska. This catalog identifies the academic programs for the entire University of Alaska Anchorage and provides specifics about the Anchorage campus. In addition, UAA publishes separate bulletins identifying the academic programs and student information for Kenai Peninsula, Kodiak, and Matanuska-Susitna Colleges.

Instructional programs at the University of Alaska Anchorage span certificate, associate, baccalaureate, and masters degree programs. In addition, UAA features extensive community and continuing education activities. Offering lifelong learning opportunities for students of all ages is central to UAA's mission. Academic, vocational-technical, and personal enrichment opportunities are all found at UAA. Also, UAA houses a cooperative Biomedical Education Program (WAMI) offered in conjunction with the University of Washington School of Medicine, and houses the statewide Mining and Petroleum Program headquartered in Kenai.

Research is an active part of UAA. In addition to work done by individual faculty, organized research units at UAA complement the academic programs and reflect the special character of the University mission in Alaska. Research units include the Alaska Center for International Business, the Environment and Natural Resources Institute, the Center for Alcohol and Addiction Studies, the Center for Economic Education, the Institute for Circumpolar Health Studies, the Institute of Social and Economic Research, the Center for Human Development, the Center for Economic Development, the Justice Center, and the Small Business Development Center.

The public service component of UAA is delivered primarily through university faculty and staff support of professional community activities. Over 400 professionally trained faculty and staff spread throughout the major population centers in UAA's region regularly provide consultation services and other public service activities. In addition, UAA works closely with the community and local and state agencies on projects aimed at serving the needs of the people in the region.



ANCHORAGE CAMPUS

The Anchorage campus is located in Alaska's largest city. Anchorage is an international air crossroads and the business center of the state. Home to 237,000 people, Anchorage is metropolitan and culturally diverse. Special events include the Anchorage Fur Rendezvous, one of the ten largest festivals in the nation, and the Great Alaska Shootout Basketball Tournament.

Located at UAA Drive and Providence Drive, the attractive wooded campus serves as a cultural hub for the city, providing theatre, music, arts, and sports events. Built in the mid-1960's, the campus features modern facilities, serving 15,000 students with limited student housing. Careful development has left the campus an urban oasis with resident wildlife populations including moose, waterfowl, and birds.

The Anchorage campus offers programs which lead to vocational and professional certificates, associate, baccalaureate and masters level degrees. It also provides extensive adult and community and continuing education offerings. The campus hosts a wide range of popular seminars and symposia for career development.

Academic units located on the campus include the College of Arts and Sciences, College of Community and Continuing Education, College of Career and Vocational Education, School of Business, School of Education, School of Engineering, School of Nursing and Health Sciences, and School of Public Affairs. Over 80 departments are active within the schools and colleges.

The diversity of student needs has led to extensions of the Anchorage campus in the city and service region. Some of the larger sites which are coordinated through the College of Community and Continuing Education include the following:

CHUGIAK-EAGLE RIVER CAMPUS

Located in the Eagle Center on Eagle River Road in the community of Eagle River ten miles north of Anchorage, this increasingly popular facility delivers a variety of general interest and degree oriented courses. Enrollment exceeds 2,000 students per semester.

DOWNTOWN CENTER

The DownTown Center, located at 7th Avenue and A Street, offers a wide range of computer program classes designed for the beginner, intermediate and professional user. In addition, a Certificate in Computer Application Skills is offered encompassing courses which are designed to give participants important skills and knowledge for today's marketplace. The certificate program provides an opportunity to take a series of non-credit, regularly scheduled computer classes on either DOS or Macintosh operating systems. The center maintains three IBM and Macintosh computer labs for instruction. For more information, call 279-0249.

MILITARY EDUCATION SERVICES

Postsecondary education programs for active duty military personnel, dependents of active duty personnel, Department of Defense employees, and civilians at military bases are offered throughout the state. Major military bases and corresponding military education centers include:

- Fort Richardson Army Post and Elmendorf Air Force Base in Anchorage
- Eielson Air Force Base and Fort Wainwright Army Post near Fairbanks
- Fort Greely Army Post near Delta Junction

Educational programs are also provided at Adak Naval Air Station, Eareckson/Shemya Air Force Base, the US Navy Radar site at Amchitka, the US Coast Guard LORAN Station at Attu, and Clear Air

Force Station. Coursework ranges from classes in support of an Associate of Arts to a Master in Public Administration. Enlisted personnel benefit from UAA's membership in SOCAD and BDFS networks: training and experience are evaluated for applicable credit. Classes are delivered via traditional classroom instruction, videotape course delivery, and live interactive satellite delivery (LIVENET). (See also page 184). For more information, call (907) 753-7119.

KENAI PENINSULA COLLEGE

Kenai Peninsula College (KPC) is located on 364 acres between Kenai and Soldotna. The campus includes a vocational building, academic classrooms, laboratories, a library and media center, a bookstore, and a snack bar/commons area.

With over 1,900 students and a permanent, full-time faculty, KPC has grown into a comprehensive college offering a variety of programs to meet vocational, academic, and community needs. The programs offered at KPC include complete associate degree programs, coursework leading to baccalaureate degrees, vocational programs, and continuing education and personal development courses.

The Kachemak Bay Branch of the College is located on Pioneer Avenue in Homer. Academic courses are offered leading to the Associate of Arts degree and Associate of Applied Science degrees and vocational certificates in Office Management Technology and Small Business Management. A wide range of continuing education courses are also available.

KODIAK COLLEGE

Kodiak College, located on an island 250 air miles south of Anchorage, serves over 1,000 students per semester and includes outreach sites in the communities of Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions.

Kodiak College provides courses leading to associate or baccalaureate degrees plus Adult Basic Education, GED preparation, special interest, continuing education, and vocational technical courses.

The campus is a cultural center in the community, sponsoring events such as concerts, plays, lectures, seminars, art shows, and TV productions.

MATANUSKA-SUSITNA COLLEGE

Mat-Su College serves over 1,500 students. The campus is located on a 950-acre site on Trunk Road, about halfway between Wasilla and Palmer, the two largest communities in the Matanuska Valley. A modern 98,000 square foot facility houses the majority of the educational activities. Courses are also provided in other locations in the Mat-Su Borough as demand warrants.

The College offers courses leading to associate and baccalaureate degrees. Upper division courses are available on a limited basis. Numerous vocational and special interest courses meet the needs of students attending the College.

ADMINISTRATIVE ORGANIZATION

The University of Alaska Anchorage administration is organized into three divisions: Academic Affairs, Administrative Services, and Student Services. Each division is managed by a Vice Chancellor who reports to the Chancellor. Some administrative functions (such as University Relations) report directly to the Chancellor.

ACADEMIC AFFAIRS

Academic Affairs oversees UAA's instructional units and academic support offices. These include the schools, colleges, centers, and institutes that offer credit and noncredit programs at all academic levels, certificate through graduate:

Units reporting to the Provost and Vice Chancellor for Academic Affairs include:

College of Arts and Sciences
College of Career and Vocational Education
College of Community and Continuing Education
School of Business
School of Education
School of Engineering
School of Nursing and Health Sciences
School of Public Affairs
Kenai Peninsula College
Kodiak College
Matanuska-Susitna College
Consortium Library
Computing and Technology Services
Institutional Research
Centers and Institutes



ADMINISTRATIVE SERVICES

The Administrative Services Division oversees fiscal, logistical and plant services which directly support all aspects of UAA; activities include:

Bookstore
Budget Development and Maintenance
Business Services
Parking
Personnel
Physical Plant
University Police Department
Purchasing
Vice Chancellor for Administrative Services

STUDENT SERVICES

Student Services helps students to succeed within and outside of the formal academic classrooms and labs. It provides enrollment, retention, social, cultural and support services which complement intellectual development:

Advising and Counseling
Enrollment Services
Financial Aid
Minority Student Services
Residential Life
Student Health Center
Student Union/Development
Vice Chancellor for Student Services

INTERNATIONAL STUDIES

UAA is striving to become a comprehensive urban university that serves the population of Alaska. As an institution of higher learning, it seeks to provide programs that introduce the widest possible range of knowledge through exposure to diverse ideas, cultures, civilizations, languages, literatures, sciences, technologies, and professions. To achieve this goal, UAA is internationalizing its programs, research, and other activities.

The University of Alaska's Six-Year Plan calls for the development of international distinction in knowledge of the North Pacific and Circumpolar Regions. The Governor of Alaska has identified UAA as the unit to receive financial support for the Alaska Center for International Business. The federal government has identified UAA as the institutional focus for a Soviet-USA Cooperative Research Agreement on circumpolar health.

International Studies is in a formative stage at UAA. It includes a Canadian Studies Program, the Alaska Center for International Business, and the Institute for Circumpolar Health Studies. Future developments may include area studies in the Pacific Rim and Circumpolar Regions, leading to minors and later to an International Studies major at UAA.

Students may have the opportunity to take courses and participate in the research and activities of the various internationally engaged centers and units.

MISSION

The mission of the University of Alaska Anchorage is to participate in the development, dissemination, and application of knowledge through high quality instruction, research, and service to the public. As a comprehensive institution including a large urban campus in Anchorage, Kenai Peninsula College, Kodiak College, Matanuska-Susitna College, and a network of extension centers, the University draws students from throughout Alaska as well as from other states and nations. Prince William Sound Community College is affiliated with the University.

The University of Alaska Anchorage is a major center for development and delivery of programs in health and biomedical sciences, public policy and administration, special education, vocational-technical education, and international business and trade, with an emphasis on Pacific Rim nations. A wide range of certificate, associate, baccalaureate, and graduate programs is offered in the arts and sciences, vocational-technical fields, and in professional areas of study. Basic and applied research programs also constitute an important component of the mission of the University of Alaska Anchorage. The institution serves as an intellectual and cultural resource center through its programs in the fine arts, performing arts, and humanities.

An open admissions policy and a commitment to innovation and flexibility enable the University of Alaska Anchorage to make quality higher education available to all who have the ability and interest to pursue an education or profession. Access to lifelong learning opportunities is provided through programs in developmental education, continuing education, community education, and traditional academic programs.

The University of Alaska Anchorage seeks to serve the broadest possible array of students. Thus, admission to the associate of arts program, to several other associate degree and certification programs, and to courses in continuing, community, and developmental education is open to all. Requirements for admission to some associate of applied science degree programs and to all baccalaureate and graduate degree programs vary depending upon the specific field of study.

The University of Alaska Anchorage promotes student success by maintaining a strong emphasis on faculty excellence and student services. The institution has an outstanding and committed faculty, many of whom are recognized nationally and internationally for their scholarly and professional accomplishments. Programs are focused on student needs and support the development of students by contributing to their cultural, social, intellectual, physical, and emotional growth. The University of Alaska Anchorage also provides support services for students with special needs.

The University of Alaska Anchorage maintains an environment that values, promotes, develops and fosters equal treatment of races and cultural and ethnic groups throughout its academic programs, student body, faculty and staff. Particular emphasis is given to the development of programs and services to meet the diverse needs of Alaska Natives. Overall the goal of the University is to achieve broad racial and cultural diversity across all elements of the institution.

Located in the largest population area of the state, the University of Alaska Anchorage has the obligation to encourage and enhance the economic development of the region and state and to assist in the responsible development of natural and human resources. To achieve these goals, the institution cooperates with government, business, and industry. To ensure maximum use of resources, the University of Alaska Anchorage shares responsibility with both the University of Alaska Fairbanks and the University of Alaska Southeast in the delivery of selected programs.

To ensure the responsible development and delivery of programs, the University of Alaska Anchorage involves local citizens in planning programs and services, and coordinates with school districts, governmental agencies, and other institutions of higher education. Moreover, University policy includes students, faculty, and staff in the governance of the institution.

The University of Alaska Anchorage has a distinctive mission in the state of Alaska, and through its range of instructional resources, research programs, and service responsibilities responds to the needs of the people of Alaska, the nation, and the world.

AFFIRMATIVE ACTION

Through the institution's Affirmative Action Plan, the University of Alaska Anchorage recognizes its responsibility to provide education and employment opportunities for all qualified individuals. UAA also operates an Affirmative Action Office which implements protective Federal and State laws, orders, and decisions on institutional exclusion and illegal discrimination.

At UAA, students and prospective students are afforded educational services such as admission decisions, financial aid, access to academic programs, and health and counseling services without regard to race, color, religion, national origin, sex, age, physical or mental disability, or veteran status except as necessary and permitted by law. A student or prospective student who feels that he/she is being discriminated against has the right to contact the appropriate supervisor for assistance. The student or prospective student may also contact the UAA Affirmative Action Office, the UAA Minority Student Services Office, the University of Alaska Statewide EEO/AA Office in Fairbanks, or the U.S. Department of Labor (Office of Federal Contract Compliance Programs, Federal Building, Anchorage, Alaska) for advice on discrimination complaints.

Our Affirmative Action policy is in accordance with the laws enforced by the Department of Education and the Department of Labor, including Presidential Executive Order 11246, as amended, Title VI and Title VII of the 1964 Civil Rights Act, Title IX of the Education Amendments of 1972, the Public Health Service Act of 1971, the Veterans' Readjustment Assistance Act of 1974, the Vocational Rehabilitation Act of 1973, the American Disabilities Act of 1990, the Age Discrimination in Employment Act of 1967, the Equal Pay Act of 1963, the 14th Amendment, EEOC's Sex Discrimination Guidelines, and Alaska Statutes 18.80.220 and 14.18. Inquiries regarding application of these and other regulations should be directed to the University's Affirmative Action Director, the Office of Civil Rights (Department of Education, Washington, DC), or the Office of Federal Contract Compliance Programs (Department of Labor, Washington,DC).

SEXUAL HARASSMENT

The University of Alaska Anchorage is a community that cherishes free and open exchange of ideas in the pursuit of knowledge. Maintaining this freedom and openness requires the presence of safety and trust; it requires the absence of coercion, intimidation, and exploitation. Therefore, harassment of any kind — particularly sexual harassment — has no place in the University. It subjects its victims to pressures that destroy the conditions necessary for true learning.

Harassment is neither condoned nor tolerated on this campus. Members of the University community who exercise most authority and leadership — faculty and supervisors — are principally responsible for maintaining a positive, harassment-free, learning environment. Anyone who believes he/she has been a victim of sexual harassment should contact the appropriate dean's or director's office, the Advising and Counseling Center, the UAA Affirmative Action Office, the University of Alaska Statewide EEO/AA Office in Fairbanks, or the U.S. Department of Labor (Office of Federal Contract Compliance Programs, Federal Building, Anchorage, Alaska).

SAFETY IS EVERYONE'S BUSINESS AT UAA

We care about your safety on campus. While relatively safe, our campus is not a sanctuary from crime and accidents still occur no matter how hard we try to prevent them. You are encouraged to be responsible for your own safety and to bring safety concerns to the attention of UAA faculty or staff, or to contact Campus Police at 786-1120 when you observe an unsafe environment. For your own safety, please also take the time to locate the nearest exit and emergency telephone when you are in campus buildings.



ACCREDITATION

The University of Alaska Anchorage is fully accredited by the Commission on Colleges of the Northwest Association of Schools and Colleges.

The following programs have additional approval and/or accreditation:

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

AVIATION MAINTENANCE TECHNOLOGY
Certificate
Associate of Applied Science
Approved by the Federal Aviation Administration

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

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

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

EDUCATION
All education certification programs are accredited by the National Association of State Directors of Teacher Education and Certification

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

MEDICAL ASSISTING
Associate of Applied Science
Accredited by the Committee on Allied Health Education and Accreditation, a division of the American Medical Association

MEDICAL LABORATORY TECHNOLOGY
Associate of Applied Science
Accredited by the National Accrediting Agency for Clinical Laboratory Sciences under the auspices of the Committee on Allied Health Education and Accreditation, a division of the American Medical Association

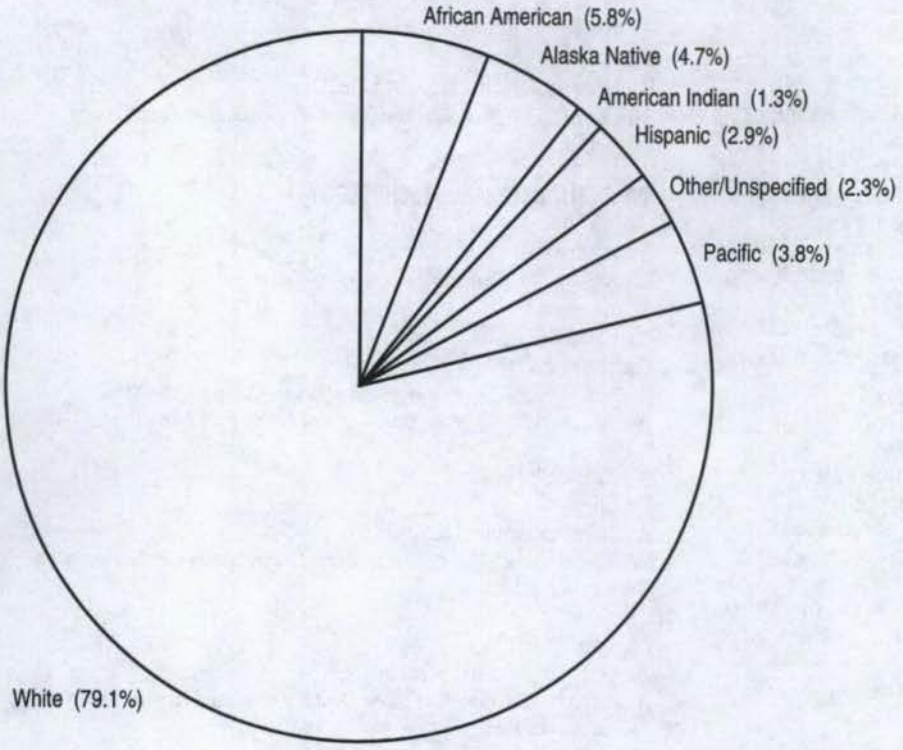
NURSING
Associate of Applied Science
Bachelor of Science
Master of Science
Accredited by the National League for Nursing
Approved by Alaska Board of Nursing

PARALEGAL STUDIES
Certificate
Approved by the American Bar Association

SOCIAL WORK
Bachelor of Social Work
Accredited by the Council on Social Work Education (CSWE)

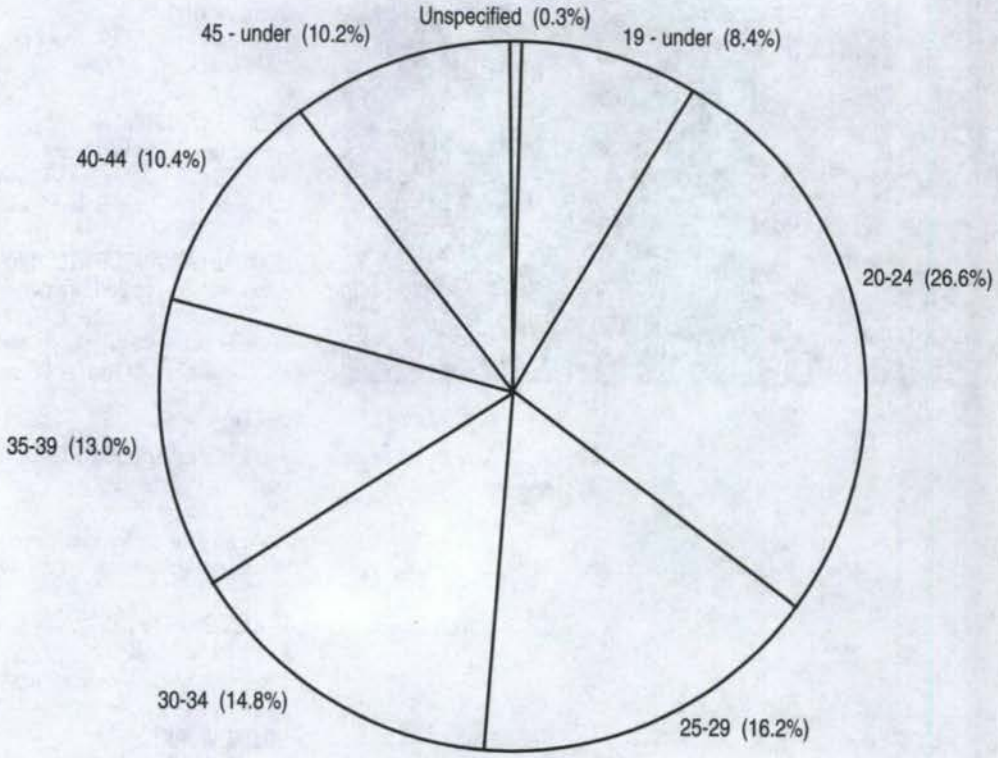
STUDENT PROFILE: RACE

Spring Closing 1993



STUDENT PROFILE: AGE

Spring Closing 1993



CHAPTER 2

ENROLLMENT SERVICES

Open Enrollment
Orientation
Registration
Exchange Programs
Other Enrollment Services
National Student Exchange
Western Undergraduate Exchange
Biomedical Program

OPEN ENROLLMENT

UAA's open enrollment policy allows students to register for courses in which they have adequate background. To qualify for open enrollment, a student must:

1. Have earned a high school diploma or the equivalent (GED), or;
2. Be 18 years of age or older and have participated in UAA's assessment and advisement process (see section below), or;
3. Qualify under special University programs, such as Alaska Wilderness Studies.

UAA's open enrollment policy does not guarantee subsequent formal admission to certificate or degree programs. In addition to meeting the University's open enrollment criteria, applicants for formal admission may need to satisfy other individual program or degree level requirements.

The formal admission process for undergraduate programs (certificate, associate, baccalaureate) is described in Chapter 9 of this catalog. The formal admission process for graduate programs is described in Chapter 10 of this catalog.

ASSESSMENT AND ADVISEMENT

Individuals 18 years of age and over who do not have high school diplomas or GEDs may still enroll in classes under Open Enrollment. They may be admitted to most associate programs under UAA's open admission policy once assessment and advisement have taken place.

Interested persons should contact the advising center at their local campus. An advisor reviews the individual's background, provides an opportunity for assessment, and determines the appropriate entry level of instruction.

INTERNATIONAL STUDENTS

UAA welcomes students from other countries. International students with Permanent Resident or Immigrant visas may enroll under the open enrollment option or through formal admission. Individuals wanting to apply for the International Student Form I-20A must be formally admitted to degree-seeking status. See the International Student Policy and the Admissions sections of this catalog. Individuals with other visa types are advised to contact the International Student Advisor in Enrollment Services for information.

NON-DEGREE-SEEKING STUDENTS

Individuals in this category are not currently seeking a UAA certificate or degree. Non-degree-seeking students need only meet open enrollment criteria and satisfy course prerequisites to register in courses. Non-degree-seeking students who wish to register for graduate courses must obtain department chair or faculty member signature. Non-degree-seeking students may not qualify for such benefits as Financial Aid or International Student Form I-20A.

Registration as a non-degree-seeking student implies no commitment by the University to the student's later admission to a degree program.

UNDER-AGE STUDENTS

An under-age student is one who is under eighteen (18) years of age and does not otherwise meet the requirements for open enrollment or admission. In order to register for University courses, under-age students must:

1. Qualify under a special University program such as Alaska Wilderness Studies, or
2. Complete the UAA Under-age Student Enrollment Form. This form may be obtained from the Office of Enrollment Services and requires signatures of the student's parent or guardian, the school principal and/or counselor, UAA course faculty member(s), and the approval of the Associate Vice Chancellor for Student Services, or when the student wishes to enroll at an extended college, the Director of that college. Please note that all signatures must be obtained prior to submitting the form to the Associate Vice Chancellor for Student Services or Director of an extended college.

Under-age students may enroll in a maximum of seven (7) credits per semester.

ORIENTATION

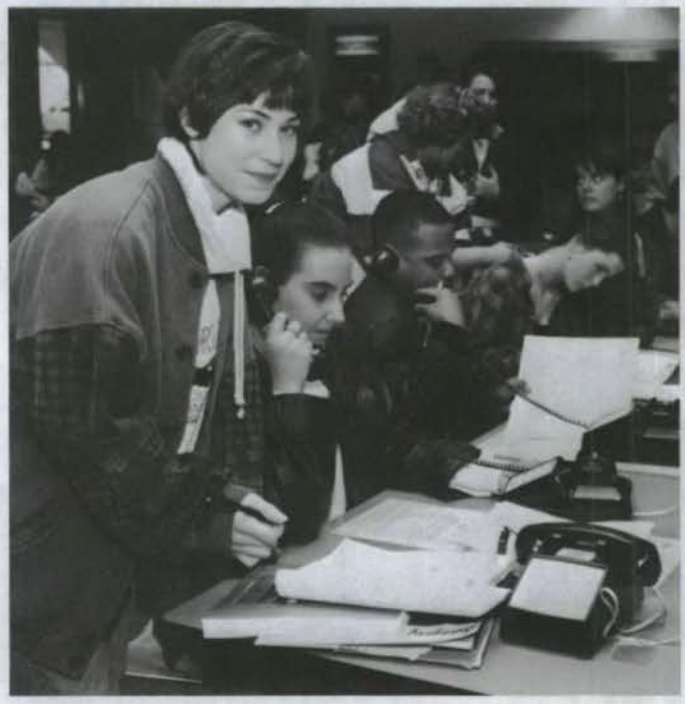
The Office of New Student Services provides orientation services to all freshmen, transfer, re-entry, Alaska Native and international students. Orientation can help new students adjust to University life. During orientation students meet with academic advisors and receive registration information and assistance. Campus tours are also provided.

Enrollment Services sponsors the Freshman Early Admit Program. Freshmen applying to UAA for the coming fall semester may participate in priority registration and orientation in early spring. Students in this program meet with advisors, enroll in courses, and participate in other orientation activities.

REGISTRATION

Registration is available during the dates listed in the University's Academic Calendar or other days as announced by Enrollment Services. Priority is determined by academic need. First priority is for students graduating with a UAA degree or certificate at the end of the semester; second priority is for continuing students accepted into a UAA degree program. All other continuing students receive third priority. Fourth priority is for students new to UAA but who are admitted into a UAA degree program. Fifth priority is for all other potential students who have submitted a completed Intent to Register form. To complete their registration, priority students pay all tuition and fees during the priority period. The registrations of priority continuing students who are declared academically ineligible at the end of the current semester will be cancelled.

Late registration is conducted in person or by phone (Voice Response Registration) immediately preceding the beginning of fall and spring semesters. Access to late on-site registration is by alphabetical sequence. Voice Response Registration is available to all students who attended the previous semester or who have submitted a completed Intent to Register form.



A two-week late registration period begins on the first day of the semester. Registration for semester-length classes is not allowed after the tenth day of the semester. *Even if a student has been attending class from the beginning of the course, his/her registration will not be accepted after the late registration deadline.* Students are not officially registered until all forms are filed and all fees paid. Refer to the Academic Calendar published each semester in the Class Schedule for specific deadlines.

Students may adjust their schedules and add/drop courses throughout the late on-site and late registration periods.

Caution: Dropping or auditing courses may affect eligibility for future financial aid. Financial aid students should check with the UAA Financial Aid Office before dropping or auditing a course.

All students are encouraged to meet with a faculty advisor prior to each semester; however, the primary responsibility for meeting University requirements is the student's. Non-credit and Continuing Education Unit courses have special registrations. Contact the College of Community and Continuing Education for more information about these courses.

The University cannot guarantee that each course listed in the catalog will be offered each semester. The semester Class Schedule lists course and registration information specific to the semester.

BIO/DEMO INFORMATION

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

GRADUATE EXTENDED REGISTRATION

Graduate students not on approved inactive status must be registered in at least one course applicable to their degree or certificate program within each 12-month period in which they are actively working toward a degree. Extended registration allows students to remain active in the graduate program while physically absent from campus for work or other reasons.

Graduate students not registered for a course but whose only remaining requirement(s) for graduation is (are) completion of a thesis or project, and/or removal of a deferred grade, must initiate an extended registration. This requires a fee and can be done during each semester's registration period or at Enrollment Services by the end of week twelve (12) of the semester. With completion of extended registration, a graduate student is considered active for the current semester. Students who fail to register in a course, extend their registration, or obtain a leave of absence (see Leave of Absence, Chapter 10) may be removed from the graduate program.

REGISTRATION BY PROXY

Students unable to register in person may have a proxy register for them, if they provide the proxy with a signed Registration by Proxy Form. These forms are available in the Class Schedules or from the Enrollment Services Information Center. The proxy must follow the policies and calendar governing registration. Proxy registrations are not accepted without written permission from the student.

REGISTRATION CHANGES

It is the responsibility of the student to become familiar with UAA policies, procedures and deadlines.

Refer to the Academic Calendar published each semester in the Class Schedule for specific deadlines.

Add, drop, withdrawal, credit/no credit, and audit deadlines for courses other than semester-length will be prorated according to the length of the class.

Students are expected to register only for course sections which they plan to attend and to complete all courses for which they register. If a change in a student's class schedule becomes necessary, semester-length courses may be changed according to the chart on the following page.

AUDITING CLASSES

Audit registrations are on a space-available basis. Auditors may be dropped from a class to make room for credit-seeking students. No credit is received for audited courses. Terms for auditing the course are determined by the faculty. Faculty may request the course be removed from the student's transcript if the student fails to comply with the agreed-upon terms. Submission of papers for correction and grading and participation in laboratory experiences are at the discretion of the faculty.

Students who audit classes are required to meet prerequisites, register and pay tuition and/or fees. During weeks one (1) and two (2) of the semester, audit-to-credit requires faculty signature. Audit-to-credit changes are not allowed after week two (2) of the semester. During weeks three (3) through twelve (12) of the semester, credit-to-audit changes require faculty signature. Credit-to-audit changes are not allowed after week twelve (12) of the semester. Forms are available in Enrollment Services.

Audited courses are not included in the computation of study load for full-time, part-time or overload status. In addition, students may not request local credit-by-exam for an audited course until the following academic year.



CANCELLATION OF CLASSES

The University of Alaska Anchorage reserves the right to cancel or combine classes, to change the time and dates or place of meeting, or to make other necessary revisions in class offerings. The University may discontinue a class at any time if attendance falls below expected levels.

CHANGE OF NAME

A student's name on official records at UAA must be the student's full legal name. A Change of Name form may be processed through Enrollment Services and must be supported by legal documentation, i.e., marriage certificate, dissolution or divorce decree, or a court order.

The following registration activity deadlines pertain to semester-length courses (15 weeks). Deadlines for courses more or less than semester-length are pro-rated according to the length of the course. Students are not permitted to drop or withdraw from a course after it has ended.

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

Desired Change	*Week 1 of Semester*	*Week 2 of Semester*	*After Week 2 of Semester*
ADD OR LATE REGISTRATION	Faculty signature required. Fee charged. Form filed with Enrollment Services.	Faculty signature required. Fee charged. Form filed with Enrollment Services.	Not permitted.

Desired Change	*Begin 7th calendar day of Semester through Week 3 of Semester*	*Weeks 4 through 12 of Semester*	*After Week 12 of Semester*
FACULTY INITIATED DROP OR WITHDRAWAL (OPTIONAL)	Form filed with Enrollment Services. Course will not appear on student transcript.	Form filed with Enrollment Services. Course will appear on student transcript with a grade of W.	Not permitted.

Desired Change	*Weeks 1 through 3 of Semester DROP*	*Weeks 4 through 12 of Semester WITHDRAWAL*	*After Week 12 of Semester*
DROP OR WITHDRAWAL	No faculty signature required. Fee charged. Form filed with Enrollment Services. Course will not appear on student's transcript.	No faculty signature required. Fee charged. Form filed with Enrollment Services. Course will appear on student's transcript with a grade of W.	Not permitted.

Desired Change	*Weeks 1 through 3 of Semester*	*After Week 3 of Semester*	*After Last Day of Semester*
TOTAL WITHDRAWAL FROM UNIVERSITY	No faculty signature required. Fee charged. Form filed with Enrollment Services. Courses will not appear on student's transcript.	No faculty signature required. Fee charged. Form filed with Enrollment Services. Courses will appear on student's transcript with a grade of W.	Not permitted.

CHANGE IN GRADING OPTION

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

Desired Change	*Weeks 1 through 2 of Semester*	*Weeks 3 through 12 of Semester*	*After Week 12 of Semester*
CREDIT/ NO CREDIT	Faculty signature required. Fee charged. Form filed with Enrollment Services.	Not permitted.	Not permitted.
CREDIT TO AUDIT	Fee charged. Form filed with Enrollment Services.	Faculty signature required. Fee charged. Form filed with Enrollment Services.	Not permitted.
AUDIT TO CREDIT	Faculty signature required. Fee charged. Form filed with Enrollment Services.	Not permitted.	Not permitted.

CHANGE OF ADDRESS

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

FACSIMILE (FAX) TRANSMISSION

Because the original source of a document received through a FAX transmission cannot always be accurately determined, documents received by facsimile transmissions shall be considered only as working documents pending the receipt of official, authenticated documents or other authentication.

FACULTY SIGNATURE

Some course descriptions include "Permission of Faculty" as a prerequisite. Students must obtain the signature of the faculty member instructing the course section or his/her designee before registering.

SOCIAL SECURITY NUMBER

A student's social security number is used as an identification number for University records. Students who do not wish to use their social security number may request an assigned student number. Changes or corrections to social security numbers may require documentation, i.e., driver's license or social security card.

STUDY LOAD

Students may register for a maximum of 19 credits during the fall and spring semesters, and a maximum of 15 credits during the summer session. Students who want to enroll for additional credits must submit an approved petition for overload at registration.

The faculty advisor and appropriate dean must approve overload petitions for certificate or degree-seeking students. An advisor in the local UAA advising center must approve overload petitions for non-degree-seeking students.

Students should consider their graduation timeline when planning their study load. The minimum number of required credits is 60 for an associate degree and 120 for a baccalaureate degree. To complete an associate degree in two years or a baccalaureate degree in four years (excluding summers), a full-time student should plan to take a minimum of 15 credits each semester. Many degrees require more than the minimum number of credits. Students should be aware that the need for remedial work (for example, in English or mathematics) in preparation for University-wide general education required courses may further extend the time required to complete their programs. When planning study load, students should also keep non-school demands on available time, such as employment and/or family responsibilities, firmly in mind.

TRANSCRIPTS

Official transcripts of all coursework taken at UAA may be requested from Enrollment Services. Requests must be written and must bear the signature of the student whose record is requested. A $4 fee is charged for each copy and must be paid in advance.

Requests for transcript service are not filled for students who have not signed a request, or who have unpaid financial or other obligations to the University.

EXCHANGE PROGRAMS

BIOMEDICAL PROGRAM

The Biomedical Program is affiliated with WAMI, an educational agreement between the University of Washington School of Medicine (UWSM) and the states of Washington, Alaska, Montana, and Idaho. Through this program, UWSM accepts 10 certified Alaska residents each year into its entering class. Students in the program are enrolled concurrently at the University of Alaska Anchorage (UAA) and UWSM and receive their entire first year of medical education at the University of Alaska Anchorage. After completion of the first year, the students are headquartered in Seattle for the remaining three years of their medical education. UWSM medical students have the option of receiving clinical training in family medicine, psychiatry, and obstetrics/gynecology in Alaska. UWSM participates in the American Medical College Application Service (AMCAS) and all applicants must take the Medical College Admission Test (MCAT) in order to be considered. Acceptance into the program is offered through the Admissions Committee of UWSM. UAA can provide all of the coursework needed to be competitive for acceptance into the WAMI Program. For more information concerning WAMI or a premedical curriculum at UAA, students can contact the Office of the Biomedical Program at (907) 786-4789.

STUDENT EXCHANGE PROGRAM

The University of Alaska Anchorage is a member of the National Student Exchange Program. This is a domestic as well as international student exchange with a consortium of over 107 colleges within the United States, Guam and Puerto Rico. For further information, please contact the International Student Advisor, (907) 786-1558.

STUDY ABROAD OPPORTUNITIES

The University of Alaska Anchorage offers study abroad opportunities in England, Scotland, France, Germany, Italy, Denmark, Australia, and Russia. For more information , contact Enrollment Services at (907) 786-1558

WESTERN UNDERGRADUATE EXCHANGE

The University of Alaska Anchorage participates in the Western Undergraduate Exchange (WUE), a program of the Western Interstate Commission for Higher Education (WICHE) and other western states. Through WUE, certain students who are not Alaska residents may enroll in designated UAA programs. They pay resident tuition plus 50 percent of that amount (plus other fees that are paid by all students). WUE students do not pay the higher non-resident student tuition.

Because the University of Alaska Anchorage participates in WUE, residents of Alaska may enroll under the same terms in designated institutions and programs in other states.

Information about WUE programs at the University of Alaska Anchorage may be obtained from Enrollment Services. Alaska residents may obtain information about WUE programs in other states from:

Certifying Officer for Alaska Commission on
Postsecondary Education
3030 Vintage Blvd.
Juneau, AK 99811 Phone: (907) 465-2855

-or-

WICHE Student Exchange Program
P.O. Drawer P
Boulder, CO 80301-9752 Phone: (303) 497-0210

OTHER ENROLLMENT SERVICES

Students and prospective students are invited to call (907) 786-1480 or visit Enrollment Services in the Administration Building for general information, enrollment advising, and processing services. For more information about undergraduate admissions and degree programs please see Chapter 9. For more information about graduate admissions and degree programs please see Chapter 10.

Services and Programs coordinated through Enrollment Services include:

- Academic Petitions
- Admission counseling
- Admission processing
- Application for Graduation
- Campus tours (conducted by Student Ambassadors)
- Catalog and schedule distribution to school districts and public agencies throughout the state
- Catalogs
- Chancellor's Scholarship Program
- Change of Student Name or Address
- Class Schedules
- Degree Check
- Directed Study
- Educational Opportunity Center
- Enrollment Advising
- Enrollment Certification
- General Information
- Grades
- High School and College Visitation Program
- Independent Study
- International student advising and documentation services for F-1 student visas
- Military Education Evaluations
- National Student Exchange Program
- Registration by Proxy
- Registration Procedures: Add/Drop, Withdrawal, Audit-to-Credit, Credit-to-Audit, Credit/No Credit
- Sponsorship of Alaska Career and College Fair, Counselor Day, and other outreach activities for prospective students
- Student Ambassador Program: students recruiting students
- Study abroad programs
- Transcripts
- Transfer credit evaluation
- Under Age Enrollment
- Who's Who Among College and University Students

For further information, please call (907) 786-1480.



CHAPTER 3

TUITION, FEES, AND FINANCIAL AID

Residency for Tuition Purposes
Tuition Summary
Typical Fees
Financial Obligations
Payment Procedures
Refund Policy
Senior Citizen Tuition Waiver
Student Financial Aid
Policies of Satisfactory Academic Progress
Grants
Loans
Scholarships
Student Employment
Veterans Assistance

RESIDENCY FOR TUITION PURPOSES

For the purpose of determining tuition rates, a resident is defined as any person who has been physically present in Alaska for 12 consecutive months (except for vacations or other absences for temporary purposes with intention to return) and who declares intention to remain in Alaska indefinitely. However, any person who, within one (1) year, has declared him/herself to be a resident of another state, has voted in another state, or has done any other act inconsistent with Alaska residence is considered a non-resident for tuition purposes.

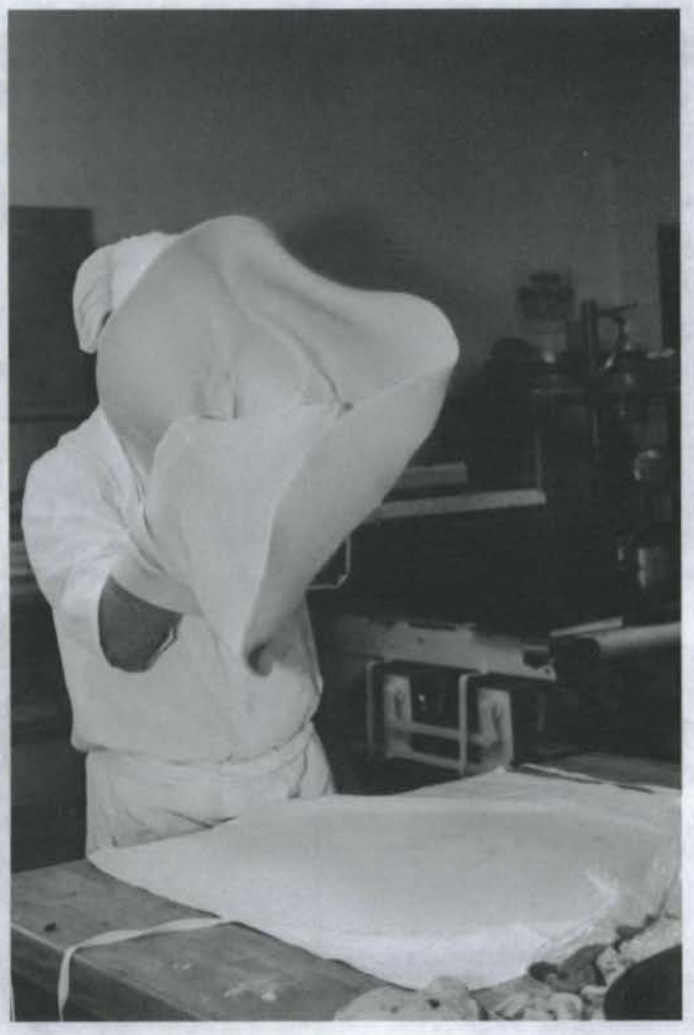
Any unemancipated person under the age of 18 whose parent or guardian qualifies as an Alaska resident as defined above is considered a resident. Otherwise, an unemancipated person under the age of 18 is considered a non-resident for tuition purposes.

A foreign student on an F-1 (non-immigrant student status) visa cannot be considered a resident for tuition purposes. Possession of a student visa is inconsistent with Alaska residence and with declared intention to remain in Alaska indefinitely.

A foreign student on a permanent visa (permitting an indefinite stay in the United States) may qualify as a resident for tuition purposes provided he/she meets the other conditions for residency. Students with non-immigrant visas cannot be considered resident for tuition purposes.

Members of the U.S. military on active duty and their dependents, members of the Alaska National Guard and their dependents, and residents of the Canadian Yukon Territory and the Northwest Territories are considered residents for tuition purposes.

This definition of residency is used solely to determine tuition rates at the University of Alaska Anchorage. Other agencies may use different definitions.



TUITION SUMMARY

RESIDENT

UNDERGRADUATE TUITION FOR RESIDENT STUDENTS

Total Credit Hours		Total Credit Hours	
1	$67	7	$ 469
2	134	8	536
3	201	9	603
4	268	10	670
5	335	11	737
6	402	12	804
		13 or more	871

Resident students enrolling in 13 or more undergraduate credits pay a consolidated tuition rate of $871.

GRADUATE TUITION FOR RESIDENT STUDENTS

Total Credit Hours		Total Credit Hours	
1	$134	6	$804
2	268	7	938
3	402	8	1072
4	536	9 or more	1206
5	670		

Resident students enrolling in 9 or more graduate credits pay a consolidated tuition rate of $1206.

Professional Development courses (500 level) will pay tuition at the rate of $134 per credit. (Additional fees are charged for non-residents.)

NON-RESIDENT

UNDERGRADUATE TUITION FOR NON-RESIDENT STUDENTS

Total Credit Hours		Total Credit Hours	
1	$67*	7	$1407
2	134*	8	1608
3	201*	9	1809
4	804	10	2010
5	1005	11	2211
6	1206	12	2412
		13 or more	2613

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

Non-resident students enrolling in 13 or more undergraduate credits pay a consolidated tuition rate of $2613.

GRADUATE TUITION FOR NON-RESIDENT STUDENTS

Total Credit Hours		Total Credit Hours	
1	$134*	6	$ 1608
2	268*	7	1876
3	402*	8	2144
4	1072	9 or more	2412
5	1340		

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

Non-resident students enrolling in 9 or more graduate credits pay a consolidated tuition rate of $2412.

OTHER FEES

In addition to tuition, any course may use materials, supplies or services which necessitate an additional fee. Fees may also be charged for administrative and/or instructional services. The University reserves the right to change its fees at any time.

SPECIAL COURSES

CHARGES FOR SELF-SUPPORT COURSES, CONTINUING EDUCATION CREDITS, AND CORRESPONDENCE COURSES ARE NOT INCLUDED IN THE CONSOLIDATED TUITION RATE.

TYPICAL FEES

FEE EXPLANATIONS

All resident and non-resident tuition rates and student activity fees are approved by the Board of Regents of the University of Alaska. The University reserves the right to change tuition rates or fees at any time.

ADD/DROP FEE

An add/drop fee of $5 is charged per transaction, beginning with the first day of class. No add/drop fee is charged if students must make changes because the University cancels or reschedules classes after registration.

ADMINISTRATIVE FEE

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

AUDIT FEE

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

CONTINUING EDUCATION UNIT (CEU) FEE

This fee varies. It is charged per Continuing Education Unit instead of tuition.

COURSE RESERVATION FEE (CRF FEE)

A $100 CRF fee is assessed when registering to hold a seat in a course. Once registered, students who fail to pay tuition, defer tuition payment, or drop all classes will pay the fee. If payment is made on time, the fee will be discounted.

CREDIT-BY-EXAM FEE

A non-refundable $15-per-credit fee is charged to challenge a course.

CREDIT FOR PRIOR LEARNING EVALUATION FEE

A $75 non-refundable fee is assessed when the student files a Credit for Prior Learning Application.

CREDIT FOR PRIOR LEARNING FEE

A $15-per-credit fee is assessed for each credit awarded through the Credit for Prior Learning Program.

GRADUATE EXTENDED REGISTRATION FEE

Graduate students not on approved inactive status must be registered in at least one course applicable to their degree or certificate program within each 12 month period in which they are actively working toward a degree. If no formal courses are being taken, students must initiate an extended registration and pay the equivalent to the cost of one graduate credit of instruction.

LABORATORY, MATERIAL, AND OTHER FEES

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

MUSIC LESSON FEE

Private music lesson fees are listed in the semester Class Schedule. Registration in private music lessons also requires the signature of the chair of the Music Department.

NON-CREDIT COURSE FEE

Non-credit courses are numbered 001- 049. These courses do not meet degree requirements and may have fees other than regular tuition. Such fees are listed in the semester Class Schedule as special fees.

PARKING FEE

All areas on campus except "Visitor Parking" require an appropriately displayed parking decal. Decals may be purchased during regular registration. Decal fees are non-refundable. For further details, contact Parking, (907) 786-1119.

PLACEMENT FEE

The first three (3) copies of a student's placement file are provided free of charge. A fee of $2 is charged for each additional copy.

ROYALTY FEE

A royalty or copyright fee is usually charged for each telecourse. The fee amount varies.

STUDENT ACTIVITY FEE

An activity fee of $45 per semester is assessed to students enrolling for 3 or more credits and having at least one course (3 credits or more) on the Anchorage campus. This fee supports student-related activities.

STUDENT HEALTH CENTER FEE

All students taking a total of 6 or more credits and having at least one course (3 credits or more) on the Anchorage campus will pay a mandatory health center fee of $12.

FEES

Add Fee (per class)	$5
Administrative Fee	Varies
Admission Fee (non-refundable)	
Certificate	35
Associate Degree	35
Baccalaureate Degree	35
Graduate Degree	45
ASSET (English) Placement Fee	5
Audit Fee	Varies
Catalog	6
Continuing Education Unit (CEU) Fee	Varies
Course Reservation Fee (CRF Fee)	100
Credit-by-Exam Fee (per credit)	15
Credit for Prior Learning Evaluation Fee	75
Credit for Prior Learning Fee (per credit)	15
Drop Fee (per class)	5
Graduate Extended Registration Fee	134
Graduation Application Fee	20
Laboratory, Material, and Other Fees	Varies
Language Advanced Placement (per course)	20
Music Lesson Fee (per credit)	200
Non-Credit Course Fee	Varies
Parking Fee (optional, non-refundable, per semester/annual)	55/85
Placement Fee	2
Royalty Fee	Varies
Student Activity Fee (maximum per semester)	45
Student Health Center Fee	12
Transcript Fee (per copy)	4

SPECIAL COURSE AND LABORATORY FEES

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

FINANCIAL OBLIGATIONS

The University of Alaska Anchorage reserves the right to withhold final grade reports, transcripts, or diplomas from students who have not fulfilled all their financial obligations to the institution. Permission to register for a new semester will be denied, or a student's current registration may be cancelled. Registration is not complete until all tuition, fees, and other charges have been paid.

Students in default status on student loans received through UAA will have their permission to register denied until brought current or satisfactory arrangements have been made.

Refunds are not issued after one academic year. All refunds are issued by university check.

PAYMENT PROCEDURE

All tuition, fees, and other charges for the semester must be paid in full when students register. Payment may be made in cash, by check, or by VISA or MasterCard. Tuition and fee charges may be audited, corrected, and adjusted before the end of the current semester. Students are notified of adjustments by mail. No refunds are issued for $1 or less. The University reserves the right to change its tuition or fees at any time.

REFUND POLICY

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

Students who are forced by extenuating circumstances to withdraw after the refund deadline may petition for refunds. Extenuating circumstances for refund petitions are defined as death, disability, military transfer, or sudden and uncontrollable absence. Written documentation is required and must be provided within one year from the date you register. Students who must withdraw as a result of University disciplinary action forfeit all rights to any refund.

All refunds are processed by the Accounting Office according to the following policies:

CANCELLED CLASSES

If UAA cancels a class, students may add another class of equal cost at no additional tuition charge, without being assessed an add fee for the replacement class. If a replacement class is not added, a 100% refund of tuition and course fees is automatically mailed. Refund mailing dates are listed in the current Class Schedule.

NON-CREDIT, CEU, AND SELF-SUPPORT CLASSES

100% of all tuition charges is refunded if the student officially drops at least two (2) business days before the first class begins. There is no refund after this time.

REGULAR TUITION, CREDIT COURSES (15-WEEK SEMESTER)

1. 100% of both tuition and course fees is automatically refunded when official drop/withdrawal activity is completed prior to the eighth calendar day of the semester.
2. 50% of tuition only is automatically refunded when official drop/withdrawal activity is completed between the eighth and the twenty-first calendar days of the semester. Course fees are not refunded on or after the eighth calendar day of the semester.
3. No refund is issued for a drop/withdrawal made on or after the twenty-second calendar day of the semester.
4. Refund deadlines for less-than-semester-length classes are prorated.

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

SENIOR CITIZEN TUITION WAIVER

Alaska residents 60 years of age or older may enroll in any UAA course for which they are qualified and in which space is available. There is no charge for tuition. Fees (such as lab, material, registration, non-credit, self-support credit fees, health center fee if taking more than 6 credits, and CEU fee) are not included in the tuition waiver. Senior citizens must pay these fees.

Applicants for the senior citizen waiver must complete a Tuition Waiver Request form at the time of registration.

STUDENT FINANCIAL AID

The Student Financial Aid Office assists students and prospective students to obtain the funds necessary to attend UAA. State and Federal governments, the University, and many private organizations offer grants, scholarships, loans, and employment opportunities to students who demonstrate need for such assistance. Each student's financial situation is carefully assessed, taking into consideration family size, assets, income, debts, and estimated costs of attending college. Types and amount of financial aid vary according to State and Federal guidelines, student needs, and availability of funds.

APPLICATION PROCEDURES

Interested students should contact the Student Financial Aid Office for information and applications. Students should submit applications at least six (6) months before the beginning of the semester for which they are applying. For the upcoming fall semester, the Student Financial Aid Office should have received completed applications by April 1 at the latest. Applications received after this date will be considered if funds are available. Specific procedures are as follows:

1. New students must first apply for formal admission to UAA through Enrollment Services by the appropriate deadline.
2. All interested students must complete a Free Application for Federal Student Aid.
3. All students must complete and submit the Student Aid Report (SAR) from the PELL Grant Program to the Student Financial Aid Office.
4. Students who wish to apply for other assistance, such as an Alaska State Student Loan or a specific scholarship, may complete special applications available at the Student Financial Aid Office.
5. Students who wish to apply for Bureau of Indian Affairs grants or scholarships should contact the BIA or their Native Regional Corporation for applications.
6. Students applying for federal assistance who have attended other postsecondary institutions must submit a Financial Aid Transcript from each institution previously attended.

ELIGIBILITY

To be considered for financial aid, a student must:

1. Have a high school diploma or its equivalent.
2. Be accepted for admission or in admitted status.
3. Demonstrate financial need for federal assistance as determined by the federal Student Aid Report (SAR).

4. Submit a UAA General Application for Financial Aid form (available at the Student Financial Aid Office).
5. Maintain satisfactory academic progress as defined by Student Financial Aid regulations.

FEDERAL VERIFICATION

The U.S. Department of Education reviews financial aid applications to determine that information has been reported accurately and that aid is distributed fairly. The Student Financial Aid Office also verifies information on applications before students can receive financial aid awards. Copies of the following documents may be requested:

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

Students selected for verification must submit the requested documents no later than thirty (30) days after the posted application deadlines for Guaranteed Student Loans and other campus-based aid (SEOG, Perkins, CWSP). The deadlines are October 31 for the fall semester, March 1 for the spring semester, and July 1 for the summer session. If documentation is not received, financial aid will not be awarded for that semester/session. If changes need to be made on the Student Aid Report (SAR), contact the Student Financial Aid Office.

SATISFACTORY ACADEMIC PROGRESS

To remain in satisfactory academic standing for federal assistance or state loans, students must complete the number of credits upon which the semester's aid was based. In addition, they must maintain the minimum grade point average (GPA) required by their financial aid program. On the student's grade report, AU, DF, F, NC, NP, I, W, and CEU indicate unsatisfactory completion of courses for financial aid purposes.

FINANCIAL AID POLICIES OF SATISFACTORY ACADEMIC PROGRESS

Federal, state, and institutional satisfactory academic progress regulations for federal financial aid and state student loan purposes are derived from State Loan Regulations 20 AAC 15.040 (j), (k), (l) and from Federal regulations (34 CFR) Parts 668.16 (e). Those regulations require accountability for student progress toward academic goals.

Reasonable academic progress for all programs of federal and state grants, loans, and work study is:

A. GRADE POINT AVERAGE (GPA)

Earn a cumulative grade point average of:

Undergraduate students ..... Cum GPA 2.0
Graduate students ..... Cum GPA 3.0

In addition to maintaining the above cumulative GPA, no single semester GPA can drop below:

Undergraduate students ..... Semester GPA 1.5
Graduate students ..... Semester GPA 2.5

B. CREDIT UNITS

Must complete with passing grades the minimum number of credits upon which the financial aid and/or loan award was based. Grades of NC, I, DF, NP, F, AU, W or CEU, or other non-credit entries cannot be counted as credits earned. The minimum number of credits must be from courses taken at the University of Alaska Anchorage (or under UAA consortium contracts). The minimums are:

Undergraduate:

Full-time status ..... At least 12 credits
3/4 time status ..... 9-11 credits
1/2 time status ..... 6-8 credits

Graduate:

Full-time status .....
.....At least 9 credits of courses numbered 600 or above
3/4 time status ..... 7-8 credits of 600+ courses
1/2 time status ..... 5-6 credits of 600+ courses

All Alaska Student Loan awards are based upon and require either full-time (12+ credits) or half-time (6+ credits) enrollment and course completion.

C. DEGREE PROGRAMS

In addition to the requirements for GPA and total credits passed, students must make appropriate progress toward the degree/certificate goal. That means appropriate progress through class standings. (See Chapter 8 under Class Standing).

Undergraduate — Students at UAA can receive aid from the financial aid program for a maximum of three semesters of full-time (or equivalent in 1/2 or 3/4 time) study while classified at each of the four undergraduate standings (Freshman, Sophomore, Junior, and Senior). Additionally, financial aid from federal programs is available for a maximum of four undergraduate year equivalents plus one semester at full-time status. Students are urged, however, to enroll in adequate coursework to make completion of the baccalaureate degree possible in four (4) years.

Students admitted under the Assessment and Advisement programs are eligible to receive credit for up to one year of remedial class work toward financial aid eligibility. This entitles students to one additional year or three additional semesters to complete their degree.

Semesters Completed	Degree Requirements Completed	Total Credits Completed
1	6	12
2	12	24
3	18	36
4	27	48
5	36	60
6	48	72
7	60	84
8	72	96
9	84	108
10	96	120
11	108	132
12	120	144
13	132	156

Freshmen — To be eligible for Federal Title IV financial aid during your freshman status year (or any other year), you must be officially admitted to a degree/certificate program at UAA. Verification of admission as a regular student in any degree program and in certain certificate programs is verified by the Student Financial Aid Office. During the freshman period, 18 of the 36 credits earned must meet requirements for the degree.

Sophomore — To be eligible for Federal Title IV, or financial aid in any form during your sophomore status year, (or any other year), you must be officially admitted to a degree/certificate program at UAA. Verification of admission as a regular student in any degree program and in certain certificate programs is verified by the Student Financial Aid Office. During the sophomore period, 30 or 48 of the 72 credits earned must meet requirements for the degree.

Junior — To be eligible for Federal Title IV, or financial aid in any form during your junior status year, (or any other year), you must be officially admitted to a degree/certificate program at UAA. Verification of admission as a regular student in any degree program and in certain certificate programs is verified by the Student Financial Aid

Office. During the junior period, 36 or 84 of the 108 credits earned must meet requirements for the degree.

Senior — To be eligible for Federal Title IV, or financial aid in any form during your senior status year, (or any other year), you must be officially admitted to a degree/certificate program at UAA. Verification of admission as a regular student in any degree program and in certain certificate programs is verified by the Student Financial Aid Office. During the senior period, 36 or 120 of the 144 credits earned must meet requirements for the degree.

Degree requirements include general education requirements, school/college requirements, major subject requirements, minor subject requirements and remaining allowable electives.

Graduate — To be eligible for Federal Title IV, or financial aid in any form, as a graduate student, you must be officially admitted to a graduate degree/certificate program at UAA. Admission as a graduate student is verified by the Student Financial Aid Office. A graduate student who is enrolled at UAA for 9 or more 600 level credits is classified as full-time. 300- or 400- level courses will count toward a graduate student's full-time status only if they are major program requirements (not prerequisites). To verify that 300 or 400 level courses are applicable, the official graduate studies plan must be on file in the Student Records Office.

If a student is full-time one semester and 1/2 or 3/4 time in the other semesters during any single academic year, the requirements are averaged. The following provisions apply to the Academic Progress requirements:

1. Course incompletes do not count as credits passed or grades earned. Thus, incompletes cannot be used as part of full-time, 3/4 time or 1/2 time course completion.
2. Course repeats cannot be counted as part of the course load for financial aid purposes.
3. If a financial aid package was based upon full-time enrollment, and elements of the award required full-time study (Alaska State Student Loan, certain scholarships, or the amount of a Pell Grant), and the student fails courses, withdraws, or otherwise does not complete 12 or more units, then to regain eligibility for aid in future semesters, the student must:
   a. Submit an appeal for federal aid on documented medical or extenuating circumstances to the Student Financial Aid Office or to the Alaska Commission on Postsecondary Education (on their appeal form) for State aid.
   b. Complete without aid one semester of full-time study and earn the required semester and cumulative GPA's.

D. FINANCIAL AID PROBATION

State and federal regulations mandate that a student maintain satisfactory academic progress in the chosen course of study to be eligible for continued financial aid. Academic progress at UAA is defined as completing the credits enrolled in, with the required GPA, whether receiving financial assistance or not, according to student status. Student status is defined as:

Less than 1/2 time	=	0 to 5 credits
Half time	=	6 to 8 credits
Three-quarter time	=	9 to 11 credits
Full-time	=	12 credits

If receiving financial aid, you must complete the credits funded with a cumulative GPA of 2.0.

Grades for first-time UAA students entering in any semester will be checked before financial aid is disbursed for the next semester. All students who do not complete the required number of credits or do not earn the minimum GPA for the preceding semester will be ineligible for additional financial aid. (see C. 3.a above)

Grades for returning UAA students will be checked for compliance with satisfactory academic progress standards before the offer of financial aid is extended to the student. All students who do not earn the minimum GPA for the preceding semester will be ineligible for additional financial aid.

Consideration will be given to those students who complete less than the required standard due to medical or other mitigating circumstances. These students must notify the Student Financial Aid Office, in writing, of all extenuating circumstances which have prevented them from completing the required number of classes with a 2.0 GPA.

The decision to place a student on financial aid probation or terminate financial aid will be made by the Director of Student Financial Aid and/or the Scholarship and Student Financial Aid Committee. The decision may be appealed to the Vice Chancellor of Student Services.

E. REMOVAL FROM PROBATION

To be removed from financial aid probation, students who were enrolled on a half-time status (6-8 credits), 3/4 status (9-11 credits) or full-time status (12 or more credits) at the beginning of the semester that caused them to be placed on probation must successfully complete the required number of credits and obtain a 2.0 GPA the following semester.

Students enrolling in the summer session have the privilege of carrying their probation into the fall semester by successfully completing 6 semester hours in the summer and carrying 6 semester hours of probation into the fall semester to complete the total of 12 semester hours. (This applies only to federal aid, not state aid).

F. STUDENTS ON PROBATION ARE NOT CONSIDERED MAKING SATISFACTORY PROGRESS

Students on probationary status are not considered making satisfactory academic progress and therefore are not eligible to apply for federal loans as the Student Financial Aid Office cannot certify satisfactory academic progress.

G. TERMINATION OF FINANCIAL AID

Students who do not successfully complete these requirements will have their financial aid benefits terminated. Students may petition for further financial aid by submitting a typed letter to the Director of Student Financial Aid and/or the Scholarship and Student Financial Aid Committee for reinstatement. Reinstatement will be granted only once, and if granted, the student is considered to continue on financial aid probation for that semester. All students whose financial aid benefits are reinstated and who do not complete the probationary semester successfully will again have their financial aid benefits terminated. If students wish to return, they are required to provide their own source of funding and maintain the 2.0 GPA or better for that semester, before being reconsidered for any financial aid. Semesters need not be consecutive. Students remain on termination status until they complete one semester with satisfactory progress.

H. CONCURRENT ENROLLMENT

Some students plan to enroll at UAA and at another college or university during the same semester. Concurrent enrollment plans must be approved in advance by the UAA Student Financial Aid Office. Aid cannot be received at both institutions simultaneously.

Concurrent enrollment plans are subject to the following conditions. The student must:

a. Obtain written approval from the Student Financial Aid Office by filing a petition for concurrent enrollment,
b. Enroll in a minimum of 6 semester hours at UAA,
c. Have a majority of semester credits at UAA, and
d. Obtain and submit a financial aid transcript from each college or university attended for 6 or more semester hours to verify that student will not be receiving financial aid while concurrently enrolled there.

FINANCIAL AID REFUND AND REPAYMENT POLICY

Students who need to drop or withdraw from specific courses or from all their courses must do so officially by completing an add/drop form and processing it through Enrollment Services and Accounting Services. Only students who submit an add/drop form by the deadlines will qualify for a tuition refund.

All first time UAA students receiving Title IV federal financial aid funds who totally withdraw prior to the tenth week of the semester will be refunded according to the Federal Title IV Student Financial Aid Program's Pro Rata Refund Calculation.

All other student refunds are processed by the Accounting Office according to the following policy with a few exceptions. Courses or less than semester length have shorter, pro rata refund schedules and some courses, (i.e., self-support, non-credit and CEU) follow special refunding rules. Please refer to the applicable course schedule.

REFUND

1. 100% of both tuition and course fees is refunded when an add/drop form is completed for drop or withdrawal prior to day 8 of the semester.
2. 50% of tuition only is refunded when an add/drop form is completed for drop or withdrawal on day 8 through day 21 of the semester.
3. No refund is issued when an add/drop form is completed for drop or withdrawal on or after day 22 of the semester.
4. Students who must withdraw as a result of University disciplinary action forfeit all rights of a refund.

REPAYMENT

1. All financial aid recipients who totally withdraw from UAA are required to check with the Accounting Student Financial Aid Disbursement Office to initiate the Refund and Repayment Calculation Worksheet. The Worksheet must be completed by the Student, Accounting Student Financial Aid Disbursement Office, and the Student Financial Aid Office.
2. Financial aid recipients who totally withdraw from the University are subject to repayment of Federal Funds received in excess of tuition and fees.
   a. The cash disbursement minus 4/15 of the cost of attendance must be repaid when total withdrawal occurs prior to day 8 of the semester.
   b. The cash disbursement minus 5/15 of the cost of attendance must be repaid when withdrawal occurs prior to day 15 and later than day 7 of the semester.
   c. The cash disbursement minus 6/15 of the cost of attendance must be repaid when total withdrawal is completed prior to day 22 and later than day 14 of the semester.
   d. No refund or repayment is required for withdrawals occurring on or after day 22 of the semester.
3. Students affected by Refunds and Repayments under Federal Title IV program accounts are required to make payments or satisfactory arrangements with the Accounting Student Financial Aid Disbursement Office within 30 days from the date of withdrawal. Students who fail to repay within 30 days or make satisfactory arrangements to repay will be charged with an overpayment of Federal Title IV funding which renders the individual student ineligible to receive further Federal Title IV Student Financial Aid assistance. Students failing to meet these standards will be referred to the Department of Education for collection.

GRANTS

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

BUREAU OF INDIAN AFFAIRS (BIA)

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

PELL GRANT

The PELL Grant makes funds available to eligible students with financial need. To be eligible for a PELL Grant, students must be working toward their first baccalaureate degree. Need is determined by the PELL Grant Family Contribution schedule.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)

The Supplemental Educational Opportunity Grant program is similar to the PELL Grant program and can provide additional assistance to students with financial need. Only undergraduates are eligible. SEOG awards range from $200 to $4,000 per year*. Need is determined by the Federal Congressional Methodology.

**Maximum grants at UAA will not exceed $1,500.*

LOANS

ALASKA STATE STUDENT LOAN PROGRAM (ASSL)

To be eligible for an ASSL, students must be one-year residents of the State of Alaska, hold high school diplomas or the equivalent, and be officially admitted to a certificate, associate, baccalaureate, or graduate degree program. They must also maintain full-time student status if full-time and part-time student status if part-time. Undergraduate students may borrow up to $5,500 a year for educational expenses. Graduate students may borrow up to $6,500 a year. Applications are available at the Student Financial Aid Office and the Alaska Student Loan Program Office at 707 A Street, Suite 206, Anchorage, AK. 99501. They must be submitted to the Alaska Commission on Postsecondary Education, 3030 Vintage Blvd., Juneau, AK 99811.

EMERGENCY LOAN FUND (ELF)

Thirty day loans are available when school is in session to students whose financial need is modest and temporary. An admitted full-time student may borrow a maximum of $250 for up to 30 days. A $10 administrative fee is charged.

PERKINS STUDENT LOANS

The Perkins Student Loan program is available to students enrolled at least half-time. An undergraduate student may borrow up to $9,000 for educational expenses for a 4-year period; a graduate student may borrow up to $18,000, minus any amount previously borrowed for undergraduate study.

An undergraduate with a previous baccalaureate degree is not eligible for a Perkins loan.

STAFFORD STUDENT LOAN

The Stafford Student Loan program enables students to borrow directly from lending institutions after they have qualified by completing the Free Application for Federal Student Aid. While students attend the University, interest is paid by the Federal government. Any undergraduate or graduate student enrolled at least half-time may apply for a Stafford Student Loan. First year undergraduate students can borrow up to $2,625 a year. Second year undergraduate students can borrow up to $3,500 a year. Third and

fourth year undergraduate students can borrow up to $5,500 a year. Graduate students can borrow up to $8,500 a year. The maximum loan amount for undergraduate study is $23,000; the maximum loan amount for graduate study is $65,500, minus any amount previously borrowed for undergraduate study.

SCHOLARSHIPS

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

STUDENT EMPLOYMENT

Students do not have to be receiving financial aid to take advantage of student employment programs. Students enrolled in at least three (3) credits may use the services of the Student Employment Office located in the Administration Building (within the Student Financial Aid Office). This office provides information on off-campus employment throughout the community, and helps students find employment while in college. Students may acquire valuable job experience as well as earn money.

Position openings are posted on the Job Board located by the Student Financial Aid Office in the Administration Building, or the student may contact the Student Employment Office at (907) 786-1917 or (907) 786-1918.

COLLEGE WORK STUDY PROGRAM

The College Work Study Program (CWSP) provides job opportunities for eligible students as determined by their financial need. These students may earn money to cover part of their educational expenses. The CWSP arranges jobs on- or off-campus with public or private non-profit agencies. Students may work up to twenty (20) hours per week during the semester. Wages depend on the job responsibilities and the student's qualifications. For more information please call (907) 786-1918.

Undergraduates with a previous baccalaureate degree are not eligible for College Work Study Program.

GRADUATE ASSISTANTSHIPS

Minimum qualifications for graduate assistantships are a baccalaureate degree from a college or university of recognized standing with a grade point average of at least 3.0 (B) and formal admission to a UAA graduate program. Foreign students whose native language is not English must score at least 600 overall on the Test of English as a Foreign Language (TOEFL) and at least 190 on the Test of Spoken English.

Graduate assistants are assigned responsibilities requiring approximately 20 hours per week. They receive stipends of varying amounts, from $6,164 to $7,083 per academic year. Semester tuition waivers may also be available based on full-time (9 credits) attendance. Graduate assistantships are awarded in spring for the upcoming academic year. For additional information and applications, contact the appropriate dean's office.

VETERAN'S ASSISTANCE

The University of Alaska Anchorage is approved to provide training to veterans, eligible dependents, and service personnel using Department of Veterans Affairs (DVA) educational benefits (G.I. Bill). Qualified persons who plan to use the G.I. Bill must contact the UAA Veterans Affairs Office. It will provide necessary forms and current benefit information.

Before registering for courses, students using the G.I. Bill must apply for formal admission and declare a degree and/or major program. In addition, Federal law requires that schools approved for veterans' benefits report enrollment and progress of all students who receive benefits.

The following requirements must be met by all students receiving benefits from the Department of Veterans Affairs:

ADDS, DROPS, AND OTHER CHANGES

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

ADMISSION TO UAA

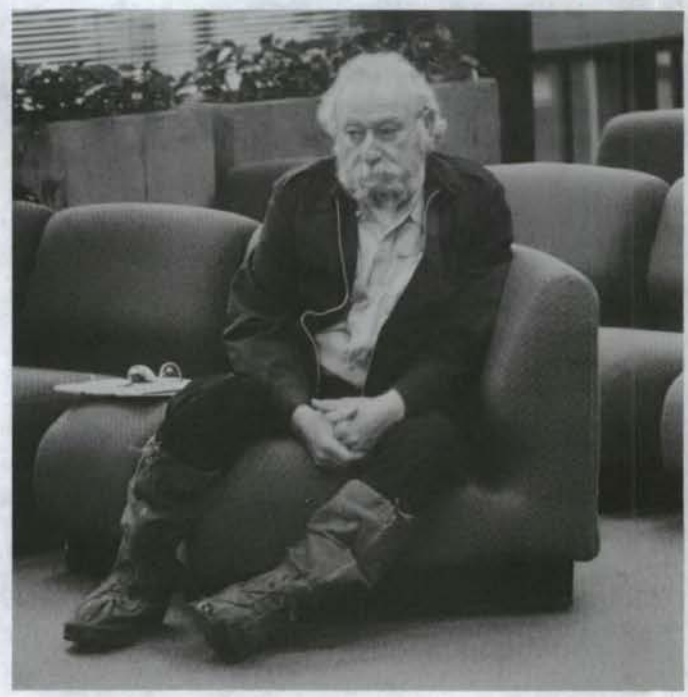
All veteran students receiving DVA benefits must be officially admitted to a degree program. Contact Enrollment Services (Administration Building Lobby) for information on requirements, (907) 786-1480.

SATISFACTORY ACADEMIC PROGRESS

Veteran students must maintain satisfactory academic progress according to University policy while they are receiving benefits. Failure to do so is reported to the Department of Veterans Affairs and may end educational benefits.

TRANSCRIPTS

Veteran students with previous college or university experience must have official transcripts on file with the University. Each student must request these transcripts from each previous institution when applying for admission to UAA. For further information, please call (907) 786-1528.



CHAPTER 4

ADVISING, LEARNING, ASSISTANCE, AND PLACEMENT

Adult Learning Center
Advising
Developmental Education
Disability Support Services
Educational Opportunity Center
Learning Resource Center
Library
Minority Student Services
Native Student Services
Placement
Reading/Writing Center

ADULT LEARNING CENTER

The Adult Learning Center, located at 403 W. Northern Lights Blvd., offers Adult Basic Education classes, as well as GED certificate instruction and English-as-a-Second Language classes. Classes meet during the morning, afternoon and evening. There is no cost other than a testing fee for GED students. Students 18 years and older who are not enrolled in high school may attend. Under special conditions, students 17 and under can enroll. The Center is a focus for those in the Anchorage area in need of basic educational skills, and provides a second chance for adults to complete a secondary education, or to upgrade math, reading, writing, science, social studies, and life coping skills. For more information, call (907) 276-6007.

ADVISING

The goal of academic advising is to assist students in developing educational plans consistent with career/life goals and to provide students with the information and skills needed to pursue those goals. It not only involves telling students what they need to know but it also aims at enabling them to find things out for themselves. The University knows that academic success is often greater when students and their advisor share a good working relationship. It is important to know who your advisor is and to seek advice often rather than meeting only when problems arise.

At UAA, admitted students with a declared major are assigned to a faculty advisor within the department offering the major. That individual can guide you on issues such as University policies and procedures, general and degree requirements, and jobs associated with the field. Contact your major department to learn how to set up an appointment with your advisor.

Students admitted to UAA as "undeclared" (those undecided about a major) and students pursuing an Associate of Arts (AA) degree are assigned to the Advising and Counseling Center. Students not admitted to UAA who take classes by filing an Intent to Register and prospective students may also seek advisement through the Advising and Counseling Center.

All students have the right to quality academic advising and the University has an obligation to ensure academic advising is available to all students. Students are encouraged to use the academic advising program, but the final responsibility for participating rests with the individual student.

ADVISING AND COUNSELING CENTER

The Advising and Counseling Center, a unit of Student Services, provides multiple services for prospective and enrolled University of Alaska Anchorage students. Services include assessment, advising, career planning/placement, and counseling services. Trained professional counselors, and supportive staff members are dedicated to assisting individuals with their needs. The Advising and Counseling Center is the starting place for many students entering the academic world.

For help with academic program planning, career exploration, personal problems, or other concerns, visit the Advising and Counseling Center. For further information, or to schedule an appointment with a counselor, go to the Business Education Building, Room 115, or please call (907) 786-4500.

ASSESSMENT

The Assessment program supports many of the testing needs of the University and also serves the community as a testing site for over 60 national tests which are used for admission, gaining college credit, and professional certification. ASSET is offered to new students for general advising and to place them in appropriate English classes and basic math classes. There is a five dollar ($5) fee for ASSET. Data from ASSET is used to improve student advising and retention. Other assessments are available to help people with career and life planning. Testing services, such as proctoring correspondence and other exams, are also available. Assessment Services is a department within the Advising and Counseling Center in the Business Education Building, Room 115. For further information, please call (907) 786-4500.

CAREER RESOURCES

Are you trying to decide on a major, enter a new phase of your working life or change careers? Such changes can be made easier through the use of Career Resources.

The Advising and Counseling Center and some Extended Colleges and Sites offer credit classes and non-credit workshops on "Career Planning and Changing" and "Information Interviewing for the Job Hunt." Materials on apprenticeship training, technical schools, and colleges and universities and the computerized Alaska Career Information Systems (AKCIS) are available through the Career Planning and Placement Center and through the Educational Opportunity Center. In addition, the ACT DISCOVER program is available in the Career Planning and Placement Center. Staff members can assist you in using these materials for accurate, up-to-date decision making and counselors are available to provide individual help with career planning and job search skills training. The Career Planning and Placement Center is located in the Business Education Building, Room 122. The Educational Opportunity Center has its main office at 500 "L" Street, Suite 501. For further information, call the Career Planning and Placement Center at (907) 786-4513 or the Educational Opportunity Center at (907) 274-5522.

CORRESPONDENCE STUDY

Within the University of Alaska system, correspondence study is administered through the University of Alaska Fairbanks campus. The UAA Advising and Counseling Center has brochures and registration forms for this program and can proctor exams. For further information, go to the Business Education Building, Room 115, or please call (907) 786-4500.

COUNSELING

Counseling services are available through the Advising and Counseling Center, located in the Business Education Building, Room 115, and through the Psychological Services Center, located in the College of Arts and Sciences Building, Room 264. The Counseling program of the Advising and Counseling Center is available to assist students in addressing difficulties that may be blocking their potential for academic success. Groups, workshops, and short-term personal counseling services are provided. Students requiring long-term counseling are referred to appropriate service outside the Advising and Counseling Center. For further information, please call (907) 786-4500.

PSYCHOLOGICAL SERVICES CENTER

The University of Alaska Anchorage Psychological Services Center (PSC) offers low-cost, short-term therapy for a variety of problems. These include:

- Self-Doubt/Low Self-Esteem
- Depression and Blues
- Assertiveness
- Anxiety and Phobias
- Difficulties in Social Interaction
- Women's Issues
- Study Skills
- Parenting Skills
- Eating Disorders
- Relationship Conflicts
- Anger, Hurt, and Grief

The PSC provides therapy for families, couples and individuals of all ages. It also provides group therapy on various issues, including assertiveness, anger management, eating disorders, and men's and women's issues.

PSC therapists are trained graduate students in the last phase of study for a Master's Degree in Clinical Psychology. Activities are supervised by the Department of Psychology faculty who are licensed psychologists. The low-cost fee schedule is based upon each individual's ability to pay and all funds are used to support the ongoing program.

Services are available to anyone on campus and in the community. One need not be a member of the UAA staff or student body to participate in the program. Operating hours are 8:00 am-5:00 pm, Monday through Friday.

The PSC services might be helpful to you or someone you know; call or stop by for more information or to set up an appointment. The PSC is located on the second floor of the College of Arts and Sciences Building. The phone number is (907) 786-1795.

DEVELOPMENTAL EDUCATION

Developmental Education offers a variety of programs for the non-traditional and at-risk student at UAA. Core traditional classes are taught in non-traditional ways, such as self-paced contract learning, computer-assisted instruction, mini courses, modular classes and interdisciplinary studies. SmartStart, a team-taught course in basic math, reading, writing and survival skills, offers classes each semester. Guided study courses such as Math 054 and Math 055 include lectures, lab, tutors, videotapes, audiotapes and workshops. Developmental Education staff members are also able to answer a variety of student questions about the Adult Learning Center, Advising and Counseling Center, the Financial Aid Office, the Learning Center, the Reading/Writing Center, and UAA instructional labs. For more information, stop by the Developmental Education office in the Learning Resources Center (Sally Monserud Building), or call (907) 786-1992.

DISABILITY SUPPORT SERVICES

Disability Support Services (DSS) is responsible for coordinating support services for UAA students who experience disabilities. Sign language interpreters, note-taking arrangements, textbooks on tape, assistive technology, and alternative testing are among the wide range of services provided. The staff at DSS also work as liaison to faculty to ensure a positive learning atmosphere. All services are tailored to the needs of the individual and type of disability. It may be necessary to provide documentation of the disabling condition when requesting services. Group support through the Disability Awareness Club assists students in having a successful college experence. The DSS office is located in the Business Education Building, Room 105. To obtain further information, call (907) 786-4530 or (907) 786-4536 TTD.

EDUCATIONAL OPPORTUNITY CENTER

As part of Enrollment Services, the Educational Opportunity Center (EOC) is a specialized counseling program for non-students who are undecided about an educational direction. EOC staff members provide information on schools and training programs throughout the United States, and assist with the application and admission process. They also help with financial aid and provide structured career counseling on how to choose a major field of study. To obtain information, please call (907) 274-5522.

LEARNING RESOURCES CENTER

The Learning Resources Center (LRC) offers students a relaxed and friendly atmosphere in which to study, read, prepare for classes, or receive supplemental assistance in academic courses and college survival skills. The LRC provides services such as free peer tutoring in mathematics, copiers, coffee and tea, and computer and audio-visual materials for checkout and use within the Center.
Six (6) academic centers and labs are featured:

- Computer/Typing Laboratory for student use
- Language Laboratory
- Mathematics Laboratory
- Group Study Area
- Quiet Study Area
- Instructor Reserve

Many faculty members place materials on Instructor Reserve for students attending their classes. These materials provide additional course information and aid students in reviewing concepts presented in class. For more information, please call (907) 786-1155.

LIBRARY

The Consortium Library serves the faculty, staff, and students of both UAA and APU. The collection consists of 552,495 bound volumes and government documents, subscriptions to over 3,479 journals and periodicals, an extensive sheet music collection, and a non-print collection. The Library is a select depository library for federal publications and a complete depository for Alaska State documents. There are special collections on Alaska and the Arctic including a growing collection of archives and manuscripts. A computer lab for public use is located within the Library. The Library is open 86.5 hours per week when classes are in session.

The Library offers reference service most of the hours it is open. Reference tools include a number of CD ROM-based computerized databases which are available without cost to library users. On-line database searches are available for cost at the Reference Desk.

The Library is a member of both the Western Library Network and OCLC (On-Line Computer Library Center). Interlibrary loan is available to both faculty and students.

The Library uses the automated GNOSIS system to circulate books. Library users must obtain a GNOSIS card prior to checking out books. The cards are available to faculty, staff, and students with the presentation of a valid university ID or registration receipt. Books are checked out for 28 day periods and may be renewed if not in demand by others.



MINORITY STUDENT SERVICES

The University of Alaska Anchorage recognizes the growing population of students of color and is determined to meet many of their needs. Minority Student Services (MSS) was formed to focus on specific needs which, when met, will improve retention and graduation rates. MSS provides academic support services for students as they pursue their personal and educational goals. The emotional expectations of students are met through the provision of social and cultural activities. Peer advisors and support groups serve as important components of the educational services offered by the MSS Office. As it is not our intent to marginalize the services and education offered to our students, MSS refers many of its students, on a case-by-case basis, to existing services available to the general

student population. If, for some reason, this proves to be a mismatch, MSS then uses its resources to provide particular assistance. Under the auspices of MSS, a Multicultural Student Center has been established. It is open for use by individuals and student clubs from any of the many different cultures represented on campus. The following are programs and services directed by Minority Student Services.

EDUCATIONAL TALENT SEARCH PROGRAM

Educational Talent Search (ETS) is designed to help low income 7th through 12th grade students achieve success in school and in their future. Its purpose is to help students finish high school and to go on to higher education. ETS is funded by a government grant and is FREE to participants. ETS provides assistance in study skills, career exploration, tutoring, college planning, goal setting, and more.

TUTORIAL ASSISTANCE PROGRAM

MSS offers free academic assistance for minority students. Small groups and labs with some one-on-one sessions are offered depending upon the need and demand. Where possible, MSS will refer students to other available resources on campus. In most cases students must request the assistance for themselves.

PROGRAM DEVELOPMENT

Minority Student Services programming features events that explore cultural diversity and presents the artistic and creative aspects of various cultural experiences. MSS co-sponsors many events with other campus organizations. Program Development is another opportunity for minority students to be involved.

NATIVE STUDENT SERVICES

Native Student Services was established to provide guidance and assistance to Alaska Native and American Indian populations. Particular care is provided for students attending the University for the first time and arriving from a rural community. Native Student Services operates a Native Student Center located in the Business Education Building, Room 108. Coffee and popcorn are available, as well as the opportunity to visit other students stopping in to relax and socialize. Native Student Services offers support in tutoring, counseling, academic and financial aid, along with social activities.



DELLA KEATS SUMMER ENRICHMENT PROGRAM

The Della Keats Summer Enrichment Program is conducted for 24 Alaska Native rural junior and senior high school students who are pursuing careers in health. Students receive six (6) weeks of intensive preparatory instruction in Math, Anatomy and Physiology, Chemistry, English and study skills.

The goal of the Della Keats Summer Enrichment Program is to bridge the transition for rural youth from small high schools to a large, urban university environment.

In addition to the academic preparation, the students receive a thorough orientation to UAA with its various student services such as admissions, financial aid, and counseling. There are also career opportunities and personal growth seminars focused on social and emotional issues.

Students are selected on the basis of their GPA, depth of high school preparation (especially math and science), career choice, essay, and letters of recommendation.

For further information contact:
Della Keats Summer Enrichment Program
University of Alaska Anchorage
3211 Providence Drive, Building K, Room 104-A
Anchorage, Alaska 99508
(907) 786-4000

PLACEMENT

The Placement Center provides a variety of job placement services to UAA students and alumni. It maintains student and alumni placement files and helps students make realistic career choices. The Center holds workshops on resume, job search, and interviewing skills, and arranges interviews with potential employees.

The Placement Center provides these additional resources and materials:

- Career information on the nature of jobs, working conditions, training requirements, job outlook, earnings, and related occupations
- Guides for correspondence study
- Internship and cooperative education listings
- Job Fair
- Placement Bulletin Board of job listings
- Study abroad opportunities listing
- Summer employment job listing
- Undergraduate/graduate program directories for the U.S.

For further information, please contact the Career Planning and Placement Center at (907) 786-4513.

READING/WRITING CENTER

The Reading/Writing Center (RWC) offers students supplemental instruction in reading, writing, and study skills.The RWC is located in the Sally Monserud Building. It is staffed by members of the UAA English faculty and teaching assistants.

The Center is used by students enrolled in regular reading and composition courses, students in other UAA courses who need help with particular projects, and those interested in self-directed improvement of skills. Users are assessed a nominal fee for these services, paid once per semester. Any counselor or teacher may refer a student to the RWC, but no referral is necessary to use the services.

Examples of the skills students develop at the RWC include comprehending course material, discussing texts in detail, remembering information, documenting information, formulating thesis statements, organizing ideas, and expressing ideas clearly. The RWC also provides assistance with spelling, vocabulary development, test-taking, technical report writing, and English-as-a-Second-Language. For further information, please call (907) 786-1091.

CHAPTER 5

STUDENT LIFE

Rights, Freedoms, and Responsibilities
Alcohol Policy
Athletic Programs
Bookstore
Computing and Technology Services
Fine and Performing Arts Facilities
Food Service
University Police Department
Residence Life
Student Health Center
Student Leadership Office
Student Union Programs and Services Office

RIGHTS, FREEDOMS, AND RESPONSIBILITIES

The role of the University of Alaska Anchorage is to encourage people of all ages to develop their skills and talents differently, according to individual abilities and interests, so that collectively they contribute to the continuum of democracy. University policies, procedures, and regulations are formulated to guarantee each student's freedom to learn and to protect the constitutional rights of others.

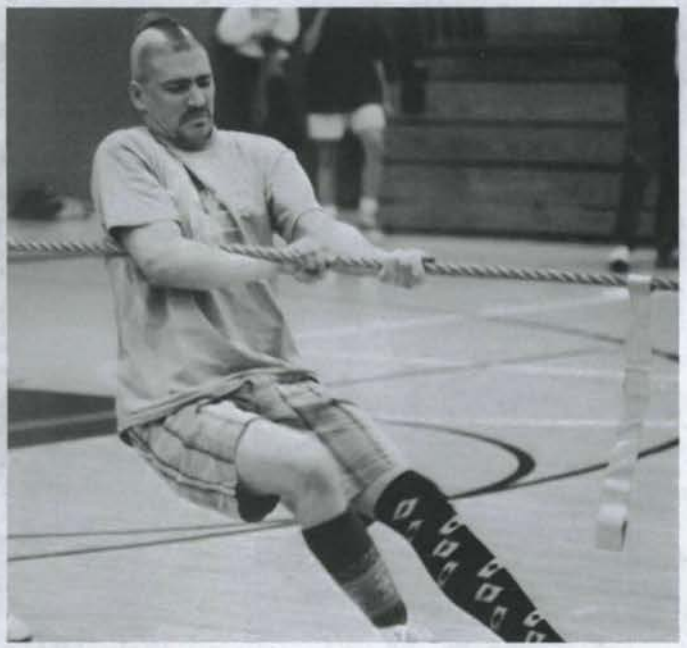
The concept of rights and freedoms, no matter how basic or widely accepted, carries with it corresponding responsibilities. Students, as well as other members of the University community, enjoy the same constitutional and civil rights guaranteed all citizens; at the same time, they are subject to the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

Violations of student conduct regulations are handled through the Office of the Vice Chancellor of Student Services. Violations of federal, state, and/or local laws make a student subject to civil or criminal action in addition to disciplinary action by the University. Each student is responsible for knowing UAA policies, procedures and deadlines. Policies and regulations may be found in the University catalog, the Student Handbook, and in the Student Development Office.

FREEDOM OF EXPRESSION

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

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



FREEDOM OF ACCESS

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

FREEDOM OF ASSOCIATION

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

FREEDOM FROM UNREASONABLE SEARCH/SEIZURE

Students shall be free from unreasonable search and/or seizure regarding their person and their personal property. If a situation should occur such that a student is interrogated and/or arrested by University security officials, students have the right to remain silent, the right to be free of coercion, and the right to be advised of these rights.

STUDENT PARTICIPATION IN INSTITUTIONAL GOVERNMENT

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

ACADEMIC RIGHTS OF STUDENTS

The University has the responsibility of providing a program of quality education in keeping with its financial resources; students have protection through campus specific procedures against prejudiced or capricious academic evaluation. Student performance shall be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Students are responsible for the proper completion of their academic program, for familiarity with all requirements of the University catalog, and for maintaining an acceptable grade average for degree requirements. Students have the right to be informed at the beginning of each term of the nature of the course, course expectations, evaluation standards, and the grading system.

ACCESS TO STUDENT RECORDS

The Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, was designated to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the FERPA Office, concerning alleged failures by the institution to comply with the Act.

UAA may release, without consent, certain directory information (name, major, dates of attendance and credentials awarded). No one outside the institution shall have access to, nor will the institution disclose any other information from a student's educational record, without the written consent of the student, except to personnel within the institution on a need to know basis, to officials of other institutions in which a student seeks to enroll, to persons in compliance with a judicial order, and to persons in an emergency in order to protect the health or safety of the student or other persons, or as otherwise permitted under the Act. Exceptions to the above policy are as follows:

1. Names of students receiving awards or appearing on the UAA Dean's List and Chancellor's List will be released to the media; also, names and addresses of the above honored students will be provided to the National Dean's List Publication unless a written request not to do so has been received by Enrollment Services.
2. Names of students receiving degrees/certificates will appear in the commencement program and will be released to the media unless a written request not to do so has been received by Enrollment Services.
3. Names of scholarship recipients will be released to the media unless a written request not to do so has been received by the Financial Aid Office.
4. Names of students receiving awards for the Chancellor's Scholarship and any other honorary scholarships, i.e. Truman Scholarship and/or appearing in Who's Who Among Students in American Universities and Colleges will be released to the media; also, names and addresses of the above honored students will be provided unless a written request not to do so has been received by Enrollment Services.

A complete copy of the UAA Policy on the application of FERPA, including procedures for challenging the content of one's records is available in Enrollment Services.

CODE OF CONDUCT

Students at the University have certain rights and responsibilities. Included in the responsibilities is an awareness of the standards of appropriate behavior. The University expects each student to exercise self-discipline which will enhance the individual's educational experience and the total learning environment of the University.

In general, the off-campus activities of students are viewed as their personal business. However, when a student violates local, state, or federal laws and at the same time violates the Code of Conduct, either on or off-campus, the University reserves the option of initiating disciplinary action on its own. Disciplinary action may be initiated by the University and sanctions imposed against any student or student organization found guilty of committing, attempting to commit, or intentionally assisting in the commission of any of the following prohibited forms of conduct.

1. **Disruption or Obstruction:** Conduct which obstructs or disrupts teaching, research, administration, disciplinary proceedings, other University activities, or other authorized on-campus non-University activities.
2. **Harassment:** Physical or verbal abuse, or sexual harassment of another person, intimidation, or other conduct, including but not limited to hazing, which creates an unreasonably hostile or offensive learning, living, or working environment.
3. **Endangerment:** Conduct, including but not limited to physical abuse, sexual assault, terroristic threats, hazing and/or coercion, which endangers or unreasonably threatens the health and/or safety of any person or group of persons, or which causes actual harm to a person or persons.
4. **Intoxicants and Drugs:** Possession, consumption, being perceptibly under the influence, or furnishing of alcoholic beverages on campus property or at supervised functions of student organizations except as provided by rules, policies, and procedures of the University of Alaska Anchorage is forbidden. Possession, consumption, being perceptibly under the influence, or furnishing of any narcotic or dangerous drugs except when use or possession is lawfully prescribed by an authorized medical doctor or dentist is forbidden.
5. **Dangerous Chemicals and Devices:** Unauthorized use, possession, or sale of firearms, explosives, dangerous chemicals, or other dangerous weapons on University property except as expressly authorized by campus procedures.
6. **Other Forms of Misconduct:** Forgery, alteration, or misuse of University documents, records, funds, or identification. Falsification of records or deliberate misrepresentation of facts on University forms and documents. Telephone misuse, theft, or malicious destruction, damage, or misuse of University or private property including computers. Unauthorized use of University funds, equipment and supplies (including but not limited to falsely representing oneself as an agent of the University, incurring debts or entering into contracts on behalf of the University).
7. **Violations of University Regulations:** Violating published University regulations, including those related to entry and use of University facilities, the rules in this section, and any other rules or regulations which may be enacted by the University. Failure to comply with the lawful directions of University personnel acting in the performance of their duties.

DISCIPLINARY PROCEDURES

A student, faculty, or staff member of the University may initiate disciplinary action against a student for violation of the University Student Code of Conduct. Allegations concerning student misconduct must be in writing and signed by the complaining party.

Initial action: Initial action for resident students living in student housing, who are charged with violating Residence Life rules, involves administrative hearings with designated Residence Life administrative staff. This procedure is described in the Residence Life handbook. Initial action for all other students and secondary action for resident students for University Student Code of Conduct violations are handled through the University student judicial hearing procedures. Campus hearing officers are designated by the Dean of Students to implement these procedures.

Preliminary interview: Incidents which are not likely to warrant suspension or expulsion will be reviewed by a campus hearing officer. A Dean of Students' designated campus hearing officer will conduct a preliminary interview with a student charged with violating the Student Code of Conduct to discuss the alleged incident. Notice of the interview will be given to the student at least three (3) working days prior to the scheduled interview. The student may present explanations, defenses and/or mitigation of his/her conduct at the time of the interview. Should the student not attend the interview, the hearing officer will review the facts of the case in the student's absence. At the conclusion of a preliminary interview, the hearing officer is empowered to:

1. Dismiss the case.
2. Issue sanctions in consultation with the Dean of Students as provided for under "Sanctions" exclusive of suspension or expulsion.
3. Refer the case for a hearing when suspension or expulsion may be a possible sanction.

Hearing Process: If the hearing officer finds that a student's alleged involvement in an incident is a matter potentially leading to suspension or expulsion from the University, a hearing will be scheduled as soon as possible, but no later than two (2) weeks from the date of the preliminary interview. The student may choose to have his or her case heard by the Dean of Students at an administrative hearing or by the Standing University Student Judicial Hearing Committee.

1. An administrative hearing is conducted by Dean of Students who will make a decision on whether or not a violation of the Student Code of Conduct occurred based on the evidence. The Dean of

Students' determination shall be made on the basis of whether there is substantial evidence to establish that it is more likely than not that the accused student violated the Student Code of Conduct.

2. The Standing University Student Judicial Hearing Committee is composed of two students, two faculty/staff members, and a hearing officer, who serves as the committee chair. The UAA Student Government will appoint two students to serve on the committee for one year terms beginning the fall semester. The Chancellor will appoint the two faculty/staff members for one year terms beginning the fall semester. Hearing officers will be selected by the Dean of Students' office from a pool of qualified faculty, staff, and students who have successfully completed judicial training sessions coordinated by the Dean of Students' staff. Students must be in good academic standing, 2.5 GPA, good disciplinary standing, and be currently enrolled in at least three (3) credits at UAA to serve on the Standing University Student Judicial Hearing Committee.

The Dean of Students will appoint a UAA faculty/staff member to present the University's case to the committee.

Committee decisions will be determined by a majority vote. The chair will only vote in case of a tie. The committee will make a decision on whether or not a violation of the Student Code of Conduct occurred based on the evidence. The committee's determination shall be made on the basis of whether there is substantial evidence to establish that it is more likely than not that the accused student violated the Student Code of Conduct. The committee may or may not recommend appropriate sanctions based on a finding of violations. In either case, the hearing officer will consult with the Dean of Students on the appropriate level of sanctions.

NOTE: To the extent possible, the University will take reasonable precautionary measures to conduct the adjudicatory process in as safe an environment as possible.

Recommended sanctions of suspension or expulsion from the University will be forwarded to the Vice Chancellor for Student Services, who will review the case as if on appeal. Should the Vice Chancellor determine suspension or expulsion is warranted, that recommendation will be forwarded through the Chancellor to the University President, who will make the final decision.

Due process: Each student at the University shall be afforded appropriate due process in disciplinary matters.

Students charged with violations of the University Student Code of Conduct will be afforded the following rights during the Student Judicial Hearing Committee hearing process:

1. Written notice outlining the allegations of misconduct and the section(s) of the Student Code of Conduct which allegedly have been violated.
2. Notification of witnesses, a copy of any witnesses' statements or complaints, and other supporting affidavits for the University.
3. The opportunity to choose between a public or private hearing to the extent that such choices are permitted by applicable state and federal laws. Student disciplinary proceedings will be private unless a written request is made to the Dean of Students, by the accused, to make them public.*
4. The opportunity to be advised by an advocate or legal counsel. Legal counsel may be physically present during disciplinary hearings, but legal counsel may not represent the accused in the disciplinary proceedings, nor speak or ask questions on the students' behalf.**
5. The opportunity to confront and hear all witnesses relied upon by the University.
6. The opportunity to present a defense, including introduction of relevant exhibits, affidavits, or witnesses.***
7. The right to remain silent to avoid self-incrimination.
8. The right to have a full and complete record of the hearing, at their own expense.
9. The right to appeal the decision, as provided, within the administrative structure of the University.

*The rights of victims, especially in instances involving personal injury and/or sexual assault, are as important as the rights of the accused. An alleged victim of personal injury or sexual assault violations will be provided information regarding the institutional responses in the disciplinary procedure. To the extent possible, the University will upon request, take reasonable measures to prevent unnecessary exposure of sexual assault victims during the adjudicatory and appeals process.

**The one exception is that legal counsel may represent the accused student if there is a concurrent criminal proceeding for violation of law.

***Restrictions on exhibits or physical evidence will be at the discretion of the committee chair.

Appeals process: A student who has been sanctioned through one level of the University adjudicatory process may elect to file one appeal. An appeal review may be granted if:

1. There was a likelihood of a substantial procedural error made by the hearing officer or the judicial hearing committee.
2. The sanction administered was not clearly appropriate for the violation committed.
3. Substantially new evidence in the case surfaced after the hearing that may have changed the initial decision if it had been known at the time of the hearing.

Appeal requests must be made in writing within five (5) working days of being informed of the written decision by the hearing officer or the Dean of Students. Failure to file within the time specified will render the original decision final within the University. The appeals process is as follows:

1. Resident students may appeal disciplinary decisions made by the Resident Coordinator to the Director of Residence Life.
2. Resident students may appeal disciplinary decisions made by the Director of Residence Life to the Dean of Students.
3. Students may appeal disciplinary decisions made by a campus hearing officer and/or the Dean of Students to the Vice Chancellor for Student Services.
4. Students may appeal suspension and expulsion recommendations made by the Vice Chancellor for Student Services to the President of the University of Alaska.
5. Students may appeal disciplinary decisions made by the Vice Chancellor for Student Services to the Chancellor only if those disciplinary decisions were original with the Vice Chancellor and not on appeal.

Once a student discipline appeal has been considered by a designated appeal reviewer, it may not be appealed again within the University.

Appeals are administrative reviews of the record. A second hearing panel review shall not be authorized by the designated appeal reviewer unless the reviewer determines a previous hearing process was sufficiently flawed as to be fundamentally unfair to the accused student.

Sanctions: The following list of sanctions is illustrative rather than exhaustive. Examples of Residence Life sanctions are addressed in the Residence Life handbook. The University reserves the right to create other sanctions or join sanctions as it deems appropriate.

1. Warning-A notice in writing to the student that the student is violating or has violated institutional regulations.

2. Probation-A written reprimand for violation of specific regulations. Probation is for a specified period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any institutional regulation during the probationary period. Probation may carry certain conditions.
3. Loss of Privileges-Denial of specific privileges for a designated period of time.
4. Restitution-Reimbursement for damage to or misappropriation of property, or for expenses incurred by a victim or the University related to the misconduct involved such as payment for alcohol/drug education classes.
5. Discretionary Sanction-Uncompensated labor, community service, educational classes, counseling, or other sanctions that may be seen as appropriate to the circumstances of a given case.
6. Restricted Access-Restriction from entering certain designated areas and use of specific equipment and facilities for a specified period of time.
7. Summary Suspension-A summary suspension may be used to protect the school from clear and present danger of disruption or threat to safety of persons and/or property. A summarily suspended student is not to occupy any portion of the campus. Summary suspension shall generally be for the purpose of investigations of the event or events in which the student or students were allegedly involved and during the period awaiting a formal campus hearing.
8. Suspension-Separation of the student from the University for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified.
9. Expulsion-Permanent separation of the student from the University.

Reinstatement will depend upon the provisions of the disciplinary action imposed. By state law, students who have been separated from the University of Alaska may only be readmitted upon the consent of the President of the University of Alaska state-wide system. Correspondence concerning disciplinary action or reinstatement should be addressed to the office of the Dean of Students.

Status of Student Pending Action: Pending action on the charges, the status of a student shall not be altered, nor shall his/her right to be present on the campus and to attend classes, except when suspended or expelled.

SEX OFFENSES ON CAMPUS

It is the policy of the University of Alaska Anchorage that the sexual assault of one member of the academic community by another will not be tolerated. This policy applies to all members of the campus community: Students, faculty, and staff.

The term *sexual assault*, as used by the University of Alaska Anchorage encompasses the legal definitions of sexual assault contained in Alaska state statutes. It includes, but is not limited to: rape, acquaintance or date rape, as well as rape by a stranger. Sexual assault is against the law and is defined as sexual misconduct that is forced or coerced against the will of the victim. The same definition applies regardless of whether the assailant is a stranger or an acquaintance (date, friend, or someone known casually). This type of threat may involve physical violence, coercion, or the threat of harm.

A person who has been the victim of sexual assault should report the crime to the University Police Department office or the local police. The Dean of Students Office, Advising & Counseling Center, and Residence Life may provide initial support services for students on the Anchorage campus. At extended colleges, the local police should be contacted and campus-based counseling staff may serve as resources. Staff will serve in an advocacy role and help refer individuals for appropriate medical, police, judicial, and counseling services.

In the event an accused person is found in violation of this policy, the entire range of sanctions outlined in the *Student Code of Conduct* may be considered including, but not limited to, disciplinary probation, suspension, or expulsion from the university. Should the alleged sexual assault involve an employee, sanctions will be determined under applicable employment contracts and agreements.

In an effort to educate the campus community about sexual assault, acquaintance rape, and other sex offenses, campus sponsored prevention programs are offered on an on-going basis throughout the year. Additional information about the above policy, and programs offered can be obtained from the following offices: Dean of Students, the University Police Department, Residence Life, and the Advising & Counseling Center. The university catalog, class schedules, and the "Fact Finder" (UAA Student handbook) contain additional resource information.

Sexual assault may also be considered a violation of the University of Alaska's policy against sexual harassment. According to the University of Alaska, Board of Regents' policy (4.08.02), sexual harassment involves unwelcome sexual advances or requests for sexual favors by a member of the campus community when the assailant uses, threatens to use, or implies that submission to, or rejection of, such conduct will have an impact on employment or academic decisions affecting the victim.

Sexual harassment includes other verbal or physical conduct related to sex when such conduct has the purpose or effect of substantially interfering with an individual's performance at work or study by creating an intimidating, hostile, or offensive environment in which to work, live, or learn. The Affirmative Action office, Dean of Students office, and the appropriate dean's and director's offices can provide information and referral on issues of sexual harassment.

ACADEMIC DISHONESTY

Academic integrity is a basic principle which requires that students take credit only for ideas and efforts that are their own. Cheating is defined as the submission of materials in assignments, exams, or other academic work which is based on sources prohibited by the faculty member. Cheating shall include but is not limited to situations in which the student:

1. Refers during an academic evaluation to material sources not authorized by the faculty member.
2. Utilizes devices during an academic evaluation that are not authorized by the faculty member.
3. Provides assistance to another student or receives assistance from another student during an academic evaluation in a manner not authorized by the faculty member.
4. Presents as his/her own the ideas or words of another person without customary and proper acknowledgment of sources.
5. Knowingly permits his/her words to be submitted by another person without the faculty member's permission.
6. Acts as a substitute or utilizes a substitute in any academic evaluation.
7. Fabricates data in support of laboratory or field work.
8. Possesses, buys, sells, obtains, or uses a copy of any materials intended to be used as an instrument of academic evaluation in advance of its administration.
9. Alters grade records of his/her own or another student's work in a course or a component of a course.

Procedures and Penalties for Academic Dishonesty:
In addition to any adverse academic action which may result from engaging in academically dishonest behavior, the University specifically reserves the right to address and sanction the conduct involved through the disciplinary procedures outlined in this catalog. Academic actions are reviewable under the Academic Appeals Policy contained in this catalog.

STUDENT COMPLAINT PROCEDURES

The purpose of the local student complaint procedure is to assist students who have complaints arising from conditions, practices, working relationships, decisions, actions, or inactions of the University of Alaska Anchorage and its employees. The procedure is designed to guide students in resolving a complaint. Students are encouraged to resolve complaints informally with the employees directly involved and to use the complaint procedure as a last resort. Should it be necessary, the student should process an appeal to the employee's supervisor if not resolved at the initial level. For more information, contact the Dean of Students office at 786-1214.

ALCOHOL POLICY

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

CAMPUS ALCHOHOL POLICY

The primary objectives of UAA's policy and procedures on alcoholic beverages are; (a) to promote responsible behavior and attitudes among all members of the University community, (b) to educate the university community concerning the use and effects of alcoholic beverages in order to promote responsible decision-making, (c) to help individuals experiencing difficulties associated with the use of alcohol. The Chancellor or the designee has the authority to approve events where alcoholic beverages will be granted on designated premises for private university sanctioned events and for a limited period of time. The sale of alcoholic beverages at University sanctioned events may not be approved by the Chancellor. Personal consumption, possession, or display of beer, wine or other alcoholic beverages is prohibited in University public places. The possession of kegs and other large quantities of alcoholic beverages will only be allowed by special permission of the Chancellor.

Any person who exhibits offensive behavior, misconduct, excessive noise or creates a public disturbance on property owned or supervised by the University will be subject to disciplinary and/or legal action.

RESIDENTIAL ALCHOHOL POLICY

The purpose of the residence halls is to provide a safe and convenient living/learning environment. A major goal of the learning experience is to promote individual choice and responsible behavior. The alcohol policy for the on-campus residence halls of the University of Alaska Anchorage shall permit those residents who are a minimum of 21 years of age to possess and consume alcoholic beverages solely for personal use in the privacy of their own apartment. All other restrictions on personal alcohol consumption, outlined under "Campus Policy" above, apply to resident students. A major concern is maintaining an educational environment that is conducive to learning. Noise and irresponsible or disturbing behavior that distracts from the learning environment will result in disciplinary and/or legal action.

The Residential Policy is subject to annual review by the Residence Hall Association and the University administration.

ALCOHOLICS ANONYMOUS

Individuals with alcohol problems may contact Alcoholics Anonymous. The Alcoholics Anonymous office is located at 52 West 8th Avenue, Room 101. Service is free; just call for help 24 hours a day at (907) 272-3212.

DRUG AND ALCOHOL COUNSELING RESOURCES

The National Institute on Drug Abuse Hotline (1-800-662-HELP) is an information and referral line that directs callers to treatment centers in the local community.

Complete information on Policies and Regulations of Control can be found in the Drug Free Schools pamphlet included with the registration information.

ATHLETIC PROGRAMS

Named the Seawolves, the University's athletic teams compete as members of the National Collegiate Athletic Association (NCAA) - Division I in ice hockey and Division II in all other sports. In addition, the Seawolves are members of the Western Collegiate Hockey Association for ice hockey, the Pacific West Conference for men's and women's basketball, women's volleyball and men's cross country running, and the Pacific Collegiate Swim Conference for men's swimming.

More than 125 student-athletes represent UAA in inter-collegiate competition in the following sports: basketball, volleyball, gymnastics and skiing for women; basketball, hockey, cross-country running, skiing and swimming for men. Seawolf teams regularly rank high in their respective conferences and divisions, and have produced many All-America performers. Any eligible, full-time UAA student may try out for a team by contacting the appropriate coach.

As part of its commitment to athletics, the University sponsors two prestigious tournaments: the Great Alaska Shootout men's basketball tournament and the Northern Lights Invitational women's basketball tournament. Each tournament annually features some of the best Division I teams in the nation. In addition, the University has served as the host for numerous conference tournaments, as well as several NCAA Championship events.

UAA athletes train and compete in excellent facilities. Headquarters for the Seawolf program is the multi-purpose Sports Center on the Anchorage campus. In addition to serving as training and competition home for most UAA regular-season events, the Sports Center houses all athletic staff offices. The Great Alaska Shootout, regular-season hockey games, and other special events are staged in the Sullivan Arena in mid-town Anchorage. Completed in 1983, the municipally owned structure can seat 6,000 fans. University ski teams train and compete on the challenging runs of Mount Alyeska, 40 miles south of the city, as well as on the 125 miles of well-groomed cross-country trails in the greater Anchorage area.



BOOKSTORE

The Bookstore stocks required and recommended textbooks, course materials, study aids, technical manuals, and reference books to assist students in the attainment of educational goals. These materials are complemented by a wide selection of fiction, nonfiction, and poetry books. Also offered are general supplies, art materials, magazines, gifts, calculators, class rings, graduation apparel, computer and typewriter rentals, and sports clothing featuring the University name and logo.

When purchasing textbooks, students are encouraged to bring their registration receipt so reference can be made to the department name, course number and section number on the receipt.

Textbooks in resalable condition may be returned for refund within ten (10) school days from the start of class. The original cash register receipt is required to show proof of purchase. The Bookstore does not provide a refund for books purchased in a prior semester. However, textbooks in good condition and scheduled for future use may be purchased by the Bookstore at a used book buy-back scheduled near the end of each semester.

The Bookstore is conveniently located near the center of the campus, adjacent to the Campus Center and Sports/PE Facility. Store hours are:

Walk-In Registration:
Open one half hour after registration starts; close one half hour after registration ends.

Fall and Spring Semesters:

Regular Hours:	Mon-Thurs	8:30-7:00
	Fri	8:30-5:00

Summer Session:
First week of each of the two sessions:

	Mon-Thurs	8:30-7:00
	Fri	8:30-5:00
Thereafter:		
	Mon-Thurs	9:00-6:00
	Fri	8:30-5:00

For further information, please call (907) 786-1151.

COMPUTING AND TECHNOLOGY SERVICES

University of Alaska students, staff, and faculty are eligible to use microcomputer and VAX computing resources at all University of Alaska campuses. University of Alaska Anchorage (UAA) Computing and Technology Services (CTS) provides Computer Operations and Customer Support for the UAA VAX computing facility (ACAD2) and three general access computing labs.

LABS

The CTS computing labs are: the Library Lab, located on the 2nd floor of the library, the Campus Center, located in room 222 of the Campus Center, and the Learning Resource Center (LRC) Lab, located in the Sally Monserud Building. The labs are available during regular building hours. The hours consultants work in the Library and LRC are posted at the labs each semester.

In the LRC lab, IBM-compatible, Apple II, and Macintosh microcomputers are available. Many of these computers are connected to the VAX system. IBM-compatible and Macintosh microcomputers, as well as plain terminals, are available in the Library lab and the Campus Center lab. Many of the microcomputers in these labs are also attached to the VAX system.

CTS student consultants are available at the Library and LRC facilities to help students, staff, and faculty become familiar with computing resources, and to help interpret error and system messages or answer computer related questions. Consultants cannot help write programs or tutor in the use of programming languages. CTS student consultants can be reached at 786-1889 (Library lab), 786-1732 (LRC lab), or by sending an electronic mail message to the VAX username AXHELP.

CTS also maintains a CD-ROM in the Library lab with PC-SIG public domain software for MS-DOS compatible computers. Copies of this shareware and freeware can be made at the lab. Disks are for sale at the bookstore.

VAX RESOURCES

The current VAX mainframe system is a DEC VAX 4500a running VAX/VMS with 128 megabytes of memory, 16 gigabytes of disk storage, tape drives, high speed and other printers.

Software available on the VAX includes: UACN Mail, VMS Mail and DEC MailWorks electronic mail systems, BASIC, FORTRAN, COBOL, Pascal, C, and APL programming languages, LISREL, SPSS, BMDP, SAS, and Minitab statistical software, DISSPLA, TELLAGRAF, and CUECHART graphics software, EDT and TPU editors, MACSYMA, TeX, TSP, and computer aided instruction programs. Other software can be accessed via the SETUP command. For more information on SETUP type HELP SETUP at the $ prompt on the VAX.

In order to have access to the VAX system, students, staff, and faculty must obtain a VAX username. Username application forms can be obtained and turned in at the Library or LRC labs. Current students need to show a registration receipt indicating that they have paid their tuition for the semester and some form of picture ID. A current student ID card is also acceptable as long as it displays the student ID number (or SSN). Faculty and staff need to show a current ID card and one piece of ID with their SSN on it to obtain a VAX computer username.

In addition to the on-campus facilities there is 24-hour VAX dial-up access available from both on- and off-campus. For 1200 baud modems the on-campus number is 3197 and off-campus is 562-0200. Modems with 2400 to 9600 baud capability can call 3200 on-campus and 562-0214 off-campus. Other communication settings needed are 8 data bits, 1 stop bit, no parity and full duplex. There are currently 32 dial-up access lines available.

VAX line printers are located in the LRC lab, in the Library lab, and just outside the Library entrance. These line printers are available to students, staff, and faculty for small to moderate sized print jobs. Large print jobs should be scheduled with Computer Operations by calling (907) 786-1884.

COMPUTER NETWORKS

The BITNET, USENET and Internet computer networks may be accessed via the UAA VAX. CTS manages local access and control of these networks. See the CTS handouts or contact a CTS student consultant for more information regarding the networks.

OTHER SERVICES

CTS presents short seminars on the VAX system free of charge to UAA students, staff, and faculty. Schedules are posted each semester. For information, or to register for seminars, please call (907) 786-1889.

CTS has a packet of 'quick start' handouts available for purchase at the bookstore on a variety of VAX and network related computer topics. VAX and third-party software manuals are also available at the Library lab. When logged onto the VAX, on-line documentation is available by using the HELP or EXPLAIN commands.

FINE AND PERFORMING ARTS FACILITIES

ARTS BUILDING

The Fine and Performing Arts programs are housed in a 94,000 square-foot building. Included in this innovative structure are studio, laboratory, performance, office, and rehearsal spaces. The facility provides dedicated space for creative work as well as general classrooms. Included in the Arts Building are spacious and well-lit studios for drawing, painting, sculpture, 3-D design, 2-D design, ceramics, printmaking, and photography. All reflect state-of-the-art design as well as beauty and practicality. Each studio is equipped with up-to-date tools and furnishings. In addition, there is ample space for displays of student and faculty work.

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

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

WENDY WILLIAMSON MEMORIAL AUDITORIUM AND LECTURE HALL

Built in 1975, the Williamson Auditorium provides UAA and the Anchorage community with a venue for lectures, performances, arts events and community gatherings. The auditorium seats 923 patrons and features sound and lighting systems, a large mainstage, backstage dressing rooms, scene shops, and a large lobby. For more information, call (907) 786-1560.

FOOD SERVICE

A variety of food services and menu options is provided in four campus dining areas: The Pub, Campus Center Cafeteria, and Cuddy Center Cafeteria, and the new Cuddy Center Dining Room. The Campus Food Service also caters student special events and campus activities.



UNIVERSITY POLICE DEPARTMENT

The University Police Department is present to provide safe access to the campus and to prevent disruptive behavior. It employs uniformed police officers, dispatchers, and call team officers to accomplish this goal.

Students, staff, faculty, and visitors should contact the University Police Department to report all crimes and emergencies on campus, as well as seek help with the following:

Disabled Vehicles
Emergency Messages
Fire and Safety Issues
First Aid/CPR
Safety Escorts
Traffic Problems

CAMPUS PARKING

Campus parking lots have space for more than 3,000 vehicles. However, motorists attempting to park during preferred class times may have to do so across campus and walk the additional distance. All campus lots are paved, lighted, and patrolled. Vehicles parked in restricted areas without proper decal or permit are ticketed and may be impounded at a cost of $50 or more to the owner. Campus parking tickets may be paid at the University Police Department Office in the Eugene Short Building from 8am to 6pm, Monday through Thursday, and from 8am to 5pm, Friday. Failure to pay parking tickets may result in withholding of transcripts or grades, or impounding of a vehicle. Uniform Traffic Citations are issued for moving violations and may be paid in District Court, downtown Anchorage.

EMERGENCIES AND FIRST AID

Emergency messages may be transmitted and first aid treatment received by contacting the University Police Department (907) 786-1120 in the Eugene Short Building. Please report unsafe conditions such as those encountered during winter and all on-campus injuries to the University Police Department.

HANDICAP PARKING

Disabled students, faculty, staff, and visitors may be eligible for special parking spaces available in each lot on the UAA campus. These parking spaces display distinctive blue-and-white logos. They are reserved for persons with physical impairments who receive permission to park in these spaces from the Department of Motor Vehicles, State of Alaska. Motorists who park illegally in disabled spaces will be ticketed. Vehicles may also be impounded at owner expense.

LOST AND FOUND

A centralized lost-and-found property storage is maintained in the University Police Department. To check for a lost item or to recover found property, contact the University Police Department, Eugene Short Building at (907) 786-1120.

SMOKE-FREE ENVIRONMENT

University of Alaska Anchorage is committed to providing faculty, staff, and students with a safe and healthy environment for work and learning. Smoking and secondhand smoke have been found to pose definite health hazards. As a result, smoking is not permitted in University facilities.

All University of Alaska Anchorage facilities are covered by this policy: Anchorage, Adak, Kenai Peninsula College, Kodiak College, and Mat-Su College. Coverage includes facilities owned, leased, or rented by the University or under control of the University, as well as all University vehicles.

As with any policy or regulation, violation of the smoke-free environment policy by staff, faculty, or students may result in disciplinary action. Campus buildings will be posted with NO SMOKING signs, notifying all visitors of the smoke-free environment of the University of Alaska Anchorage.

SPEED LIMITS

Unless otherwise posted, the campus speed limit is 20 miles per hour. Radar and marked patrol cars are used to ensure safety and compliance.

RESIDENCE LIFE

UAA can accommodate 375 single, full-time students in on-campus residential apartments. Each apartment houses four students who share bath, kitchen, living, and dining room facilities. The apartments are fully furnished. **Space in these residence halls is very limited so it is best to apply early.** Applications are accepted on a rolling basis for fall and spring semesters. Application for the residence halls during summer sessions begins March 1st and ends May 1st each year.

Residence Life provides a full range of programs and activities for residential students ranging from academic support workshops, health education, and awareness of campus safety to outdoor activities and social interaction. Residents are offered opportunities for involvement in residence hall government through the Residence Hall Association (RHA) and other student interest groups.

STUDENT HEALTH CENTER

The Student Health Center provides educational, preventative, diagnostic and treatment services for health problems. The Center is staffed by advanced nurse practitioners, an administrative assistant, and a consulting physician. The primary care benefits that you receive by paying the student health fee include routine office care or outpatient services including family planning and immunizations. Laboratory services, limited medications, and health care supplies are available to participating students at a reduced cost. The Student Health Center is located in the Business Education Building, (907) 786-4040.

STUDENT ACCIDENT AND ILLNESS INSURANCE

A group accident and illness plan is available for currently enrolled UAA students. The plan provides extensive benefits at a reasonable cost to students. For an additional premium, dependents and major medical expenses may be covered. Students can obtain more information through the Student Health Center.

In addition, students have available a form of supplemental accident insurance for field trips, practicums, and other special UAA events. The cost of this insurance is very reasonable and can be assumed by the student or a department. It is important to note that this insurance is in excess of other insurance covering the student.

Under Alaska state law, all owners and drivers of vehicles must maintain adequate insurance coverage. Students are responsible for arranging their own auto insurance. Student vehicles are not covered under UAA's auto insurance plan.

Personal property insurance is also the responsibility of each student.

STUDENT LEADERSHIP OFFICE

The Student Leadership Office coordinates leadership training for student leaders involved with student government, clubs, and other leadership positions. Students are assisted in understanding the role and benefits of leadership involvement at the University, understanding University policies and procedures, provided technical support for student events, and advised in representing their interests effectively.

CLUB COUNCIL

The Club Council's purpose is to recognize new clubs, appropriately fund and support individual clubs. Each club has one representative on the Club Council.

The University of Alaska Anchorage has over 65 clubs and encourages student participation in them. Students may form special interest, ethnic, academic, sports, or social clubs. Clubs provide a service to the University and the community, as well as contribute to students' social and educational development.

Students who wish to join an existing club or begin a new club may contact the Student Leadership Office at (907)786-1371.



LEADERSHIP HONORS

Individual leadership is publicly recognized with Leadership Honors. Students who have significantly contributed to the University of Alaska Anchorage while maintaining academic excellence are encouraged to apply. Academic excellence is demonstrated by maintaining a minimum cumulative 3.0 GPA. Other criteria include leadership involvement for four semesters if receiving a bachelor's degree and two semesters if receiving other certificates and degrees. Each student receiving Leadership Honors is recognized by a crimson honor cord at graduation and notation in the commencement program and on transcripts. For more information, please contact Student Leadership Office at (907) 786-1371.

STUDENT GOVERNMENT

The Union of Students of the University of Alaska Anchorage (USUAA) is the official representative body of the students. Every student who pays the Student Government Fee is a member. The purpose of USUAA is to represent the student body in issues affecting students on the campus whether they involve current world issues, the administration, Board of Regents, community, or legislature. The USUAA allocates the Student Government Fee to provide activities, resources, and services to students. USUAA holds elections each fall and spring semester to fill student leadership positions.

STUDENT UNION PROGRAMS AND SERVICES OFFICE

The Student Union Programs and Services Office is the central contact point for hundreds of exciting programs, activities, and leadership opportunities.

The office provides student social, recreational and educational activities in addition to advising the student radio station, student newspaper, concert program, Speech and Debate Program, Bartlett Lecture Series, Campus Cinema, and Student Showcase. Students are hired to manage and coordinate programs whenever possible.

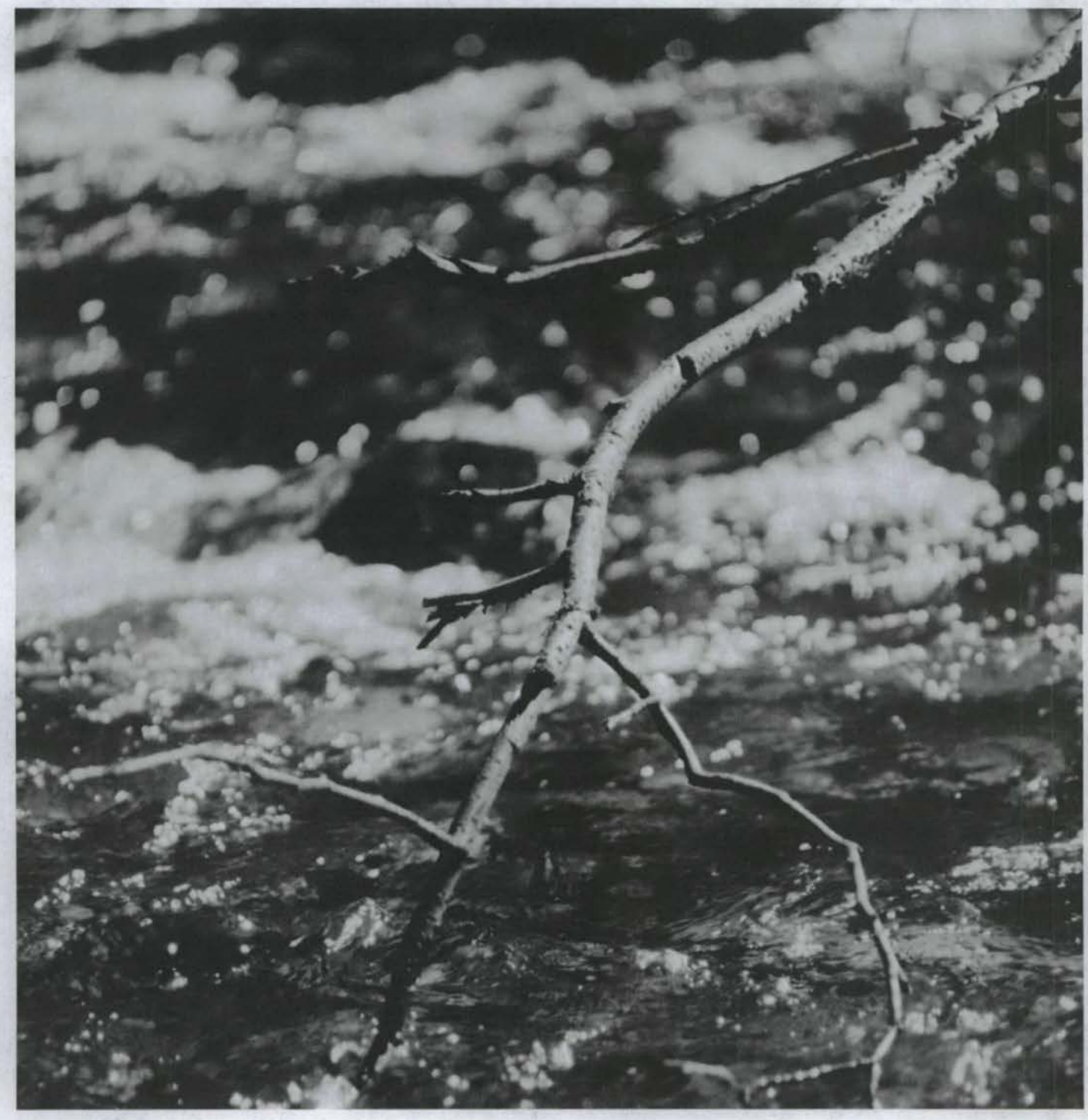
The Campus Center houses the Student Union Programs and Services Office and is the hub of campus extracurricular activities. It includes an information desk, lounge, food service, study room, computer rooms, video games, an art gallery, banking services, the student government office and the Office of the Dean of Students. The information desk provides student identification card services, Carrs Tix and University tickets, outdoor recreation equipment rental services, and many other services.

SPEECH AND DEBATE

The award-winning UAA Speech and Debate Team provides students the opportunity to gain experience in writing and speaking in a competitive setting. The work involved in research, writing, and practice is rigorous but satisfying and rewarding.

STUDENT SHOWCASE

The Student Showcase provides students with a chance to share learning through a conference-style program in which they present term papers, short stories, poems, and projects. Award-winning papers are published in the Student Showcase Journal.



CHAPTER 6

COMMUNITY AND CONTINUING EDUCATION

Registration
Adult Basic Education
Chugiak-Eagle River Campus
Conferences and Institutes
Continuing and Professional Education
Cooperative Education
Corrections Education Services
Developmental Education
Distance Education Services
Learning Resources Center
Military Education Services
North Pacific Fisheries Observer Training Center
Physical, Outdoor and Health Education
Summer Sessions

COMMUNITY AND CONTINUING EDUCATION

The College of Community and Continuing Education provides instructional programs, activities, and curricula that extend the resources of the university to the lifelong learning needs of the community. The College of Community and Continuing Education serves the university and the people of Alaska by:

- coordinating with units of the University of Alaska to provide courses to degree-seeking students within identified populations at off-campus locations or within time frames designed to make education more accessible;
- ensuring the delivery of quality continuing education to professionals and the community;
- providing instruction and services for under-prepared and at-risk students;
- providing innovative instructional formats and support services in the form of course delivery systems, student services, equipment, facilities, and expertise to faculty, students and the public; and
- providing cultural and community services programs.

The college's strength originates from serving a diverse population in a manner which encourages all students to develop their unique skills and talents. The college's stature is derived from a dedication to quality of service, equity, accountability to all constituents, and efficiency of operation.

REGISTRATION

The College of Community and Continuing Education offers ongoing registration. Students may register as soon as classes are announced up until the first day of class. Register weekdays in the Diplomacy Building at the corner of Tudor Rd. and Tudor Centre Dr., Suite 501, between 8:30 am and 4:30 pm (907) 786-6721, the DownTown Center at 7th Avenue and A Street (907) 279-0249, or the Chugiak-Eagle River Campus at the Eagle Center (907) 694-3313.

ADULT BASIC EDUCATION

Adult Basic Education classes, as well as GED certificate instruction and English-as-a-Second Language classes are offered at the Adult Learning Center (ALC), located at 403 W. Northern Lights Blvd. Classes meet during the morning, afternoon, and evening. There is no cost other than a testing fee for GED students. Students 18 years and older who are not enrolled in high school may attend. Under special conditions, students 17 and under can enroll. The Center is a focus for those in the Anchorage area in need of basic educational skills, and provides a second chance for adults to complete a secondary education, or to upgrade math, reading, writing, science, social studies, and life coping skills. For more information, please call (907) 276-6007.

CHUGIAK-EAGLE RIVER CAMPUS

Located in the community of Eagle River ten miles north of Anchorage, this extended site focuses on delivering a variety of general education and degree-oriented courses in addition to special topics such as tourism and travel study courses to residents of the Chugiak-Eagle River community. In addition to the many classes which utilize Chugiak High School, facilities located at the Eagle Center include six classrooms, two DOS-based computer labs, registration and administrative offices. For more information, call (907) 694-3313.

CONFERENCES AND INSTITUTES

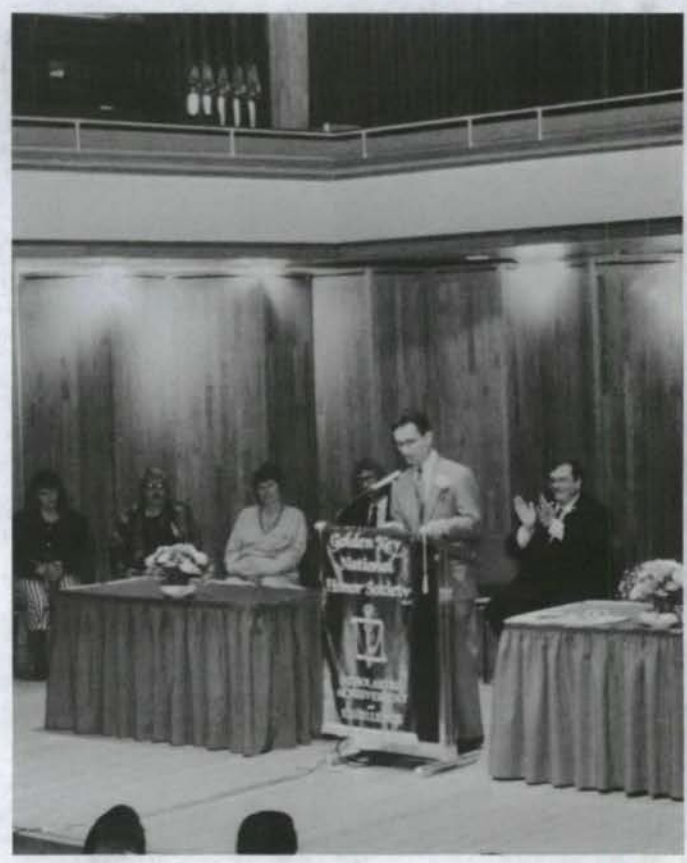
Conferences and Institutes serves the University's schools, colleges, and centers by providing a full range of services to assist in the development and implementation of conferences, institutes, seminars, and symposiums. Services include program development, logistical support and arrangements, preparation and production of announcements, programs, and instructional materials, coordination of food service, site selection and negotiation, on-site management, and financial management, evaluation and follow-up. For information, call (907) 786-6730.

CONTINUING AND PROFESSIONAL EDUCATION

Continuing and Professional Education offers programs responsive to the lifelong learning requirements of professionals who hold licenses, certificates or degrees, as well as courses to train new para-professionals. Courses are offered in the areas of continuing teacher education, adult education, health care assistant training, and staff development. Academic credit and Continuing Education Unit (CEU) offerings can be arranged to enhance a given profession or occupation. Programs are developed through partnerships with professionals in the community, public and private agencies and organizations, and academic faculty. Course content, mode of delivery, time, location, instructor, and facility needs are arranged to meet the requirements of the group. Professional development courses (500 level) and courses offered for CEUs are not applicable to any degree.

In addition, non-credit and CEU community education classes are offered in the areas of Alaska Native Studies, English-as-a-Second Language, Exploring Arts and Humanities, Homemaking Enhancement, Language Skills, Personal Growth and Development, Society, Culture and Philosophy, Science and Technology, Tourism, and Women, Men and Family Studies. For further information, please call (907) 786-6750.

Computer program classes offered at the UAA DownTown Center, located at 7th Avenue and A Street, include a wide range of classes designed for the beginner, intermediate and professional user. In addition, a non-transcripted Certificate in Computer Application Skills is offered encompassing courses which are designed to give participants important skills and knowledge for today's marketplace. The certificate program provides an opportunity to take a series of



non-credit, regularly scheduled computer classes on either DOS or Macintosh operating systems. The center maintains three IBM and Macintosh computer labs for instruction. For more information, call (907) 279-0249.

COOPERATIVE EDUCATION

Cooperative Education is a unique form of education which integrates classroom study with paid, planned, and supervised work experiences in the public and private sectors. It allows students to acquire essential practical skills by being exposed to the reality of the world of work beyond the boundaries of the campus, enhancing their self-confidence and career direction. For further information, please call (907) 786-6720.

CORRECTIONS EDUCATION SERVICES

Corrections Education Services offers courses leading to the Business Computer Information Systems AAS degree at six correctional sites throughout the state. In addition to classes on location, some LIVENET satellite-delivered telecourses are offered. The coordinating office is located on the Chugiak/Eagle River campus. For more information, call (907) 694-3313.

DEVELOPMENTAL EDUCATION

Developmental Education offers a variety of programs for the non-traditional and at-risk student at UAA. Core traditional classes are taught in non-traditional ways, such as self-paced contract learning, computer-assisted instruction, mini courses, modular classes and interdisciplinary studies. SmartStart, a team-taught course in basic math, reading, writing and survival skills, offers classes each semester. Guided study courses such as Math 054 and Math 055 include lectures, lab, tutors, videotapes, audiotapes and workshops. Developmental Education staff members are also able to answer a variety of student questions about the Adult Learning Center, Advising and Counseling services, the Financial Aid Office, the Learning Center, the Reading/Writing Center, and UAA instructional labs. For more information, stop by the Developmental Education office in the Learning Resource Center (Sally Monserud Building), or call (907) 786-1992.

DISTANCE EDUCATION SERVICES

Distance Education Services offers taped telecourses, live televised classes (LIVENET), facilitation of satellite-delivered videoconferences, coordination of UAA audioconferencing, programming of Channel 42 (the UAA television station carried on Prime Cable of Alaska), and assists departments in delivering courses to students via distance delivery. For more information, please call (907) 786-1626.

- Teleconferences - live interactive meetings or seminars conducted among people at different locations. The meeting sites are linked by satellite-delivered television signals. UAA has joined with the National University Teleconference Network (NUTN), PBS Adult Learning Satellite Service, and other leading training agencies to offer coverage of a wide range of topics presented by nationally recognized leaders.

- Live Teleclasses - carried via LIVENET (UAA's Live Interactive Educational Network), which allows students at many locations throughout Alaska to actively participate in live teleclasses originating on a university campus. Students at remote locations are connected to the campus by satellite delivered one-way video and two-way audio. Students use a toll-free phone line to call the campus classroom to ask questions of the televised instructor, or interact with fellow students, both classroom-based and at a distance. Live teleclasses are carried on Alascom's Aurora II satellite for out-of-Anchorage students, and on Prime Cable Channel 42 in Anchorage.

- Telecourses - college-level credit courses offered in televised format. Courses can be viewed on Channel 7/KAKM (Anchorage PBS), on Channel 42/Anchorage Telecampus (Prime Cable of Alaska), or on tape at video tape location sites. Telecourses include video lessons, a textbook, a study-guide, learning exercises, and exams. Most coursework can be completed in the convenience of a student's home. Students come to campus for orientation, discussion/lab sessions, and examinations. Students communicate with telecourse faculty via telephone, office appointments, computer, or FAX.

LEARNING RESOURCES CENTER

The Learning Resources Center (LRC) offers students a relaxed and friendly atmosphere in which to study, read, prepare for classes, or receive supplemental assistance in academic courses and college survival skills. The LRC provides free peer tutoring in mathematics, and computer and audio-visual materials, as well as copier use, coffee and tea.

Six academic centers and labs are featured:

- Computer Laboratory
- Language Laboratory
- Mathematics Laboratory
- Group Study Area
- Quiet Study Area
- Instructor Reserve

Many faculty members place materials on Instructor Reserve for students attending their classes. These materials provide additional course information and aid students in reviewing concepts presented in class. For more information, call (907) 786-1155.

MILITARY EDUCATION SERVICES

Postsecondary education programs for active duty military personnel, dependents of active duty personnel, Department of Defense employees, and civilians at military bases are offered throughout the state. Major military bases and corresponding military education centers include:

- Fort Richardson Army Post and Elmendorf Air Force Base in Anchorage
- Eielson Air Force Base and Fort Wainwright Army Post outside of Fairbanks
- Fort Greely Army Post outside of Delta Junction

Educational programs are also provided at Adak Naval Air Station, Eareckson/Shemya Air Force Base, the US Navy Radar site at Amchitka, the US Coast Guard LORAN Station at Attu, and Clear Air Force Station. Coursework ranges from classes in support of an Associate of Arts to a Master in Public Administration. Enlisted personnel benefit from UAA's membership in SOCAD and BDFS networks: training and experience are evaluated for applicable credit. Classes are delivered via traditional classroom instruction, videotape course delivery, and live interactive satellite delivery (LIVENET). For more information, call (907) 753-7119.

SOUTHCENTRAL REGION MILITARY EDUCATION SERVICES

- Elmendorf AFB

On Elmendorf Air Force Base, five miles north of Anchorage, the education center is housed in Building 21-590, Lemon Avenue. Degree programs offered on base include the Associate of Arts, the Bachelor of Arts in Interdisciplinary Studies, the Bachelor of Science in Technology, the Master of Arts in Interdisciplinary Studies, and the Master of Public Administration. Day, evening and weekend classes are taught during regular 15-week semesters as well as 8-week sessions. For more information, call (907) 753-0204.

- Fort Richardson

Situated seven miles northeast of Anchorage on Fort Richardson Army Post, the education center is located in Building 658 on 5th Street. Degree programs include the Associate of Arts, the Bachelor of Arts in Interdisciplinary Studies, the Bachelor of Science in Technology, the Master of Arts in Interdisciplinary Studies, and the

Master of Public Administration. Day, evening and weekend classes are taught during regular 15-week semesters as well as 8-week sessions. For more information, call (907) 428-1228.

WESTERN ALEUTIAN REGION MILITARY EDUCATION SERVICES

- Adak

The Adak Education Center serves approximately 1,000 active duty military personnel who live on the Aleutian base 1,200 miles west of Anchorage. Military and civilian personnel take a variety of courses in support of the Associate of Arts degree. In addition, the University of Alaska Southeast offers a Bachelor of Business Administration and a Master of Public Administration. For more information, call (907) 592-3253.

- Amchitka

Military Education Services offers telecourses through Distance Education to the community residing at the US Navy Radar Site at Amchitka. For more information, call (907) 592-3253.

- Attu

Military Education Services offers telecourses through Distance Education to the community residing at the US Coast Guard LORAN Station at Attu. For more information, call (907) 592-3253.

- Eareckson/Shemya

The Eareckson/Shemya Education Center serves a community of active duty Air Force and civilian personnel who live on the Aleutian military base 1,600 miles west of Anchorage. The center offers a variety of academic courses with an emphasis on general education. Military and civilian personnel take a variety of courses in support of the Associate of Arts degree. For more information, call (907) 592-3253.



NORTHERN REGION MILITARY EDUCATION SERVICES

- Eielson AFB

Eielson Air Force Base, some 30 miles east of Fairbanks, maintains an education center in the Education Services Building. Program offerings include coursework toward an Associate of Arts, a Bachelor of Science in Technology, and a Bachelor of Arts in Interdisciplinary Studies. In addition, the Univeristy of Alaska Southeast offers a Bachelor of Business Administration and a Master of Public Administration. For more information, call 907-372-3484.

- Fort Greely

Fort Greely Army Post, located in Delta Junction, offers courses toward an Associate of Arts, a Bachelor of Science in Technology, and a Bachelor of Arts in Interdisciplinary Studies. In addition, the University of Alaska Southeast offers a Bachelor of Business Administraion and a Master of Public Administration. For more information, call (907) 869-3070.

- Fort Wainwright

The Fort Wainwright Education Center is located in Building 2110 on the Ft. Wainwright Army Post east of Fairbanks. The center provides coursework toward an Associate of Arts, a Bachelor of Science in Technology, and a Bachelor of Arts in Interdisciplinary Studies. In addition, the University of Alaska Southeast offers a Bachelor of Business Administration and a Masters of Public Administration. For more information, call (907) 353-6395.

NORTH PACIFIC FISHERIES OBSERVER TRAINING CENTER

The North Pacific Fisheries Observer Training Program, located at 211 W. 7th Avenue, operates under a federal grant, with additional support from the Municipality of Anchorage and the College of Continuing Education. Experienced and skilled trainers offer classes in groundfish, crab and scallop observation, relying on the largest observer fish collection in Alaska located at the center. In conjunction with the Alaska Marine Safety Education Association, the center also offers a commercial fishermen's safety training course. For more information, call (907) 272-2704.

PHYSICAL, OUTDOOR AND HEALTH EDUCATION

Outdoor education provides non-credit and credit classes in backpacking, biking, canoeing, rock and ice climbing, gun safety, leadership, mountaineering, natural history, sea kayaking, x-country skiing, and survival and wilderness first aid. UAA is one of fourteen universities nationwide accredited to offer the National Standard Program in Wilderness Leadership. In addition to participating in the ElderHostel program, the department conducts the annual statewide Alaska Outdoor Education Conference, and regularly offers Wilderness Emergency Medical Technician courses certified by the National Association of Search and Rescue. For more information, call (907) 786-1468.

Physical education provides the community with an opportunity for rounding out the whole person through physical fitness and recreation. Emphasis is on acquisition of skills and habits for a lifetime of wellness. Over sixty credit courses ensure a class for every interest and skill level. Course topics include aerobics, group sports, lifeguarding, martial and Eastern arts, racquet sports, skating, swimming/aquatics, and weight training. For more information, call (907) 786-1468.

SUMMER SESSIONS

The Summer Sessions department coordinates the summer semester offerings for UAA. In addition to core curriculum and popular department courses, unique programs are offered, including the Computer Wilderness Camp and the Summer Theatre Conservatory for children, visiting professors offering special seminars in adult education and other disciplines, and anthropology, geology and biology field classes. For more information, call (907) 786-6740.

CHAPTER 7

CENTERS AND INSTITUTES

Center for Economic Education
Center for Human Development
Environment and Natural Resources Institute
Institute for Circumpolar Health Studies
Institute of Social and Economic Research
Justice Center
The Alaska Center for International Business/World Trade Center Alaska
The Center for Alcohol and Addiction Studies
University of Alaska Center for Economic Development
University of Alaska Small Business Development Center

CENTER FOR ECONOMIC EDUCATION

The Center for Economic Education is jointly sponsored by the Alaska Council on Economic Education and the University of Alaska Anchorage. The goal of the center is to promote and improve the teaching of economics in Alaska's elementary education classes and to provide workshops for educators in the Anchorage and southcentral Alaska area. It also provides educational materials and other assistance to individuals and school districts.

CENTER FOR HUMAN DEVELOPMENT: UNIVERSITY AFFILIATED PROGRAM

The Center for Human Development: University Affiliated Program (CHP:UAF) is the recipient of funds allocated for assistance in the area of developmental disabilities to the entire State of Alaska. Its goals must be Statewide and fit the unique services which are evolving in Alaska. These include: Alaska Youth Initiative; Alaska Supported Employment Initiative; Alaska Individualized Services System; Alaska's Evolving Developmental Pediatrics Coordination System, Full Inclusion, and Transition to Adulthood Special Education Plans.

The University Affiliated Program activities required by the Administration on Developmental Disabilities include:

Interdisciplinary Training in educating and training of consumers and their families and friends, inservice training of service personnel, educating undergraduate students, pre-service preparation of graduate students, and providing continuing education for professionals.

Technical Assistance in retrieving needed information from the professional literature, consulting on high-risk and complex problems, arranging for specialty consultation expertise, and helping agencies individualize their services.

Dissemination of Findings in retrieving needed information from the professional literature, assembling descriptions and products of work for service providers, and publishing and presenting work to professional peers.

Also required is demonstration of Exemplary Services in integrated settings to persons experiencing a developmental disability and their families which CHD:UAP accomplishes through collaborative arrangements with service providers.

ENVIRONMENT AND NATURAL RESOURCES INSTITUTE

The Environment and Natural Resources Institute (ENRI) is the natural science component of UAA's School of Public Affairs. It traces its history to 1972, when the Alaska legislature established the Arctic Environmental Information and Data Center (AEIDC) within the University as a referral and applied research center focusing on Alaska's natural resources. Today, ENRI not only incorporates AEIDC, but also the Alaska State Climate Center (ASCC) and the Alaska Natural Heritage Program (AKNHP). It provides hands-on education opportunities and a unique range of services including applied science investigations, environmental and natural resource policy analyses, information transfer, and interpretation and communication of scientific knowledge. ENRI focuses on developing and testing innovative methods of assessing environmental risks and consequences of proposed actions. Its chief goal is to support decision making and policy formulation concerning natural resources and environmental issues during the conceptualization or predevelopment stage. The Institute fosters a holistic and interdisciplinary research approach that leads to frequent collaboration among its own scientists and others throughout the University system; students are involved whenever possible.

Each of ENRI's major program components compiles specialized environmental and natural resources data and information and provides access to it to the public and private sectors. AEIDC houses unpublished and difficult-to-find literature that focuses on environmental and natural resources topics, but it also includes some publications of general historical interest to northern researchers. Its collections encompass 11,500 government publications and microforms, 8,800 bound volumes, and 95 periodical and newsletter titles. ASCC provides information and data on Alaska's climatology and meteorology, and an ENRI scientist serves as the Alaska state climatologist. AKNHP focuses on developing and maintaining a dynamic biological data base on rare and significant Alaska species, habitats, communities, and ecosystems. The information it provides is useful in land development planning, permitting, environmental review, resource management, conservation, applied scientific research, endangered species review, and education.

INSTITUTE FOR CIRCUMPOLAR HEALTH STUDIES

The Institute for Circumpolar Health Studies (ICHS) was established at UAA by the Legislature in 1988 as a step toward finding solutions to the common health problems of Alaskans and inhabitants of other circumpolar regions. The Institute serves as a headquarters for circumpolar health studies, providing information, coordination, research, and training for the medical and health sciences community. The role of the Institute is to coordinate and stimulate research in practical health problems which affect Alaska and the Circumpolar North.

INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH

The Institute of Social and Economic Research (ISER) is a public policy and social science research institute, applying multidisciplinary skills to the analysis of social and economic change in Alaska and northern regions. Since 1961 the institute has investigated virtually every major public policy issue in Alaska, including the effects of natural resource development, the fiscal policies of state and local governments, the transportation and energy requirements of developing regions, and the effects of change on Alaska's Native people and on the quality of life in Alaska. ISER is affiliated with the School of Public Affairs, and faculty from the school and other parts of the university take part in ISER research projects. The institute provides opportunities for student involvement through internships and research assistantships.

JUSTICE CENTER

The Justice Center contributes to the improvement of Justice administration in Alaska through research, education, and community services. Formed in 1975, the Center's mission is to improve understanding of the justice system throughout rural and urban Alaska. Center staff conduct research in crime, law, policing, and the administration of civil and criminal justice. The Center is responsible for the collection of University of Alaska crime and arrest statistics, and it produces and distributes throughout the state the Alaska Justice Forum, which presents studies and explores issues related to crime and administration of justice. The Justice Center includes the Alaska Justice Statistical Analysis Unit, a program funded by the Bureau of Justice Statistics, U.S. Department of Justice.

THE ALASKA CENTER FOR INTERNATIONAL BUSINESS/WORLD TRADE CENTER ALASKA

The Alaska Center for International Business (ACIB) was created in 1984 by the University of Alaska Board of Regents to facilitate the development of sound business and economic relations with nations of the Asia-Pacific region and other nations of the world, and to help Alaska to diversify its economy and expand its economic base through international trade.

The major focus of ACIB is applied research. ACIB faculty and staff examine on a continuing basis the dynamics of markets and marketing in the international arena. The Center conducts research on market conditions that affect sales of Alaska products and that suggest opportunities for new products and services. Examples of recent

applied research projects include market indicators for Alaska salmon, product specifications in Asian markets for Alaska lumber, new markets for Alaska seafood, and marketing strategies for Alaska reindeer horn. Public policy implications and recommendations often flow from these research projects.

ACIB fosters instruction in an international curriculum designed to make Alaskan businesses more competitive in world markets. Credit classes are taught by ACIB faculty primarily through the University of Alaska Anchorage. Special classes are conducted and materials developed for Alaska high school teachers. An area emphasis is provided through the Alaska-Japan Studies Project. And seminars on trade and how to conduct international business topics are organized for business people and government officials. Periodic Pacific Rim fisheries conferences are held in Alaska and abroad for the purpose of coordinating international fisheries policy and exploring new business opportunities. ACIB offers occasional study tours to countries such as Japan, China, and Russia.

ACIB maintains one of the nation's largest computerized trade data bases. The information system focuses primarily on natural resources, but also contains data on trade flows, exchange rates, and specialized import and export data from Japan, Europe, and nations involved in NAFTA. The Center publishes research reports, an annual Alaska trade summary, periodic summaries of Alaska's primary exports, and newsletters such as the *Pacific Rim Fisheries Update* and the *Russian Far East News*. In addition to operating a trade resource library, the center also produces award-winning television and radio programs as part of its public service mandate.

ACIB operates the World Trade Center Alaska (WTCA), a membership organization designed to facilitate business transactions by networking Alaska members with members throughout the world. WTCA provides trade leads and other information through its publications--*Cross Currents* and *Trade Winds*. WTCA manages a grant from the U.S. Department of Commerce to help businesses in the U.S. Northwest and Alaska find opportunities in the Russian Far East.

ACIB also operates the American Russian Center (ARC), a project funded by the U.S. Agency for International Development. ARC has four main areas of emphasis: to provide technical assistance to the Russian Far East; to train Russian small business people in the Russian Far East; to increase educational exchanges between Alaska and the Russian Far East. ARC operates offices in Yuzhno-Sakhalin and Yakutsk. More sites are expected in the future.

ACIB provides opportunities for undergraduate and graduate students in each of its program areas. Synergy between ACIB, WTCA, and ARC provide unique opportunities for research and for gaining practical experience in the global economy. Students are encouraged to contact ACIB for more information.

THE CENTER FOR ALCOHOL AND ADDICTION STUDIES

The Center for Alcohol and Addiction Studies addresses the continuing need for research, education and training in the area of addictions in Alaska. The Center's educational programs are designed to help students understand the nature of addictive substances and addictive disorders, treatment approaches, prevention concepts and methods, program evaluation, and contemporary public policy issues and concerns about addictive disorders. The coursework in Addiction Studies has been approved by the Alcohol and Drug Abuse Counselor Certification Review Board.

The Center's research programs seek to expand the body of knowledge on the nature and scope of alcohol and drug abuse problems in Alaska, and their relation to other public health problems.

The Center also addresses the continuing need for skill development and training by professionals working in health science disciplines or health-related fields. The unique Alaskan environment requires that human service professionals acquire both crosscultural and cross-discipline experiences. Part of the mission of the Center is to provide education and training for professionals and students in health and health-related fields.

The Center conducts a wide range of public service activities that include conferences and special workshops for substance abuse and health professionals, and for the general public.

UNIVERSITY OF ALASKA CENTER FOR ECONOMIC DEVELOPMENT

The mission of the University of Alaska Center for Economic Development is to provide technical assistance to private non-profit and government-related agencies engaged in economic development. The Center focuses on regional problems and opportunities. It will utilize the University's unique research capabilities and expertise to help address the technical assistance and information needs of various economic development entities. The Center coordinates its efforts with the Alaska Department of Commerce and Economic Development and the Alaska Department of Community and Regional Affairs.

UNIVERSITY OF ALASKA SMALL BUSINESS DEVELOPMENT CENTER

The University of Alaska Small Business Development Center (UASBDC) is a cooperative program of the US Small Business Administration, the Alaska Division of Economic Devlopment and the University of Alaska. The objectives of the SBDC programs are to leverage federal dollars and resources with those of the state, academic community and private sector to strengthen small businesses; to contribute to the economic growth of the state; and to create a broader based delivery system to the small business community. The primary emphasis of the SBDC program is on in-depth, quality business counseling and training. Small businesses are assisted in the areas of management, marketing, sales, finance, accounting and other disciplines required for small business growth, expansion and innovation. The SBDC has four regional centers located in Anchorage, Fairbanks, Juneau, and Wasilla (serving the Matanuska-Susitna area), in addition to a rural outreach program.

Other business assistance programs provide counseling and workshop training in government contracting and an electronic bid matching sytem for clients interested in being "matched" with Commerce Business Daily Solicitations.

All of SBDC's business assistance programs encourage the involvement of University faculty and all provide internship opportunities for University of Alaska students.





CHAPTER 8

ACADEMIC POLICIES

Academic Appeals
Academic Petition
Academic Standing
Access to Student Records
Age Limit of Credits
Cheating
Class Attendance
Class Standing
Corequisites
Commencement
Correspondence Study
Credit
Directed Study
Faculty-Initiated Withdrawals
Full-Time/Part-Time Status
GPA and Student Activities
Grading
Graduation Application
Graduation with Honors
Honors List
Independent Study
Loss of Baccalaureate Degree-Seeking Status
Non-Traditional Credit
Prerequisites
Recommendations
Reinstatement
Removal From a Major Program
Repeating Courses

ACADEMIC APPEALS

Students shall have the right to appeal academic actions. A written request for appeal must be made to the dean/director of the appropriate school or college not later than fifteen (15) working days following notification of the action under review. The request shall set forth clearly and concisely the action to be reviewed, the reason the student believes the action was inappropriate, and the corrective action the student seeks.

As a general rule, the dean/director will not overturn the action of a faculty member or committee unless it is shown to be arbitrary and capricious, clearly erroneous, or based on unlawful discrimination.

Each student requesting review of an academic action shall be entitled to address the dean/director directly if desired before the decision is rendered by the dean/director. Whenever possible, the dean/director's decision will be rendered and conveyed to the student in writing within five (5) days of receipt of the student's request for review. Until receipt of the dean/director's decision, the student will be permitted to attend classes unless such attendance poses a danger to the student or others. There shall be no further appeal of academic matters within the University.

For removal from a major program or loss of baccalaureate degree-seeking status only, the decision of the dean/director shall be appealable to the Vice Chancellor for Academic Affairs. The student must submit a written appeal to the Vice Chancellor within three (3) days of receipt of the dean/director's decision. Whenever possible, the Vice Chancellor's decision shall be rendered and conveyed to the student within five (5) days. There shall be no further appeal within the University.

These two processes for academic appeal to the Dean and to the Vice Chancellor for Academic Affairs constitute the final decision of the University of Alaska Anchorage on these matters. If a student wishes to seek judicial review of this administrative agency decision, he/she must file an appeal with the superior court for the state of Alaska within 30 days of the decision in accordance with Alaska Appellate Rule 602 (a) (2).

ACADEMIC PETITION

Deviations from academic policies or requirements must be approved by academic petition. Petition forms may be obtained from the school or college, or from Enrollment Services.

Final authority to deny or approve petitions pertaining to school/college requirements rests with the Dean or Director of the school or college. Petitions pertaining to general education requirements and/or general university requirements must, in addition, be processed through the Office of Academic Affairs, with final authority to deny or approve resting with the Vice Chancellor for Academic Affairs.

All petitions for submitting transferred credits for degree requirements must be accompanied by catalog copy of the course description(s) from the institution of origin.

Changes in course level, grading, or number of credits awarded are not petitionable.

ACADEMIC STANDING

Undergraduate students are in satisfactory academic standing when they have a cumulative GPA of 2.00 or higher and a semester GPA of 2.00 or higher for the most recently completed semester. The GPA is computed on credits earned at the University of Alaska Anchorage only. Individual departments may establish additional criteria for satisfactory academic standing.

Students are presumed to be in satisfactory academic standing during their first semester at UAA. A baccalaureate degree-seeking student who fails to earn a semester and/or cumulative GPA of 2.00 will be subject to academic action. Depending upon the circumstances, academic action may result in academic warning, academic probation, loss of baccalaureate degree-seeking status, or removal from a major program.

Academic Warning is the status assigned to baccalaureate degree-seeking students whose semester GPA falls below 2.00 (C) but whose cumulative GPA is 2.00 or higher. Students may be placed on academic probation without having first received an academic warning if their semester and cumulative GPA both fall below 2.00 (C).

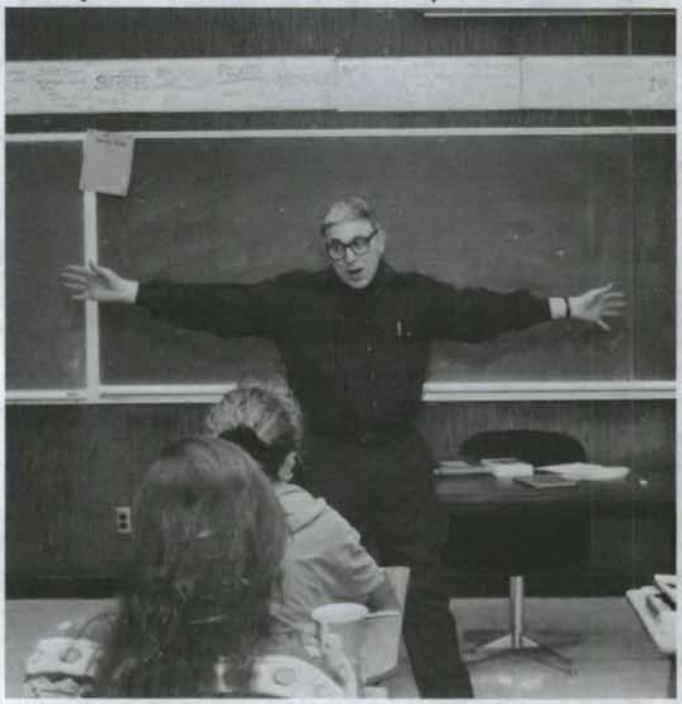
Academic Probation is the status assigned to baccalaureate degree-seeking students whose cumulative GPA is below 2.00 (C). This status may be continued until a student loses degree-seeking status or raises his/her cumulative GPA to 2.00 (C) or higher. Students whose semester and cumulative GPA fall below 2.00 (C) in the same semester will be placed directly on academic probation without having received an academic warning. Some degree programs have more rigorous academic progress requirements. Failure to meet or maintain them may result in departmental probation or removal from a degree program. Consult the degree requirements section of this catalog.

ACCESS TO STUDENT RECORDS

The Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, was designated to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the FERPA Office about alleged failures by the institution to comply with the Act.

UAA may release, without consent, certain directory information (name, major, dates of attendance and credentials awarded). No one outside the institution shall have access to, nor will the institution disclose any other information from a student's education record, without the written consent of the student, except to personnel within the institution on a need to know basis, to officials of other institutions in which a student seeks to enroll, to persons in compliance with a judicial order, and to persons in an emergency in order to protect the health or safety of the student or other persons, or as otherwise permitted under the Act. Exceptions to the above policy are as follows:

1. Names of students receiving awards or appearing on the UAA Dean's List and Chancellor's List are released to the media; also, names and addresses of the above honored students are provided to the National Dean's List Publication unless a written request not to do so has been received by Enrollment Services.



2. Names of students receiving degrees/certificates appear in the commencement program and are released to the media unless a written request not to do so has been received by Enrollment Services.
3. Names of scholarship recipients are released to the media unless a written request not to do so has been received by the Financial Aid Office.
4. Names of students receiving awards for the Chancellor's Scholarship and any other honorary scholarships, i.e. Truman Scholarship and/or appearing in Who's Who Among Students in American Universities and Colleges are released to the media; also, names and addresses of the above honored students are provided unless a written request not to do so has been received by the Enrollment Services.

A complete copy of the UAA policy on the application of FERPA, including procedures for challenging the content of one's records is available in Enrollment Services.

AGE LIMIT OF CREDITS

There is no University-wide undergraduate policy on the age limit of credits. However, to guarantee currency of course content, some departments and degree programs require courses to have been completed within a specified period of time. Contact specific departments for more information.

CHEATING

Cheating is not tolerated at the University of Alaska Anchorage. It constitutes grounds for dismissal from the University. Cheating is defined as any means by which a student uses unauthorized assistance to prepare materials submitted as his/her own. Refer to Academic Dishonesty in Chapter 5 of this catalog or to the Student Handbook for specifics.

CLASS ATTENDANCE

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

Unexcused absences may result in a student receiving a failing grade. Unreasonable refusal to accommodate a bona fide emergency absence or an official university absence as described below may be appealable under the Academic Appeals Process.

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

A faculty member may initiate a drop/withdrawal for students who fail to meet individual course attendance requirements; however, the faculty member is under no obligation to do so.

CLASS STANDING

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

	Credits
Freshman/First Year	0 - 29
Sophomore/Second Year	30 - 59
Junior	60 - 89
Senior	90+

Transfer students will be assigned class standing based on the number of credits accepted in transfer by the University. Non-degree-seeking students are not assigned a class standing.

COREQUISITES

Students are responsible for making sure that they have either 1) taken and passed corequisites or 2) enrolled in the corequisite concurrently with the course listing the corequisite. Corequisites are listed in the individual course descriptions in this catalog. An instructor withdrawal may be initiated for those students who enroll without having 1) passed the corequisites or 2) enrolled concurrently in the corequisite.

COMMENCEMENT

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

CORRESPONDENCE STUDY

Within the University of Alaska system, correspondence study is administered through the University of Alaska Fairbanks campus. The UAA Advising and Counseling Center has brochures and registration forms for this program and can proctor exams. For further information, go to Business Education Building, Room 115, or please call (907) 786-4500.

CREDIT

RESIDENT CREDIT

Resident credit is defined as credit earned in formal classroom instruction, directed study, independent study, research, and telecourses offered by the University of Alaska Anchorage. All other courses are defined as non-resident credit, including transfer credit, non-traditional credit, correspondence study, and credit by examination.

TRANSFER CREDIT

Where possible, transfer credit is equated with University of Alaska Anchorage courses. When this is not possible, evaluators may grant specifically designated elective credit to meet a General Education Requirement. The principle that governs approval of substituting transferred credits for General Education or College Wide degree requirements is that only coursework that clearly and demonstrably satisfies the intent of the requirement can be accepted as a substitute. The University of Alaska Anchorage reserves the right to reject transfer credit or to require an examination before credit is allowed.

An evaluation of transfer credit is completed after a student has been accepted to degree-seeking status.

ACCREDITED COLLEGES/UNIVERSITIES

1. Transfer credit is accepted only from institutions in the United States fully accredited by one of the following regional accrediting associations:
   - Middle States Association of Colleges and Schools
   - New England Association of Schools and Colleges
   - North Central Association of Colleges and Schools
   - Northwest Association of Schools and Colleges
   - Southern Association of Colleges and Schools
   - Western Association of Schools and Colleges
2. Only college-level courses completed with grades equal to C (2.00) or higher are considered for transfer.

3. Students who plan to transfer credits from foreign institutions must provide an official statement of educational equivalency from a recommended credentials evaluation service. Addresses are available from Enrollment Services. The fee depends upon the type and complexity of the evaluation.
4. Transfer credits are not included in the student's UAA grade point average (GPA) computation, except to determine eligibility for graduation with honors.
5. Challenge exams and credit by exams posted on another university's transcript will not be considered for transfer credit (see National Credit by Examination).

UNACCREDITED INSTITUTIONS

As a practice, the University of Alaska Anchorage accepts as transfer credit only those credits earned by students at institutions accredited by regional accrediting agencies. Accreditation by such agencies, recognized by the U.S. Department of Education, demonstrates that the institution operates within commonly accepted standards of instruction. Credits from unaccredited institutions are not normally accepted.

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

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

Category	Credit Hours
Written Communication Skills	6
Oral Communication Skills	3
Humanities/Social Sciences/Fine Arts	15
Quantitative Skills/Natural Sciences	10
Total	34

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

In its catalog, each University of Alaska institution specifies the courses which meet the general education categories at that institution and which can thus be guaranteed to transfer as described above.

DIRECTED STUDY -96

A Directed Study course is a permanent catalog course delivered on an individual basis when the course is not offered that semester. It provides the opportunity for the student to take a permanent course on an individual basis when the course is not offered that semester. The policies are as follows:

1. Retroactive registration not permitted.
2. Forms not correctly completed will not be processed.
3. Deadline for directed study registration will close for that semester with the end of the fourth week of the semester.
4. There can be no change in the basic content of the course. In particular, this means the number, level, prefix, description, title, grading policy (A-F, P/NP), credits, and course content cannot differ from the permanent course.
5. Only permanent or term faculty are allowed to supervise or to be the Instructor of Record for Directed Study courses. Deans and Directors may function as Instructor of Record when no permanent or term faculty are available to fulfill that function. The responsibilities of the Instructor of Record are: a) see that the grades are turned into the Director of Records; b) see that the material is presented in full in a timely manner; c) approve the course of study; d) approve the credentials of other faculty involved; e) agree to assume responsibility if problems arise.
6. The faculty member must have taught the permanent course or a related course prior to teaching a directed study.
7. The initiation of directed studies must come from the discipline in charge of the prefix.

FACULTY-INITIATED WITHDRAWALS

A faculty member may initiate a drop/withdrawal for students who fail to meet individual course attendance requirements; however, the faculty member is under no obligation to do so.

At the beginning of the semester, faculty may begin to drop students who fail to attend class by the 7th calendar day of the semester.

Faculty-initiated drops/withdrawals are permitted through week 12 of the semester for semester-length courses (15 weeks). For courses other than semester length, the faculty option to drop/withdraw a student for non-attendance is prorated according to the length of the course.

Add/drop forms are available from Enrollment Services in the Administration Building.

FULL-TIME/PART-TIME STATUS

An undergraduate student who is enrolled at UAA for 12 or more credits is classified as full-time. An undergraduate who is enrolled at UAA for fewer than 12 credits is classified as part-time.

Audited courses and Continuing Education Units (CEUs) are not included in the computation of study load for full-time or part-time status.

GPA AND STUDENT ACTIVITIES

Students with satisfactory academic performance are eligible for participation in intercollegiate competition or extracurricular activities. Students may not participate in intercollegiate competition or extracurricular activities if their cumulative GPA falls below 2.00 (C). Additional and higher academic standards may be required by certain specific activities. Students are advised to keep their participation in activities within limits that will allow them to achieve satisfactory academic performance.

GRADING

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

Academic Letter Grades

A Honor grade; indicates comprehensive mastery of required work.
B Indicates high level of performance in meeting course requirements.
C Indicates satisfactory level of performance.
D Indicates lowest passing grade; may not be acceptable to satisfy requirements in certain majors and in graduate programs.
F Indicates failure.

These letter grades carry grade points and are used to calculate GPAs.

Non-Academic Grades

CR Indicates credit received for course.
NC Indicates no credit received for course.
DF Deferred; temporary grade which indicates course requirements cannot be completed by end of semester.
I Incomplete; grade which indicates additional coursework must be completed to receive final grade.
P Indicates passing work.
NP Indicates work that is not passing.

These grades do not carry grade points and are not used to calculate GPAs. However, CR, NC, P, and NP grades may be used to determine satisfactory academic progress.

Other Designations

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

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



CREDIT/NO CREDIT

Credit/No Credit is a grading option that encourages students to explore areas of interest. Undesignated electives may be completed under this option. A maximum of fifteen (15) credits earned by this option may be applied to an Associate or Baccalaureate degree.

General Education Requirements (GER), school or college requirements and courses in a student's major or minor are not allowed under this option. If students later change their major/minor and the course becomes a requirement, the course may be accepted in the new major/minor at the discretion of the new department.

The CR/NC option is not available for graduate courses. Nor can this option be used on courses repeated for GPA improvement.

The instructor grades students using the grading basis approved for the course (A-F or P/NP). Students are awarded credit for the course if their final grade is P or C or higher. A grade of CR is entered on the student's transcript. If performance falls below that level (D,F,NP) the course is not recorded on the student's transcript or included in GPA calculations.

For performance comparison only, a grade of CR (Credit) is considered equivalent to a grade of C or higher. A grade of CR does not carry grade points and is not included in GPA calculations.

Through the end of week two (2) of the semester, students may request the CR/NC grading option by submitting the necessary paperwork to Enrollment Services. Once selected, this grading option may not be changed to regular grading after the end of week two (2) of the semester.

DEFERRED GRADE

A DF is a temporary grade used to indicate that course requirements cannot be completed by the end of the semester. Credit will be withheld without penalty until all requirements of the course have been met. This grade is used for courses such as theses and projects that require more than one semester to complete.

Unless the faculty member submits a written request for an extension to Enrollment Services, the DF grade coursework must be completed within a specified time, not to exceed two (2) years. To change a DF to another grade, the faculty member must submit a Change of Grade form to Enrollment Services.

If coursework is not completed within two (2) years and the faculty member does not submit a change of grade at that time, the DF (deferred) becomes a permanent grade and it is necessary for the student to re-register for the course.

GRADE CHANGES

Grades submitted by the faculty, other than incomplete (I) or deferred (DF), are assumed to be final grades. A grade may not be changed unless a legitimate error has been made on the part of the faculty member. Corrections of grading errors must be made by the end of the semester (excluding summer) following the one in which the grade was originally assigned. A Change of Grade form must be submitted to Enrollment Services by the appropriate faculty member or staff designee. Change of Grade forms will not be accepted if submitted to Enrollment Services by the student.

GRADE POINT AVERAGE COMPUTATION (UAA GPA)

UAA uses the 4-point system as a measure of scholastic success. The grade point average (GPA) is computed by dividing the total cumulative quality grade points earned (Q Pts) at UAA by the total quality hours attempted (Q Hrs).

Credits accepted in transfer are not used to calculate the student's UAA GPA. They are, however, used to calculate the student's overall GPA for graduating with honors. Grades and credits earned from all repeated courses are also included in calculating the student's GPA for graduating with honors. Academic letter grades carry the following grade points:

A = 4.00	B = 3.00	C = 2.00
D = 1.00	F = 0.00	

The number of credits (for example, 3) is multiplied by the grade point value of the grade (for example, A = 4) to give the total grade points (for example, 12) for each course. The total number of quality grade points (Q Pts) is then divided by the total number of quality hours attempted (Q Hrs).

Non-academic grades do not carry grade points and are not used in calculating the GPA: CR, NC, DF, I, P, and NP. In addition, AU and W are not grades and are not used in GPA calculations. (See Grading.)

GRADE REPORTS

Enrollment Services mails final grades to students as soon as they are compiled after the close of each semester. The grade report reflects the grade that appears on the instructor's final grade sheet; subsequent changes are not included.

Grades are mailed to the student address provided at registration, unless a change of address has been submitted to Enrollment Services. Only one grade report is mailed; additional copies are not available.

INCOMPLETE GRADE

An I (Incomplete) is a temporary grade. It may be used at the faculty member's discretion to indicate that although a student has not yet completed all of the required coursework, there is a possibility that the student may pass the course if and when all the requirements have been completed.

An Incomplete Grade Contract between the student and the faculty member for completion of coursework is maintained by the department. Coursework must be completed by a date specified in the contract, not to exceed one (1) year. Upon the student's completion of the required coursework, the faculty member must submit a Change of Grade form to Enrollment Services. If terms of the contract are not met, the student may be assigned a failing grade (F or NP, depending on the grading basis of the class). If coursework is not completed within one (1) year and the faculty member does not submit a change of grade at that time, the I (Incomplete) becomes a permanent grade, and it is necessary for the student to re-register for the course.

PASS/NO PASS

In some courses students are graded Pass/No Pass. This grading system is established at the time the course is approved and must apply to the class as a whole. Pass/No Pass grading is not a student option.

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

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

GRADUATION APPLICATION

UAA issues diplomas three times a year: in January following the fall semester, in May following the spring semester, and in September following the summer session.

To be eligible for graduation, a student must submit an Application for Graduation and the $20 fee to Enrollment Services by the end of week two (2) of the semester. Students must obtain their advisor's signature on the application form. Application for Graduation forms are available from Enrollment Services.

Upon receipt of the student's Application for Graduation, a review is completed. If the student has met all requirements, the certificate or degree is awarded at the end of the semester. Students are held responsible for meeting all academic regulations and degree/certificate requirements.

Names of students receiving degrees/certificates appear in the Commencement Program and are released to the media unless a written request not to do so has been received by Enrollment Services. Students who do not want their name to be released may so indicate on the Application for Graduation form.

Applications for Graduation received after the deadline are processed for graduation the following semester. Students who apply for graduation and who do not complete degree/certificate requirements by the end of the semester must re-apply for graduation and pay the $20 fee again.

GRADUATION WITH HONORS

To be eligible to graduate with honors, an undergraduate student must first earn a cumulative GPA of 3.50 or higher in all college work attempted at UAA. A transfer student who is earning an associate degree must complete a minimum of 15 resident credits with academic letter grades to be eligible to graduate with honors. A transfer student who is earning a baccalaureate degree must complete a minimum of 30 resident credits with academic letter grades to be eligible to graduate with honors.

All transfer students must have a cumulative GPA of 3.50 or higher in all college work attempted both at UAA and at all other institutions attended in order to graduate with honors.

Grades and credits earned from all repeated courses are included in determining eligibility to graduate with honors.

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

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

HONORS LIST

Students maintaining exceptional academic achievement are recognized after the fall and spring semesters on the Dean's List and the Chancellor's List. Names of students appearing in the UAA Dean's List and the Chancellor's List are released to the media; also, names and addresses of honor students are provided to the National Dean's List Publication unless a written request not to do so has been received by Enrollment Services.

THE CHANCELLOR'S LIST

To be eligible for the Chancellor's List, a student must be an undergraduate enrolled in at least 12 UAA credits graded with academic letter grades and must have earned a GPA of 4.00 for the semester. Regardless of the number of credits a student is enrolled in, temporary grades of "I" (incomplete) or "DF" (deferred) will prevent a student from being eligible for the Chancellor's List until course work has been completed and the "I" or "DF" is replaced by a final grade.

THE DEAN'S LIST

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

INDEPENDENT STUDY -97

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

1. Retroactive registration not permitted.
2. Independent study courses cannot be used to fulfill GER (not petitionable).
3. Forms not correctly completed will not be processed.
4. Deadlines for independent study registration for a particular semester coincide with the withdrawal deadline.
5. Only permanent or term faculty are allowed to be the Instructor of Record for the Independent Study courses. Deans and

Directors may function as Instructor of Record when no permanent or term faculty are available to fulfill that function. The responsibilities of the Instructor of Record are to: a) see that the grades are turned into the Director of Records; b) see that the material is presented in full in a timely manner; c) approve the course of study; d) approve the credentials of other faculty involved; e) agree to assume responsibility if problems arise.

6. The initiation of independent study courses must come from the discipline in charge of the prefix.

LOSS OF BACCALAUREATE DEGREE-SEEKING STATUS

An undergraduate student's academic status is changed to non-degree-seeking if the University's minimum academic standards are not met. This applies to students who begin a semester on academic probation and fail to earn a semester GPA of at least 2.00 (C). Some programs have more rigorous academic standards. Consult the degree requirements section of this catalog.

A student who has lost baccalaureate degree-seeking status may register as a non-degree-seeking student. However, non-degree-seeking students may not qualify for Financial Aid or International Student Form I-20A. Students may request reinstatement to degree-seeking status. Refer to the Reinstatement Policy.

NON-TRADITIONAL CREDIT

Non-traditional credit evaluations are available for accepted degree-seeking UAA students. These allow students, who have gained knowledge and skills through work and other life experiences, to gain credits for equivalent UAA courses. Documenting military or occupational training, taking local or national examinations, and developing portfolios for faculty review are some of the methods used. The specific processes are listed below.

ADVANCED PLACEMENT IN A LANGUAGE

A student may receive advanced placement in a language if he/she has completed a UAA catalog course in that language with a grade of B or better. Students who fulfill this requirement may be granted credit for the two immediately preceding language courses, for a maximum of eight (8) credits. This policy shall not apply to students who have already been granted Language credits under the Advanced Placement Program.

It is the student's responsibility to notify Enrollment Services in writing of completion of the language course.

CERTIFIED EXPERIENCE CREDIT

This program allows crediting of certified but not accredited institution-sponsored learning. The University may award elective credit or specific course credit by petition or departmental agreement.

1. National/State/Local Certificates: Persons who have met certain standards and/or passed certain tests may be awarded academic credit. Credit agreements are currently in effect for the Federal Aviation Administration, Anchorage Police Department, Alaska State Troopers, State Corrections Academy, Federal Wildland Fire Management Training Program, the Certified Professional Secretary (CPS) Examination, the Certified Professional Legal Secretary (CPLS) Examination, the Child Development Certificate, and the National Occupational Competency Testing Institute (NOCTI) Examination.
2. Business or Industry Credit: Recommendations for business or industry credit equivalents are found in the American Council on Education's National Guide. They cover courses or formal instruction offered by businesses, government agencies, labor unions, and professional or voluntary associations.

CREDIT FOR PRIOR LEARNING

For some courses, students may receive non-traditional credit on a case-by-case basis by documenting their prior learning through experience and training. The process involves faculty and administrative review, an initial evaluation fee, and a fee for each credit awarded. Contact the UAA Prior Learning Coordinator in The Learning Center for more information.



LOCAL CREDIT BY EXAMINATION

Accepted, degree seeking students may be awarded credit through locally developed comprehensive examinations on specific subjects. However, credit by examination is not available for all courses. Applications for and information on specific courses available through local credit by examination may be obtained from departments or the local UAA advising center.

1. Courses with numbers below 100 may not be taken through credit by exam.
2. Only regular catalog courses may be challenged. Special topics courses, trial courses, independent study courses, and practicum courses may not be taken through credit by exam.
3. When an appropriate exam exists, CLEP, DANTES, ACT-PEP, or other national examinations may be administered instead of a local examination.
4. Determination of which courses may be taken through local credit by exam and construction of the examinations is at the discretion of the appropriate department.
5. Local credit by exam is not awarded for a course that duplicates one for which credit has already been granted.
6. Students are awarded credit and a grade of P (Pass) if they successfully pass the local exam. If the exam is not passed, the course is not recorded on the student's transcript. Grades for courses taken through local credit by examination do not carry grade points used in calculating student GPAs.
7. Credit awarded through local credit by examination is considered non-resident credit.
8. There is no limit to the number of credits which may be acquired through the local credit by examination process.
9. Students have one (1) year from the date of application to take the local examination.
10. Students may not request local credit-by-exam for an audited course until the following academic year.

MILITARY CREDIT

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

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

No more than 15 semester credits are awarded toward an associate degree and no more than 30 semester credits are awarded toward a baccalaureate degree. Exceptions are granted only to students enrolled in the SOCAD or SOCNAV programs.

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

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

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

Please contact Enrollment Services for further information regarding required documentation and forms.

NATIONAL CREDIT BY EXAMINATION

ADVANCED PLACEMENT PROGRAM

UAA awards credit for satisfactory performance (a score of 3 or higher) on the College Board Advanced Placement Examinations. These exams are normally completed by students during their senior year in high school. In most cases, passing scores and credits awarded for the following national exams are based on the most current American Council on Education recommendations.

A student desiring advanced placement credit must request that an official report of exam scores be sent to Enrollment Services. Students may receive credit for more than one Advanced Placement Examination.

UAA awards advanced placement credit according to the following standards:

Advanced Placement Exam	UAA Equivalent
ART	
Studio Art	4 credits lower-division art elective
History of Art	ART 261/262
BIOLOGY	BIOL 102/103+ 4 credit lower-division biology elective
CHEMISTRY	CHEM 105
COMPUTER SCIENCE	CS 201/202
ECONOMICS	
Macroeconomics	ECON 201
Microeconomics	ECON 202
ENGLISH	
Language & Composition	ENGL 111
Literature & Composition	ENGL 121
FRENCH	
Level 3: French Language	FREN 101/102
Level 3: French Literature	FREN 201/202
GERMAN	
Level 3: German Language	8 credits lower-division language/German elective
GOVERNMENT AND POLITICS	
American Government and Politics	PS 101
Comparative Government and Politics	PS 102
HISTORY	
American History	HIST 131/132
European History	HIST 102
LATIN	
Virgil	4 credits lower-division Latin elective
Catullus-Horace	4 credits lower-division Latin elective
MATHEMATICS	
Calculus AB	MATH 107/108/200
Calculus BC	MATH 107/108/200/201
MUSIC	
Music Theory	MUS 111
Music Listening & Literature	MUS 121
PHYSICS	
Physics B	PHYS 123
Physics C	PHYS 211
SPANISH	
Level 3: Spanish Language	SPAN 101/102
Level 3: Spanish Literature	SPAN 201/202

COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

1. General Exams

UAA awards up to 24 credits for CLEP general exams to students who earn a score of 500 or higher.

Credit for CLEP general exams are awarded according to the following standards:

English	No credit awarded
English Composition with Essay (Meets UAA Written Communications Requirement)	ENGL 111 for 500+ score
Mathematics	3 credits for 500+ score
Natural Sciences	BIOL 102 for 500+ score
(Meets UAA Natural Science Requirement/no lab credit)	3 credits elective
Humanities (Meets UAA Humanities/Fine Arts Requirement)	6 credits for 500+ score
Social Sciences/History (Meets UAA Humanities/Social Sciences Requirement)	6 credits for 500+ score

Students must request that an official report of exam scores be sent to Enrollment Services.

Examinations may not be repeated earlier than six (6) months.

2. Subject Exams

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

Students must request that an official report of exam scores be sent to Enrollment Services.

Examinations may not be repeated earlier than six (6) months.

DANTES/USAFI EXAMINATIONS

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

ACT-PEP EXAMINATIONS

Credit may be awarded for successful completion of the ACT-PEP (ACT Proficiency Examination Program). Credit for exams is elective credit or, through agreements with departments, is equated to UAA courses. An official copy of the student's ACT-PEP scores must be submitted to Enrollment Services.

ACT (ENGLISH COMPONENT) OR SAT (VERBAL COMPONENT)

A student who has earned an appropriate ACT English or SAT Verbal score may elect not to take ENGL 111 and may enroll in ENGL 211, 212 or 213. If the student earns a score of C or higher in ENGL 211, 212, or 213, UAA awards 3 credits for ENGL 111.

Exam	Date Taken	Score
ACT English	Before October 1989	26+
ACT English	October 1989 or later	30+
SAT Verbal	Any date	55+ (550+)

It is the student's responsibility to notify Enrollment Services in writing of completion of the 200-level English course.

TEST OF STANDARD WRITTEN ENGLISH

A student who has earned a score of 60+ in the Test of Standard Written English (TSWE), a component of the SAT test, is awarded credit for ENGL 111. Official SAT TSWE test scores must be sent to Enrollment Services.

NATIONAL OCCUPATIONAL COMPETENCY TESTING INSTITUTE (NOCTI) EXAMINATION

NOCTI tests may be used to document competency in various occupational fields (e.g. Electronic Communication, Welding, Diesel Mechanic) as an option for students who want to enter certain College of Career and Vocational Education (CCVE) degree programs. Successful completion earns 30 semester credits toward the technical competency requirement of the applicable AAS degree. Completion of the technical competency requirements (45 credits) is prescribed by the applicable CCVE department. A fee is charged. Applicants may call (907) 786-1675 or (907) 786-4676 for further information.

PREREQUISITES

Students are responsible for checking to make sure that prerequisites have been met. Prerequisites are listed in individual course descriptions in this catalog. If a student has not taken and passed the necessary prerequisites, but feels confident of performing the course work, the student may request permission from the instructor of the course to enroll in the class. An instructor withdrawal may be initiated for those students who enroll without either prerequisites or instructor permission.

RECOMMENDATIONS

Students who have successfully completed the courses listed as recommended will be better prepared to take the course. However, it is possible for students to successfully complete the course without having taken the recommended courses.

REINSTATEMENT

Students who have lost baccalaureate degree-seeking status are allowed to register as non-degree-seeking students. However, non-degree-seeking students do not qualify for Financial Aid or the International Student Form I-20A.

Subsequent to loss of baccalaureate degree-seeking status, a student may request reinstatement to baccalaureate degree-seeking status after completing a minimum of 12 credits in 100- level or higher courses with a cumulative GPA of 2.00 (C) or higher at UAA and/or another accredited institution.

Reinstated students are then eligible to re-apply for admission to a baccalaureate degree program. They must submit a Request for Reinstatement and an application for admission to Enrollment Services with official transcripts of all academic work completed since loss of degree-seeking status. Forms are available from Enrollment Services.

A student who is reinstated and has an overall UAA cumulative GPA less than 2.00 (C) is automatically placed on academic probation.

REMOVAL FROM A MAJOR PROGRAM

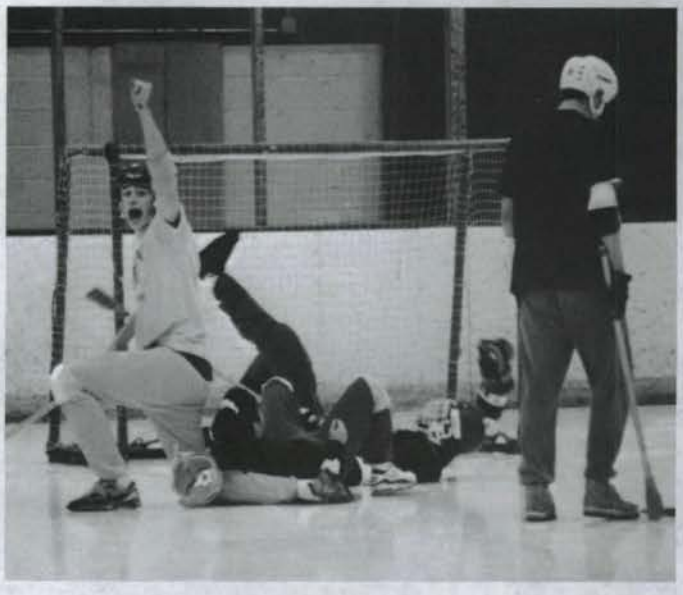
Some baccalaureate degree programs require that students meet more rigorous academic standards in order to progress. Failure to meet these program standards may result in the student being removed from his/her major program. The student's major program is then changed to undeclared. He/she remains a degree-seeking student as long as the University's minimum academic standards are met. A continuing student may use the Change of Major/Degree process to request re-admission or admission to a different degree program. Students must contact the major department for admission or re-admission requirements. Change of Major/Degree forms are available from Enrollment Services.

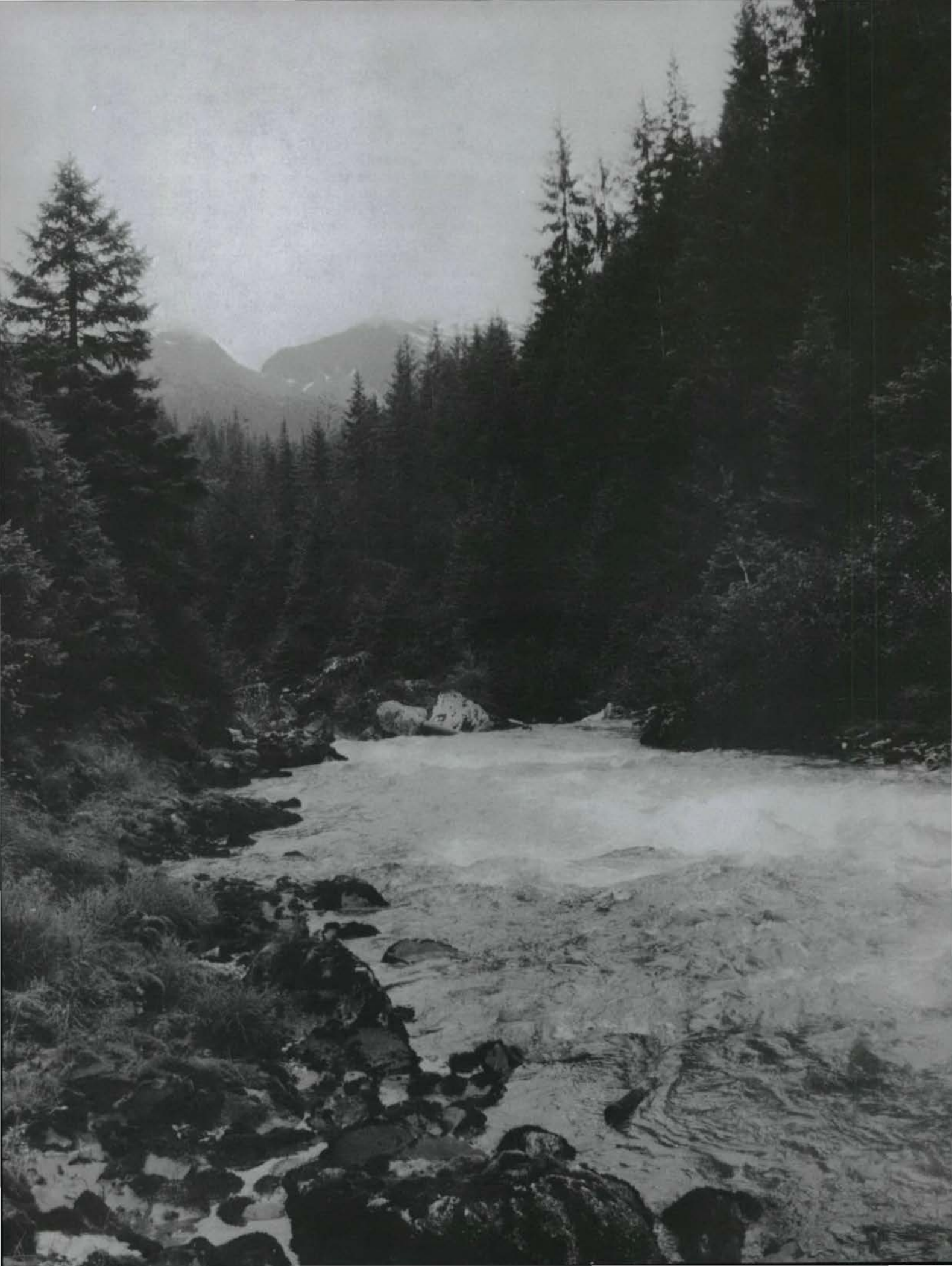
REPEATING COURSES

Some courses may be repeated for additional credits if this option is stated in the course description.

All courses may be repeated for student GPA improvement. Previous courses and grades will remain on the student's transcript, but only the credits and last grade earned are applied toward graduation requirements and calculated in the student's cumulative UAA GPA. The Credit/No Credit grading option cannot be selected when courses are to be repeated for GPA improvement. Students may not repeat a course for credit-by-exam, correspondence or through work at another college or university for the purpose of raising their grade point average at UAA.

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





CHAPTER 9

UNDERGRADUATE ADMISSION AND DEGREE PROGRAMS

Formal Admission to Undergraduate Programs
General University Requirements for Undergraduate Programs
Undergraduate Programs by Schools and Colleges

FORMAL ADMISSION TO UNDERGRADUATE PROGRAMS

Students who wish to earn vocational certificates, associate degrees, or baccalaureate degrees must apply and be formally admitted to the individual programs. Students may apply for initial admission as undeclared majors. However, they must still be formally accepted by their specific major department before completing any degree or certificate program.

FRESHMEN

First-time degree-seeking freshmen and those degree-seeking applicants with fewer than 30 college-level semester credits must submit official high school transcripts (or GED scores) and official copies of ACT or SAT test scores along with the application for admission. Freshmen applying to associate or certificate programs are encouraged to take the ASSET placement test. In addition, freshmen who have earned credits at other regionally accredited colleges and universities must submit official transcripts from all institutions previously attended.

EXCEPTIONS FOR ASSOCIATE DEGREE AND CERTIFICATE SEEKING STUDENTS

Returning adult students who have been out of high school for more than 10 years may elect not to submit high school transcripts if they wish to enter as associate students. After completion of 30 semester credits, they may request a transfer of admission status to the baccalaureate level. Such requests are processed at no charge according to admission requirements for baccalaureate programs. Associate degree and certificate students may substitute ASSET results for ACT or SAT test scores as well.

SOPHOMORES, JUNIORS, AND SENIORS

Applicants with 30 or more college-level semester credits must submit official transcripts from all regionally accredited colleges and universities previously attended.

TRANSFER STUDENTS

At the time of formal admission to degree-seeking status, transfer students must declare and submit official transcripts from all colleges and universities previously attended.

Transcripts are evaluated to determine if the credits are applicable to a degree program at UAA. Only transcripts from regionally accredited institutions declared at the time of application for admission are considered for transfer evaluation.

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

1. Meet admission requirements.
2. Complete the Undergraduate General University Requirements but not the General Education Requirements.
3. Complete all school/college requirements, if applicable and the Major Program Requirements.

TRANSCRIPTS AND TEST SCORES

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

All transcripts, test scores, and other supporting documents submitted for admission or transfer credit evaluation become the property of the University. They cannot be reissued or copied.

INTERNATIONAL STUDENTS

Students who wish to transfer college-level course work from international institutions must submit official transcripts and English translations (if necessary) as well as an official statement of educational equivalency from a recommended international credentials evaluation service. Lists of such services may be obtained from Enrollment Services. Fees depend upon the type and complexity of the evaluation.

International students (F-1) who wish to apply for the United States Department of Justice, Immigration, and Naturalization Services Certificate of Eligibility for Non-Immigrant Students (Form I-20A) must do all of the following:

1. Meet University admission requirements for degree-seeking students and be accepted to a program.
2. Submit an official TOEFL (Test of English as a Foreign Language) score of at least 450.
3. Submit a statement of financial support for the anticipated period of study.
4. Provide official transcripts and a statement of educational equivalency from a recommended credentials evaluation service.

To be issued an I-20A, international students must be formally admitted, full-time, degree-seeking students, even if their major is undeclared. Contact the International Student Advisor in Enrollment Services for details.

These requirements apply only to students who are requesting a Form I-20A Student Visa. Other international students may enroll under the Open Enrollment or Formal Admission policy.

RETURNING STUDENTS

Returning students are former UAA degree-seeking students who have had a break in attendance. Returning students who have attended another college or university since their last attendance at UAA must re-apply for admission and submit official transcripts to Enrollment Services from each institution attended since then.

Returning students who have not attended college during their absence from UAA may be eligible to update their admission status at no charge providing they still expect and are eligible to receive their degrees under the terms of the catalog in effect at the time of original admission.

PRE-MAJOR STATUS

Students applying to certain programs that have limited space and/or highly selective admission criteria may be initially admitted to a pre-major status within that program. Admission to pre-major status does not guarantee subsequent admission to the major. Students admitted to this status should contact their program advisor at the earliest opportunity for further information about the program's special requirements and for guidance in selecting appropriate classes. Students admitted initially to pre-major status must first satisfy all requirements for formal admission to the major and then complete the "Change of Major" process, changing from pre-major to the program itself. Such changes will not effect a student's degree requirements or catalog year. Students still must satisfy the degree requirements in effect at the time of original admission to pre-major status, unless they change major and degree intentions completely.

CHANGING MAJORS AND DEGREE PROGRAMS: DECLARING MAJORS

Once formally admitted and in attendance, students may request to change their major or degree program to another program at the same level (i.e. associate to associate, baccalaureate to baccalaureate) through the Change of Major/Degree process. Students admitted initially in undeclared or pre-major status may declare a major or degree program through this process as well. Students must meet the specific admission requirements of their new program, and must be formally accepted to the program by signature of the Dean or Department Chair.

Students wishing to change from an associate program to a baccalaureate program (or vice versa) must formally apply for admission to the new level.

Students must follow established UAA procedures for declaring a major and, if necessary, for changing a major or degree. Students who change their major or degree must satisfy the catalog requirements for the new major or degree in effect at the time of the change.

CERTIFICATE AND ASSOCIATE DEGREE PROGRAMS ADMISSION REQUIREMENTS

Most certificate and associate degree programs operate under an open admission policy. To qualify for admission to associate degree or vocational certificate-seeking status, a student must:

1. Have earned a high school diploma or the equivalent (GED), or
2. Be 18 years of age or older and have participated in UAA's Assessment and Advisement process as explained in Chapter 2.

APPLICATION FORM AND FEE

Applications may be obtained from Enrollment Services. A non-refundable application fee of $35 must be submitted with each application.

Some certificate and associate programs have additional requirements. Consult the individual program sections of this catalog.

ADMISSION ON PROBATION TO ASSOCIATE DEGREE-SEEKING STATUS

Some associate degree programs, such as Auto Diesel Technology, Aviation Maintenance Technology, Dental Assisting, Dental Hygiene, Medical Assisting, Medical Laboratory Technology, Nursing, and Surveying and Mapping, have admission requirements beyond the open admission requirements. Students applying to these programs may initially be admitted to pre-major status or they may be admitted on probation by the department. Pre-major status does not guarantee subsequent admission to the major. Students admitted on probation may be dismissed from the program if they do not perform satisfactorily. Consult the degree program sections of this catalog for more information.

BACCALAUREATE DEGREE PROGRAMS ADMISSION REQUIREMENTS

To qualify for initial admission to baccalaureate degree-seeking status, a student must satisfy at least one of the following:

1. Graduation from an accredited high school with a grade point average of at least 2.50 (C+), and completion of either the SAT or ACT test, or
2. Successful completion of the GED and completion of either the SAT or ACT test, or
3. Graduation with an associate degree from a regionally accredited institution, or
4. Completion of at least 30 college-level semester credits with a grade point average of at least 2.00 (C).

These criteria do not apply to students who have been removed from baccalaureate degree-seeking status at UAA. (See Reinstatement, Chapter 8).

Some baccalaureate programs have additional or higher requirements than the minimums listed above. Consult the certificate and degree program sections of this catalog for more specific information. Applicants who do not meet the higher requirements may initially be admitted in an undeclared or pre-major status provided they meet the minimum requirements for admission to the baccalaureate level. Admission to undeclared or pre-major status does not guarantee subsequent admission to a specific degree program. Such students are encouraged to contact their program advisor at the earliest opportunity for further information and guidance.

ADMISSION ON PROBATION TO BACCALAUREATE DEGREE-SEEKING STATUS

In exceptional circumstances, students may be admitted to baccalaureate degree-seeking status on probation. Generally, students in the following categories may be admitted on probation:

1. High school graduates with a high school GPA of 2.00 through 2.49, or
2. Transfer students with a collegiate GPA of 1.75 through 1.99.

In most cases, students on probation are admitted as undeclared majors only. Before they may declare a major through the Change of Major process, they must meet the individual program's admissions requirements.

APPLICATION FORM AND FEE

Applications may be obtained from Enrollment Services. A non-refundable application fee of $35 must accompany each application for admission.

GENERAL UNIVERSITY REQUIREMENTS FOR UNDERGRADUATE PROGRAMS

General University Requirements have been established for all certificate and degree programs at UAA. Students must complete them in addition to specific certificate and degree requirements stated in the program section of this catalog.

CERTIFICATES

Students may earn more than one (1) certificate by completing all requirements for each additional program. The following requirements must also be met:

1. When completing the last half of a certificate program, students must earn at least 50 percent of the credits in residence. For example, in a 30-credit certificate program, at least 8 of the last 15 must be resident credits.
2. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. Some certificate programs require higher GPAs.
3. Students must earn a minimum of 15 credits for an official transcripted certificate.
4. Students may elect to graduate under the requirements of the catalog in effect at the time of formal admission to a certificate program or the catalog in effect at the time of graduation. However, if the requirements for a certificate as specified in the entry-level catalog are not met within five (5) years of formal acceptance into the program, the student must meet the requirements in effect at the time of graduation.

ASSOCIATE DEGREES

The Associate of Arts degree is intended to provide general education. Therefore, it includes no major specialty, and students may earn only one AA degree. The Associate of Applied Science degree is intended to provide specialized education. Therefore, it does include a major specialty, and students may earn more than one AAS degree. The following requirements must be met for associate degrees:

1. Students must earn a minimum of 60 credits for either an AA or an AAS degree.
2. Students must complete at least 15 of the last 30 credits in residence.
3. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. Some associate degree programs require higher GPAs.
4. Students may elect to graduate under the requirements of the catalog in effect at the time of formal admission to a degree program or the catalog in effect at the time of graduation. However, if the requirements for an associate degree as specified in the entry-level catalog are not met within five (5) years of formal acceptance into the program, the student must meet the requirements in effect at the time of graduation.
5. For an Associate of Arts degree, students must complete a minimum of 60 credits at the 100-level or above, including at least 20 credits at the 200-level or above.
6. All courses for an Associate of Applied Science degree must be at the 100 level or above.

CONCURRENT PROGRAMS OF STUDY

Double Majors. Associate degree-seeking students may apply to graduate (during the same semester) with two majors, providing the degree program is the same for each major. For example, a student may select two areas from the approved majors within the Associate of Applied Science degree program (such as Welding and Automotive Technology). Students must apply and be accepted into each major program.

Students may request a double major at the time of initial admission to UAA or add a major at a later date through the Change of Major degree process. Forms are available from Enrollment Services.

Students must satisfy the General University Requirements, the General Education Requirements, and both sets of major requirements.

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

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

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

Students must submit a separate application for admission for each degree they expect to receive. Admission forms are available from Enrollment Services.

Associate degree-seeking students must complete the General University Requirements, the General Education Requirements for their primary program, the requirements for both major programs, and at least twelve (12) resident credits beyond the total number of credits required for the primary degree.

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

SECOND ASSOCIATE DEGREE

The Associate of Arts degree is intended to provide students with the education necessary to undertake baccalaureate degree work. Due to its general intent, only one AA degree may be earned per student.

UAA Students. Students who have received an Associate of Applied Science degree from UAA and who want to obtain another Associate of Applied Science degree must:

1. Meet admission requirements.
2. Complete at least twelve (12) resident credits beyond the previous associate degree(s).
3. Complete the Major Program Requirements for the second degree.
4. Maintain a cumulative GPA of at least 2.00 (C) at UAA in order to graduate. (Some programs may require a higher GPA in the major.)

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

1. Meet admission requirements.
2. Complete the General University Requirements but not the General Education Requirements.
3. Complete the Major Program Requirements.

DEGREE REQUIREMENTS, ASSOCIATE OF ARTS (AA)

All courses must be at the 100 level or above. At least 20 credits of the required 60 credits must be at the 200-level.

CLASSIFICATION	CREDITS
1. Oral Communications SPCH 111, Fundamentals of Oral Communication	3
2. Written Communications ENGL 111, Methods of Written Communication and one of the following: ENGL 211, Intermediate Exposition with Readings in Literature ENGL 212, Technical Writing ENGL 213, Intermediate Exposition with Readings in Nonfiction CIOS 262, Written Business Communications	6
3. Applied Studies	9
4. Humanities	9
5. Math and Natural Sciences	9
6. Social Sciences	9
7. Electives	15
Total Minimum Credits	60

DEGREE REQUIREMENTS, ASSOCIATE OF APPLIED SCIENCE (AAS)

All courses must be at the 100 level or above.

CLASSIFICATION	CREDITS
1. Oral Communications SPCH 111, Fundamentals of Oral Communication SPCH 241, Public Speaking	3
2. Written Communications ENGL 111, Methods of Written Communication and one of the following: ENGL 211, Intermediate Exposition with Readings in Literature ENGL 212, Technical Writing ENGL 213, Intermediate Exposition with Readings in Nonfiction CIOS 262, Written Business Communications	6
3. General Requirements Choose one or a combination of Humanities*, Math, Natural Sciences, or Social Sciences courses. (See Associate Degree Course Classifications list on page 68.) Courses chosen must be at the 100-level or above.	6
**Any English courses used to satisfy the Humanities general requirement must be different from the written communications requirement and have a course number higher than Engl 111.*	
4. Major Specialty (See Degree Programs)	Varies
5. Electives	Varies
Total Minimum Credits	60

ASSOCIATE OF ARTS AND BACCALAUREATE DEGREE GENERAL EDUCATION REQUIREMENTS LINK

Associate degree students who plan to enroll in a baccalaureate degree program can maximize transferability/applicability of their credits by taking the following courses to meet Associate of Arts degree requirements:

CLASSIFICATION	CREDITS
1. Oral Communications SPCH 111, Fundamentals of Oral Communication	3
2. Written Communications ENGL 111, Methods of Written Communication and one of the following: ENGL 211, Intermediate Exposition with Readings in Literature ENGL 212, Technical Writing ENGL 213, Intermediate Exposition with Readings in Nonfiction	6
3. Applied Studies Courses that meet this requirement focus on the application of skills and/or methodology of a discipline.	9
4. Humanities Choose 6 credits from the Humanities and 3 credits from the Fine Arts Baccalaureate General Education Requirements List. See page 70.	9
5. Math and Natural Sciences Choose one course with a lab from the Natural Sciences Baccalaureate General Education Requirements List and one Quantitative Skills course. See page 70.	9
6. Social Sciences Choose at least 6 credits from the Social Sciences Baccalaureate General Education Requirements List. See page 70.	9
7. Electives Note: The Associate of Arts degree requirements of 20 credits at the 200-level and the 15 residency credits must also be met.	15

ASSOCIATE DEGREE COURSE CLASSIFICATIONS

Students in associate degree programs should use the following table to determine which courses meet their requirements.

Applied Studies
Accounting
Agriculture
Alaska Wilderness Studies
Architectural and Engineering Technology
Auto/Diesel Technology
Aviation Technology
Business Administration
Business Statistics
Civil Engineering
Computer Information and Office Systems
Dental Assisting
Dental Hygiene
Dietetics and Nutrition
Drafting
Early Childhood Development
Education
Electronic Technology
Emergency Medical Technology
Emergency Trauma Technician
Energy
Engineering Science
Engineering and Science Management
English-As-A-Second Language
Fire Service Administration
Fisheries Technology
Foodservice Technology
Forestry Technology
Health
Home Economics
Human Services
Interior Design
Journalism and Public Communications
Justice
Library Skills
Medical Assisting
Medical Laboratory Technology
Nursing
Paralegal Studies
Petroleum Engineering
Physical Education/Recreation
Social Work
Surveying and Mapping
Wastewater Treatment
Welding Technology
Wildlife and Fisheries Technology

Humanities
American Sign Language
Art
Dance
English
History*
Humanities
Journalism and Public Communications (JPC 215 & 367 only)
Languages
Linguistics
Music
Philosophy
Speech
Theatre
Women's Studies*

Math and Natural Sciences
Applied Statistics
Astronomy
Biological Sciences
Biological Anthropology (ANTH 205 only)
Chemistry
Computer Science
Geology
Mathematics
Natural Sciences
Philosophy (PHIL 101 only)
Physical Geography (GEOG 205 & 205L only)
Physics

Social Sciences
Anthropology
Business Administration (BA 151 only)
Counseling
Economics
Geography (except GEOG 205 & 205L)
Guidance
Health Sciences (HS 220 only)
History*
Human Services (HUMS 106 only)
International Studies (INTL 301 only)
Journalism and Public Communications (JPC 101 only)
Justice (JUST 110 & 330 only)
Paralegal Studies (PARL 101 only)
Political Science
Psychology
Social Work (SWK 106 only)
Sociology
Women's Studies

**History and Women's Studies may be used for either Humanities or Social Sciences credit, but not for both.*

BACCALAUREATE DEGREES

To receive a baccalaureate degree from UAA, students must satisfy: General University Requirements, General Education Requirements, school/college requirements, if applicable, and Major Program Requirements.

For General Education Requirements, refer to Degree Requirements, Baccalaureate. For school/college and Major Program Requirements, refer to the appropriate school or college section of this catalog.

GENERAL UNIVERSITY REQUIREMENTS

General University Requirements for all baccalaureate degrees are as follows:

1. Students must earn at least 120 credits. Some degree programs require completion of additional credits.
2. Students must earn at least 42 upper-division credits, including 24 upper-division credits in residence. Some degree programs require completion of additional credits.
3. Students must earn at least 30 of the last 36 credits in residence. In addition, transfer students must earn in residence at least 12 credits in each major field and, where applicable, at least 3 credits in each minor field.
4. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. They must also earn a cumulative GPA of at least 2.00 (C) in all courses required for each major and each minor. Some degree programs require a higher UAA GPA in the major.
5. Students who have been accepted to baccalaureate degree-seeking status at UAA may elect to graduate under either the requirements of the catalog in effect at their time of acceptance into a degree program or the requirements of the catalog in effect during their year of graduation. If more than seven (7) years have elapsed since the student's acceptance to degree-seeking status, the student must graduate under the catalog requirements in effect during the year of graduation.
6. Students must follow established UAA procedures for declaring a major and, if necessary, for changing a major or degree. Students who change their major or degree must satisfy the catalog requirements for the new major or degree in effect at the time of the change.

MINORS

A minor is a component of a baccalaureate degree. A minor may only be issued simultaneously with a baccalaureate degree.

A minor from UAA will consist of a minimum of eighteen (18) credits, at least six (6) of which must be upper division. Students must earn at least three (3) credits in residence in each minor field. They must also earn a UAA cumulative GPA of at least 2.00 (C) in the minor. Students must follow minor requirements from the same catalog used for the baccalaureate program.

Refer to each discipline for specific requirements.

Students must declare minors no later than the deadline to submit an Application for Graduation.

CONCURRENT PROGRAMS OF STUDY

Double Majors. Baccalaureate degree-seeking students may apply to graduate (during the same semester) with two majors, providing the degree program is the same for each major. For example, a student may select two areas from the approved majors within the Bachelor of Arts degree program (such as History and Justice). Students must apply for and be accepted into each major program.

Students may request a double major at the time of initial admission to UAA or add a major at a later date through the Change of Major/Degree process. Forms are available from Enrollment Services.

Students must satisfy the General University Requirements, the General Education Degree Requirements for the primary program, both sets of school/college requirements, if applicable, and major program requirements.

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

Double Degrees. Baccalaureate degree-seeking students may graduate (during the same semester) with two degrees provided they have applied for and been accepted in both degree programs. A Bachelor of Education degree and a Bachelor of Arts degree is an example of a double degree.

Students must submit a separate application for admission for each degree they expect to pursue. Admission forms are available at Enrollment Services.

Baccalaureate degree-seeking students must complete the General University Requirements, the General Education Degree Requirements for the primary program, both sets of school/college requirements, if applicable, major program requirements, and at least twenty-four (24) resident credits beyond the total number of credits required for the primary degree before an additional degree can be awarded.

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

SECOND BACCALAUREATE DEGREE

UAA Students. Students who have received a baccalaureate degree from UAA and who want to obtain another baccalaureate degree must:

1. Meet admission requirements.
2. Complete at least twenty-four (24) resident credits beyond the previous baccalaureate degree(s).
3. Complete the school/college requirements, if applicable, and the Major Program Requirements, including any resident and/or upper division requirements, for the second degree.
4. Maintain a cumulative GPA of at least 2.00 (C) at UAA in order to graduate. (Some programs may require a higher GPA in the major.)

Transfer Students. Students who have received a baccalaureate degree from another regionally accredited college or university and who want to obtain a baccalaureate degree from UAA must:

1. Meet admission requirements.
2. Complete the General University Requirements but not the General Education Requirements.
3. Complete all school/college requirements, if applicable, and the Major Program Requirements.

DEGREE REQUIREMENTS,
BACCALAUREATE GENERAL EDUCATION REQUIREMENTS (GER)
UAA BACCALAUREATE GENERAL EDUCATION REQUIREMENTS

All students who earn a baccalaureate degree from UAA must have completed the General Education Requirements (34 credits required).

Certain degree programs have designated more specific requirements from this list, so not every course listed below is applicable to every degree program. Students must refer to their specific degree programs to determine the General Education Requirements for their major. Courses ending with numbers __93 or __94 will not satisfy a GER.

CLASSIFICATION **CREDITS**

1. Oral Communications.....3

Courses that fulfill this requirement are those which emphasize the acquisition of English language skills in orally communicating ideas in an organized fashion through instruction accompanied by practice. Courses completed at UAA must be selected from the following:

SPCH 111, Fundamentals of Oral Communication

2. Written Communications.....6

Courses that fulfill this requirement are those which emphasize the acquisition of English language skills in organizing and communicating ideas and information through expository writing. Courses completed at UAA must be selected from the following:

ENGL 111, Methods of Written Communication
ENGL 211, Intermediate Exposition with Readings in Literature
ENGL 212, Technical Writing
ENGL 213, Intermediate Exposition with Readings in Nonfiction

3. Quantitative Skills.....3

Courses that fulfill this requirement are those which emphasize the development and application of quantitative problem-solving skills as well as skills in the manipulation and/or evaluation of quantitative data. Courses completed at UAA must be selected from the following:

AS 252, Elementary Statistics
AS 307, Probability and Statistics
MATH 106, College Algebra and Trigonometry
MATH 107, College Algebra
MATH 108, Trigonometry
MATH 200, Calculus I
MATH 201, Calculus II
MATH 270, Applied Finite Mathematics for the Managerial Sciences
MATH 272, Calculus for Managerial Sciences

4. Humanities.....6

Credits satisfying the Humanities area must be earned outside of student's major field of study. General humanities courses introduce the student to the humanistic fields of language, arts, literature, history and philosophy within the context of their traditions. (Note: History may be applied to either the Humanities or the Social Sciences requirements but not to both. If the student counts any history course(s) toward one requirement, they can not count any history course(s) toward the other.) Courses completed at UAA must be selected from the following:

ART 261, History of World Art I
ART 262, History of World Art II
ART 367, History of Photography
CHIN 101, Elementary Chinese I
CHIN 102, Elementary Chinese II
CHIN 201, Intermediate Chinese I
ENGL 121, Introduction to Literature
ENGL 201, Masterpieces of World Literature I
ENGL 202, Masterpieces of World Literature II
ENGL 203, Survey of British Literature I
ENGL 204, Survey of British Literature II
ENGL 306, American Literature I
ENGL 307, American Literature II
FREN 101, Elementary French I
FREN 101E, Elementary French I
FREN 102, Elementary French II
FREN 102E, Elementary French II
FREN 201, Intermediate French I
FREN 201E, Intermediate French I
FREN 202, Intermediate French II
FREN 202E, Intermediate French II
GER 101, Elementary German I
GER 101E, Elementary German I
GER 102, Elementary German II
GER 102E, Elementary German II
GER 201, Intermediate German I
GER 201E, Intermediate German I
GER 202, Intermediate German II
GER 202E, Intermediate German II
GER 209, German Grammar
HIST 101, Western Civilization I
HIST 102, Western Civilization II
HIST 121, East Asian Civilization I
HIST 122, East Asian Civilization II
HIST 131, History of United States I
HIST 132, History of United States II
HIST 341, History of Alaska
HUM 211, Introduction to Humanities I
HUM 212, Introduction to Humanities II
HUM 250, Myths and Contemporary Culture
JPC 215, History of Mass Communication
JPC 367, History of Photography
JPN 101, Elementary Japanese I
JPN 101E, Elementary Japanese I
JPN 102, Elementary Japanese II
JPN 102E, Elementary Japanese II
JPN 201, Intermediate Japanese I

JPN 201E, Intermediate Japanese I
JPN 202, Intermediate Japanese II
JPN 202E, Intermediate Japanese II
KOR 101, Elementary Korean I
KOR 102, Elementary Korean II
KOR 201, Intermediate Korean I
LAT 101, Elementary Latin I
LAT 102, Elementary Latin II
LING 101, The Nature of Language
MUS 221, History of Music I
MUS 222, History of Music II
PHIL 101, Introduction to Logic
PHIL 201, Introduction to Philosophy
PHIL 211, History of Philosophy I
PHIL 212, History of Philosophy II
PHIL 213B, Eastern Philosophy and Religion
PHIL 214, Western Religion
PHIL 301, Ethics
PS 332, History of Political Philosophy I: Classical
PS 333, History of Political Philosophy II: Modern
RUSS 101, Elementary Russian I
RUSS 101E, Elementary Russian I
RUSS 102, Elementary Russian II
RUSS 102E, Elementary Russian II
RUSS 201, Intermediate Russian I
RUSS 201E, Intermediate Russian I
RUSS 202, Intermediate Russian II
RUSS 202E, Intermediate Russian II
SPAN 101, Elementary Spanish I
SPAN 101E, Elementary Spanish I
SPAN 102, Elementary Spanish II
SPAN 102E, Elementary Spanish II
SPAN 201, Intermediate Spanish I
SPAN 201E, Intermediate Spanish I
SPAN 202, Intermediate Spanish II
SPAN 202E, Intermediate Spanish II
THR 311, Representative Plays I
THR 312, Representative Plays II
THR 411, History of the Theatre I
THR 412, History of the Theatre II

5. Fine Arts.....3

Courses that fulfill this requirement are those that provide the student with an introduction to the fine arts (visual arts and performing arts) as academic disciplines as opposed to those that emphasize skills acquisition. (Note: Fine arts courses that introduce the history/social/aesthetic background while also including the application of the creative skill may be acceptable. In addition, MUS 121 may not be counted towards the degree requirement for music majors pursuing either a BA or BM degree.) Courses completed at UAA must be selected from the following:

ART 160, Art Appreciation
ART 261, History of World Art I
ART 262, History of World Art II
ART 367, History of Photography
DNCE 170, Dance Appreciation
JPC 367, History of Photography
MUS 121, Music Appreciation
MUS 221, History of Music I
MUS 222, History of Music II
THR 111, Introduction to Theatre
THR 311, Representative Plays I
THR 312, Representative Plays II
THR 411, History of Theatre I
THR 412, History of Theatre II

6. Social Sciences.....6

Credits satisfying the Social Sciences area must be earned outside of student's major field of study. Courses that fulfill this requirement are broad survey courses that provide the student with exposure to the theory, methods, and data of the social sciences. (Note: History may be applied to either the Humanities or the Social Sciences requirement but not to both. If the student counts any history course(s) toward one requirement, they can not count any history course(s) toward the other.) Courses completed at UAA must be selected from the following:

ANTH 101, Introduction to Anthropology
ANTH 200, Natives of Alaska
ANTH 202, Cultural Anthropology
ANTH 250, The Rise of Civilization
BA 151, Introduction to Business
ECON 201, Principles of Macroeconomics
ECON 202, Principles of Microeconomics
GEOG 103, World Economic Geography
HIST 101, Western Civilization I
HIST 102, Western Civilization II
HIST 121, East Asian Civilization I
HIST 122, East Asian Civilization II
HIST 131, History of United States I
HIST 132, History of United States II
HIST 341, History of Alaska
HS 220, Core Concepts in the Health Sciences
HUMS 106, Introduction to Social Welfare
INTL 301, Canada: Introductory Survey
JPC 101, Introduction to Mass Communication
JUST 110, Introduction to Justice
JUST 330, Justice and Society
PARL 101, Introduction to Law
PS 101, Introduction to American Government
PS 102, Introduction to Political Science
PS 311, Comparative Politics
PS 312, Nation-State Case Studies
PS 351, Political Sociology
PSY 111, General Psychology
PSY 150, Human Development
SOC 101, Introduction to Sociology
SOC 106, Introduction to Social Welfare
SOC 201, Social Problems and Solutions
SOC 202, The Social Organization of Society
SOC 222, Small and Rural Communities
SOC 342, Sexual, Marital and Family Lifestyles
SOC 351, Political Sociology
SWK 106, Introduction to Social Welfare

7. Natural Science 7

Required credits must include one laboratory class. Courses that fulfill this requirement are those that provide the student with broad exposure and include general introduction to the theory, methods, and disciplines of the natural sciences. Courses completed at UAA must be selected from the following:

ASTR 103, Introductory Astronomy I
ASTR 104, Introductory Astronomy II
BIOL 102, Introductory Biology
BIOL 103, Introductory Biology Laboratory
BIOL 105, Fundamentals of Biology I/Laboratory
BIOL 106, Fundamentals of Biology II/Laboratory
BIOL 111, Human Anatomy and Physiology I
BIOL 112, Human Anatomy and Physiology II
BIOL 113, Lectures in Human Anatomy and Physiology I
BIOL 114, Lectures in Human Anatomy and Physiology II
CHEM 103, Introduction to General and Organic Chemistry
CHEM 104, Introduction to Organic Chemistry and Biochemistry
CHEM 105, General Chemistry I
CHEM 106, General Chemistry II
GEOG 205, Elements of Physical Geography
GEOG 205L, Elements of Physical Geography Laboratory
GEOL 111, Physical Geology
GEOL 112, Historical Geology
GEOL 115, Environmental Geology
GEOL 115L, Laboratory in Environmental Geology
PHYS 123, Basic Physics I
PHYS 124, Basic Physics II
PHYS 211, General Physics I
PHYS 212, General Physics II

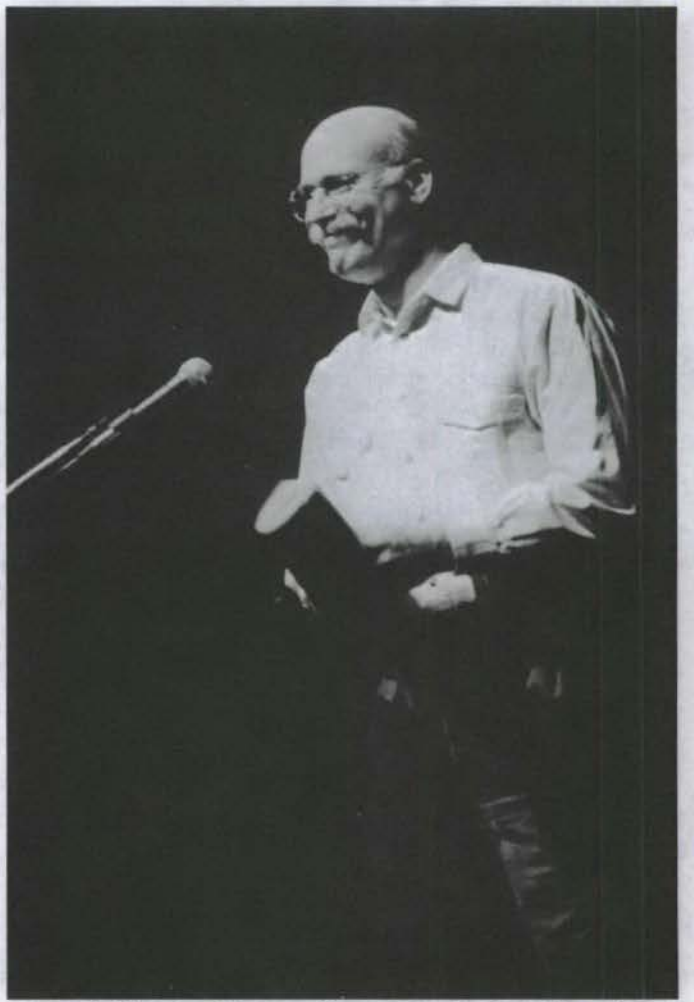
INTERDISCIPLINARY DEGREES, BACCALAUREATE

Upon completing at least 15 UAA credits, a student may develop an interdisciplinary BA or BS degree program. The proposed program must differ significantly from established degree programs and must not be a substitute for a regular degree program. Interdisciplinary degree programs are not transferrable to other University of Alaska campuses.

To receive a baccalaureate degree in Interdisciplinary Studies from UAA, the student must meet General University Requirements and General Education Requirements. Major Program Requirements are established in the interdisciplinary program plan developed by the student in consultation with an advisory committee.

An interdisciplinary baccalaureate program proceeds as follows:

1. The student develops a proposal specifying the degree (BA or BS), title, and program content, including recommendations for courses to meet General Education Requirements.
2. The student obtains an advisory committee of at least three (3) faculty members from the appropriate academic disciplines. If the interdisciplinary degree program involves more than one (1) school or college, the committee must include a faculty member from each.
3. The student obtains the assistance of one (1) faculty member to chair the advisory committee and serve as the interdisciplinary degree program director.
4. The student presents the proposal for committee review and approval. If the committee supports the proposal, it is forwarded to the appropriate academic dean(s).
5. The dean(s) reviews the proposal, committee membership, and recommendation for degree program director. If the dean(s) approves the interdisciplinary degree program and committee structure, the degree program plan is forwarded to Enrollment Services.
6. If changes are necessary in the degree program plan, they must have written approval of the advisory committee and appropriate dean(s).
7. The student works with the advisory committee and Enrollment Services to insure that all degree requirements are met.



***Tobias Wolff**, author of the best-selling memoir,* This Boy's Life, *and other award winning works, was UAA's writer in residence in 1994.*

COLLEGE OF ARTS AND SCIENCES

INTRODUCTION

The College of Arts and Sciences is dedicated to the principle that an enlightened understanding of the world is fostered by study of an individual's physical environment, one's cultural values and processes, one's creative expressions, and one's systems of thought and discovery. In fulfillment of this educational commitment, the fields of study offered by the College serve two ends: they are intellectually valuable in themselves and they are an essential complement to other fields of knowledge. The faculty are highly trained and energetic professionals who are here to impart the knowledge and skills of their academic disciplines both to majors within the College and to students in the various professional schools and the community. The formal means of communicating this knowledge and these skills are the courses and degree programs of the College.

The College welcomes applications from students who have just graduated from high school as well as from those who are continuing their higher education, whether to complete an associate or a baccalaureate degree or to undertake graduate studies. Students who wish to begin work on their degrees at another university or at a junior or community college and intend to transfer credits to the University of Alaska Anchorage should plan their course work in accordance with the general University requirements and the requirements of the particular program in which they are interested in earning a degree.

Prospective transfer students, particularly those who have not decided upon a major, should pay special attention to the requirements of programs within the College of Arts and Sciences regarding the applicability of credits toward degrees. The transcripts of accepted transfer students will be evaluated by the Office of Degree Services, and credits accepted for transfer, where possible, will be equated with University of Alaska Anchorage courses. Community or junior college credits accepted for transfer will apply toward the degrees in the College of Arts and Sciences subject to the transfer of credit regulations.

HIGH SCHOOL PREPARATION

The following high school courses are recommended but not necessarily required in preparation for admission to the various programs within the College of Arts and Sciences:

English
Four years with emphasis on spelling, writing, grammar, and research skills such as preparation of bibliographies.

Mathematics
BA candidates: Three years with emphasis on Algebra I and II, Trigonometry, Geometry, Analysis.
BS candidates: Four years with emphasis on Algebra I and II, Trigonometry, Geometry, Analysis.

Science
BA candidates: Two to three years with emphasis in Biology, Chemistry, Physics, Geology, and/or Earth Science.
BS candidates: Three to four years with emphasis in Biology, Chemistry, Physics, Geology, and/or Earth Science.

Language
One to two years. Suggested languages: German, Russian, Latin, Japanese, French, Spanish, Chinese, or Native Languages.

Social Sciences
Two years with emphasis in World History, U.S. History, Comparative Political Theory, Current Events, Geography, Cultural Anthropology, and/or Prehistoric Archaeology.

Arts
One to two years with emphasis in basic and fundamental courses in the Arts with more advanced courses dependent upon students' particular interest.

Computer Science
One to two years. Basic knowledge of computer science recommended for all college-bound students.

UNDERGRADUATE DEGREE

ASSOCIATE OF ARTS (AA)

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate general university requirements listed on page 66.
2. If you intend to complete the Associate of Arts degree and then continue on to a baccalaureate degree, consult the Associate of Arts and Baccalaureate Degree General Education Requirements Link on page 67.

DEGREE REQUIREMENTS — CREDITS

1.	Oral Communications		
	SPCH 111	Fundamentals of Oral Communication	3
2.	Written Communications		6
	ENGL 111	Methods of Written Communication and one of the following:	
	ENGL 211	Intermediate Exposition with Readings in Literature	
	ENGL 212	Technical Writing	
	ENGL 213	Intermediate Exposition with Readings in Nonfiction	
	CIOS 262	Written Business Communications	
3.	Applied Studies		9
4.	Humanities		9
5.	Math and Natural Sciences		9
6.	Social Sciences		9
7.	Electives		15
Total Minimum Credits			60

COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

To earn a Bachelor of Arts, Bachelor of Science, Bachelor of Music, Bachelor of Social Work, or Bachelor of Fine Arts, students must complete the requirements shown below, in addition to the General Education Requirements (page 70), the General University Requirements (page 69) and major program requirements. Students should examine the program descriptions for the major program and consult with an advisor before making final course selections. Some courses may be used to satisfy the General Education Requirements, the College of Arts and Sciences Requirements, and the major program requirements.

Electives

No more than six (6) credits in Physical Education and Recreation (PER) courses may be applied toward a BA or BS degree program offered by the College of Arts and Sciences.

BACHELOR OF ARTS

The Bachelor of Arts degree is a liberal arts degree. The basic assumption of a liberal arts degree is that a broad knowledge base will serve the student over a lifetime.

A. Cultural Heritages
   1. Comparative Cultures (ANTH 250) — 3
   2. Western Culture (HIST 101 and HIST 102) — 6
   3. American Culture (HIST 131, 132, PS 101) — 3

B. Arts and Letters
   1. Introduction to Literature (ENGL 121, 203, 204, 306, 307) — 3
   2. Language/Humanities — 6
      Any two (2) semester sequence in one of the following humanities sequences or in a language other than English:
      ART 261-262
      ENGL 201-202
      MUS 221-222
      PHIL 211-212
      PHIL 213B-214
      PS 332-333
      THR 311-312
      THR 411-412

C. Ways of Knowing — 3
   ENGL 120, PHIL 101, 201, 301, 421

D. Social Behavior — 3
   Choose one of the following not in the major:
   ANTH 101
   ECON 201
   JPC 101
   PS 102
   PSY 111
   SOC 101
   SOC/SWK/HUMS 106

BACHELOR OF SCIENCE

The requirements of the Bachelor of Science degree are designed to equip students with the technical competencies needed in scientific disciplines.

A. Mathematics and Statistics
   MATH 200 or 272 — 3-4
   AS 307 — 3

B. Computer Programming
   CS 105, 107, 109, 201, 202; ES 201 — 3

C. Language/Humanities — 6-8
   Any two (2) semester sequence in French, German, Japanese, Russian, or Spanish or one of the following humanities sequences:
   ART 261-262
   ENGL 201-202
   MUS 221-222
   PHIL 211-212
   PS 332-333
   THR 311-312
   THR 411-412

D. Natural Sciences — 9*
   To be selected from the following list:
   ASTR 103, 104
   BIOL 102, 103, 105, 106, 111, 112, 113, 114
   CHEM 103, 104, 105, 106
   GEOL 111, 112
   PHYS 123, 124, 211, 212
   *Must be in addition to the seven (7) credit Natural Science General Education Requirement. The total Natural Science Requirement (16 credits) must include at least six (6) credits in each of two (2) disciplines and two (2) lab credits.

BACHELOR OF MUSIC

The Bachelor of Music is primarily a performance degree.

A. Computer Literacy: CS 100 — 3

B. Language Proficiency — 8
   Any two (2) semester language sequence.

BACHELOR OF SOCIAL WORK

The Bachelor of Social Work degree is a professional degree accredited by the Council on Social Work Education (CSWE). Students must complete General University, General Education, and Bachelor of Arts requirements along with foundation and major courses found on page 98.

BACHELOR OF FINE ARTS

The Bachelor of Fine Arts is a professionally oriented program designed to prepare students for careers in art. No additional college requirements.

CAS MINOR

A minor from the College of Arts and Sciences will consist of a minimum of eighteen (18) credits, at least six (6) of which will be upper-division. Refer to each discipline for specific courses required.

ALASKA NATIVE STUDIES

INTRODUCTION

The Alaska Native Studies program seeks to provide the student with: an introduction to Alaskan Native ways of knowing and seeing the world, an experiential and theoretical exploration of Alaskan Native cultures, a series of critical perspectives on traditional and contemporary Native experience and politics in pluralistic society. The Alaska Native Studies minor is highly recommended for Native and non-Native students and professionals who work with the rural and urban Alaska Native community.

ALASKA NATIVE STUDIES AS A MINOR

1. Complete the following core courses:

AKNS 201	Native Perspectives	3
AKNS 401	Seminar: Cultural Knowledge of Native Elders	3

2. Complete one of the following as a core course: 4

AKNS 101	Alaska Native Languages I (4)
AKNS 102	Alaska Native Languages II (4)
AKNS 109	Alaska Native Language Orthography (4)

3. Complete no fewer than 6 credits of the following (Courses must be from two different prefixes): 6

*AKNS 101	Alaska Native Languages I (4)
	or
*AKNS 102	Alaska Native Languages II (4)
	or
*AKNS 109	Alaska Native Language Orthography (4)
ANTH 200	Natives of Alaska (3)
ANTH 436	Aleut Adaptations (3)
ART 365	Native Art of Alaska (3)
AWS 278	Alaska Native Survival Techniques (3)
HIST 200	History of Alaska Native Heritage (3)
JUST 455	Rural Justice (3)
JUST 462	Indian Law and the Settlement Act (3)
PER 278	Alaska Native Sports Traditions (2)
PS 346	Alaska Native Politics (3)

** If not taken as a core course.*

4. Complete 3 credits from the following: 3

ANTH 435	Northwest Coast Cultures (3)
ENGL 344	Contemporary Native American Literature (3)
HIST 235	History of American Indians (3)
HIST 242	History of Kodiak (3)
HIST 341	History of Alaska (3)
PS 411	Tribes, Nations, and Peoples (3)

5. A total of 19 credits or more is required for the minor, of which 6 credits must be upper-division.

ANTHROPOLOGY

INTRODUCTION

Anthropology is the study of human diversity on a cross-cultural basis, aimed at achieving both scientific and humanistic education goals. Anthropology is comprised of four sub-fields: sociocultural anthropology, biological anthropology, archaeology, and linguistics. The BA/BS degrees are designed to provide the student with a solid general foundation in the discipline by emphasizing understanding of different cultures and peoples as well as different theories and methodologies. Although there is some opportunity for limited specialization in either archaeology or sociocultural anthropology and in Alaska studies, the department believes that such specialization should be deferred until graduate work.

UNDERGRADUATE DEGREES

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements for either a BA or BS degree listed on page 74.

D. MAJOR REQUIREMENTS

BACHELOR OF ARTS, ANTHROPOLOGY

1. Complete 39 credits from the following, 18 of which must be upper-division credits.
2. Complete four of the following core courses (12 credits): 12

ANTH 202	Cultural Anthropology (3)
ANTH 205	Biological Anthropology (3)
ANTH 210	Introduction to Anthropological Linguistics (3)
ANTH 211	Fundamentals of Archaeology (3)
ANTH 260	Old World Archaeology (3)

3. Complete these required courses (6 credits):

ANTH 410	History of Anthropology	3
AS 252	Elementary Statistics (3)	3
	or	
AS 307	Probability and Statistics (3)	

4. Complete three ethnographic area courses from the following (9 credits): 9

ANTH 200	Natives of Alaska (3)
ANTH 325	Cook Inlet Anthropology (3)
ANTH 326	Arctic Ethnology (3)
ANTH 333	Peoples and Cultures of Southeast Asia (3)
ANTH 335	Native North Americans (3)
ANTH 435	Northwest Coast Cultures (3)
ANTH 436	Aleut Adaptations (3)

Geographical focus (6 credits maximum): 6

ANTH 312	North American Archaeology (3)
ANTH 316	Arctic Archaeology (3)
ANTH 330	Ancient Civilizations of Mexico and Guatemala (3)

5. Complete two courses from the following topical/theoretical courses (6 credits): 6
   - ANTH 340 Urban Anthropology (3)
   - ANTH 354 Culture and Ecology (3)
   - ANTH 355 Medical Anthropology (3)
   - ANTH 361 Language and Culture (3)
   - ANTH 400 Anthropology of Religion (3)
   - ANTH 420 Economic Anthropology (3)
   - ANTH/JUST 456 Anthropology and the Law (3)
   - ANTH 480 Analytical Techniques in Archaeology (3)
6. Anthropology Electives (6 credits): 6
   Any course in Anthropology, including ANTH 101 and ANTH 250, may be applied toward the elective requirement.
7. Anthropology majors may apply to the department at the end of their junior year to undertake independent research resulting in a substantial, thesis-quality paper. A maximum of six credits will be given for the two-semester project. Prior arrangements with the department are required.
8. A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

BACHELOR OF SCIENCE, ANTHROPOLOGY

1. Complete 39 credits from the following, 18 of which must be upper-division credits
2. Complete four of the following core courses (12 credits): 12
   - ANTH 202 Cultural Anthropology (3)
   - ANTH 205 Biological Anthropology (3)
   - ANTH 210 Introduction to Anthropological Linguistics (3)
   - ANTH 211 Fundamentals of Archaeology (3)
   - ANTH 260 Old World Archaeology (3)
3. Complete these required courses (6 credits):
   - ANTH 410 History of Anthropology 3
   - AS 307 Probability and Statistics 3
4. Complete three ethnographic area courses from the following (9 credits): 9
   - ANTH 200 Natives of Alaska (3)
   - ANTH 325 Cook Inlet Anthropology (3)
   - ANTH 326 Arctic Ethnology (3)
   - ANTH 333 Peoples and Cultures of Southeast Asia (3)
   - ANTH 335 Native North Americans (3)
   - ANTH 435 Northwest Coast Cultures (3)
   - ANTH 436 Aleut Adaptations (3)

   Geographical focus (6 credits maximum):
   - ANTH 312 North American Archaeology (3)
   - ANTH 316 Arctic Archaeology (3)
   - ANTH 330 Ancient Civilizations of Mexico and Guatemala (3)
5. Complete two courses from the following topical/theoretical courses (6 credits): 6
   - ANTH 340 Urban Anthropology (3)
   - ANTH 354 Culture and Ecology (3)
   - ANTH 355 Medical Anthropology (3)
   - ANTH 361 Language and Culture (3)
   - ANTH 400 Anthropology of Religion (3)
   - ANTH 420 Economic Anthropology (3)
   - ANTH/JUST 456 Anthropology and the Law (3)
   - ANTH 480 Analytical Techniques in Archaeology (3)
6. Anthropology Electives (6 credits): 6
   Any course in Anthropology, including ANTH 101 and ANTH 250, may be applied toward the elective requirement.
7. Anthropology majors may apply to the department at the end of their junior year to undertake independent research resulting in a substantial, thesis-quality paper. A maximum of six credits will be given for the two-semester project. Prior arrangements with the department are required.
8. A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

ANTHROPOLOGY AS A MINOR

Students majoring in another subject who wish to minor in Anthropology, must complete the following requirements. A total of 18 credits is required for the minor, 6 of which must be upper-division.

1. Select two courses (6 credits) from the following: 6
   - ANTH 101 Introduction to Anthropology (3)
   - ANTH 202 Cultural Anthropology (3)
   - ANTH 205 Biological Anthropology (3)
   - ANTH 210 Introduction to Anthropological Linguistics (3)
   - ANTH 211 Fundamentals of Archaeology (3)
   - ANTH 260 Old World Archaeology (3)
2. Complete at least one course (3 credits) from either the ethnographic area or the topical/theoretical area, as specified above for majors in Anthropology. 3
3. Complete three courses (9 credits) of anthropology electives. 9

APPLIED STATISTICS

INTRODUCTION

During the past several decades, the social and economic structure of the United States has shifted from an industrialized base to an information and services base. Rapid development of computer technology has led to an increase in the use of statistics as a tool for analyzing data across all disciplines. Increasing demand exists for individuals with training in statistical analysis. The unprecedented growth of research institutes nationwide confirms the importance of sampling and statistical analysis.

Statistics is now widely used in a broad spectrum of disciplines. There is substantial demand among students and various entities within the community for this program.

APPLIED STATISTICS AS A MINOR

Students majoring in another subject who wish to minor in Applied Statistics must complete the following requirements. A total of 26 credits is required for the minor.

1. Complete these required courses (20 credits):
   - AS 307 Probability and Statistics 3
   - AS 308 Intermediate Statistics 3

AS 315	Nonparametric Statistics	3
AS 402	Scientific Sampling	3
MATH 200	Calculus I	4
MATH 201	Calculus II	4

2. Complete a minimum of 6 credits from the following: 6

AS 310	Regression Analysis (3)
AS 312	Analysis of Variance (3)
AS 400	Selected Topics in Statistics (3) (maximum 3 credits)
AS 407	Time Series Analysis (3)
AS 408	Multivariate Analysis (3)
MATH 371	Probability Models (3)
MATH 407	Mathematical Statistics I (3)
MATH 408	Mathematical Statistics II (3)

Note: Applied Statistics courses may be taken to satisfy the elective portion of the minor or the elective portion of the Mathematics major but not both.

ART

INTRODUCTION

Art gives form to human experience; it expresses the entire range of thought and feeling. Affirming the belief that knowledge of the visual arts is an indispensable part of any broad education, the Department of Art offers a wide range of learning experiences designed to encourage independent thinking and creativity, and to develop an appreciation of humankind's artistic achievements from pre-history to the present. The Bachelor of Arts and the Bachelor of Fine Arts are accredited by the National Association of Schools of Art and Design.

The Department of Art discerns three distinct functions for visual arts education at UAA: training future professional artists-painters, sculptors, printmakers, craftspersons and designers; training future art teachers for public and private elementary and secondary schools; and supplying supplementary training in the visual arts for students who wish to enrich their lives through the study of visual art, but who do not wish to obtain a degree.

Students must note the following:

1. Some courses do not apply to degree programs.
2. Some courses may be taken for repeat credit;
3. Many art courses require or strongly suggest completion of certain prerequisite art courses. Non-art majors who wish to enroll in an art class without first having completed the recommended prerequisites are free to do so but may find the classroom experience difficult or unrewarding.
4. Art majors must obtain pre-registration advising and approval from art faculty for art course work undertaken each semester.

ART EDUCATION - TEACHER PREPARATION

Students preparing to teach art should consult the School of Education concerning university programs leading to art teacher certification.

UNDERGRADUATE DEGREES

BACHELOR OF ARTS, ART

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69. A maximum of 60 credits in Art may be applied toward the degree. Transfer students who are candidates for the BA degree with a major in Art must complete a minimum of 18 Art credits in residence.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements listed on page 74.

D. MAJOR REQUIREMENTS

LOWER-DIVISION ART (27 CREDITS):

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

ART 105	Beginning Drawing	3
ART 111	Two-Dimensional Design	3
ART 113	Three-Dimensional Design	3
ART 205	Intermediate Drawing	3
ART 261	History of World Art I	3
ART 262	History of World Art II	3

2. Choose one two-dimensional course, one three-dimensional course, and one course from either list to total 9 credits: 9

Two-Dimensional Area:

ART 112	Color Design (3)
ART 213	Beginning Painting (3)
ART 215	Beginning Printmaking (Intaglio) (3)
ART 216	Beginning Printmaking (Lithography) (3)
ART/JPC 224	Beginning Photography (3)
ART 256	Drawing for Illustration I (3)
ART 258	Illustration I (3)
ART 259	Illustration II (3)

Three-Dimensional Area:

ART 201	Beginning Handbuilt Ceramics (3)
ART 209	Beginning Metalsmithing and Jewelry (3)
ART 211	Beginning Sculpture (3)
ID 141	Interior Design (3)

Upper-division Art (21 credits):

3. Complete a total of 15 credits in the areas of studio emphasis listed below, at least 9 credits of which must be in a single area of studio emphasis: 15

Painting	Photography
Illustration	Drawing
Printmaking	Metalsmithing
Sculpture	Graphic Design
Ceramics	

4. Complete the following Art requirements (6 credits): 6
   Upper-division Art History

Miscellaneous Requirements (15 Credits):

5. Complete the following:
   PHIL 401 Aesthetics 3
   Upper-division General Electives 12
6. A total of 121 credits are required for the degree, of which 42 credits must be upper-division.

Bachelor of Fine Arts, Art

Introduction

The Bachelor of Fine Arts degree is a professionally oriented program designed to prepare students for careers in art. Enrollment in the BFA program is recommended only for those students willing to make the considerable commitment of time and energy necessary to achieve professional competence in their primary area of studio emphasis.

Admission Requirements

Complete the undergraduate admission requirements listed on page 64. Admission into the BFA program, termination from it, and granting of the degree are done at the discretion of the BFA Committee. Students desiring to enter the BFA program should request a copy of the current program policy from the Department.

Students wishing to pursue a primary area of studio emphasis in Illustration or Graphic Design should note differing BFA options. Students admitted into the BFA program must complete a minimum of 24 art credits in residence at UAA after acceptance into the BFA program. For the transfer student, a minimum of 12 resident art credits must be completed in the primary area of studio emphasis, and a minimum of 3 resident art credits completed in the secondary area of studio emphasis.

Applicants for admission into the BFA program must meet the following requirements:

1. Applicants must have been officially admitted into the College of Arts and Sciences.
2. Applicants must have completed all lower-division art requirements for the BFA degree.
3. Applicants must have been enrolled at the University of Alaska Anchorage for at least one semester.
4. Applicants must meet minimum academic GPA requirements of:
   2.50 overall course work
   3.00 overall art course work

The following materials must be submitted to the Department of Art at least two weeks prior to the application interview with the BFA Committee:

1. Application for admission into the BFA Program.
2. Letter of intent stating objectives and qualifications. Student should indicate an awareness of the differences between the BA in Art and the BFA degree programs.
3. Copies of all college transcripts.
4. A list of all college art courses taken with grade received.

Applicants seeking admission into the BFA program will present their portfolio at a regularly scheduled BFA Committee meeting. Acceptance into the BFA program will be determined by the BFA Committee members present at the meeting. Applicants should check with the Department of Art main office for meeting times and places. Meetings are generally held once a month. Applicants may submit works for consideration in both slide form and as original works of art.

Academic Progress

All BFA Committee meetings will be conducted with only the BFA student and the BFA Committee present. The progress of all BFA candidates in residence will be reviewed a minimum of once a semester by the BFA Committee. BFA students enrolled in Art 499, Thesis, will be reviewed a minimum of twice a semester in addition to the final thesis evaluation. The BFA Committee will be comprised of all Art faculty entitled to vote on departmental matters.

Special Note: The thesis proposal must be submitted to and accepted by the BFA Committee during the semester prior to enrollment in Art 499, Thesis.

The final meeting with the BFA Committee will be to evaluate the student's thesis project. Evaluation will be based on content, presentation, and the degree of success in visual realization of the written proposal. At least 10 slides of the student's thesis will be furnished to the Department of Art. These slides must be acceptable to the BFA Committee, and will become the property of the Department of Art.

Graduating BFA students have the option of participating in an annual BFA Show. Exhibited works will be selected by the BFA Committee. The BFA Show may be held more than once a year as determined by available space and number of graduating BFA students. Graduating BFA students are invited, but not required, to donate one work of art to UAA's permanent collection. Acceptance of donated student work is left to the discretion of the BFA Committee. After successfully completing all BFA requirements the student is responsible for submitting an application for the degree.

Graduation Requirements

Students must complete the following graduation requirements:

A. General University Requirements

Complete the baccalaureate degree requirements listed on page 69. A maximum of 84 credits in Art may be applied toward the degree.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

There are no additional college requirements for the BFA degree.

D. MAJOR REQUIREMENTS

Complete the following required art courses with a minimum overall GPA of 3.00 and a minimum GPA of 3.50 in the primary area of studio emphasis. A minimum cumulative GPA of 2.50 in all university course work is required to graduate.

LOWER-DIVISION ART (27 CREDITS):

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

ART 105	Beginning Drawing	3
ART 111	Two-Dimensional Design	3
ART 113	Three-Dimensional Design	3
ART 205	Intermediate Drawing	3
ART 261	History of World Art I	3
ART 262	History of World Art II	3

2. Choose one two-dimensional course, one three-dimensional course, and one course from either list to total 9 credits. 9

Two-Dimensional Area:

ART 112	Color Design (3)
ART 213	Beginning Painting (3)
ART 215	Beginning Printmaking (Intaglio) (3)
ART 216	Beginning Printmaking (3) (Lithography)
ART/JPC 224	Beginning Photography (3)
ART 256	Drawing for Illustration I (3)
ART 258	Illustration I (3)
ART 259	Illustration II (3)

Three-Dimensional Area:

ART 201	Beginning Handbuilt Ceramics (3)
ART 209	Beginning Metalsmithing (3) and Jewelry
ART 211	Beginning Sculpture (3)
ID 141	Interior Design (3)

UPPER-DIVISION ART (42 CREDITS):

3. Complete a total of 21 upper-division credits in one of the primary areas of studio emphasis listed below: 21

Graphic Design* See requirements below.
Illustration** See requirements below.

Painting	Printmaking
Photography	Ceramics
Metalsmithing	Sculpture
Drawing	Fiber

4. Complete a total of 9 upper-division credits in one of the secondary areas of studio emphasis listed below: 9

Painting	Ceramics
Photography	Sculpture
Metalsmithing	Fiber
Drawing	Graphic Design
Printmaking	Illustration

*GRAPHIC DESIGN REQUIREMENTS

BFA students pursuing a primary area of studio emphasis in Graphic Design must complete the following requirements. The following 30 credits are taken in lieu of the standard BFA primary and secondary areas of studio emphasis as listed in 3 and 4 above. BFA students pursuing a primary area of studio emphasis in Graphic Design must complete all other requirements for the BFA degree as listed in the catalog.

Required:

ART 351	Typography (3) (must repeat once for credit)	6
ART 352	Advanced Graphic Design (3) (must repeat once for credit)	6
ART 354	Advertising Design	3
ART 451	Internship/Graphic Design	3

Electives: 12

ART/JPC 324	Intermediate Photography (3)
ART 356	Drawing for Illustration II (3) (may repeat once for credit)
ART 357	Computer Art and Design (3) (may repeat once for credit)
ART 451	Internship/Graphic Design (3)

**ILLUSTRATION REQUIREMENTS

BFA students pursuing a primary area of studio emphasis in Illustration must complete the following requirements. The following 30 credits are taken in lieu of the standard BFA primary and secondary areas of studio emphasis as listed in 3 and 4 above. BFA students pursuing a primary area of studio emphasis in Illustration must complete all other requirements for the BFA degree as listed in the catalog.

Required:

ART 356	Drawing for Illustration II (3) (must repeat once for credit)	6
ART 458	Illustration III (1-6)	6
ART 459	Illustration IV (1-6)	6

Electives: 12

ART/JPC 324	Intermediate Photography (3)
ART 355	Airbrush (3) (may repeat once for credit)
ART 357	Computer Art and Design (3) (may repeat once for credit)
ART 358	Children's Book Illustration (3) (may repeat once for credit)
ART 455	3-D Illustration (3) (may repeat once for credit)
ART 457	Internship/Illustration (1-6)

5. Complete the following Art requirements (12 credits):

Upper-division Art History	9
Thesis Project	3

6. Complete the following requirements (18 Credits):

PHIL 401	Aesthetics	3
Studio Art Electives, any level		15

7. A total of 121 credits is required for the degree, of which 42 credits must be upper-division. A minimum cumulative GPA of 2.50 in all university course work is required to graduate.

ART AS A MINOR

Students majoring in another subject who wish to minor in Art must complete the following requirements. A total of 18 credits is required for the minor, 6 of which must be upper-division.

Art History (ART 261 or 262)	3
Design (ART 111 or 113)	3
Drawing (any course)	3
Studio (any degree course)	6
Art History or Studio	3

BIOLOGICAL SCIENCES

INTRODUCTION

Although biology is traditionally thought of as the study of living organisms, the field has moved both rapidly and dramatically into such disciplines as molecular genetics and macroevolution. The program has been designed to reflect these trends while striving to develop an in-depth understanding of both the traditional and modern biological sciences.

The biology program prepares individuals through a basic science core curriculum that provides the physical science and biology foundations necessary for successful career preparation. Two general divisions are recognized in the biology program: the cell-molecular and the organismal-ecology-evolution areas. The cell-molecular biology area focuses on preprofessional sciences for students wishing to pursue careers in medicine, dentistry, veterinary and graduate school. The organismal-ecology-evolution area is a more general curriculum emphasizing environmental, organismal, evolutionary, and general biological sciences preparatory for graduate school or employment in both private and public sectors.

Elective credits in both cell-molecular and organismal-ecology-evolutionary-biology areas are available to all biology majors. Students are strongly encouraged to consult with their advisors to determine which electives best suit their programmatic needs and career requirements.

Bachelor of Arts, Bachelor of Science, and Master of Science biology degree programs are offered by the Department of Biological Sciences. Both of the baccalaureate programs require a total of 124-125 credits for graduation and can be completed in four years by students who have had adequate high school preparation in math and sciences. Refer to page 73 for recommended high school courses.

COMMUNITY SERVICE COURSES

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

BIOL 074 Field Natural History
BIOL 075 Local Flora
BIOL 124 Biota of Alaska: Selected Topics
BIOL 126 Birds in Field and Laboratory
BIOL 139 Introduction to Forestry
BIOL 150 Introduction to Marine Biology

UNIVERSITY SERVICE COURSES

The department offers several courses specifically designed for students majoring in the Nursing, Health Science, and Allied Health Sciences which are accepted for Biology major credit only by petition. A general biology lecture and lab course is also offered every semester for non-biology majors. Only certain 100-level courses currently satisfy General Education Requirements and Natural Sciences Area requirements for specified baccalaureate degree programs in the College of Arts and Sciences (CAS). Refer to both General Education Requirements and specific CAS program degree requirements.

BIOL 100	Human Biology
BIOL 102	Introductory Biology
BIOL 103	Introductory Biology Laboratory
BIOL/GEOL 104	Natural History of Alaska
BIOL 111	Human Anatomy and Physiology I
BIOL 112	Human Anatomy and Physiology II
BIOL 113	Lectures in Human Anatomy and Physiology I (= BIOL 111 lecture without the lab)
BIOL 114	Lectures in Human Anatomy and Physiology II (= BIOL 112 lecture without the lab)
BIOL 240	Introductory Microbiology for Health Sciences
BIOL 241	Lectures in Introductory Microbiology for Health Sciences (= BIOL 240 lecture without the lab)

UNDERGRADUATE DEGREES

BACHELOR OF ARTS, BIOLOGICAL SCIENCES

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences Requirements listed on page 74.

D. MAJOR REQUIREMENTS

1. Unless otherwise noted, the major requirements may also be used to satisfy the general education and other degree requirements.
2. Complete at least 35-38 credits in biology of which at least 19 must be upper-division.
3. Complete these required core courses (28-29 credits):

BIOL 105	Fundamentals of Biology I	4
BIOL 106	Fundamentals of Biology II	4
BIOL 219	Fundamentals of Biology III	4
BIOL 252	Principles of Genetics	4
BIOL 310	Animal Physiology (3)	3-4
	or	
BIOL 316	Plant Physiology (4)	
	or	
BIOL 361	Cell Biology (3)	
BIOL 492	Undergraduate Seminar	1
CHEM 103	Introduction to General	8
	and Organic Chemistry (4)	
	and	
CHEM 104	Introduction to Organic	
	Chemistry and Biochemistry (4)	
	or	
CHEM 105	General Chemistry I (4)	
	and	
CHEM 106	General Chemistry II (4)	

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

GEOL 111	Physical Geology (4)	
	and	
GEOL 112	Historical Geology (4)	
	or	
PHYS 123	Basic Physics I (4)	
	and	
PHYS 124	Basic Physics II (4)	

5. Complete 15-17 credits of upper-division program electives from the following areas:

Ecology	3-4
Microbiology	4-5
Biology electives	8

6. A total of 124 credits is required for the degree, of which 42 credits must be upper-division.

BACHELOR OF SCIENCE, BIOLOGICAL SCIENCES

The Bachelor of Science degree includes a single core program of course work leading to two major areas of study. The Cell-Molecular track prepares students for professional careers in areas such as medicine, dentistry and veterinary science. The Organismal-Ecology-Evolution track prepares students for careers in environmental, organismal, evolutionary biology. A wide selection of electives is available to all students. It is imperative that students consult their advisors to determine which electives are most appropriate to their career interests. Some of these elective courses are offered periodically, depending on demand. Refer to course descriptions to identify these courses.

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences Requirements listed on page 74.

D. MAJOR REQUIREMENTS

1. Unless otherwise noted, the major requirements may also be used to satisfy the general education and other degree requirements.
2. Complete 46-51 credits in biology of which at least 30 must be upper-division.
3. Complete these required support courses (38 credits):

AS 307	Probability and Statistics	3
AS 308	Intermediate Statistics*	3
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
CHEM 321	Organic Chemistry I	4
CHEM 322	Organic Chemistry II	4
MATH 200	Calculus I	4
MATH 201	Calculus II	4
PHYS 123	Basic Physics I (4)	8
	and	
PHYS 124	Basic Physics II (4)	
	or	
PHYS 211	General Physics I (4)	
PHYS 212	General Physics II (4)	

**It is recommended that AS 308 be taken. Students may substitute AS 308 for 3 upper-division biology credits.*

4. Complete biology core courses (32-33 credits):

BIOL 105	Fundamentals of Biology I	4
BIOL 106	Fundamentals of Biology II	4
BIOL 219	Fundamentals of Biology III	4
BIOL 252	Principles of Genetics	4
BIOL 308	Principles of Evolution	3
BIOL 310	Animal Physiology (3)	3-4
	or	
BIOL 316	Plant Physiology (4)	
	or	
BIOL 361	Cell Biology (3)	
BIOL 340	General Microbiology	5
BIOL 371	Principles of Ecology	4
BIOL 492	Undergraduate Seminar	1

5. Complete 14-15 credits of upper-division program electives from the following list: NOTE: Preprofessional students may substitute CHEM 441-442 Principles of Biochemistry and 443 Biochemistry Laboratory for 8 upper-division Biology credits. 14-15

A. Recommended electives in Cellular and Molecular Biology: Cellular-Molecular

BIOL 310	Animal Physiology (3)
	or
BIOL 316	Plant Physiology (4)
	or
BIOL 361	Cell Biology (3)

BIOL 352 Human Genetics (3)
BIOL 362 Cell Biology Laboratory (3)
BIOL 412 Endocrinology (3)
BIOL 461 Molecular Biology (3)
BIOL/CHEM 471 Immunochemistry (4)
BIOL 488 Developmental Biology (4)

Zoology
BIOL 327 Parasitology (4)
BIOL 487 Comparative Anatomy of Vertebrates (4)

Techniques
BIOL 403 Microtechnique (4)
BIOL 495 Instructional Practicum: Laboratory (1)

B. Recommended elective courses in Organismal, Ecology and Evolutionary Biology:

Botany
BIOL 331 Systematic Botany (4)
BIOL 333 Biology of Non-Vascular Plants (4)
BIOL 334 Biology of Vascular Plants (4)
BIOL 335 Bryophytes and Lichens (4)
BIOL 439 Plant Ecology Field Course (3)

Zoology
BIOL 327 Parasitology (4)
BIOL 423 Ichthyology (4)
BIOL 427 Invertebrate Zoology (4)
BIOL 487 Comparative Anatomy of Vertebrates (4)

Ecology-Systems
BIOL 309 Biogeography (3)
BIOL 310 Animal Physiology (3)
or
BIOL 316 Plant Physiology (4)
or
BIOL 361 Cell Biology (3)
BIOL 373 Environmental Biology (3)
BIOL 375 Terrestrial Ecosystems (3)
BIOL 378 Marine Biology (3)
BIOL 475 Arctic Tundra Ecosystems (3)
BIOL 476 Boreal Ecosystems (3)

Techniques
BIOL 403 Microtechnique (4)
BIOL 495 Instructional Practicum: Laboratory (1)

C. Special topics, independent study and individual research (credits arranged):
BIOL 497 Independent Study in Biology
BIOL 498 Individual Research

6. A total of 124-125 credits is required for the degree, of which 42 credits must be upper-division.

BACHELOR OF SCIENCE, NATURAL SCIENCES

The Department of Biological Sciences also oversees the Bachelor of Science in Natural Sciences. This curriculum emphasizes the interrelationships among the sciences. This flexible degree program can be used to meet admissions requirements of specific professional schools in medicine, dentistry, and veterinary medicine.

It is also designed for health sciences practitioners who wish to obtain a stronger background in both the biological and chemical sciences.

For a complete program description see page 94.

BIOLOGICAL SCIENCES AS A MINOR

Students majoring in another subject who wish to minor in Biological Sciences must complete the following requirements. A total of 24 credits is required for the minor, 8 of which must be upper-division.

BIOL 105	Fundamentals of Biology I	4
BIOL 106	Fundamentals of Biology II	4
BIOL 219	Fundamentals of Biology III	4
BIOL 252	Principles of Genetics	4
Upper-division biology electives		8

CANADIAN STUDIES

INTRODUCTION

A Canadian Studies Committee was inaugurated in the 1985-86 academic year. In the Fall of 1987, UAA embarked upon a modest Canadian Studies Program designed to fit into the UAA mission with its focus on the Pacific Rim and Circumpolar regions.

The foundation for the UAA Canadian Studies Program is a two-semester, multidisciplinary, 6 credit course sequence on Canada. The first semester provides a basic overview of Canadian geography, anthropology, history, sociology, economics and politics. During the second semester, students are introduced to a number of significant contemporary Canadian issues. These have included Canadian/U.S. relations and Canada's role in international relations; Canada's delivery of distance and bilingual education; the health system and health delivery in Canada including specifically Northern health concerns; land claims and native sovereignty; Canadian culture—theatre, film, literature, and poetry; Canada's contributions in science and Arctic engineering; resource development in the Canadian North and Quebec and the current Canadian constitutional crisis.

A minor in Canadian Studies is available at UAA. The purpose of the minor is to offer students who have an interest in Canada the opportunity to combine a broad introduction to Canada with more detailed study of certain aspects of Canadian society. Students wishing to complete a minor in Canadian Studies must obtain prior approval for their program of study from the Director of Canadian Studies, CAS Building, Room 362, (907)786-4856.

CANADIAN STUDIES AS A MINOR

Students majoring in another subject who wish to minor in Canadian Studies must complete the following requirements. A total of 18 credits is required for the minor.

1. Complete the following required courses (6 credits):

INTL 301	Canada: Introductory Survey	3
INTL 302	Canada: Contemporary Issues	3

2. Complete 12 credits of approved electives, including at least one offering of INTL 303, Canada: Selected Topics. 12

The courses listed below are potentially applicable to the Canadian Studies Minor. Students will also be permitted to count special topics

courses and independent/directed study courses that focus specifically on Canada.

Note: To ensure adequate Canadian content when taking elective courses for the minor, the student must demonstrate that research and papers prepared for these courses focus on Canada.

ANTH 316	Arctic Archaeology	3
ANTH 326	Arctic Ethnology	3
ANTH 335	Native North Americans	3
ANTH 371	Selected Topics	1-3
ANTH 435	Northwest Coast Cultures	3
ART 365	Native Art of Alaska	3
BIOL 475	Arctic Tundra Ecosystems	3
ECON 415	Urban and Regional Economics	3
ECON 423	Comparative Economic Systems	3
ECON 435	Economics of Resources	3
ECON 463	International Economics	3
ED 478	Methods and Materials for Bilingual Education	3
ENGL 265	Literature of the North	3
ENGL 383	Film Interpretation	3
FREN 432	Studies of Literature and Culture	3
GEOG 207	Edge of Fire: A Physical Geography of the American West	3
HIST 341	History of Alaska	3
HIST 431	Colonies and Revolution	3
HIST 434	Early National Period: 1800-1850	3
INTL 303	Canada: Selected Topics	3
JUST 365	Comparative Justice Systems	3
PS 312	Nation-State Case Studies	3
PS 321	International Relations	3
PS 413	Comparative Case Study	3
PS 419	Studies in Comparative Politics	3
PS 424	International Law and Organization	3

CHEMISTRY

INTRODUCTION

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

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

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

HIGH SCHOOL PREPARATION

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

English	4 years
Mathematics	
Algebra (This must have included at least complex numbers, logarithms, quadratic functions, inequalities and absolute values, plus conic sections.)	2 years
Geometry	1 year
Trigonometry	1/2 year
Natural Sciences	
Physics (This must cover mechanics, thermodynamics, electricity and magnetism, and optics.)	1 year
Chemistry (This must cover elementary laboratory procedures, introduction to atoms and molecules, chemical reactions, equilibrium, and an introduction to chemical calculations.)	1 year

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

UNDERGRADUATE DEGREE

BACHELOR OF SCIENCE, CHEMISTRY

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. College of Arts and Sciences Requirements

Complete the College of Arts and Sciences requirements listed on page 74.

D. Major Requirements

Students are strongly encouraged to talk to a faculty advisor in the Chemistry Department to insure that the necessary math and science courses are taken in the first two years of study.

Students working toward a degree in Chemistry can choose one of two options:

Chemistry Option

1. Complete the following required courses (72 credits):

CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
CHEM 212	Quantitative Analysis	5
CHEM 321	Organic Chemistry I	4
CHEM 322	Organic Chemistry II	4
CHEM 331	Physical Chemistry I	3
CHEM 332	Physical Chemistry II	5
CHEM 434	Instrumental Methods	4
CHEM 452	Inorganic Chemistry I	3
CHEM 453	Inorganic Chemistry II	5
CHEM 492	Undergraduate Seminar (1)	2
CHEM 498	Individual Research (3)	6
MATH 200	Calculus I	4
MATH 201	Calculus II	4
MATH 202	Calculus III	4
MATH 302	Ordinary Differential Equations	3
PHYS 211	General Physics I	4
PHYS 212	General Physics II	4

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

Biochemistry Option

1. Complete the following required courses (73 credits):

CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
CHEM 212	Quantitative Analysis	5
CHEM 311	Physical Chemistry: A Biological Orientation	3
CHEM 321	Organic Chemistry I	4
CHEM 322	Organic Chemistry II	4
CHEM 434	Instrumental Methods	4
CHEM 441	Principles of Biochemistry I	3
CHEM 442	Principles of Biochemistry II	3
CHEM 443	Biochemistry Laboratory	2
CHEM 492	Undergraduate Seminar (1)	2
CHEM 498	Individual Research (3)	6
MATH 200	Calculus I	4
MATH 201	Calculus II	4
MATH 202	Calculus III	4
PHYS 123	Basic Physics I (4)	8
	and	
PHYS 124	Basic Physics II (4)	
	or	
PHYS 211	General Physics I (4)	
	and	
PHYS 212	General Physics II (4)	
Upper-division biology credits		9

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

Chemistry as a Minor

Students majoring in another subject who wish to minor in Chemistry must complete the following requirements. A total of 24 credits is required for the minor.

CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
CHEM 212	Quantitative Analysis	5
CHEM 311	Physical Chemistry: A Biological Orientation (3)	3
	or	
CHEM 331	Physical Chemistry I (3)	
CHEM 321	Organic Chemistry I	4
CHEM 322	Organic Chemistry II	4

COMPUTER SCIENCE

INTRODUCTION

The Department of Mathematical Sciences offers courses covering the major areas of computer science. These courses constitute the basis for an undergraduate major which prepares students for a variety of professional and technical careers in business, industry, and government or for graduate work leading to advanced degrees. In addition, the department offers an undergraduate minor and service courses for students from other fields who will use computer science as a tool in their own areas. Students interested in computer science will be advised with respect to computer science courses by the department so they may profitably pursue their academic and professional interests.

Requirements for a major in Computer Science are specified in two alternative forms. The program under the information systems option is the more broadly based and provides preparation for a wide range of careers in business and management information processing. The scientific option is more specifically oriented towards preparing a student for a career in scientific or engineering programming as well as for graduate training in computer science.

Each student taking any Computer Science course will be charged a single lab fee of $20 for the semester. (Applies to Elmendorf or Fort Richardson classes only when specifically annotated in the schedule. This fee does not apply to Eagle River Computer Science courses).

UNDERGRADUATE DEGREES

Admission Requirements

Complete the undergraduate admission requirements listed on page 64.

Graduation Requirements

Students must complete the following graduation requirements:

A. General University Requirements

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements for either a BA or BS degree listed on page 74.

D. MAJOR REQUIREMENTS

Students working toward a degree in Computer Science may choose one of three options:

I. BACHELOR OF ARTS, COMPUTER SCIENCE

Information Systems Option

1. Complete the following CS/MATH core courses (45 credits):

CS 101	Introduction to Data Processing	3
CS 210	Software and Hardware Concepts	3
CS 215	COBOL Program Development I	3
CS 216	COBOL Program Development II	3
CS 315	Systems Analysis Methods	3
CS 316	Structured Systems Analysis and Design	3
CS 360	Database Program Development	3
CS 414	Information Systems Planning and Management	3
CS 470	Applied Software Development Project	3
MATH 270	Applied Finite Mathematics for the Managerial Sciences	3
MATH 272	Calculus for Managerial Sciences	3
Upper-division Computer Science electives (excluding CS 340)		12

2. Complete required support courses (27 credits):

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
AS 252	Elementary Statistics	3
AS 308	Intermediate Statistics	3
BA 325	Corporate Finance	3
BA 335	Management Principles and Practices	3
BA 343	Principles of Marketing	3
BA 377	Operations Management	3
ENGL 311	Advanced Exposition (3)	3
	or	
ENGL 312	Advanced Technical Writing (3)	

3. Complete 3 credits of programming language electives such as CS 105, CS 107, CS 109, CS 201, ES 201, or other, with the approval of the Computer Science faculty advisors. 3
4. The program, including electives, must be developed with an academic advisor from the College of Arts and Sciences and must be approved by the Chair of the Department of Mathematical Sciences.
5. A total of 124 credits is required for the degree, of which 42 credits must be upper-division.

II. BACHELOR OF SCIENCE, COMPUTER SCIENCE

A. Information Systems Option

1. Complete the following CS/MATH core courses (45 credits):

CS 101	Introduction to Data Processing	3
CS 210	Software and Hardware Concepts	3
CS 215	COBOL Program Development I	3
CS 216	COBOL Program Development II	3
CS 315	Systems Analysis Methods	3
CS 316	Structured Systems Analysis and Design	3
CS 360	Database Program Development	3
CS 414	Information Systems Planning and Management	3
CS 470	Applied Software Development Project	3
MATH 270	Applied Finite Mathematics for the Managerial Sciences	3
MATH 272	Calculus for Managerial Sciences	3
Upper-division Computer Science electives (excluding CS 340)		12

2. Complete required support courses (27 credits):

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
AS 307	Probability and Statistics	3
AS 308	Intermediate Statistics	3
BA 325	Corporate Finance	3
BA 335	Management Principles and Practices	3
BA 343	Principles of Marketing	3
BA 377	Operations Management	3
ENGL 311	Advanced Exposition (3)	3
	or	
ENGL 312	Advanced Technical Writing (3)	

3. Complete 3 credits of programming language electives such as CS 105, CS 107, CS 109, CS 201, ES 201, or other, with the approval of the Computer Science faculty advisors. 3
4. The program, including electives, must be developed with an academic advisor from the College of Arts and Sciences and must be approved by the Chair of the Department of Mathematical Sciences.
5. A total of 121 credits is required for the degree, of which 42 credits must be upper-division.

B. Scientific Option

1. Complete the following core courses (66 credits):

CS 101	Introduction to Data Processing	3
CS 105	FORTRAN Programming	3
CS 201	Programming Concepts I	3
CS 202	Programming Concepts II	3
CS 210	Software and Hardware Concepts	3
CS 310	Numerical Methods	3
CS 330	Data Structures and Algorithms	3
CS 381	Optimization Techniques	3
CS 430	Computer Modeling and Simulation Techniques	3
CS 470	Applied Software Development Project	3
MATH 200	Calculus I	4
MATH 201	Calculus II	4
MATH 202	Calculus III	4
MATH 302	Ordinary Differential Equations	3
MATH 314	Linear Algebra	3
MATH 321	Analysis of Several Variables (3)	3
	or	
MATH 306	Discrete Methods (3)	
Upper-division electives in Computer Science/Math (excluding CS 340, MATH 420, and MATH 495)		15*

*A maximum of 6 credits in Mathematics is allowed.

2. Complete required support courses (23 credits):

AS 307	Probability and Statistics	3
AS 308	Intermediate Statistics	3
AS 402	Scientific Sampling	3
BA 377	Operations Management	3
ENGL 311	Advanced Exposition (3)	3
	or	
ENGL 312	Advanced Technical Writing (3)	
PHYS 211	General Physics I	4
PHYS 212	General Physics II	4

3. The program, including electives, must be developed with an academic advisor from the College of Arts and Sciences and must be approved by the Chair of the Department of Mathematical Sciences.
4. A total of 127 credits is required for the degree, of which 42 credits must be upper-division.

COMPUTER SCIENCE AS A MINOR

Students majoring in another subject who wish to minor in Computer Science must complete the requirements under one of the following options.

Information Systems Option

A total of 33 credits is required for the minor, 9 of which must be approved upper-division Computer Science credits.

1. Complete the following required courses (27 credits):

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
CS 101	Introduction to Data Processing	3
CS 210	Software and Hardware Concepts	3
CS 215	COBOL Program Development I	3
CS 216	COBOL Program Development II	3
Upper-division Computer Science electives		9

2. Complete two courses from the following (6 credits): 6

BA 325	Corporate Finance (3)
BA 335	Management Principles and Practices (3)
BA 343	Principles of Marketing (3)
BA 377	Operations Management (3)

Scientific Option

A total of 43-44 credits is required for the minor, 6 of which must be approved upper-division Computer Science elective credits.

Complete the following required courses:

AS 252	Elementary Statistics (3)	3
	or	
AS 307	Probability and Statistics (3)	
CS 101	Introduction to Data Processing	3
CS 105	FORTRAN Programming (3)	3
	or	
ES 201	Computer Techniques (3)	
CS 201	Programming Concepts I	3
CS 202	Programming Concepts II	3
CS 210	Software and Hardware Concepts	3
MATH 200	Calculus I (4)	3-4
	or	
MATH 272	Calculus for Managerial Sciences (3)	
Upper-division Computer Science electives		6
Natural Sciences Requirement for College of Arts and Sciences, BS degree		16

ENGLISH

INTRODUCTION

The English curriculum includes courses in basic literacy, study and thinking skills, vocabulary, composition, research writing, creative writing, linguistics, and literature. Students in required composition courses learn that effective writing comes from exploration and experimentation. English degree program majors develop a variety of skills in reading, writing, speaking, analytical thinking, and creative imagination. All literature courses are designed to extend knowledge of our literary heritage. The offerings of the English Department provide an opportunity for a truly liberal education—one that encourages both self-discovery and interest in enduring ideas.

For information on placement tests, challenge exams, transfer credits, petition procedures or registration details, contact the English Department. For information on courses for speakers of languages other than English, see English-As-A-Second Language (ESL).

UNDERGRADUATE DEGREE

BACHELOR OF ARTS, ENGLISH

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements listed on page 74.

D. MAJOR REQUIREMENTS

Students working toward a degree in English can choose one of three options: Traditional, Teaching, or Creative Writing.

1. Complete the following core courses for all options (15 credits):

ENGL 201	Masterpieces of World Literature I	3
ENGL 202	Masterpieces of World Literature II	3
ENGL 351	Poetry	3
ENGL 424	Shakespeare	3
ENGL 435	History of Criticism	3

2. Complete one of the following options.

Traditional Option (21 credits)

Take two of the following:		6
ENGL 306	American Literature I (3)	
ENGL 310	Ancient Literature (3)	
ENGL 315	Medieval Literature (3)	
ENGL 320	Renaissance Literature (3)	
ENGL 325	Neoclassical Literature (3)	
ENGL 330	Literature of Romanticism (3)	
ENGL 340	The Victorian Period (3)	
Take one of the following:		3
ENGL 307	American Literature II (3)	
ENGL 342	The Literature of Modernism (3)	
ENGL 343	Contemporary Literature (3)	
ENGL 440	Topics in 20th Century Comparative Literature (3)	
Take one of the following:		3
ENGL 361	The Novel (3)	
ENGL 363	The Short Story (3)	
ENGL 371	Prose Nonfiction (3)	
ENGL 381	Drama (3)	
ENGL 383	Film Interpretation (3)	
And take the following (9 credits):		
ENGL 475	Modern Grammar (3)	3
	or	
ENGL 476	History of English Language (3)	
Upper-division English electives		6

Teaching Option (24 credits)

Take two of the following:		6
ENGL 310	Ancient Literature (3)	
ENGL 315	Medieval Literature (3)	
ENGL 320	Renaissance Literature (3)	
ENGL 325	Neoclassical Literature (3)	
ENGL 330	Literature of Romanticism (3)	
ENGL 340	The Victorian Period (3)	
ENGL 341	Modern Literature: 1890-1920 (3)	
ENGL 342	The Literature of Modernism (3)	
ENGL 343	Contemporary Literature (3)	
Take one of the following:		3
ENGL 352	Undergraduate Writers' Workshop: Poetry (3)	
ENGL 362	Undergraduate Writers' Workshop: Fiction (3)	
ENGL 372	Undergraduate Writers' Workshop: Nonfiction (3)	
ENGL 382	Undergraduate Writers' Workshop: Drama for Stage and Screen (3)	
ENGL 414	Research Writing (3)	
Take one of the following:		3
ENGL 361	The Novel (3)	
ENGL 363	The Short Story (3)	
ENGL 371	Prose Nonfiction (3)	
ENGL 381	Drama (3)	
ENGL 383	Film Interpretation (3)	
Take one of the following:		3
ENGL 421	Chaucer (3)	
ENGL 426	Milton (3)	
And take the following (9 credits):		
ENGL 475	Modern Grammar	3
ENGL 476	History of English Language	3
ENGL 487	Standard Written English	3

Note: ENGL/ED 413 Secondary Methods: English (4 credits) is required for teacher certification. For additional requirements in the certification program, students must consult an advisor in the School of Education.

Creative Writing Option (21 credits)

Take one of the following:		3
ENGL 310	Ancient Literature (3)	
ENGL 315	Medieval Literature (3)	
ENGL 320	Renaissance Literature (3)	
ENGL 325	Neoclassical Literature (3)	
ENGL 330	Literature of Romanticism (3)	
ENGL 340	The Victorian Period (3)	
ENGL 341	Modern Literature: 1890-1920 (3)	
ENGL 342	The Literature of Modernism (3)	
ENGL 343	Contemporary Literature (3)	
Students must take 6 credits of undergraduate workshops in their thesis area and 3 credits in another workshop for 9 credits:		9
ENGL 352	Undergraduate Writers' Workshop: Poetry (3-6)	
ENGL 362	Undergraduate Writers' Workshop: Fiction (3-6)	
ENGL 372	Undergraduate Writers' Workshop: Nonfiction (3-6)	
ENGL 382	Undergraduate Writers' Workshop: Drama for Stage and Screen (3-6)	
Take two of the following:		6
ENGL 361	The Novel (3)	
ENGL 363	The Short Story (3)	
ENGL 371	Prose Nonfiction (3)	
ENGL 381	Drama (3)	
ENGL 383	Film Interpretation (3)	
And take the following (3 credits):		
ENGL 499	Thesis Project	3

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

ENGLISH AS A MINOR

Students majoring in another subject who wish to minor in English must complete the following requirements. A total of 18 credits is required for the minor.

ENGL 201	Masterpieces of World Literature I	3
ENGL 202	Masterpieces of World Literature II	3
ENGL 351	Poetry	3
ENGL 424	Shakespeare	3
ENGL 435	History of Criticism	3
Upper-division English electives		3

GEOLOGY

INTRODUCTION

Geology is the study of the earth, its composition, and the dynamic systems operating on it. It encompasses the past five billion years of solar system history including fossil life forms and their environments. Exciting new discoveries and revolutionary advances have led to an understanding of plate tectonics, natural resource origin and distribution, and planetary geology. Knowledge of geologic phenomena is essential to deal effectively with issues regarding the environment, natural hazards, changing climate, development of resources and even the survival of life on the planet.

The Bachelor of Education in Secondary Education , with a teaching major in geology, offers the students training in education as well as proficiency in geology.

GEOLOGY AS A MINOR

Students majoring in another subject who wish to minor in Geology must complete the following requirements. Completion of 18-20 credits is required for the minor, eight (8) of which must be upper-division.

GEOL 111	Physical Geology	4
GEOL 112	Historical Geology	4
Upper-division Geology electives		8
Other Geology electives		2-4

HISTORY

INTRODUCTION

History as a subject in its broadest sense is all that human beings have thought and done. Knowledge of history is the principle means by which humans discover and preserve their collective identity, for through such knowledge, we gain a glimpse of our potential and a clear view of our limitations.

History as an intellectual discipline examines and interprets the documentary records of human activity, records that are often fragmentary and incomplete. As a discipline, history is both a science and an art; it requires an intricate balance of scientific technique and creative imagination to weave fragments of evidence into an intelligent account of human experience. For this reason, history remains a challenging, rewarding, and often sobering intellectual experience.

UNDERGRADUATE DEGREE

BACHELOR OF ARTS, HISTORY

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements listed on page 74.

D. MAJOR REQUIREMENTS

1. Complete the following courses (36 credits):

HIST 101	Western Civilization I	3
HIST 102	Western Civilization II	3
HIST 131	History of United States I	3
HIST 132	History of United States II	3
HIST 477	Senior Seminar	3
Upper-division History electives		15
History electives, any level		6

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

HISTORY AS A MINOR

Students majoring in another subject who wish to minor in History must complete the following requirements. A total of 18 credits is required for the minor, 9 of which must be upper-division.

HIST 101	Western Civilization I (3)	6
	and	
HIST 102	Western Civilization II (3)	
	or	
HIST 131	History of United States I (3)	
	and	
HIST 132	History of United States II (3)	
Upper-division History electives		9
History elective, any level		3

JOURNALISM AND PUBLIC COMMUNICATIONS

INTRODUCTION

The Department of Journalism and Public Communications offers an undergraduate program leading to the Bachelor of Arts. All majors are required to take a set of core courses and to select one of five options. These options include journalism, public relations and advertising, telecommunication and film, photography, and general communication. Students with special needs may be allowed to take courses from more than one option. The Bachelor of Arts is accredited by the Accrediting Council on Education in Journalism and Mass Communication.

The program is designed to provide students with basic knowledge about gathering and presenting information through the various mass media. These courses also examine the place of media in society, and provide opportunities to examine social, ethical, and legal issues related to communications.

Broad scholarship is emphasized. Study is required in as many other fields as possible, such as anthropology, economics, history, language, philosophy, political science, psychology, sociology, and the sciences. This broad background is essential in preparation for careers in fields which demand a broad range of knowledge of their practitioners. Students selecting the public relations/advertising option are encouraged to take courses in marketing and business administration as part of their elective credits outside the major and the liberal arts requirements.

UNDERGRADUATE DEGREE

BACHELOR OF ARTS, JOURNALISM AND PUBLIC COMMUNICATIONS

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

ACADEMIC PROGRESS

A grade of "C" or better is needed in ENGL 211 or ENGL 213 and in any JPC course that is a prerequisite before proceeding to the advanced course.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements listed on page 74.

D. MAJOR REQUIREMENTS

1. Students must complete 126 credits, of which 90 must be outside the major. These 90 credits must include 65 credits in liberal arts courses. Only 36 JPC credits will be accepted in partial fulfillment of degree requirements. This consists of 18 credits in core courses taken by all majors, and 18 credits in one of the option areas. Students should know how to type before enrolling in writing classes. Computers are used in these classes, and students will be asked to write against deadline.
2. Complete all six of the following JPC core courses (18 credits):

JPC 101	Introduction to Mass Communication	3
JPC 111	Understanding Aural and Visual Communications	3
JPC 201	Newswriting	3
JPC 326	Principles of Advertising	3
JPC/JUST 413	Communications Law	3
JPC 435	Communication Research	3

3. Complete six courses in one of the following options (18 credits):

Journalism - Option I

Complete 18 credits: 18

JPC 212	Editing (REQUIRED) (3)
JPC 215	History of Mass Communication (3)
JPC/ART 224	Beginning Photography (3)
JPC 300	Photojournalism (3)
JPC 301	Advanced Newswriting (3)
JPC 311	Magazine Writing (3)
JPC 329	Graphics and Publication Design (3)
JPC 341	Broadcast Journalism Production (3)
JPC 400	Practicum (1-3)
JPC 401	Specialized Writing (3)
JPC 416	Information Age Communication (3)
JPC 440	The Press: Issues and Answers (3)
JPC 450	Internship in Journalism (3)
JPC 490	Selected Topics in Communication (1-3)

Public Relations and Advertising - Option II

Complete 18 credits: 18

JPC 212	Editing (REQUIRED) (3)
JPC 215	History of Mass Communication (3)
JPC/ART 224	Beginning Photography (3)
JPC 320	Principles of Public Relations (3)
JPC 328	Advertising Campaign (3)
JPC 329	Graphics and Publication Design (3)
JPC 330	Advanced Public Relations (3)
JPC 364	Advertising Strategy (3)
JPC 365	Advertising Creativity (3)
JPC 400	Practicum (1-3)
JPC 401	Specialized Writing (3)
JPC 416	Information Age Communication (3)
JPC/ART 423	Advertising and Public Relations Photography (3)
JPC 440	The Press: Issues and Answers (3)
JPC 451	Internship in Public Relations or Advertising (3)
JPC 490	Selected Topics in Communication (1-3)

Telecommunication and Film - Option III

Complete 18 credits:		18
JPC 215	History of Mass Communication (3)	
JPC/ART 224	Beginning Photography (3)	
JPC 310	Audio Production (3)	
JPC 316	Producing for Film and Television (3)	
JPC 325	Writing for Film and Television (3)	
JPC 341	Broadcast Journalism Production (3)	
JPC 350	Directing for Film and Television (3)	
JPC 400	Practicum (1-3)	
JPC 416	Information Age Communication (3)	
JPC 440	The Press: Issues and Answers (3)	
JPC 452	Internship in Telecommunications (3)	
JPC 490	Selected Topics in Communication (1-3)	

Photography - Option IV

Complete 18 credits:		18
JPC 215	History of Mass Communication (3)	
JPC/ART 224	Beginning Photography (REQUIRED) (3)	
JPC 300	Photojournalism (3)	
JPC/ART 323	Color Photography (3)	
JPC/ART 324	Intermediate Photography (3)	
JPC/ART 331	Experimental Photography (3)	
JPC/ART 367	History of Photography (3)	
JPC 400	Practicum (1-3)	
JPC 416	Information Age Communication (3)	
JPC/ART 423	Advertising and Public Relations Photography (3)	
JPC/ART 424	Advanced Photography (3)	
JPC 440	The Press: Issues and Answers (3)	
JPC 453	Internship in Photography (3)	
JPC 490	Selected Topics in Communication (1-3)	

General Communication - Option V

Complete 18 credits:	18
As a fifth option, students may take a cross section of the above courses upon justification to and approval of advisor.	

4. A total of 126 credits is required for the degree, of which 42 credits must be upper-division.

JOURNALISM AND PUBLIC COMMUNICATIONS AS A MINOR

Students majoring in another subject who wish to minor in JPC must complete the following requirements. A total of 18 credits is required for the minor, 6 of which must be upper-division.

JPC 101	Introduction to Mass Communication	3
JPC 111	Understanding Aural and Visual Communications	3
JPC 201	Newswriting	3
Upper-division JPC electives		6
Lower- or upper-division JPC electives		3

LANGUAGES

INTRODUCTION

Since language is the distinguishing trait of human beings, it can be said that the more languages we learn, the more human we become. The learning of other languages enhances linguistic competence and cultural sensitivity of one's own. It is through the languages and familiarity with other cultures that we best learn to appreciate and understand our national linguistic and cultural heritage, to grasp and tolerate differences of outlook and thereby achieve our full potential as citizens of an increasingly interdependent world.

The Department of Languages offers Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish from beginning to various levels of proficiency. The skills of reading and listening, speaking and writing are the foundations of the language learning process. Students build the basics in the first year. In subsequent years they learn grammatical structures, composition and conversation. In the fourth year they engage in the study and interpretation of more complex subjects such as culture and literary texts.

LANGUAGE CREDIT BY ADVANCED PLACEMENT

A student who passes a UAA catalog course in a language with a grade of B or better shall be eligible to be granted credit for the two immediately preceding courses, if any, a total of eight (8) credits. This policy shall not apply to students who have already been granted credit under the Advanced Placement Program, nor will it apply to special topics, individual and self study, literature or civilization courses. The student shall apply for these credits in Enrollment Services and pay an administrative fee.

FOREIGN LANGUAGES AS A MINOR

Students who wish to minor in languages must complete the following requirements: a total of 18 credits is required, of which 15 credits must be at or above the 100 level and at least nine (9) credits of which must be upper-division. Credits must be in one discipline chosen from the following languages:

French	Russian
German	Spanish
Japanese	

A comprehensive examination attesting to the student's oral and written proficiency in the language is required.

MATHEMATICS

INTRODUCTION

The well-trained mathematician is needed in many sectors of the community including business, government, education, computing, surveying and the vocational field.

The Department of Mathematical Sciences offers a broad-based selection of courses in mathematics, computer science, and statistics. The four-year degree program offers an excellent foundation for any career involving theoretical or applied mathematics. Information on Computer Science and Applied Statistics can be found in the catalog under the appropriate headings.

The Department of Mathematical Sciences has two microcomputer laboratories, and an additional laboratory with terminals to a mainframe computer. Students also have access to a statewide network of computers. Peer tutoring and computer-assisted instruction are available for those students needing help in mathematics.

The Department of Mathematical Sciences offers a comprehensive mathematics program for those students who wish to:

a. improve job-related mathematics skills
b. study mathematics for self-interest
c. study mathematics for use in another discipline
d. obtain a Vocational Certificate
e. obtain an Associate of Arts Degree
f. obtain an Associate of Applied Science Degree
g. obtain a Bachelor of Arts Degree
h. obtain a Bachelor of Science Degree

UNDERGRADUATE DEGREES

BACHELOR OF ARTS, MATHEMATICS

BACHELOR OF SCIENCE, MATHEMATICS

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements for either a BA or BS degree listed on page 74.

D. MAJOR REQUIREMENTS

Students working toward a degree in Mathematics can choose from three options.

Options I & II

BACHELOR OF ARTS, MATHEMATICS

BACHELOR OF SCIENCE, MATHEMATICS

1. Complete the following courses (33 credits):

AS 307	Probability and Statistics	3
MATH 200	Calculus I	4
MATH 201	Calculus II	4
MATH 202	Calculus III	4
MATH 302	Ordinary Differential Equations	3
MATH 303	Introduction to Modern Algebra	3
MATH 314	Linear Algebra	3
MATH 321	Analysis of Several Variables	3
MATH 324	Advanced Calculus	3
MATH 410	Introduction to Complex Analysis (3)	3
	or	
MATH 422	Partial Differential Equations (3)	

2. Complete three additional courses (9 credits) applying advanced mathematical techniques, selected according to the student's interests (excluding MATH 495). One of these courses must be a computer language course. 9 3.
The program, including electives, must be developed with an academic advisor from the College of Arts and Sciences and must be approved by the Chair of the Department of Mathematical Sciences.
4. A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Option III

BACHELOR OF ARTS, MATHEMATICS - WITH TEACHING CERTIFICATE

1. Complete the following courses (27 credits):

AS 307	Probability and Statistics	3
MATH 200	Calculus I	4
MATH 201	Calculus II	4
MATH 202	Calculus III	4
MATH 303	Introduction to Modern Algebra	3
MATH 305	Geometry	3
MATH 314	Linear Algebra	3
MATH 420	Foundations of Mathematics	3

2. Complete three additional courses (9 credits) applying advanced mathematical techniques, selected according to the student's interests. One of these courses must be a computer language course. 9
3. Complete the Secondary Education teacher certification requirements as listed on page 145.
4. The program, including electives must be developed with an academic advisor from the College of Arts and Sciences and must be approved by the Chair of the Department of Mathematical Sciences.
5. A total of at least 144 credits is required for the degree, of which 42 credits must be upper-division.

MATHEMATICS AS A MINOR

Students majoring in another subject who wish to minor in Mathematics must complete the following requirements. A total of 18 credits is required for the minor, 6 of which must be approved upper-division Mathematics credits.

MATH 200	Calculus I	4
MATH 201	Calculus II	4
MATH 202	Calculus III	4
Approved upper-division Mathematics electives		6

MUSIC

INTRODUCTION

Music is among the expressive arts. It is related both historically and philosophically to the existence of humankind.

The music program is intended to give students a diverse preparation, increasing musical breadth and intensifying musical experience. The program has as its goal a well-rounded musical education that demonstrates the interrelationship of music history, theory, and performance, and develops qualified musical leaders in schools and communities across the nation.

Students may enroll in one of four majors: Bachelor of Arts in Music, Bachelor of Music in Performance, Bachelor of Music in Elementary Education, and Bachelor of Music in Secondary Education.

The Bachelor of Arts in Music is a curriculum planned for those desiring a broad liberal education with a concentration in music. Students pursuing this degree sample courses of their choosing in each of the major academic areas while still having time to strengthen their understanding and performance in their chosen areas of music.

The Bachelor of Music in Performance offers intense specialization for those desiring professional training in music.

The Bachelor of Music in Elementary Education provides thorough preparation in teacher training with sufficient time to develop excellence in performance areas.

The Bachelor of Music in Secondary Education offers the student extensive training in general education and also proficiency in developing and directing music programs at the secondary level. During the course of studies, the student is also given sufficient time to develop excellence in performance areas.

UNDERGRADUATE DEGREES

BACHELOR OF ARTS, MUSIC

BACHELOR OF MUSIC, PERFORMANCE

BACHELOR OF MUSIC, ELEMENTARY EDUCATION

BACHELOR OF MUSIC, SECONDARY EDUCATION

ADMISSION REQUIREMENTS: ALL MAJORS

Complete the undergraduate admission requirements listed on page 64.

ACADEMIC PROGRESS: ALL MAJORS

At the end of the sophomore year, all music majors must demonstrate a satisfactory level of proficiency of performance in their applied major in order to advance to upper-division courses. A student may elect to continue study at the 200 level in attempting to pass requirements for admission to upper-division study.

MUS 154, Functional Piano I, and the piano proficiency exam by jury, must be passed prior to completion of 60 credits in the program. Music majors may not enroll in certain upper-division music courses until this jury exam is passed. See music degree listings for specific requirements.

GRADUATION REQUIREMENTS: ALL MAJORS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements for either a BA or BM degree, listed on page 74.

D. MAJOR REQUIREMENTS: ALL MAJORS

All Bachelor of Music majors must complete a graduation recital on the student's major instrument in the senior year. Students seeking a Bachelor of Music in Performance must complete a half recital in the junior year and a full recital in the senior year. The student, in both recitals, must demonstrate the ability to perform a program of artistic merit satisfactorily in public.

1. Complete the following required courses (29 credits):

MUS 131	Music Theory I	3
MUS 132	Music Theory II	3
MUS 133	Sightsinging and Ear Training I	2
MUS 134	Sightsinging and Ear Training II	2
MUS 154	Functional Piano I	1
MUS 221	History of Music I	3
MUS 222	History of Music II	3
MUS 231	Music Theory III	3
MUS 232	Music Theory IV	3
MUS 233	Sightsinging and Ear Training III	2
MUS 234	Sightsinging and Ear Training IV	2
MUS 280	Basic Conducting	2

2. All music majors enrolled in MUS 161 through 462 (juried Private Music Lessons at all levels) are required to participate in an appropriate ensemble each semester of enrollment. Piano majors enroll in MUS 302, Chamber Music and Accompanying.
3. All music majors enrolled in MUS 161 through 462 (juried Private Music Lessons at all levels) are required to perform in at least one student recital per semester.
4. Jury finals are required at the end of each semester for all music majors in MUS 161 through 462 (Private Music Lessons at all levels)
5. Attendance at department approved recitals and concerts is mandatory for all music majors enrolled in MUS 161 through 462 (juried Private Music Lessons at all levels) providing students with a variety of musical experiences which expand the regular curriculum. Failure to meet the minimum attendance requirement will lower by one letter the grade assigned for private lessons.

Additional Major Requirements: Music Major, BA

1. Complete required music courses:

MUS 161-462	Private Lessons (on major instrument)	4
MUS 301, 302, 303, 307, or 409	Ensembles	10
MUS 331	Form and Analysis	3
MUS 467, 468 or 469	Master Class	0-8

2. Music majors may not enroll in upper-division academic courses (MUS 331, 420-424, 431, or 432) until they have passed the piano proficiency exam by jury.
3. A total of 130 credits is required for the degree, of which 42 credits must be upper-division.

Additional Major Requirements: Performance Major, BM

1. Complete required music courses:

MUS 161-462	Private Lessons (on major instrument)	16
MUS 301, 302, 303 ,307, or 409	Ensembles	16
MUS 467, 468 or 469	Master Class	0-16

2. Select 11 upper-division credits from the following:

MUS 331	Form and Analysis	3
MUS 381	Choral Conducting (2)	2
	or	
MUS 382	Instrumental Conducting (2)	
MUS 431	Counterpoint	3
MUS 432	Orchestration	3
Music History or Literature electives		5-6

3. Music majors must have passed the piano proficiency exam by jury before enrolling in private lessons at the MUS 361 level.
4. A total of 129-145 credits is required for the degree, of which 42 credits must be upper-division.

Additional Major Requirements: Elementary Education Major, BM

1. Complete required music courses:

MUS 161-462	Private Lessons (on major instrument)	8
MUS 301, 302, 303, or 307	Ensembles	16
MUS 331	Form and Analysis	3
MUS 371-375	Methods and Techniques	10
MUS 381	Choral Conducting (2)	2
	or	
MUS 382	Instrumental Conducting (2)	
MUS 432	Orchestration	3
MUS 467, 468 or 469	Master Class	0-8
MUS/ED 471	Elementary Music Methods	3

2. Students preparing to teach music should consult the School of Education concerning university programs leading to music teacher certification.
3. Music majors must have passed the piano proficiency exam by jury before enrolling in private lessons at the MUS 361 level.
4. A total of 132-140 credits is required for the degree, of which 42 credits must be upper-division.

Additional Major Requirements: Secondary Education Major, BM

1. Complete required music courses:

MUS 161-462	Private Lessons (on major instrument)	8
MUS 301, 302, 303, or 307	Ensembles	16
MUS 331	Form and Analysis	3
MUS 371-375	Methods and Techniques	10
MUS 381	Choral Conducting (2)	2
	or	
MUS 382	Instrumental Conducting (2)	
MUS 432	Orchestration	3
MUS 467, 468, or 469	Master Class	0-8
ED/MUS 472	Secondary Music Methods	3

2. Students preparing to teach music should consult the School of Education concerning university programs leading to music teacher certification.
3. Music majors must have passed the piano proficiency exam by jury before enrolling in private lessons at the MUS 361 level.
4. A total of 132-140 credits is required for the degree, of which 42 credits must be upper-division.

MUSIC AS A MINOR

Students majoring in another subject who wish to minor in music must complete the following requirements. A total of 19 credits is required for the minor, 8 of which must be upper-division.

MUS 111, 131, or 132	6
MUS 121 or 221 or 222	3
MUS 301, 302, 303, 307, or 409	4
MUS 161-462	2
MUS 371, 372, 373, 374, 375, 467, 468, or 469	4

NATURAL SCIENCES

INTRODUCTION

Modern sciences do not stand alone. Most draw heavily upon the tenets of at least one other discipline. The Natural Sciences curriculum emphasizes the interrelationships among the sciences and allows students to obtain a strong background in two or more sciences while meeting the requirements of a single degree program. A minimum of 74 science credits is required for this major, as specified below.

The Natural Sciences program is administered by the Department of Biological Sciences. For further information about the Natural Sciences program, contact the Chairperson of the Department of Biological Sciences. Upon acceptance into the major, an advisor will be assigned in Biology, Chemistry/Physics/Astronomy or Geology, according to the student's declared area of emphasis.

UNDERGRADUATE DEGREE

BACHELOR OF SCIENCE, NATURAL SCIENCES

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

Note: Major requirements may also be used to satisfy the General Education Requirements.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements listed on page 74. It is recommended that MATH 200 or MATH 272, AS 307 and the Computer Programming requirements be completed in the first two years of study.

Note: Major requirements may also be used to satisfy the College of Arts and Sciences Requirements.

D. MAJOR REQUIREMENTS

Students must complete the following major requirements:

1. Complete three of the following course sequences (24 credits):

BIOL 105	Fundamentals of Biology I (4)	24
	and	
BIOL 106	Fundamentals of Biology II (4)	
	OR	
CHEM 105	General Chemistry I (4)	
	and	
CHEM 106	General Chemistry II (4)	
	OR	
GEOL 111	Physical Geology (4)	
	and	
GEOL 112	Historical Geology (4)	
	OR	
PHYS 123	Basic Physics I (4)	
	and	
PHYS 124	Basic Physics II (4)	

Note: It is recommended that the three science course sequences be completed in the first two years of study. For students whose emphasis lies in the area of the biological sciences, it is recommended that BIOL 219 also be completed within the first two years of study, as it is a prerequisite to several upper-division biology courses.

2. Complete an additional 50 science credits from at least two science disciplines, of which at least 35 credits must be upper-division. Possible combinations include but are not limited to the following: 50

   Biology/Chemistry
   Biology/Psychology/Statistics
   Physics/Geology/Chemistry/Mathematics

   Acceptable credits from UAA or from other accredited institutions include but are not limited to credits earned in the following disciplines:

Applied Statistics	Natural Resource Management
Computer Sciences	Mathematics
Environmental Sciences	Wildlife Management
Engineering	Oceanography
Health Sciences	Psychology

Note: Credit for laboratory, internship, or clinical practicum courses will be awarded on an individual basis with the general rule of one credit for three lab hours applying in most cases.

3. Courses taken to meet the 50 credit Natural Sciences major degree requirement must be chosen with the approval of your advisor.
4. Submit a Program of Study signed by your advisor to Enrollment Services Office during the semester prior to the semester in which you plan to graduate. All courses listed in the Program of Study must be approved by the formal advisor before submission to the Enrollment Services Office.
5. A total of 120 credits are required for the degree, of which 42 credits must be upper-division.

PHILOSOPHY

INTRODUCTION

Philosophy acquaints students with the rich, living, intellectual traditions of both the Western and Eastern world. Philosophy courses address perennial questions vital to those traditions, and questions which evoke curiosity and critical inquiry. The basic objective of the Philosophy program is to develop an ability to understand and critically analyze basic concepts of reality, humanity, knowledge, society, and value.

The department serves all students and all disciplines. None of its courses have prerequisites, but most will require intensive and extensive reading and writing assignments. Courses at the 300- and 400-level assume a greater analytic ability; and it would be helpful, but not necessary, for students to have junior standing and to have taken at least one lower-division philosophy course before undertaking one of them.

The department offers a minor which is intended to enrich and complement a student's major program as well as offering the opportunity to pursue philosophical interests seriously and at length. A philosophy minor is also valuable preparation for many professional and graduate programs.

PHILOSOPHY AS A MINOR

Students majoring in another subject who wish to minor in Philosophy must complete the following requirements. A total of 18 credits are required for the minor.

1. Complete these required courses (12 credits):

PHIL 101	Introduction to Logic	3
PHIL 201	Introduction to Philosophy	3
PHIL 211	History of Philosophy I	3
PHIL 212	History of Philosophy II	3

2. Complete a minimum of 6 credits from the list below: 6

PHIL 301	Ethics (3)
PHIL 310	Philosophy of Love (3)
PHIL 320	Existentialism (3)
PHIL 401	Aesthetics (3)
PHIL 421	Philosophy of the Social Sciences (3)

POLITICAL SCIENCE

INTRODUCTION

In its oldest definition, political science was called the master science. More modern definitions are less comprehensive, but of the social sciences, political science has perhaps the least definite boundaries and the widest concerns. Consequently, political science covers many different subjects, uses several diverse methods, and appeals to a variety of students.

Students come to political science because they are interested in politics: some of them with an eye to a political career, some with a scholarly intent, and many wishing to know more about this central, inescapable human concern. The Department of Political Science aims to make all students aware and critical of their first opinions (since human beings are at their most opinionated in politics); to open up the possibilities of politics; to reveal the permanent political problems; to impart an intellectual discipline; and to supply a guide for choice.

Political Science is divided into five areas: Comparative Politics, International Relations, Political Philosophy, American Politics, and Political Behavior. Majors in Political Science are required to take at least one course in each of these areas, to specialize in one of them, and to complete introductory courses in economics and history as well as in political science. They are encouraged to take a broad range of courses in the liberal arts.

The Department also offers a Political Science minor with an emphasis in Political Science and an emphasis in Public Administration. Students selecting the Political Science emphasis choose courses in four of the five areas or develop a specialization in political science which complements their major field. Students selecting the Public Administration emphasis take courses in public administration, public policy, and organization theory.

The Department welcomes all students who want to learn more about politics. It reserves its honors for majors who earn qualifying marks both in a senior seminar and on a comprehensive examination.

HONORS IN POLITICAL SCIENCE

Students majoring in Political Science are eligible to graduate with Departmental Honors if they satisfy all of the following requirements:

1. Meet the requirements for a BA degree in Political Science.
2. Maintain a grade point average of 3.5 or above in courses applicable to the degree requirements.
3. Complete PS 400, Senior Seminar in Politics, with an honor grade ("A" or "B").
4. Receive an honors score (based upon criteria established by the Department) on a comprehensive examination for majors in their final semester.

Departmental Honors are awarded by the faculty in Political Science.

UNDERGRADUATE DEGREE

BACHELOR OF ARTS, POLITICAL SCIENCE

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate General Education Requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements listed on page 74.

D. MAJOR REQUIREMENTS

Note: Courses which meet General Education Requirements for Political Science majors are designated by a dagger (†) after their titles. Courses which meet College of Arts and Sciences requirements for Political Science majors are designated by a section mark (§) after their titles.

1. Complete the following core courses (21 credits):

PS 101	Introduction to American Government§	3
PS 102	Introduction to Political Science§	3
PS/SOC 361	Social Science Research Methods	3
ECON 201	Principles of Macroeconomics †	3
ECON 202	Principles of Microeconomics †	3
HIST 131	History of United States I †	3
HIST 132	History of United States II †	3

2. Complete one starred (*) course from each of the five areas below (15 credits): 15

Comparative Politics

*PS 311	Comparative Politics (3)
PS 312	Nation-State Case Studies (3)
PS 411	Tribes, Nations, and Peoples (3)
PS 412	Comparative Political Economy (3)
PS 413	Comparative Case Study (3)
PS 419	Studies in Comparative Politics (1-3)
PS 619	Studies in Comparative Politics (1-3)

International Relations

*PS 321	International Relations (3)
*PS 322	United States Foreign Policy (3)
PS 323	United States Defense Policy (3)
PS 324	Model United Nations (1/3)
PS/HIST 421	The Rise and Fall of Great Powers (3)
PS/HIST 423	Nuclear Weapons and National Strategies (3)
PS 424	International Law and Organization (3)
PS 429	Studies in International Relations (1-3)
PS 629	Studies in International Relations (1-3)

Political Philosophy

*PS 331	Political Philosophy (3)
*PS 332	History of Political Philosophy I: Classical§ (3)
*PS 333	History of Political Philosophy II: Modern§ (3)
PS 431	The American Political Tradition (3)
PS 432	Contemporary Political Thought (3)
PS 433	Theories of War and Politics (3)
PS 439	Studies in Political Philosophy (1-3)
PS 639	Studies in Political Philosophy (1-3)

American Politics

*PS 341	Congress (3)
*PS 342	The American Presidency (3)
PS/JUST 343	Constitutional Law (3)
PS 344	State and Local Politics (3)
PS 345	Alaska Government and Politics (3)
PS 346	Alaska Native Politics (3)
PS 347	Public Administration (3)
PS 348	Public Policy (3)
PS 441	Urban and Metropolitan Government (3)
PS 449	Studies in American Politics (1-3)
PS 649	Studies in American Politics (1-3)

Political Behavior

*PS/SOC 351	Political Sociology (3)
*PS 352	Public Opinion and Political Behavior (3)
PS 451	Political Parties and Group Politics (3)
PS 452	Campaigns and Elections (3)
PS 453	Organization Theory (3)
PS 454	Internship in Political Science (1-3)
PS 459	Studies in Political Behavior (1-3)
PS 659	Studies in Political Behavior (1-3)

3. Complete nine (9) credits in additional upper-division Political Science courses. At least six of these credits must be from courses in a single one of the five areas listed in item 2 above. 9
4. Complete six (6) additional credits at any level in courses in Political Science or in related courses drawn from the following list: 6

HIST/ECON 360	Modern Economic History (3)
HIST 401	The History of Warfare (3)
HIST 402	The Second World War (3)
INTL 301	Canada: Introductory Survey † (3)
INTL 302	Canada: Contemporary Issues (3)

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

Note: Students who wish to apply graduate-level courses to baccalaureate degree requirements must do so by petition. Courses so applied may not be used to meet the requirements of any master's program.

POLITICAL SCIENCE AS A MINOR

The Department of Political Science offers a minor with an emphasis in Political Science or an emphasis in Public Administration. A minor requires 18 credits earned according to the following rules.

Note: Courses required for Political Science minors which may be used to meet General Education Requirements and/or College of Arts and Sciences requirements are designated by a pound sign (#) after their titles. For other courses in Political Science which meet General Education Requirements and/or College of Arts and Sciences requirements, see pp. 70-72.

Political Science

Introductory courses (6 credits):

PS 101	Introduction to American Government #	3
PS 102	Introduction to Political Science #	3

Additional courses, according to one of the following options (twelve credits): 12

1. One starred (*) course from four of the five areas listed in item 2 above under major requirements; or
2. Three courses, including at least one starred (*) course, from one of the areas listed in item 2 above under major requirements, and one starred (*) course from another area. (PS 100, First-Year Seminar in Politics, may be substituted for the latter starred course.)

Public Administration

Introductory courses (6 credits):

PS 101	Introduction to American Government #	3
PS 102	Introduction to Political Science #	3

Additional courses, as follows (12 credits):

PS 347	Public Administration	3
PS 348	Public Policy	3
PS 453	Organization Theory	3
One additional starred (*) course from one of the areas listed in item 2 above under major requirements.		3

Note: Political Science majors who earn a Political Science minor with an emphasis in Public Administration may not count upper-division courses required for the minor (i.e., PS 347, PS 348, or PS 453) toward the major requirements in item 3 above for additional upper-division credits in Political Science.

PSYCHOLOGY

INTRODUCTION

The baccalaureate program in psychology offers students psychological information (theory and application), and skills for living more effectively, for gaining or advancing in employment, and admission to higher levels of education. Both the Bachelor of Arts and the Bachelor of Science degrees are available.

The psychology major requirements are flexible and are designed to serve a variety of career goals. The student majoring in psychology pursuing a general interest in human nature will probably take a different sequence of psychology courses than a student who is preparing for advanced work in psychology. All students are encouraged to plan undergraduate work carefully. Early and frequent consultation with an advisor is helpful in selecting courses which will provide a solid foundation in psychology and a good general education.

HONORS IN PSYCHOLOGY

The Department of Psychology recognizes exceptional undergraduate students by awarding them Departmental Honors in Psychology and noting the award on their permanent university transcript. To graduate with Departmental Honors, the student must be a declared Psychology Major and meet the following requirements:

1. Satisfy all requirements for a BA or BS degree in Psychology.
2. Maintain an overall GPA of 3.50.
3. Take Systems and Theories of Psychology (PSY 412).
4. Take Research Methods in Experimental Psychology (PSY 420).
5. Demonstrate professional competence by completing a Senior Thesis (PSY 499). The thesis project must follow applicable departmental guidelines.
6. Attain a minimum score of 600 in the Psychology Specialty test on the Graduate Record Exam. (Allow six weeks for scores to reach the Department).
7. Students intending to graduate with Departmental Honors must notify the Departmental Honors Committee, in writing, on or before the date they file their Application for Graduation with the Enrollment Services Office.

UNDERGRADUATE DEGREES

BACHELOR OF ARTS, PSYCHOLOGY

BACHELOR OF SCIENCE, PSYCHOLOGY

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements for either a BA or BS degree listed on page 74.

D. MAJOR REQUIREMENTS (41 CREDITS)

1. Complete these required core courses (29 credits):

PSY 111	General Psychology	3
PSY 150	Human Development	3
PSY 260	Statistics for Psychology	3
PSY 261	Introduction to Experimental Psychology	4
PSY 265	Psychology of Abnormal Behavior	3
PSY 355	Learning and Cognition	4
PSY 368	Personality Theories	3
PSY 370	Physiological Psychology	3
PSY 375	Psychology of Social Behavior	3

2. Take an additional 12 credits of psychology, 9 of which must be upper-division. 12
3. All psychology majors must take a standardized test of knowledge of psychology approved by the Psychology Department. There is no minimum score required for graduation.
4. A total of 120 credits is required for the degree of which 42 credits must be upper-division.

PSYCHOLOGY AS A MINOR

Students majoring in another subject who wish to minor in Psychology must complete the following requirements. Complete a total of 18 credits of Psychology, 6 of which must be upper-division. Must include PSY 111 and 3 additional courses required for a major in Psychology.

SOCIAL WORK

INTRODUCTION

The educational purpose of the Bachelor of Social Work program at the University of Alaska Anchorage is to prepare graduates for beginning professional social work practice. Preparation for professional practice builds on a broad based liberal arts education accomplished through completion of General Education and College of Arts and Sciences degree requirements.

Social work is a profession committed to assisting individuals, families, groups, organizations, communities and society as a whole in the improvement of the quality of life through the amelioration of social problems, equitable distribution of social resources, and client empowerment. Within an overall emphasis on client-centered problem solving, the Bachelor of Social Work degree program at University of Alaska Anchorage is guided by the following principles:

*Social work practice is based on selective use of knowledge in change efforts with human systems and social problems.
*Social work practice recognizes human diversity as a primary element.
*Social work practice is based on professional values.
*Social work practice is based on professional relationships.
*Social work practice is based on reciprocal role performance.

Social work education engages the student in carefully planned experiences to achieve the knowledge, skills, and attitudes necessary for beginning professional competence. These experiences take place in the classroom, laboratory, volunteer experience, small seminars, and selected field work practicum placements.

The Bachelor of Social Work degree program is accredited by the Council on Social Work Education (CSWE).

UNDERGRADUATE DEGREE

BACHELOR OF SOCIAL WORK

ADMISSION REQUIREMENTS: GENERAL

Complete the undergraduate admission requirements listed on page 64.

Credits earned through other CSWE accredited social work programs can be transferred to UAA and applied toward the Bachelor of Social Work degree. Approval from the UAA Social Work Department is required for acceptance of social work transfer credits from programs which are not accredited by the CSWE.

ADMISSION REQUIREMENTS: SOCIAL WORK PROGRAM

To be formally admitted, the student must:

1. Declare Social Work as a major.
2. Complete the General Education Requirements, including prerequisite and foundation courses with a cumulative GPA of 2.00 or higher.
3. Complete SWK 106, 206, and 360 with a grade of "C" or better.
4. Demonstrate written communication skills through provision of a sample of written work.
5. Submit a written application and a personal statement to the Social Work Department addressing the student's interest in social work.
6. Submit with the application packet a copy of the ASSET test taken within the last six (6) months.
7. Demonstrate beginning competence in client-centered interviewing skills through submission of a videotape of simulated interviews. Guidelines are provided in SWK 360, Interviewing for Generalist Social Work Practice.
8. Participate in a faculty interview to jointly assess student readiness to undertake professional practice and complete the academic requirements of the degree program.

ACADEMIC PROGRESS

Students in the Social Work program must have a grade of "C" or better in each course required for the major. Adherence to the Code of Ethics established by the National Association of Social Workers is required.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements found on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements for the Bachelor of Arts degree listed on page 74.

D. FOUNDATION COURSES

1. Complete the following courses which can be satisfied under GER or CAS requirements:

PSY 150	Human Development (GER)
SOC 101	Introduction to Sociology (GER or CAS)

2. Choose one of the following:

BIOL 102	Introductory Biology (GER)
BIOL 105	Fundamentals of Biology I (GER)
BIOL 106	Fundamentals of Biology II (GER)
BIOL 111	Human Anatomy and Physiology I (GER)
BIOL 113	Lectures in Human Anatomy and Physiology I (GER)

3. Complete the following:

AS 252	Elementary Statistics (GER)

4. Choose one of the following:

ANTH 200	Natives of Alaska (GER)
ANTH 202	Cultural Anthropology (GER)

E. MAJOR REQUIREMENTS

1. Complete the following required courses (45 credits):

SWK/HUMS/SOC 106	Introduction to Social Welfare	3
SWK 206	Introduction to Social Work	3
SWK 324	Social Work Research	3
SWK 342	Human Behavior in the Social Environment	3

SWK 343	Human Behavior: Diversity and Discrimination	3
SWK 360	Interviewing for Generalist Social Work Practice	3
SWK 406	Social Welfare: Policies and Issues	3
SWK 461A	Social Work Practice I	3
SWK 461B	Social Work Practicum I	6
SWK 462A	Social Work Practice II	3
SWK 462B	Social Work Practicum II	6
Upper-division Social Work electives		6

2. Complete general electives to total 120 credits.
3. A total of 120 credits is required for the degree, of which 42 must be upper-division.

SOCIAL WORK AS A MINOR

Students majoring in another subject who wish to minor in Social Work must complete the following requirements. A total of 18 credits is required for the minor.

SWK/HUMS/SOC 106	Introduction to Social Welfare	3
SWK 206	Introduction to Social Work	3
SWK 342	Human Behavior in the Social Environment	3
SWK 343	Human Behavior: Diversity and Discrimination	3
SWK 406	Social Welfare: Policies and Issues	3
Upper-division Social Work electives		3

SOCIOLOGY

INTRODUCTION

Sociology is the study of social systems—the way they are formed, sustained, and changed. It is concerned with processes which shape individual communication, world view and behavior. The curriculum in sociology is meant to provide the student with the following: a contribution to a liberal arts education, preparation for graduate training in sociology, and/or preparation for applied sociology in the world of work. Within the major, students can select a specialization in Family and Life Cycles, Community and Change, or General Sociology with a focus on liberal arts. Within the Family and Community specializations, majors must select either an academic or applied focus.

UNDERGRADUATE DEGREES

BACHELOR OF ARTS, SOCIOLOGY

BACHELOR OF SCIENCE, SOCIOLOGY

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate General Education Requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements for either a BA or BS degree listed on page 74.

D. MAJOR REQUIREMENTS

1. Complete Sociology core courses (16 credits):

SOC 101	Introduction to Sociology	3
SOC 201	Social Problems and Solutions	3
SOC/PSY 353	Application of Statistics to Social Sciences	3
SOC/PS 361	Social Science Research Methods	3
SOC 402	Theories of Sociology	3
SOC 491	Senior Sociology Seminar	1

2. Complete one of the following options:

Option I

Family and Life Cycles (18 credits):

For majors specializing in small groups and family systems:

1. Complete two general background courses (6 credits): 6
   - SOC 275 Social Psychology (3)
   - SOC 363 Social Stratification (3)
   - SOC 405 Social Change (3)
2. Complete two core area courses (6 credits): 6
   - SOC 242 An Introduction to Marriage, Family and Intimate Relationships (3)
   - or
   - SOC 342 Sexual, Marital and Family Lifestyles (3)
   - SOC 246 Adolescence (3)
   - SOC 310 Sociology of Aging (3)
   - SOC 377 Men, Women and Change (3)
   - SOC 452 Violence in Intimate Relationships (3)
3. Select either the Academic Emphasis or the Applied Emphasis: 6
   - A. For the Academic Emphasis, complete two additional courses from item 2 core area courses (above).
   - B. For the Applied Emphasis, complete two courses from the following application courses:
   - SOC/HUMS/SWK 106 Introduction to Social Welfare (3)
   - SOC 142 Sociology of Sexuality (3)
   - SOC/JUST 454 Evaluation Research and Change (3)
   - SOC 487 Sociology Practicum (3) (May be repeated)

Option II

Community and Change (18 credits):

For majors specializing in rural community and urban systems.

1. Complete two general background courses (6 credits): 6
   - SOC 202 The Social Organization of Society (3)
   - SOC 307 Demography (3)
   - SOC 343 Sociology of Deviant Behavior (3)
   - SOC 363 Social Stratification (3)
   - SOC 404 Environmental Sociology (3)
   - SOC 405 Social Change (3)

2. Complete two core area courses (6 credits): 6
   - SOC 222 Small and Rural Communities (3)
   - SOC 309 Urban Sociology (3)
   - SOC 373 Strategies of Community Change (3)
   - SOC/SWK 407 Formal Organizations (3)
3. Select either the Academic Emphasis or the Applied Emphasis: 6
   - A. For the Academic Emphasis, complete two additional courses in item 2 core area courses (above).
   - B. For the Applied Emphasis, complete required applications courses:
   - SOC/JUST 454 Evaluation Research and Change (3)
   - SOC 487 Sociology Practicum (3) (May be repeated)

Option III

General Sociology (18 credits):

For majors desiring a general sociology degree with a liberal arts orientation and/or potential of a double major.

1. Complete three courses (9 credits) from the following: 9
   - SOC 275 Social Psychology (3)
   - SOC 343 Sociology of Deviant Behavior (3)
   - SOC 347 Sociology of Religion (3)
   - SOC/PSY 353 Application of Statistics to Social Sciences (3)
   - SOC 363 Social Stratification (3)
   - SOC 405 Social Change (3)
   - SOC/SWK 407 Formal Organizations (3)
2. Select three additional courses (9 credits) from philosophy, political science, economics, psychology, sociology, or related disciplines with consent of advisor. 9

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

SOCIOLOGY AS A MINOR

Students majoring in another subject who wish to minor in Sociology must complete the following requirements. A total of 21 credits is required for the minor.

SOC 101	Introduction to Sociology	3
SOC/PS 361	Social Science Research Methods	3
SOC 402	Theories of Sociology	3
Upper-division Sociology electives		6
Sociology electives, any level		6

THEATRE

INTRODUCTION

Theatre is the art of giving life in performance to dramatic literature. The Department of Theatre offers a well-rounded liberal arts approach in its curriculum, with courses covering all the basic areas of theatrical endeavor, including acting, directing, stagecraft, scene design, lighting, costuming, makeup, dramatic literature, theatre history, dramatic theory and criticism, and playwriting.

Production is at the very center of our award-winning theatre program. Each season UAA Theatre produces four plays on its convertible thrust Main Stage, and as many as twenty one act or full-length plays in the student-directed Second Stage program. In most years one of our productions is chosen to tour rural Alaska. The plays are cast at open auditions and more than 100 majors, non-majors, and members of the community are involved in our season each year.

UNDERGRADUATE DEGREE

BACHELOR OF ARTS, THEATRE

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences requirements for a BA degree listed on page 74.

D. MAJOR REQUIREMENTS

1. Complete the following required courses (40 credits):

THR 111	Introduction to the Theatre	3
THR 121	Acting I	3
THR 131	Theatrical Production Techniques	3
THR 141	Stagecraft I	3
THR 221	Movement for the Actor	3
THR 243	Scene Design	3
THR 257	Costume Design and Construction I	3
THR 311	Representative Plays I (3)	3
	or	
THR 312	Representative Plays II (3)	
THR 331	Directing I	3
THR 411	History of the Theatre I	3
THR 412	History of the Theatre II	3

Upper-division Theatre electives		7

2. Choose one of the following courses (3 credits): 3

THR 321	Characterization (3)
THR 329	Combat for the Stage (3)
THR 343	Scenic Design II (3)
THR 357	Costume Design and Construction II (3)
THR 435	Directing II (3)

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

THEATRE AS A MINOR

Students majoring in another subject who wish to minor in Theatre must complete the following requirements. A total of 18 credits is required for the minor.

THR 111	Introduction to the Theatre	3
THR 121	Acting I	3
THR 141	Stagecraft I	3
THR 311	Representative Plays I (3)	3
	or	
THR 312	Representative Plays II (3)	
THR 411	History of the Theatre I (3)	3
	or	
THR 412	History of the Theatre II (3)	
Theatre electives		3

WOMEN'S STUDIES

INTRODUCTION

The interdisciplinary Women's Studies minor offers students the opportunity to select courses from a variety of academic disciplines. Women's Studies courses are planned to foster open, vigorous inquiry about women, to challenge curricula in which women are absent or peripheral, to question cultural assumptions in light of new information, and to create a supportive environment for those interested in studying women.

WOMEN'S STUDIES AS A MINOR

Students majoring in another subject who wish to minor in Women's Studies must complete the following requirements. A total of 18 credits is required for the minor, of which 9 must be upper-division.

1. Complete these required courses (12 credits):

ANTH 270	Cross-Cultural Perspectives on Women (3)	3
	or	
PSY 313	Psychology of Women (3)	
ENGL 304	British Women Writers (3)	3
	or	
ENGL 308	American Women Writers (3)	
SOC 242	An Introduction to Marriage, Family and Intimate Relationships (3)	3
	or	
SOC 377	Men, Women and Change (3)	
WS 200	Introduction to Women's Studies	3

2. Complete 6 credits of pre-approved electives. Any course on the above list which has not been taken as a requirement may be taken as an elective. For example, if ENGL 304, British Women Writers, has been taken to satisfy a Women's Studies minor requirement, ENGL 308, American Women Writers, is available for elective credit.

Other pre-approved electives are: 6

ENGL 133	Women's Autobiography (3)
ENGL 150	Women Writers (3)
HIST 381	American Women's History to 1870 (3)
HIST 382	American Women's History since 1870 (3)
HIST 460	Women of the World, History and Issues (3)
HUMS 150	Marriage, Divorce and Intimate (3) Relationships in the 90's
HUMS 350	Men and Masculinity (3)
PSY 203	Assertiveness Training (3)
SOC 342	Sexual, Marital and Family Lifestyles (3)
SOC 452	Violence in Intimate Relationships (3)
SWK 445	Women's Issues in the Human Services (3)
WS 401	Seminar in Women's Studies (1-3)
WS 460	Women's Writing Workshop (3)

Other courses may apply to the minor with approval of Women's Studies Chair.



SCHOOL OF BUSINESS

INTRODUCTION

The School of Business has three departments: (1) Accounting, (2) Business Administration, and (3) Computer Information and Office Systems. The Associate of Applied Science, Bachelor of Business Administration and Masters of Business Administration are offered by the school. The school maintains close relationships with the Alaska Center for International Business, the Small Business Development Center, the Center for Economic Development and the local business community. The Dean's Executive Advisory Council includes over 20 top executives representing the leading employers in the state. Many local firms offer scholarships, internships, and job opportunities for School of Business students. The school has over thirty full-time faculty with graduate degrees from many of the best universities in the country and extensive business experience. The school maintains a small school atmosphere with high academic standards.

MISSION

The mission of the School of Business is to develop and support the leadership of Alaska's business, government and not-for-profit organizations through quality instruction, research, service and technical assistance in management and business related disciplines.

ACCOUNTING

INTRODUCTION

The Department of Accounting offers two programs: an Associate of Applied Science (AAS) degree with a major in Accounting and the Bachelor of Business Administration (BBA) degree with a major in Accounting. The programs are designed to prepare students for a career in business, government, or other types of organizations. BBA graduates will generally pursue a professional accounting career while AAS graduates will be qualified for vocationally oriented accounting positions. The Department of Accounting is also committed to enhancing the lifelong learning opportunities for responsible citizenship and personal satisfaction where accounting and business dimensions are critical ingredients. The AAS degree in Accounting is available at UAA and Matanuska-Susitna College campuses.

UNDERGRADUATE DEGREES

ASSOCIATE OF APPLIED SCIENCE, ACCOUNTING

ADMISSION REQUIREMENTS

See Open Admission on page 65.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree graduation requirements listed on page 66.
2. Complete the Associate of Applied Science Requirements (15 credits) listed on page 67. To provide maximum transferability to the BBA in Accounting, it is recommended that students consider the Bachelor of Business Administration general education and business core requirements when selecting courses to fulfill the Associate of Applied Science general requirements.

MAJOR REQUIREMENTS

1. Complete the following required courses (33 credits):

ACCT 101	Principles of Financial Accounting I	3
ACCT 102	Principles of Financial Accounting II	3
ACCT 202*	Principles of Managerial Accounting	3
ACCT 210	Income Tax Preparation	3
ACCT 222	Introduction to Computers and Accounting	3
ACCT 225	Accounting for Payroll, Receivables and Payables	3
ACCT 230	Financial Statement Preparation and Presentation	3
BA 151	Introduction to Business	3
BA/JUST 241	Business Law I	3
CIOS 110	Computer Concepts in Business	3
ECON 201	Principles of Macroeconomics	3

**Student must pass MATH 105 ("C" or better) or successfully complete an equivalent Math Placement Test.*

2. Complete 12 credits of electives. Students may choose any course above the 100 level in ACCT, BA, CIOS, or ECON, but may not use more than 6 credits from one discipline. 12
3. A total of 60 credits is required for the degree.

BACHELOR OF BUSINESS ADMINISTRATION, ACCOUNTING

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

ADMISSION REQUIREMENTS TO UPPER-DIVISION COURSES

1. Completion of at least 39-40 credits with a cumulative GPA of 2.25 or higher.
2. Completion of each of the following courses with a grade of "C" or better (30-31 credits):

ACCT 201 and 202	6
BA 273	3
CIOS 110	3
ECON 201 and 202	6
ENGL 111 and ENGL 211, 212, or 213	6
MATH 270 or 107	3-4
SPCH 111	3

3. Completion of at least 9 credits that satisfy UAA General Education Requirements in the following areas: 9
   - Fine Arts
   - Humanities
   - Natural Sciences

Admission to Upper-division Status:
BBA students in Accounting, Business Administration, and Computer Information and Office Systems who do not meet the above standards may not take upper-division courses in ACCT, BA, or CIOS. Other students must meet course prerequisites.

Conditional Admission to Upper-division Status:
A student classified as being conditionally admitted to upper-division status may take upper-division ACCT, BA and CIOS courses for one semester only, while completing lower-division deficiencies.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate General Education Requirements listed on page 70.

C. SCHOOL OF BUSINESS REQUIREMENTS

ACCOUNTING MAJORS

A minimum of 63 credits for this degree must be from outside the business area. All ACCT, BA, and CIOS courses are considered within the business area. A maximum of 9 ECON credits may be counted as being outside the business area; any additional ECON credits will be counted as being within the business area.

Complete the BBA core requirements (24 -26 credits):

1. The following courses must be completed with a "C" or better 1) before enrolling in the upper-division core courses below and 2) prior to graduating:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BA 273	Introduction to Statistics for Business and Economics	3
CIOS 110	Computer Concepts in Business	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
MATH 270	Applied Finite Mathematics for the Managerial Sciences (3)	3-4
	or	
MATH 107	College Algebra (4)	
MATH 272	Calculus for Managerial Sciences (3)	3-4
	or	
MATH 200	Calculus I (4)	

Note: Students who plan to attend graduate school are encouraged to take MATH 107 (College Algebra) and MATH 200-201-202 (Calculus) instead of MATH 270 and 272.

2. Complete these upper-division core courses (21 credits):

ACCT 316	Accounting Information Systems	3
BA 300	Organizational Theory and Behavior	3
BA 325	Corporate Finance	3
BA 343	Principles of Marketing	3
BA 377	Operations Management	3
BA 380	Managerial Presentations	3
BA 488	The Environment of Business	3

D. MAJOR REQUIREMENTS

1. Complete the following requirements (30 credits):

ACCT 301	Intermediate Accounting I	3
ACCT 302	Intermediate Accounting II	3
ACCT 310	Income Tax	3
ACCT 342	Managerial Cost Accounting	3
ACCT 452	Auditing	3
JUST/BA 241	Business Law I	3
JUST/BA 242	Business Law II	3
Accounting electives*		6
Upper-division ECON elective or BA 375		3

*Required Accounting electives (6 credits) must be selected from the following courses:

ACCT 401	Advanced Accounting I (3)
ACCT 402	Advanced Accounting II (3)
ACCT 410	Advanced Income Tax (3)
ACCT 411	Estate and Trust Tax Law (3)
ACCT 420	Natural Resource Accounting (3)
ACCT 425	Accounting for Alaskan Industries (3)
ACCT 430	Governmental Accounting (3)
ACCT 435	Accounting for Not-For-Profit Organizations (3)
ACCT 442	Advanced Cost Accounting and Controllership (3)
ACCT 453	Internal Auditing (3)
ACCT 480	Accounting Theory (3)

2. A total of 127 credits is required for the degree, of which 48 credits must be upper-division.

ACCOUNTING AS A MINOR

Students majoring in another subject who wish to minor in Accounting, must complete the following requirements. A total of 15 credits is required for the minor.

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
Upper-division Accounting electives		9

BUSINESS ADMINISTRATION

INTRODUCTION

The Department of Business Administration offers a Certificate in Small Business Management at the Kenai campus, an AAS degree in General Business at the Kodiak campus, an AAS degree in Small Business Administration at the Anchorage, Kenai and Mat-Su campuses as well as a BBA degree in Economics, Finance, Management and Marketing on the Anchorage campus. Students in Finance, Management and Marketing may also select an international option. A Business Administration minor is also available on the Anchorage campus. These are professional programs designed to meet the challenges of a dynamic and changing business environment. Graduates in business find job opportunities in Alaska, throughout the U.S. and in many foreign countries.

CERTIFICATE

SMALL BUSINESS MANAGEMENT

This Small Business Management certificate is offered only through Kenai Peninsula College.

The one-year Small Business Management certificate enables the student to explore business career options and gives entry-level job skills and/or upgrades skills for employment advancement. It also serves as the first year of training towards the two-year Associate of Applied Science in Small Business Administration.

1. Complete the following communications requirements (6 credits):

ENGL 111	Methods of Written Communication	3
Select 3 credits from the following:		3
ENGL 211	Intermediate Exposition with Readings in Literature (3)	
ENGL 212	Technical Writing (3)	
ENGL 213	Intermediate Exposition with Readings in Nonfiction (3)	
CIOS 262	Written Business Communications (3)	

2. Complete the following requirements:

A. Select 3 credits from the following: 3

ACCT 101*	Principles of Financial Accounting I (3)
ACCT 201	Principles of Financial Accounting (3)
ACCT 120	Bookkeeping for Business I (3)

B. Select 3 credits from the following: 3

ACCT 102*	Principles of Financial Accounting II (3)
ACCT 202	Principles of Managerial Accounting (3)
ACCT 222	Introduction to Computers and Accounting (3)

**Students taking ACCT 101 and ACCT 102 cannot use ACCT 201 for credit for the Small Business Management certificate.*

3. Complete the following:

BA 166	Small Business Management	3
BA 231	Fundamentals of Supervision	3

4. Select 6 credits from the following: 6

ACCT	Accounting
BA	Business Administration
CIOS	Computer Information and Office Systems
ECON	Economics

5. With advisor approval, complete 3-5 elective credits. 3-5
   MATH 102 Business Math, or above is recommended.
6. A total of 27-29 credits is required for the certificate.

UNDERGRADUATE DEGREES

ASSOCIATE OF APPLIED SCIENCE, GENERAL BUSINESS

This degree is offered only through Kodiak College.

ADMISSION REQUIREMENTS

See Open Admission on page 65.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

MAJOR REQUIREMENTS

1. Complete the following required courses (24 credits):

ACCT 101	Principles of Financial Accounting I	3
ACCT 102	Principles of Financial Accounting II	3
BA 151	Introduction to Business	3
BA/JUST 241	Business Law I	3
BA/JUST 242	Business Law II	3
CIOS 105A	Introduction to PC Computers	1
CIOS 105B	Introduction to PC Applications	2
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3

2. Complete an additional 12 credits from any 100- or 200-level ACCT, BA, CS, ECON, or CIOS course. 12
3. Complete an additional 9 elective credits. 9
4. A total of 60 credits is required for the degree.

ASSOCIATE OF APPLIED SCIENCE, SMALL BUSINESS ADMINISTRATION

ADMISSION REQUIREMENTS

See Open Admission on page 65.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67. To provide maximum transferability, it is recommended that students consider the Bachelor of Business Administration general education and business core requirements when selecting courses to fulfill the Associate of Applied Science general requirements.

MAJOR REQUIREMENTS

1. Complete the required support courses (12-16 credits):

ACCT 101	Principles of Financial Accounting I (3)	3-6
	and	
ACCT 102	Principles of Financial Accounting II (3)	
	or	
ACCT 201	Principles of Financial Accounting (3)	
ACCT 202	Principles of Managerial Accounting	3
CIOS 110	Computer Concepts in Business	3
MATH 105	Intermediate Algebra (3)	3-4
	or	
MATH 107	College Algebra (4)	
	or	
MATH 270	Applied Finite Mathematics for the Managerial Sciences (3)	

Note: MATH 105 will not satisfy the Quantitative Skills General Education Requirement for the baccalaureate degree.

2. Complete the required BA core courses (21 credits):

BA 151	Introduction to Business	3
BA 166	Small Business Management	3
BA 231	Fundamentals of Supervision	3
BA 233	Fundamentals of Financial Management	3
BA/JUST 241	Business Law I	3
BA 260	Marketing Practices	3
BA 264	Personal Selling	3

3. Complete 8-12 credits of electives from the following: 8-12

BA 105	Principles of Banking (3)
BA 131	Personal Finance (3)
BA 204	Introduction to Money and Banking (3)
BA 206	Analyzing Financial Statements (3)
BA 209	Consumer Lending (3)
BA 232	Fundamentals of Organizational Management (3)
BA/JUST 242	Business Law II (3)
BA 261	Advertising and Sales Promotion (3)
BA 262	Public Relations (3)
BA 263	Practices in Consumer Behavior (3)

4. A total of 60 credits is required for the degree.

BACHELOR OF BUSINESS ADMINISTRATION

Major areas: Economics
Finance
Management
Marketing

The Bachelor of Business Administration (BBA) is a professional degree offered through the School of Business. It is designed to prepare students to pursue meaningful and rewarding careers in management. The curriculum for the BBA degree is management oriented rather than highly specialized. Concepts that are relevant to both small and large firms and both the public and private sectors are emphasized.

The four majors — Economics, Finance, Management, and Marketing, —are designed to prepare students to pursue careers in the private and public sectors. Local, state, national, and international firms, and not-for-profit organizations provide a ready market for graduates in each of these four major areas of concentration.

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

ADMISSION REQUIREMENTS TO UPPER-DIVISION COURSES

1. Completion of at least 39-40 credits with a cumulative GPA of 2.25 or higher.
2. Completion of each of the following courses with a grade of "C" or better (30-31 credits):

ACCT 201 and 202	6
BA 273	3
CIOS 110	3
ECON 201 and 202	6
ENGL 111 and ENGL 211, 212, or 213	6
MATH 270 or 107	3-4
SPCH 111	3

3. Completion of at least 9 credits that satisfy UAA General Education Requirements in the following areas:
   - Fine Arts
   - Humanities
   - Natural Sciences

Admission to Upper-division Status:
BBA students in Accounting, Business Administration, and Computer Information and Office Systems who do not meet the above standards may not take upper-division courses in ACCT, BA, or CIOS. Other students must meet course prerequisites.

Conditional Admission to Upper-division Status:
A student classified as being conditionally admitted to upper-division status may take upper-division ACCT, BA and CIOS courses for one semester only, while completing lower-division deficiencies.

GRADUATION REQUIREMENTS

ALL BUSINESS ADMINISTRATION MAJORS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

ALL BUSINESS ADMINISTRATION MAJORS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate General Education Requirements listed on page 70.

C. SCHOOL OF BUSINESS REQUIREMENTS

ECONOMICS, FINANCE, MANAGEMENT AND MARKETING MAJORS

A minimum of 61 credits for this degree must be from outside the business area. All ACCT, BA, and CIOS courses are considered within the business area. A maximum of 9 ECON credits may be counted as being outside the business area; any additional ECON credits will be counted as being within the business area.

Complete the Business core requirements (24-26 credits):

1. The following courses must be completed with a "C" or better 1) before enrolling in the upper-division core courses below and 2) prior to graduation:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BA 273	Introduction to Statistics for Business and Economics	3
CIOS 110	Computer Concepts in Business	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
MATH 270	Applied Finite Mathematics for the Managerial Sciences (3)	3-4
	or	
MATH 107	College Algebra (4)	
MATH 272	Calculus for Managerial Sciences (3)	3-4
	or	
MATH 200	Calculus I (4)	

Note: Students who plan to attend graduate school are encouraged to take MATH 107 (College Algebra) and MATH 200-201-202 (Calculus) instead of MATH 270 and 272.

2. Complete these upper-division core courses (21 credits):

BA 300	Organizational Theory and Behavior	3
BA 325	Corporate Finance	3
BA 343	Principles of Marketing	3
BA 377	Operations Management	3
BA 380	Managerial Presentations	3
BA 488	The Environment of Business	3
CIOS 376	Management Information Systems	3

D. MAJOR REQUIREMENTS

Economics Major

1. Complete the following requirements (24 credits):

ECON 321	Intermediate Microeconomics	3
ECON 324	Intermediate Macroeconomics	3
ECON 350	Money and Banking	3
ECON 429	Business Forecasting	3
Upper-division Economics electives*		12

**No more than a total of 6 credits earned in independent study, or ECON 454, Economics Internship, may be used to satisfy requirements for the major.*

2. A total of 122 credits is required for the degree, of which 48 credits must be upper-division.

Finance Major

1. Complete the following requirements (15 credits):

BA 375	Statistics for Business and Economics (3)	3
	or	
ECON 429	Business Forecasting (3)	
BA 425	Advanced Corporate Financial Problems	3
BA 426	Financial Institutions	3
BA 427	International Finance	3
BA 450	Investment Management	3

2. Complete the following:

Upper-division Business electives	12
(At least 9 credits must be in ECON, ACCT, or Real Estate.)	

3. International Option (18-21 credits):
Students majoring in Finance may further internationalize their degree program by completing:

A.	Language Courses	9-12

(Three courses designed to enhance linguistic competence in languages, except Latin and Language Self Study. It must include a two semester course sequence).

B.	International economics, politics, law and/or culture courses (to be chosen in consultation with Business Administration international advisor).	9

4. A total of 122 credits is required for the degree, of which 48 credits must be upper-division.

See degree check sheets available in the School of Business.

Management Major

1. Complete the following requirements (27 credits):

BA 361	Human Resource Management	3
BA 461	Negotiations and Conflict Management	3
BA 462	Strategic Management	3
BA 481	Applications in Management	3
BA 489	Entrepreneurship and New Business Planning	3
Electives in ACCT, BA or CIOS		12

2. International Option (21 credits):
Students majoring in Management may further internationalize their degree program by completing:

A.	BA 490 International Comparative Management	3
B.	Language Courses	9

(Three courses designed to enhance linguistic competence in languages, except Latin and Language Self Study. It must include a two semester course sequence).

C.	International economics, politics, law and/or culture courses (to be chosen in consultation with Business Administration international advisor).	9

3. A total of 122 credits is required for the degree, of which 48 credits must be upper-division.

See degree check sheets available in School of Business.

Marketing Major

1. Complete the following courses (24 credits):

BA/JUST 241	Business Law I	3
BA 264	Personal Selling	3
BA 310	Consumer Behavior	3
BA 327	Product Promotion Strategies (3)	3
	or	
JPC 326	Principles of Advertising (3)	
BA 441	Retailing Management	3
BA 445	Marketing Research	3
BA 460	Marketing Management	3
ECON 429	Business Forecasting (3)	3
	or	
BA 375	Statistics for Business and Economics (3)	

2. International Option (21 credits):
   Students majoring in Marketing may further internationalize by completing the following:

A.	BA 447	International Marketing	3
B.	Language Courses		9

(Three courses designed to enhance linguistic competence in languages, except Latin and Language Self Study. It must include a two semester course sequence).

C.	International economics, politics, law and/or culture courses (to be chosen in consultation with Business Administration international advisor).	9

3. A total of 122 credits is required for the degree, of which 48 credits must be upper-division.

See degree check sheets available in School of Business.

BUSINESS ADMINISTRATION AS A MINOR

Students majoring in another subject who wish to minor in Business Administration must complete the following requirements. A total of 21 credits is required for the minor. Prerequisites for these courses must also be satisfied.

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
Upper-division Business electives		9

COMPUTER INFORMATION AND OFFICE SYSTEMS

INTRODUCTION

The Computer Information and Office Systems Department provides educational opportunities in computer information systems and office systems and technology through certificate and degree programs, courses for all students, and career-enrichment opportunities.

Courses involving computer instruction as well as many other business school courses are supported by four computerized classrooms and state-of-the-art open laboratory facilities. These computer classrooms and labs provide students with hands-on learning experiences using both Digital PCs and Apple workstations supported by DEC 5000 UNIX network servers. Our computers provide experiences using several operating systems, most major application software, and several languages from third generation to modern 4GL, query, and object-oriented environments.

School of Business students have the opportunity to use the computer facilities to help them with their course work. New laboratories include a special business presentation facility and an experimental decision-support room.

Computer and office-related courses are taught using both structured instructor-led and self-guided tutorial approaches. The Office Instructional Center (OIC) provides an open-entry/open-exit environment for students to learn a variety of skills on a self-paced basis. In these courses students begin at a level appropriate for them, work at their own pace, and receive the individual instruction needed to succeed.

Computer Information Systems

The School of Business prepares students for computer careers in systems analysis and design, end-user computing, managing information systems, databases and networks, and associated occupations through the Management Information Systems (MIS) major in the Bachelor of Business Administration. Careers in computer programming and systems design are available from our Associate of Applied Science Degree in Business Computer Information Systems (BCIS). Both degrees are based on the DPMA model curriculum and are linked so that the careful student can move from the two-year to four-year degree without losing credits.

Both degrees emphasize using computers within business and public sector settings through hands-on teaching methods. The student is prepared for the technical aspects of the computer environment as well as the techniques and issues of managing information resources.

Computer career education in the School of Business is enhanced by work and internship opportunities both within our own laboratories and with business and government facilities. The CIOS Department also has a successful placement program for its graduates.

Office Management and Technology

Office Management and Technology (OMT) programs provide career education leading to certificates or an Associate of Applied Science degree, as well as job enrichment courses.

You may choose between three emphases in the Associate of Applied Science (OMT) degree: Secretarial and Legal Secretarial; (Bookkeeping is offered at the Kodiak campus). The certificate program provides five areas of concentrated study: General Clerical, Legal Secretary, Word/Information Processing, and Business Communications; a Bookkeeping certificate is offered only at the Kodiak campus.

OMT programs prepare students for career entry or advancement and also offer skills preparation for personal use. Courses meet the needs of beginning, experienced, or re-entry office workers, including secretaries, file clerks, receptionists, typists, word/information processors, and office supervisors. Review courses are also available to prepare candidates for the Certified Professional Secretary (CPS) Examination.

In addition to structured courses, the Office Instructional Center (OIC) provides an open-entry/open-exit environment for students to learn a variety of skills on a self-paced basis. In these courses, students begin at a level that is appropriate for them, work at their own pace, and receive the individual instruction needed to succeed.

CERTIFICATES

BOOKKEEPING

This Bookkeeping certificate is offered only through Kodiak College.

1. Complete the following required courses (22 credits):

CIOS 100B	Keyboarding I: B	1
CIOS 100C	Keyboarding I: C	1
CIOS 105A	Introduction to PC Computers	1
CIOS 160	Business English	3
CIOS 161	Business Math	3
CIOS 165	Office Procedures	3
CIOS 167	Proofreading	1
CIOS 262	Written Business Communications	3
CIOS 264	Interpersonal Skills in Organizations	3
CIOS 276	Records Management	3

2. Complete the following 8 credits:

ACCT 120	Bookkeeping for Business I	3
BA 131	Personal Finance	3
CIOS 111A	Introduction to LOTUS in DOS	1
CIOS 162	Payroll Procedures	1

3. A total of 30 credits is required for the certificate.

BUSINESS COMMUNICATIONS

1. Complete the following CIOS required courses (11 credits):

CIOS 115	Selected Introductory Word Processing Applications	1
CIOS 160	Business English	3
CIOS 167	Proofreading	1
CIOS 262	Written Business Communications	3
CIOS 264	Interpersonal Skills in Organizations	3

2. Complete the following required courses (18 credits):

BA 380	Managerial Presentations	3
ENGL 111	Methods of Written Communication	3
ENGL 212	Technical Writing	3
CIOS 105	Introduction to PC Computers and Applications (3)	3
	or	
CIOS 107	Macintosh Computer and Applications (3)	
	or	
CIOS 110	Computer Concepts in Business (3)	
PSY 111	General Psychology (3)	3
	or	
SOC 101	Introduction to Sociology (3)	
SPCH 111	Fundamentals of Oral Communication	3

3. A total of 29 credits is required for the certificate.

GENERAL CLERICAL

1. Complete 16-18 credits from the following required courses:

CIOS 115 (A-J)	Selected Introductory Word Processing Applications	1
CIOS 160	Business English	3
CIOS 161	Business Math	3
CIOS 165	Office Procedures	3
CIOS 166	Filing (1)	1-3
	or	
CIOS 276	Records Management (3)	
CIOS 167	Proofreading	1
CIOS 250A	Machine Transcription A	1
CIOS 264	Interpersonal Skills in Organizations	3

2. Complete 5-6 credits from the following courses: 5-6

CIOS 100*	Keyboarding I (3)
	or
CIOS 100A*	Keyboarding I: A (1)
CIOS 100B*	Keyboarding I: B (1)
CIOS 100C*	Keyboarding I: C (1)
CIOS 260	Keyboarding II (3)
CIOS 261	Keyboarding III (3)

**Credit will not be counted for BOTH CIOS 100 and CIOS 100A, 100B, and 100C.*

3. Complete 4-7 elective credits from the following: 4-7

CIOS 105	Introduction to PC Computers and Applications (3)
CIOS 107	Macintosh Computer and Applications (3)
CIOS 107A	Introduction to Macintosh Computers (1)
CIOS 110	Computer Concepts in Business (3)
CIOS 113C	Introduction to Mac Operating System (1)
CIOS 115 (A-J)	Selected Introductory Word Processing Applications (1)
CIOS 170	Calculators (1)
CIOS 215 (A-J)	Selected Advanced Word Processing Applications (1)
ACCT 120	Bookkeeping for Business I (3)
ACCT 101	Principles of Financial Accounting I (3)
	or
ACCT 201	Principles of Financial Accounting (3)

4. A total of 28 credits is required for the certificate.

LEGAL SECRETARY

1. Complete 13 credits from the following required courses:

CIOS 160	Business English	3
CIOS 165	Office Procedures	3
CIOS 167	Proofreading	1
CIOS 272	Law Office Procedures: Litigation Documents	3
CIOS 264	Interpersonal Skills in Organizations	3

2. Complete 6-11 credits from the following: 6-11

CIOS 100*	Keyboarding I (3)
	or
CIOS 100A*	Keyboarding I: A (1)
CIOS 100B*	Keyboarding I: B (1)
CIOS 100C*	Keyboarding I: C (1)
CIOS 107A	Introduction to Macintosh Computers (1)
CIOS 115 (A-J)	Selected Introductory Word Processing Applications (1)
CIOS 215 (A-J)	Selected Advanced Word Processing Applications(1)
CIOS 260	Keyboarding II (3)
CIOS 261	Keyboarding III (3)

**Credit will not be counted for BOTH CIOS 100 and CIOS 100A, 100B, and 100C.*

3. Complete 1-3 credits from the following: 1-3

CIOS 250A	Machine Transcription A (1)
CIOS 250B	Machine Transcription B (1)
CIOS 252	Legal Transcription (1-3)

4. Complete 2-9 elective credits from the following: 2-9
   - CIOS 105 Introduction to PC Computers and Applications (3)
     or
   - CIOS 110 Computer Concepts in Business (3)
   - CIOS 107 Macintosh Computer and Applications (3)
   - CIOS 111A Introduction to LOTUS in DOS (1)
   - CIOS 112A Introduction to dBASE III+ (1)
   - CIOS 113A Introduction to MS-DOS (1)
   - CIOS 113C Introduction to Mac Operating System (1)
   - CIOS 116A Introduction to Desktop Publishing on Mac (1)
     or
   - CIOS 116B Introduction to Desktop Publishing on IBM (1)
     or
   - CIOS 338 Desktop Publishing and Design (3)
   - CIOS 161 Business Math (3)
   - CIOS 170 Calculators (1)
   - CIOS 273 Law Office Procedures: Client Documents (3)
   - ACCT 101 Principles of Financial Accounting I (3)
   - ACCT 120 Bookkeeping for Business I (3)
   - ACCT 121 Bookkeeping for Business II (3)
5. A total of 29 credits is required for the certificate.

WORD/INFORMATION PROCESSING

1. Complete the following required courses (12 credits):
   - CIOS 160 Business English 3
   - CIOS 165 Office Procedures 3
   - CIOS 262 Written Business Communications 3
   - CIOS 264 Interpersonal Skills in Organizations 3
2. Complete 5-6 credits from the following: 5-6
   - CIOS 100* Keyboarding I (3)
     or
   - CIOS 100A* Keyboarding I: A (1)
   - CIOS 100B* Keyboarding I: B (1)
   - CIOS 100C* Keyboarding I: C (1)
   - CIOS 260 Keyboarding II (3)
   - CIOS 261 Keyboarding III (3)

**Credit will not be counted for BOTH CIOS 100 and CIOS 100A, 100B, and 100C.*

3. Complete 1-3 credits from the following: 1-3
   - CIOS 250A Machine Transcription A (1)
   - CIOS 251 Medical Transcription (3)
   - CIOS 252 Legal Transcription (1-3)
4. Complete 6 credits from the following: 6
   - CIOS 105 Introduction to PC Computers and Applications (3)
     or
   - CIOS 110 Computer Concepts in Business (3)
   - CIOS 107 Macintosh Computer and Applications (3)
5. Complete 3 credits from the following: 3
   - CIOS 115 (A-J) Selected Introductory Word Processing Applications (1)
   - CIOS 215 (A-J) Selected Advanced Word Processing Applications (1)
6. Complete 0-3 credits from the following: 0-3
   - CIOS 107A Introduction to Macintosh Computers (1)
   - CIOS 111A Introduction to LOTUS in DOS (1)
   - CIOS 111B Introduction to Excel on Mac (1)
   - CIOS 112A Introduction to dBASE III+ (1)
   - CIOS 112C Introduction to Filemaker on Mac (1)
   - CIOS 113A Introduction to MS-DOS (1)
   - CIOS 113B Introduction to Windows (1)
   - CIOS 113C Introduction to Mac Operating System (1)
   - CIOS 116A Introduction to Desktop Publishing on Mac (1)
     or
   - CIOS 116B Introduction to Desktop Publishing on IBM (1)
     or
   - CIOS 338 Desktop Publishing and Design (3)
   - CIOS 167 Proofreading (1)
   - CIOS 170 Calculators (1)
7. A total of 30 credits is required for the certificate.

UNDERGRADUATE DEGREES

ASSOCIATE OF APPLIED SCIENCE, BUSINESS COMPUTER INFORMATION SYSTEMS

ADMISSION REQUIREMENTS

See Certificate and Associate Degree Program Admission Requirements on page 65. English and Math Placement Tests are given by the Advising and Counseling Center. Your faculty advisor will assist you by recommending the proper levels of entry and appropriate CIOS course plan. Students who are not proficient in typing (a minimum of 30 wpm) should enroll in CIOS 100A Keyboarding I:A. Students must be able to read and comprehend technical manuals and texts.

ACADEMIC PROGRESS

A grade of "C" or higher is required to continue in each higher CIOS course.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the General University Requirements for Associate Degrees listed on page 66.
2. Complete the Associate of Applied Science Requirements (15 credits) listed on page 67. ENGL 212 is recommended. For the general requirements, it is strongly recommended that students select 6 credits from Humanities, Math and Natural Sciences or Social Sciences that meet both the AAS and Baccalaureate General Education Requirements.

MAJOR REQUIREMENTS

1. Complete the breadth requirement (21-22 credits):

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
CIOS 110	Computer Concepts in Business	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
MATH 270	Applied Finite Mathematics for the Managerial Sciences (3) or	3-4
MATH 107	College Algebra (4)	
General Education Requirement Elective*		3

**Choose Humanities or Natural Sciences course that meets both AAS and Baccalaureate General Education Requirements.*

2. Complete the Business core requirement (3 credits):

BA 273	Introduction to Statistics for Business and Economics	3

3. Complete CIOS required courses (19 credits):

CIOS 185	Introduction to Programming Business Applications	3
CIOS 201	Programming Business Applications with COBOL	5
CIOS 231	Programming Advanced Business Applications with COBOL	5
CIOS 310	Analysis and Design of Business Systems	3
CIOS 330	Database Management Systems	3

4. Complete elective credits approved by a CIOS Department advisor (5 credits). 5
5. A total of 63-64 credits is required for the degree.

ASSOCIATE OF APPLIED SCIENCE, OFFICE MANAGEMENT AND TECHNOLOGY

ADMISSION REQUIREMENTS

See Open Admissions on page 65.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements listed on page 67. CIOS 262 recommended.

MAJOR REQUIREMENTS

A. Bookkeeping Emphasis

This emphasis is offered only through Kodiak College.

1. Complete 21 credits from the following required courses:

CIOS 100*	Keyboarding I (3) or	3
CIOS 100A*	Keyboarding I: A (1)	
CIOS 100B*	Keyboarding I: B (1)	
CIOS 100C*	Keyboarding I: C (1)	
CIOS 160	Business English	3
CIOS 161	Business Math	3
CIOS 165	Office Procedures	3
CIOS 262*	Written Business Communications	3
CIOS 264	Interpersonal Skills in Organizations	3
CIOS 276	Records Management	3

**If CIOS 262 was taken to meet the Written Communications General Education Requirement, then complete 3 elective CIOS credits of your choice.*

2. Complete 18 credits from the following:

ACCT 101	Principles of Financial Accounting I	3
ACCT 102	Principles of Financial Accounting II	3
ACCT 120	Bookkeeping for Business I	3
BA 131	Personal Finance	3
CIOS 111A	Introduction to LOTUS in DOS	1
CIOS 162	Payroll Procedures	1
Any 100/200 level ACCT, BA, CIOS, or ECON elective		4

3. General electives 6
4. A minimum of 60 credits is required for the degree.

B. Secretarial Emphasis

1. Complete 13 credits from the following:

CIOS 160	Business English	3
CIOS 161	Business Math	3
CIOS 165	Office Procedures	3
CIOS 167	Proofreading	1
CIOS 264	Interpersonal Skills in Organizations	3

2. Complete 6 credits from the following: 6

CIOS 100*	Keyboarding I (3) or
CIOS 100A*	Keyboarding I: A (1)
CIOS 100B*	Keyboarding I: B (1)
CIOS 100C*	Keyboarding I: C (1)
CIOS 102	Keyboarding Skill Building (1)
CIOS 260	Keyboarding II (3)
CIOS 261	Keyboarding III (3)

**Credit will not be counted for BOTH CIOS 100 and CIOS 100A, 100B, and 100C.*

3. Complete 1-3 credits from the following: 1-3

CIOS 250A	Machine Transcription A (1)
CIOS 250B	Machine Transcription B (1)
CIOS 251	Medical Transcription (3)
CIOS 252	Legal Transcription (1-3)

4. Complete 3 credits from the following: 3

CIOS 105	Introduction to PC Computers (3) and Applications
CIOS 110	Computer Concepts in Business (3)

5. Complete 1-3 credits from the following: 1-3

CIOS 115 (A-J)	Selected Introductory Word Processing Applications (1)
CIOS 215 (A-J)	Selected Advanced Word Processing Applications (1)

6. Complete 3 credits from the following: 3

CIOS 262*	Written Business Communications (3)

**If CIOS 262 was taken to meet the Written Communications General Education Requirement, then complete 3 elective CIOS credits of your choice.*

7. Complete 3 credits from the following: 3

ACCT 101	Principles of Financial Accounting I (3)
ACCT 120	Bookkeeping for Business I (3)
ACCT 201	Principles of Financial Accounting (3)

8. Complete 3 credits from the following: 3

CIOS 107	Macintosh Computer and Applications (3)
CIOS 107A	Introduction to Macintosh Computers (1)
CIOS 113C	Introduction to Mac Operating System (1)
CIOS 116A	Introduction to Desktop Publishing on Mac (1) or
CIOS 116B	Introduction to Desktop Publishing on IBM (1) or
CIOS 338	Desktop Publishing and Design (3)

9. Complete 7-9 credits from the following: 7-9

CIOS 166	Filing (1)

or

CIOS 276	Records Management (3)
CIOS 263	Professional Secretarial Procedures (3)

or

BA 231	Fundamentals of Supervision (3)
BA 151	Introduction to Business (3)

or

BA 166	Small Business Management (3)

10. Complete 0-5 elective credits to total 60 credits. 0-5

CIOS 168	Shorthand (3)
CIOS 170	Calculators (1)
CIOS 192	Seminars in Office Management and Technology (1)

11. A minimum of 60 credits is required for the degree.

C. Legal Secretarial Emphasis

1. Complete 13 credits from the following:

CIOS 160	Business English	3
CIOS 161	Business Math	3
CIOS 165	Office Procedures	3
CIOS 167	Proofreading	1
CIOS 264	Interpersonal Skills in Organizations	3

2. Complete 1-3 credits from the following: 1-3

CIOS 250A	Machine Transcription A (1)
CIOS 251	Medical Transcription (3)
CIOS 252	Legal Transcription (1-3)

3. Complete 3 credits from the following: 3

CIOS 105	Introduction to PC Computers and Applications (3)
CIOS 110	Computer Concepts in Business (3)

4. Complete 1-3 credits from the following: 1-3

CIOS 115 (A-J)	Selected Introductory Word Processing Applications (1)
CIOS 215 (A-J)	Selected Advanced Word Processing Applications (1)

5. Complete 3 credits from the following:

CIOS 262*	Written Business Communications	3

**If CIOS 262 was taken to meet the Written Communications General Education Requirement, then complete 3 elective CIOS credits of your choice.*

6. Complete 3 credits from the following: 3

ACCT 101	Principles of Financial Accounting I (3)
ACCT 120	Bookkeeping for Business I (3)
ACCT 201	Principles of Financial Accounting (3)

7. Complete 18 credits from the following: 18

CIOS 215D	Advanced WordPerfect in DOS (1)
CIOS 261	Keyboarding III (3)
CIOS 272	Law Office Procedures: Litigation Documents (3)
CIOS 273	Law Office Procedures: Client Documents (3)
CIOS 274	Alaska Rules of Civil Procedures (3)
CIOS 263	Professional Secretarial Procedures (3)

or

BA 151	Introduction to Business (3)

or

BA 231	Fundamentals of Supervision (3)
PARL 101	Introduction to Law (3)

or

JUST 110	Introduction to Justice (3)

or

BA/JUST 241	Business Law I (3)

8. Complete the following (3 credits):

CIOS 295C	Office Systems Internship (1-6)	3

or

One year work experience in an Alaska law office within the last five years may be substituted for CIOS 295C. If work experience is substituted, complete CIOS elective credits to equal 60 credits.

9. A minimum of 60 credits is required for the degree.

BACHELOR OF BUSINESS ADMINISTRATION, MANAGEMENT INFORMATION SYSTEMS

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

ADMISSION REQUIREMENTS TO UPPER-DIVISION COURSES

1. Completion of at least 39-40 credits with a cumulative GPA of 2.25 or higher.
2. Completion of each of the following courses with a grade of "C" or better (30-31 credits):

ACCT 201 and 202	6
BA 273	3
CIOS 110	3
ECON 201 and 202	6
ENGL 111 and ENGL 211, 212, or 213	6
MATH 270 or 107	3-4
SPCH 111	3

3. Completion of at least 9 credits that satisfy UAA General Education Requirements in the following areas: 9

Fine Arts
Humanities
Natural Sciences

Admission to Upper-division Status:
BBA students in Accounting, Business Administration, and Computer Information and Office Systems who do not meet the above standards may not take upper-division courses in ACCT, BA, or CIOS. Other students must meet course prerequisites.

Conditional Admission to Upper-division Status:
A student classified as being conditionally admitted to upper-division status may take upper-division ACCT, BA and CIOS courses for one semester only, while completing lower-division deficiencies.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate General Education Requirements listed on page 70.

C. SCHOOL OF BUSINESS REQUIREMENTS

MANAGEMENT INFORMATION SYSTEMS MAJORS

A minimum of 59 credits for this degree must be from outside the business area. All ACCT, BA, and CIOS courses are considered within the business area. A maximum of 9 ECON credits may be counted as being outside the business area; any additional ECON credits will be counted as being within the business area.

Complete the Business Core requirements (24-26):

1. The following courses must be completed with a "C" or better 1) before enrolling in the upper division core courses below and 2) prior to graduating:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BA 273	Introduction to Statistics for Business and Economics	3
CIOS 110	Computer Concepts in Business	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
MATH 270	Applied Finite Mathematics for the Managerial Sciences (3) or	3-4
MATH 107	College Algebra (4)	
MATH 272	Calculus for Managerial Sciences (3) or	3-4
MATH 200	Calculus I (4)	

Note: Students who plan to attend graduate school are encouraged to take MATH 107 (College Algebra) and MATH 200-201-202 (Calculus) instead of MATH 270 and 272.

2. Complete these upper-division core courses (21 credits):

BA 300	Organizational Theory and Behavior	3
BA 325	Corporate Finance	3
BA 343	Principles of Marketing	3
BA 377	Operations Management	3
BA 380	Managerial Presentations	3
BA 488	The Environment of Business	3
CIOS 310	Analysis and Design of Business Systems	3

D. MAJOR REQUIREMENTS

1. Complete the following required courses (22 credits):

CIOS 185	Introduction to Programming Business Applications	3
CIOS 201	Programming Business Applications with COBOL	5
CIOS 231	Programming Advanced Business Applications w/ COBOL	5
CIOS 330	Database Management Systems	3
CIOS 410	Project Management	3
CIOS 490	MIS Seminar/Project (1-6)	3

2. Complete 9 credits of upper-division program electives approved by the department. These may include, but are not limited to: 9

ACCT 316	Accounting Information Systems (3)
CIOS 315	Advanced Topics in Microcomputer Applications for Business (3)
CIOS 338	Desktop Publishing and Design (3)
CIOS 340	Interactive and Database Programming for Business Applications (3)
CIOS 350	Developing Application Software in an IBM Environment (3)
CIOS 360	4th GL Programming for Business Applications (3)
CIOS 361	C Language for Business Applications (3)
CIOS 362	RPG Programming for Business Programming (3)
CIOS 376	Management Information Systems (3)
CIOS 395	Programmer/Analyst Internship (1-6)
CIOS 420	Consulting and Training End Users (3)
CIOS 430	Decision Support and Expert Systems (3)
CIOS 450	Managing Data Communications and Computer Networks (3)
BA 375	Statistics for Business and Economics (3) or
ECON 429	Business Forecasting (3)
CIOS 495	Systems Analyst/User-Support Internship (1-6)

3. A total of 124 credits is required for the degree, of which 48 credits must be upper division. At least 48 of the 124 must be upper-division. A minimum of 59 credits of non-business courses are required. See your faculty advisor to ensure the proper balance of credits.

COLLEGE OF CAREER AND VOCATIONAL EDUCATION

INTRODUCTION

The University of Alaska Anchorage is a major center for development and delivery of programs in vocational education within the University of Alaska. The majority of these vocational programs are housed in the College of Career and Vocational Education. Certificates and degrees from the Associate of Applied Science through the Master's Degree are offered in over 20 program areas. In addition, the College is the home of the statewide Vocational Teacher Education graduate program and the statewide Mining and Petroleum Training Service. In keeping with the mission of the University of Alaska Anchorage, the College of Career and Vocational Education has a commitment to innovation and flexibility that makes high quality education and training available to all who have the ability and interest to pursue an education or profession. Faculty within the College are highly trained professionals, many with years of experience in the technical specialties related to their teaching areas. The College makes extensive use of Vocational Advisory Committees to insure that programs are closely linked to the needs of the work force. Graduates of the College generally find immediate employment in their chosen field of study.

Regional Coordination

The College of Career and Vocational Education serves as a resource to the Southcentral region extended campuses in the area of vocational education. The Dean of the College serves as regional vocational education coordinator and provides assistance to the campus directors and faculty in coordinating the development and delivery of vocational education programs and course work in Kenai, Kodiak and Palmer. The goal of regional coordination of vocational education is to allow the student maximum flexibility within acceptable academic guidelines. Many courses are offered between UAA and the Southcentral extended campuses and may be easily transferred from one campus to another.

High School Preparation

The College of Career and Vocational Education has a close and positive working relationship with the Anchorage School District Martin Luther King Career Center, where seven articulation agreements exist. Vocational curricula in many areas are designed to allow students to make a smooth transition from high school to college. It is possible for students to enroll in and earn college credit for vocational courses while still in high school. Information regarding pre-college preparation can be obtained from the counseling staff at UAA or the home high school.

Mining and Petroleum Training Service (MAPTS)

The Mining and Petroleum Training Service was conceived to meet the immediate training needs of the petroleum industry during Alaska's oil-driven industrial growth period. Since that time, the program has expanded to the point where it now is viewed as a special arm of the University concentrating efforts in industrial training for many different client groups. With the recent growth of the mining industry in Alaska, the MAPTS program has served as the prime agency in coordinating UAA's effort to assist this industry with worker training. MAPTS is a vibrant and exciting segment of the College of Career and Vocational Education's commitment to meeting the ongoing need for vocational training in the state.

AGRICULTURE

INTRODUCTION

Matanuska-Susitna College offers an Associate of Applied Science in Agriculture for students wanting a two-year degree or for those choosing to transfer to the College of Career and Vocational Education BS in Technology. Various Agriculture courses taken for credit may fulfill general college electives for other degree programs or transfer to other colleges and universities.

Many students from unrelated occupations enroll in various agriculture courses for personal interest in specific subject areas. Students wanting a career change or improvements, consider agriculture courses which may be taken on a credit or audit basis. Students may enroll at the beginning of any semester. A full-time student earning the Associate of Applied Science degree in Agriculture should be able to complete the course work in approximately 4 or 5 semesters, excluding non-credit courses which, when offered, are short term and practical.

UNDERGRADUATE DEGREE

Associate of Applied Science, Agriculture

The Agriculture Program is offered only at Matanuska-Susitna College.

Admission Requirements

See Open Admission on page 65.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

Major Requirements

1. Complete the following required courses (15 credits):

AGRI 100	Survey of Agriculture	3
AGRI 101	Introduction to Plant Science I	3
AGRI 103	Introduction to Soil Science	3
AGRI 110	Introduction to Animal Science	3
AGRI 120	Introduction to Agriculture Business	3

2. Complete an additional 15 credits of Agriculture electives. 15
3. A total of 60 credits is required for the AAS degree.

AIR TRAFFIC CONTROL

INTRODUCTION

The Air Traffic Control program prepares students for work in the FAA Air Traffic Control system. It also fulfills lower-division requirements for certain baccalaureate degree programs and provides recurrency for personnel in air traffic control. Areas of study include aviation weather, radar environment, air traffic control regulations, and basic responsibilities of first-level field supervisors. Simulated flight training in the department's Link Trainer is featured, and air traffic control students practice controlling airplanes in a lab. Students visit several air traffic control facilities in Anchorage, some of which offer intern programs. The FAA has identified Air Traffic Control as a "Pre-Hire" program which will enhance FAA employment placement to qualified graduates.

The AAS degree may be completed in 4 semesters with a course load of 15 credits each semester. Students with no prior background in aviation should begin course work in the fall semester.

UNDERGRADUATE DEGREE

Associate of Applied Science, Air Traffic Control

Admission Requirements

See Open Admission on page 65. UAA has no restrictions on age or physical condition of students. However, students desiring employment with the Federal Aviation Administration should be aware of FAA employment requirements:

1. Class II medical certificate as required in FAR 61.53, 63.19, and 65.49.
2. 30-year-old maximum age restriction for students anticipating employment in terminal or en route options.

Students with low reading comprehension and math skills should first take preparatory courses. The ATC program requires extensive reading and interpreting of technical information.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67. ENGL 212 is recommended.

Major Requirements

1. Complete the following required courses (43 credits):

AT 116	Instrument Ground School	4
AT 140	Air Traffic Control History	3
AT 141	Aviation Weather	3
AT 142	Control Environment	3
AT 143	Air Traffic Control Regulations	3
AT 144	Air Traffic Control Airborne Lab	2
AT 145	Principles of Flight	3
AT 146	Air Traffic Control Intern Program	4
AT 240	Operations in Flight Service Station	3
AT 241	Airport Traffic Control	3
AT 242	Procedures for Control of Instrument Traffic (PCIT) I	3
AT 243	Procedures for Control of Instrument Traffic (PCIT) II	3
AT 244	Procedures for Control of Instrument Traffic (PCIT) III	3
AT 245	Pilot/Controller Techniques	3

2. Electives 3
3. A total of 61 credits is required for the degree.

ARCHITECTURAL AND ENGINEERING TECHNOLOGY

INTRODUCTION

The Architectural and Engineering Technology program provides continuing education, entry-level skills, and advanced technical skills in several specialized fields, including Computer-Aided Design and Drafting (CADD) and Geographic Information Systems (GIS).

Students are trained to become skilled workers on architectural and engineering teams. AET certificate and degree graduates are employed as technicians or drafters and work in private industry as well as state or federal agencies.

The AAS degree requires 4 to 5 semesters to complete.

The AET faculty assist students with curriculum planning to prepare for the Associate Technician Qualifying Examination offered by the Institute for the Certification of Engineering Technicians.

Although courses taken may apply to the first two years of a four-year degree program (i.e. BS in Technology), the AAS degree should not be considered a preparatory or substitute for professional degree programs in Architecture or Engineering. Students pursuing a four-year degree program should contact the Engineering Department at UAA or the AET Program Coordinator for careers in architecture.

Subject to scheduling, students may select either 5-week, 7-week, or 15-week blocks of instruction for each AET course. Content is the same; only the amount of time a course meets per week is different. Students spend at least one hour on outside lab work for each hour in class. Lab facilities are available for students' use seven days a week. A full curriculum is offered during fall and spring with occasional short courses during the summer.

In addition to tuition and fees, students should expect to purchase books and equipment required for each course. However, supplies should not be purchased before the first class.

CERTIFICATES

ADMISSION REQUIREMENTS

Specific application procedures are necessary to enroll, and certain courses require prerequisites or faculty permission. Contact 786-1669 for further information.

GRADUATION REQUIREMENTS

In order to receive a certificate offered by the AET Department, students must achieve a 4.00 grade point average (GPA) in their certificate requirements.

ARCHITECTURAL DRAFTING

CERTIFICATE REQUIREMENTS

1. Complete the following required courses:

AET 101	Fundamentals of Drafting for Building Construction	3
AET 102	Specifications and Materials for Building Construction	4
AET 121	Architectural Working Drawings and Office Practice	3
AET 122	Architectural Presentation Techniques	3
AET 221	Design Development for Architectural Technicians	4
AET 281	Basic 2-D CADD	4

2. A total of 21 credits is required for the certificate.

CIVIL ENGINEERING DRAFTING

CERTIFICATE REQUIREMENTS

1. Complete the following required courses:

AET 101	Fundamentals of Drafting for Building Construction	3
AET 102	Specifications and Materials for Building Construction	4
AET 111	Topography and Land Development Drafting	3
AET 211	Subdivision Design and Land Classification	4
AET 212	Advanced Site Development Techniques	3
AET 281	Basic 2-D CADD	4

2. A total of 21 credits is required for the certificate.

MECHANICAL AND ELECTRICAL DRAFTING

CERTIFICATE REQUIREMENTS

1. Complete the following required courses:

AET 101	Fundamentals of Drafting for Building Construction	3
AET 102	Specifications and Materials for Building Construction	4
AET 141	Mechanical Building Equipment Systems Design and Drafting	3
AET 151	Electrical Building Equipment Systems Design and Drafting	3
AET 281	Basic 2-D CADD	4

2. A total of 17 credits is required for the certificate.

STRUCTURAL DRAFTING

CERTIFICATE REQUIREMENTS

1. Complete the following required courses:

AET 101	Fundamentals of Drafting for Building Construction	3
AET 102	Specifications and Materials for Building Construction	4
AET 131	Structural Working Drawings and Office Practice	3
AET 231	Structural Design and Detailing for Engineering Technicians	3
AET 281	Basic 2-D CADD	4

2. A total of 17 credits is required for the certificate.

UNDERGRADUATE DEGREE

ASSOCIATE OF APPLIED SCIENCE, ARCHITECTURAL AND ENGINEERING TECHNOLOGY

ADMISSION REQUIREMENTS

Specific application procedures are necessary to enroll, and certain courses require prerequisites or faculty permission. Contact 786-1669 for further information.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67. GEOL 111 and MATH 105 are recommended.

MAJOR REQUIREMENTS

1. Complete the following required courses (39 credits):

AET 101	Fundamentals of Drafting for Building Construction	3
AET 102	Specifications and Materials for Building Construction	4
AET 111	Topography and Land Development Drafting	3
AET 121	Architectural Working Drawings and Office Practice	3
AET 122	Architectural Presentation Techniques	3
AET 131	Structural Working Drawings and Office Practice	3
AET 141	Mechanical Building Equipment Systems Design and Drafting	3
AET 151	Electrical Building Equipment Systems Design and Drafting	3
AET 211	Subdivision Design and Land Classification	4
AET 212	Advanced Site Development Techniques	3
AET 221	Design Development for Architectural Technicians	4
AET 231	Structural Design and Detailing for Engineering Technicians	3

2. Electives 6
   CS 100, SMS 136, or AET 281 are recommended.
3. A total of 60 credits is required for the degree.

AUTO-DIESEL TECHNOLOGY

INTRODUCTION

The Auto-Diesel Technology Department offers two AAS degrees, Automotive Technology and Diesel Technology. There are two program options for the Automotive Technology degree.

Automotive Technology (General) - This program is modeled after a variety of very successful corporate training programs. The program is five semesters long. It incorporates a prearranged, supervised, evaluated practicum after the first two semesters, with the possibility of an additional practicum during the last semester. Students experience training on a wide variety of modern domestic and imported vehicles, light trucks, and vans. Laboratory and shop objectives are met on training vehicles, components, and live shop projects. Automotive Technology graduates have been placed in dealerships, independent shops, service stations, mass merchandisers, aviation ground support, and fleet repair facilities. Employers require a current vehicle operator's license and a good driving record. The student should have physical capabilities required of the trade which typically include standing long hours; lifting heavy objects; contacting hazardous materials; operating machinery; exposure to noise, heat, cold, vapors, and other work place hazards; manipulating tools; and working with small parts in confined and awkward positions. Technicians must be able to distinguish colors in minimal light, transcribe numbers up to 17+ digits, and work up to 10 hours a day, 6 days per week. Equal opportunities are available for men and women.

Automotive Technology (Ford ASSET) - The ASSET (Automotive Student Service Educational Training) program is a joint venture with Ford Motor Company and its sponsoring Ford, Mercury, and Lincoln dealerships. Admission to this program is only in even numbered years and has very specific admission requirements. Please contact the ASSET instructor, the department or a sponsoring dealership for details. Students in the ASSET program attend class the first eight weeks of the semester and paid work experience the balance of the semester at the sponsoring dealership. The program is five semesters in length and includes a summer semester. General Education courses (English, Speech, Math, etc.) are conducted on a half-semester format by special arrangement through the College of Arts and Sciences.

Diesel Technology - The Diesel Technology program generally deals with trucks and rubber-tired equipment. Much of the technical knowledge and skills will transfer to tracked equipment or marine engine/power production. The program is four semesters long and shares a common first year with the Automotive program. The second year is very specific training in Diesel Technology related topics. Laboratory/shop experiences occur on component pieces from our training engines and vehicles donated by the manufacturers, the department's four diesel powered vehicles, and live jobs. Diesel Technology graduates have been placed statewide in independent repair shops, various fleets, construction, mining, aviation ground support, and the seafood processing support industry. Employers require a current vehicle operator's license, a good driving record, and good physical condition. Equal opportunities are available for men and women.

High-level reading skills are a must for successful automotive or diesel technicians. Text books and shop manuals are written at the postsecondary reading level. All ADT classes require 2-3 hours of outside preparation for each classroom hour. Typically, full-time students will study 3-4 topics per semester and spend approximately 35-40 hours per week preparing for and attending classroom and laboratory/shop classes. Prospective students are provided with a list of required tools for their selected program. Students are required to supply their own industry quality tools and tool box. Special purchase arrangements for the required tools are available from various sources at special student pricing. Students should plan ahead and have all sources of financial aid secured prior to registration for classes.

In addition to the general university requirements, Automotive and Diesel Technology AAS degree and certificate programs have specific advising and admissions procedures. All students will be admitted as pre-majors until they have completed the admissions process. Contact the ADT program for a complete information packet and current application process. Postsecondary transcripts, SAT, or ASSET placement test scores must be available. A keyboarding assessment is required to prepare for the computer competency requirement. A resume of work experiences and a letter stating why the individual wants to become an automotive or diesel technician is required as part of the ADT program advising file. Upon receipt of the above documents an ADT faculty advisor will be assigned to assist the student in advancing to official ADT major status and developing their educational plan.

Automotive Technology and Diesel Technology certificates (General or nontranscripted) and AAS degrees require demonstrated computer competency. Computer competency may be demonstrated in any of the following ways:

1. A 3 credit course in a computer language or an introductory course in data processing or microcomputers.
2. Work-related experience verifying computer competency as approved by the faculty advisor.
3. Self-initiated computer competency as approved by the faculty advisor.

CERTIFICATES

AUTOMOTIVE TECHNOLOGY

1. Complete the following required courses:

First Semester

ADT 102	Auto Basics and Careers	3
ADT 111	Power Trains I	3
ADT 121	Auto Electrical I	3
ADT 130	Basic Auto Engines	3

Second Semester

ADT 114	Power Trains II	3
ADT 131	Auto Electrical II	3
ADT 150	Brake Systems	4
ADT 162	Suspension and Alignment	4

Third Semester

ADT 195	Automotive Practicum I	6

Fourth Semester

ADT 211	Auto Fuel Systems	4
ADT 212	Engine Performance	6
ADT 214	Emission Systems	4

Fifth Semester

ADT 225	Auto Heating and A/C	3
ADT 227	Auto Electrical III	3
ADT 282	Power Trains III (3)	3
	or	
ADT 295	Automotive Practicum II (3)	

2. A total of 55 credits is required for the certificate.

DIESEL TECHNOLOGY

1. Complete the following required courses:

First Semester

ADT 102	Auto Basics and Careers	3
ADT 111	Power Trains I	3
ADT 121	Auto Electrical I	3
ADT 130	Basic Auto Engines	3

Second Semester

ADT 114	Power Trains II	3
ADT 131	Auto Electrical II	3
ADT 150	Brake Systems	4
ADT 162	Suspension and Alignment	4

Third Semester

ADT 241	Diesel Fuel Systems	2
ADT 243	Heavy-Duty Electrical Systems	3
ADT 245	Diesel Engines	2
ADT 246	Diesel Service Laboratory I	5
WELD 112	Shielded Metal Arc Welding (4)	4
	or	
Other approved WELD course (4)		

Fourth Semester

ADT 248	Diesel Service Laboratory II	6
ADT 261	Hydraulics	2
ADT 263	Heavy-Duty Power Trains	2
ADT 265	Heavy-Duty Chassis	2

2. A total of 54 credits is required for the certificate.

NONTRANSCRIPTED DEPARTMENTAL CERTIFICATES OF COMPLETION

Four nontranscripted departmental certificate of completion programs are available: Automotive Electrical; Automotive Brakes, Suspension and Alignment; Automotive Power Trains; and Automotive Engine Performance. Discuss academic plan and scheduling with faculty advisor.

A. Automotive Electrical

1. Complete the following courses:

ADT 102	Auto Basics and Careers	3
ADT 121	Auto Electrical I	3
ADT 131	Auto Electrical II	3
ADT 195	Automotive Practicum I	6
ADT 227	Auto Electrical III	3

2. A total of 18 credits is required for the nontranscripted departmental certificate of completion.

B. Automotive Brakes, Suspension and Alignment

1. Complete the following courses:

ADT 102	Auto Basics and Careers	3
ADT 121	Auto Electrical I	3
ADT 131	Auto Electrical II	3
ADT 150	Brake Systems	4
ADT 162	Suspension and Alignment	4
ADT 195	Automotive Practicum I	6

2. A total of 23 credits is required for the nontranscripted departmental certificate of completion.

C. Automotive Power Trains

1. Complete the following courses:

ADT 102	Auto Basics and Careers	3
ADT 111	Power Trains I	3
ADT 114	Power Trains II	3
ADT 121	Auto Electrical I	3
ADT 131	Auto Electrical II	3
ADT 195	Automotive Practicum I	6
ADT 282	Power Trains III	3

2. A total of 24 credits is required for the nontranscripted departmental certificate of completion.

D. Automotive Engine Performance

1. Complete the following courses:

ADT 102	Auto Basics and Careers	3
ADT 121	Auto Electrical I	3
ADT 130	Basic Auto Engines	3
ADT 131	Auto Electrical II	3
ADT 211	Auto Fuel Systems	4
ADT 212	Engine Performance	6
ADT 214	Emission Systems	4
ADT 295	Automotive Practicum II	3

2. A total of 29 credits is required for the nontranscripted departmental certificate of completion.

UNDERGRADUATE DEGREES

ASSOCIATE OF APPLIED SCIENCE, AUTOMOTIVE TECHNOLOGY

GENERAL PROGRAM

ADMISSION REQUIREMENTS

Specific admission requirements apply to this program. See department for criteria.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

MAJOR REQUIREMENTS

1. Complete the following required courses:

First Semester

ADT 102	Auto Basics and Careers	3
ADT 111	Power Trains I	3
ADT 121	Auto Electrical I	3
ADT 130	Basic Auto Engines	3
One AAS degree requirement		3

Second Semester

ADT 114	Power Trains II	3
ADT 131	Auto Electrical II	3
ADT 150	Brake Systems	4
ADT 162	Suspension and Alignment	4
One AAS degree requirement		3

Third Semester

ADT 195	Automotive Practicum I	6
One AAS degree requirement		3

Fourth Semester

ADT 211	Auto Fuel Systems	4
ADT 212	Engine Performance	6
ADT 214	Emission Systems	4
One AAS degree requirement		3

Fifth Semester

ADT 225	Auto Heating and A/C	3
ADT 227	Auto Electrical III	3
ADT 282	Power Trains III (3)	3
	or	
ADT 295	Automotive Practicum II (3)	
One AAS degree requirement		3

2. A total of 70 credits is required for the degree.

FORD ASSET PROGRAM

ADMISSION REQUIREMENTS

Specific admission requirements apply to this program. Student selection occurs up to 3 months prior to the start of the program. Accepted students will have met admission criteria and been selected by a sponsoring Ford, Lincoln, Mercury dealership.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree graduation requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

MAJOR REQUIREMENTS

1. Complete the following required courses:

First Semester

ADT 115	Automotive Technology ASSET I	13
One AAS degree requirement		3

Second Semester

ADT 135	Automotive Technology ASSET II	13
One AAS degree requirement		3

Third Semester

ADT 215	Automotive Technology ASSET III	13
One AAS degree requirement		3

Fourth Semester

ADT 235	Automotive Technology ASSET IV	13
One AAS degree requirement		3

Fifth Semester

ADT 255	Automotive Technology ASSET V	13
One AAS degree requirement		3

2. A total of 80 credits is required for the degree.

ASSOCIATE OF APPLIED SCIENCE, DIESEL TECHNOLOGY

ADMISSION REQUIREMENTS

Specific admission requirements apply to this program. See department for criteria.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

.

MAJOR REQUIREMENTS

1. Complete the following required courses:

First Semester

ADT 102	Auto Basics and Careers	3
ADT 111	Power Trains I	3
ADT 121	Auto Electrical I	3
ADT 130	Basic Auto Engines	3
One AAS degree requirement		3

Second Semester

ADT 114	Power Trains II	3
ADT 131	Auto Electrical II	3
ADT 150	Brake Systems	4
ADT 162	Suspension and Alignment	4
One AAS degree requirement		3

Third Semester

ADT 241	Diesel Fuel Systems	2
ADT 243	Heavy-Duty Electrical Systems	3
ADT 245	Diesel Engines	2
ADT 246	Diesel Service Laboratory I	5
WELD 112	Shielded Metal Arc Welding (4)	4
	or	
Other approved WELD course (4)		
One AAS degree requirement		3

Fourth Semester

ADT 248	Diesel Service Laboratory II	6
ADT 261	Hydraulics	2
ADT 263	Heavy-Duty Power Trains	2
ADT 265	Heavy-Duty Chassis	2
Two AAS degree requirements		6

2. A total of 69 credits is required for the degree.

AVIATION ADMINISTRATION

INTRODUCTION

The Aviation Administration program is designed to provide a technical understanding of the aviation industry and its operations. Individuals currently employed in the industry traditionally take these courses for advancement. Others use the program to achieve entry-level skills.

Classes on specific administrative procedures in aviation have been developed. Major areas include Airport Management, Airline Management, and Air Service Operation Management.

There are no special admission requirements, and the AAS degree may be earned in four semesters if a student completes 12-18 credits per semester. Class time involves 12-20 hours per week. Most classes are scheduled during fall and spring semesters.

This program is one of several programs that can serve as an entry into the Bachelor of Science in Technology degree offered through the College of Career and Vocational Education. Interested students should contact the Aviation faculty for full details on both programs.

UNDERGRADUATE DEGREE

Associate of Applied Science, Aviation Administration

Admission Requirements

See Open Admission on page 65.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

Major Requirements

1. Complete the following required courses (31 credits):

AT 100	Private Pilot Ground School	4
AT 132	Survey of Aviation	3
AT 133	Aviation Law and Regulations	3
AT 134	Principles of Aviation Administration	3
AT 135	Management: Airport	3
AT 136	Management: Air Service Operation	3
AT 233	Aviation Safety	3
AT 235	Elements of Weather	3
AT 236	Management: Airline	3
BA 151	Introduction to Business (3)	3
	or	
BA 231*	Fundamentals of Supervision (3)	

2. Complete 15 credits of electives. The following is a recommended list: 15

ACCT 101	Principles of Financial Accounting I (3)
ACCT 102	Principles of Financial Accounting II (3)
BA 166*	Small Business Management (3)
CIOS 105	Introduction to PC Computers and Applications (3)
ECON 201	Principles of Macroeconomics (3)
PSY/HUMS 153	Human Relations (3)

3. A total of 61 credits is required for the degree.

**Required of students completing the BS in Technology, Airway Science Option.*

AVIATION MAINTENANCE TECHNOLOGY

INTRODUCTION

The Aviation Maintenance Technology program is an FAA-approved and nationally recognized course of study that is designed to prepare graduates for entry-level positions as technicians for general aviation, corporate aviation, airlines or manufacturers. The curriculum offers emphasis on modern aircraft systems such as electronics, composite structures, automatic controls and turbine engines. Graduates are employed worldwide in many phases of aviation. Students may choose to pursue an FAA mechanic's certificate with airframe and powerplant ratings or an Associate of Applied Science degree in Aviation Maintenance Technology.

Successful progress through the AMT program requires that all students have minimum algebra proficiency at the MATH 055 level (MATH 105 recommended, see application procedures below). Math courses should be taken prior to entry into the AMT program; however, under some circumstances, the course may be taken during the first semester along with certain other aviation maintenance courses. Taking courses out of sequence will probably extend the program beyond its normal length. Students in the certificate or degree program who take courses out of sequence are enrolled on a space-available basis. Many AMT courses have prerequisites. Faculty permission is required prior to registration for any AMT course.

The AAS degree usually requires one semester of study beyond the certificate program. Students carry a full load of 30 to 35 class hours per week in order to finish in five semesters.

AMT students may continue their studies while pursuing a Bachelor of Science in Technology degree at UAA. Other universities offering baccalaureate degrees in Aviation Maintenance Technology or related fields (Aircraft Maintenance Engineering, Aircraft Maintenance Management, etc.) accept credits, certificates, and degrees earned at UAA to apply to their four-year degrees. The actual number of credits that transfer and how they apply to the degree are determined by the receiving institution. Those intending to pursue a four-year degree in Aviation Maintenance Technology are urged to discuss their plans with an AMT faculty advisor.

AAS degree candidates who have completed an FAA approved program in aviation maintenance at an accredited institution, and who have passed all courses in the major field with a grade of "C" or better, and who currently hold a valid FAA mechanic's certificate with airframe and powerplant ratings may, with the approval of the department, substitute that certificate and training for all or a portion of the major degree requirements for the AAS degree in Aviation Maintenance Technology.

Admission Requirements, Certificate and Degree

Complete the following application procedures:

1. Apply for admission to UAA and to the AMT program by contacting the Aviation Maintenance Technology (AMT) program, University of Alaska Anchorage, 2811 Merrill Field Drive, Anchorage, Alaska 99501. Telephone: (907) 276-3737.
2. Have official high school transcripts, or official GED, and any vocational-technical training certificates sent to UAA Enrollment Services.
3. Present evidence to the AMT program of math competency equivalent to completion of MATH 055. This may be accomplished by:
   a. presentation of college transcripts for department evaluation, or
   b. by attaining an appropriate score on a PHYS 110 entrance exam administered by the UAA Advising and Counseling Center. (Please call (907) 786-4500 to make arrangements.)
4. Demonstrate English language proficiency through appropriate score on English Placement Test administered by UAA Advising and Counseling Center or through presentation of transcripts for department evaluation. Generally, applicants prepared for entry into ENGL 108-109 have sufficient proficiency for entry into the AMT program.

CERTIFICATE

Aviation Maintenance Technology

Admission Requirements

See Admission Requirements above.

Certificate Requirements

1. Complete the following required courses:

AT 170	Acft Ground Operations and Safety	1
AT 171	Basic Aerodynamics	3
AT 172	Publications, Regulations and Records	3
AT 173	Acft Electrical Hardware	3
AT 174	Acft DC Electrical Systems	3
AT 174L	Acft DC Electrical Systems Lab	1
AT 175	Drawing and Precision Measurement	2
AT 176	Acft Materials and Processes I	2
AT 177	Recip Engine Theory	2
AT 178	Turbine Engine Theory	2
AT 181	Fuel Systems	3
AT 181L	Fuel Systems Lab	1
AT 183	Acft Electrical Machinery	2
AT 183L	Acft Electrical Machinery Lab	1
AT 184	Acft AC Electrical Systems	3
AT 184L	Acft AC Electrical Systems Lab	1
AT 185	Sheetmetal Structures	3
AT 185L	Sheetmetal Structures Lab	2
AT 186	Non-destructive Inspection Methods	3
AT 187	Recip Engine Overhaul	3
AT 187L	Recip Engine Overhaul Lab	2
AT 273	Fluid Power Systems	3
AT 273L	Fluid Power Systems Lab	2
AT 274	Acft Electronic Systems	5
AT 274L	Acft Electronic Systems Lab	1
AT 276	Propeller Systems	1
AT 277	Recip Engine Installation and Operations	3
AT 277L	Recip Engine Installation and Operations Lab	2
AT 279	Turbine Engine Repair and Overhaul	3
AT 279L	Turbine Engine Repair and Overhaul Lab	1
AT 283	Acft Auxiliary Systems	3
AT 283L	Acft Auxiliary Systems Lab	1
AT 285	Bonded Structures	4
AT 285L	Bonded Structures Lab	1
AT 286	Acft Materials and Processes II	2
AT 289	Turbine Engine Installation and Operations	2
AT 289L	Turbine Engine Installation and Operations Lab	2
AT 364	Avionics Systems	3
AT 367	Acft Assembly and Inspections	4
AT 367L	Acft Assembly and Inspections Lab	2

2. A total of 91 credits is required for the certificate.

UNDERGRADUATE DEGREE

Associate of Applied Science, Aviation Maintenance Technology

Admission Requirements

1. Satisfy all requirements for admission to the certificate program.
2. This degree requires two special competencies:
   A. Computer competency which may be demonstrated in one of the following ways:
      1.) A 3 credit course in a computer language or an introductory course in data processing or microcomputers.
      2.) Work-related experience verifying computer literacy as approved by the faculty advisor.
      3.) Self-initiated computer literacy as approved by the faculty advisor.
   B. An overview of aviation demonstrated in one of the following ways:
      1.) Satisfactorily complete AT 100 or AT 132.
      2.) Possess an FAA Private Pilot certificate.
      3.) Present evidence of passing the FAA Private Pilot written exam.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

Major Requirements

1. Complete the following required courses (91 credits):

AT 170	Acft Ground Operations and Safety	1
AT 171	Basic Aerodynamics	3
AT 172	Publications, Regulations and Records	3
AT 173	Acft Electrical Hardware	3
AT 174	Acft DC Electrical Systems	3
AT 174L	Acft DC Electrical Systems Lab	1
AT 175	Drawing and Precision Measurement	2
AT 176	Acft Materials and Processes I	2
AT 177	Recip Engine Theory	2
AT 178	Turbine Engine Theory	2
AT 181	Fuel Systems	3
AT 181L	Fuel Systems Lab	1
AT 183	Acft Electrical Machinery	2

AT 183L	Acft Electrical Machinery Lab	1
AT 184	Acft AC Electrical Systems	3
AT 184L	Acft AC Electrical Systems Lab	1
AT 185	Sheetmetal Structures	3
AT 185L	Sheetmetal Structures Lab	2
AT 186	Non-destructive Inspection Methods	3
AT 187	Recip Engine Overhaul	3
AT 187L	Recip Engine Overhaul Lab	2
AT 273	Fluid Power Systems	3
AT 273L	Fluid Power Systems Lab	2
AT 274	Acft Electronic Systems	5
AT 274L	Acft Electronic Systems Lab	1
AT 276	Propeller Systems	1
AT 277	Recip Engine Installation and Operations	3
AT 277L	Recip Engine Installation and Operations Lab	2
AT 279	Turbine Engine Repair and Overhaul	3
AT 279L	Turbine Engine Repair and Overhaul Lab	1
AT 283	Acft Auxiliary Systems	3
AT 283L	Acft Auxiliary Systems Lab	1
AT 285	Bonded Structures	4
AT 285L	Bonded Structures Lab	1
AT 286	Acft Materials and Processes II	2
AT 289	Turbine Engine Installation and Operations	2
AT 289L	Turbine Engine Installation and Operations Lab	2
AT 364	Avionics Systems	3
AT 367	Acft Assembly and Inspections	4
AT 367L	Acft Assembly and Inspections Lab	2

2. Complete the following (12 credits):

A. Humanities elective*		3
B. Social Sciences elective (PSY 111 recommended).		3
C. MATH 105	Intermediate Algebra	3
D. PHYS 110	Physics for Technicians	4

3. A total of 113 credits is required for the degree.

**Any English courses used to satisfy the Humanities general requirement must be different from the written communications requirement and have a course number higher than ENGL 111.*

COMPUTER ELECTRONICS

INTRODUCTION

This two-year degree program trains students in maintenance and repair of digital/computer equipment including computer circuitry, hands-on maintenance, electronic fundamentals and programming. Students are prepared for employment as computer technicians, field service representatives, and other jobs requiring electronic skills.

UNDERGRADUATE DEGREE

Associate of Applied Science, Computer Electronics

The Computer Electronics program is offered only at Kenai Peninsula College.

Admission Requirements

1. ASSET placement at the MATH 100 entry-level or above.
2. ASSET placement for reading at the ENGL 107 level or above.
3. Students placing below these math and reading levels on ASSET must see a faculty advisor in computer electronics prior to registering for computer electronics courses.

General University Requirements

Complete the associate degree requirements listed on page 66.

Communication and General Requirements

1. Communication Requirements

ENGL 111	Methods of Written Communication	3
ENGL 212	Technical Writing	3
SPCH 111	Fundamentals of Oral Communication	3

2. General Requirements

MATH 101	Technical Mathematics	3
MATH 105	Intermediate Algebra	3
PHYS 123	Basic Physics I (4)	8
	and	
PHYS 124	Basic Physics II (4)	
	or	
PHYS 115	Physical Science I for Technicians (4)	
	and	
PHYS 116	Physical Science II for Technicians (4)	

Major Requirements

1. Complete the following required courses (35 credits):

CIOS 110	Computer Concepts in Business	3
CS 105	FORTRAN Programming (3)	3
	or	
CS 107	Pascal Programming (3)	
	or	
CS 207	C Programming (3)	
ET 101	Basic Electronics: DC Physics	4
ET 102	Basic Electronics: AC Physics	4
ET 126	Principles of Logic and Gating	4
ET 175	Technical Introduction to Microcomputers	3
ET 240	Application of Integrated Circuits	3
ET 241	Microcomputer Interfacing	3
ET 242	Computer Peripheral Devices	4
ET 245	Basic Electronics	4

2. Electives 2
3. A total of 60 credits is required for the degree.

DENTAL ASSISTING

INTRODUCTION

If you like helping people, enjoy working with your hands as well as your mind, and want a job with responsibility, a career in dental assisting may be for you.

The Dental Assisting program prepares students to become skilled members of the dental health care team. Assistants greatly increase the efficiency of the dentist in the delivery of oral health care and are valuable members of the dental care team.

The duties of the dental assistant are among the most comprehensive and varied in the dental office. The dental assistant performs a wide

range of tasks requiring both interpersonal and technical skills. Some specific tasks dental assistants may perform include: assisting the dentist provide oral health care during a variety of procedures; exposing and processing radiographs (x-rays); recording the patient's medical history and vital signs; preparing and sterilizing the proper instruments and equipment for the dentist's use; providing the patient with post-operative instructions following surgery or some other type of dental treatment; showing patients how to brush and floss; making impressions of patients' teeth for study casts; performing office management tasks, such as scheduling appointments, answering the telephone, billing, and inventory control; and performing basic procedures in the dental office laboratory, such as trimming models, polishing appliances, and fabricating temporaries.

Since most dentists employ two or three dental assistants, employment opportunities in this field are widespread. Many types of practice settings are available to dental assistants. For example, an assistant may choose to work in a private practice or a group practice. In addition, an assistant can work in a general dentistry or specialty practice, such as oral and maxillofacial surgery, orthodontics, endodontics, periodontics, prosthodontics, or pediatric dentistry. Job opportunities also exist in public health facilities, federal government facilities, hospitals, dental school clinics, insurance companies, and vocational schools or community colleges and universities teaching others to become dental assistants.

There are many advantages to a career in dental assisting. Dental assisting is a real challenge, demanding versatility and a willingness to assume responsibility for a variety of different tasks. If you want outstanding working conditions where you will be in demand, dental assisting may be a career for you.

The Dental Assisting program is an 8-month program of classroom instruction and clinical experience. A certificate of completion is awarded after fulfilling requirements of this program. In addition, an associate of applied science degree is available for graduates who wish to complete additional courses required for a degree. A faculty advisor in the Dental Assisting program should be consulted prior to entry in the program.

The Dental Assisting program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education. As a result of this, graduates are eligible to take the Dental Assisting National Board examination in General Chairside Assisting and upon successful completion will become Certified Dental Assistants.

Admission to the Program

Special admission requirements and screening procedures are required. It is strongly recommended that interested individuals contact the advisor in the Department of Dental Assisting to review procedures and requirements for admission.

Prerequisites

Graduation from high school or equivalent (GED).

Application Procedure

1. Complete a dental assisting application form and mail to the address below.
2. Request official transcripts from high school (and college, if applicable). Send to:

   UAA Dental Assisting Program
   Allied Health Science Building, Room 124
   3211 Providence Drive
   Anchorage AK 99508-4670
   Please call: (907) 786-1353 or 786-1701
3. Contact UAA's Advising and Counseling Center at 786-4500 to schedule the required testing for admission to the Dental Assisting program. The center will forward test results to the Dental Assisting program. If test scores are low, additional course work will be recommended to help you achieve your goal of completing the Dental Assisting program.
4. Request two letters of recommendation to be sent to the Dental Assisting program. Preferably these letters should come from former or current employers or instructors. The letters must include comments on applicant's ability, motivation, interpersonal skills, communication skills, and work habits.
5. The information listed above must be in applicant's file before they will be considered for enrollment in the program in the fall semester of the year applying.

Applications to the program may be made at any time; however, for enrollment in the fall semester, application must be completed by August 1. Applicants are encouraged to apply as early as possible so they can complete classes identified by test results as being necessary for successful completion of the program.

Selection Criteria - Applicants are selected for admission based upon their test scores, grades in high school and college, ability to complete the application process, and dental assisting experience. If test results are low and classes are recommended to improve reading comprehension levels, applicants will be advised and proof of successful course completion must be provided prior to acceptance into the program.

CERTIFICATE

Dental Assisting

Admission Requirements

See admission to the program and application procedure above.

Certificate Requirements

1. Complete the following required courses:

DA 121	Chairside Procedures I	6
DA 122	Chairside Procedures II	8
DA 123	Biomedical Sciences for Dental Assistants	4
DA 124	Dental Materials and Application I	2
DA 125	Dental Materials and Application II	2
DA 126	Dental Sciences for Dental Assistants	1

DA 127	Dental Practice Management and Professionalism	3
DA 128	Dental Communication Skills	2
DA 195A	Dental Assisting Practicum I	1
DA 195B	Dental Assisting Practicum II	3
DA/DH 110	Dental Radiography	4

2. A total of 36 credits is required for the certificate.

UNDERGRADUATE DEGREE

Associate of Applied Science, Dental Assisting

Admission Requirements

See admission to the program and application procedure above.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

Major Requirements

1. Complete the following required courses (45-46 credits):

BIOL 102	Introductory Biology (3)	4
	and	
BIOL 103	Introductory Biology Laboratory (1)	
	or	
BIOL 105	Fundamentals of Biology I (4)	
DA 121	Chairside Procedures I	6
DA 122	Chairside Procedures II	8
DA 123	Biomedical Sciences for Dental Assistants	4
DA 124	Dental Materials and Application I	2
DA 125	Dental Materials and Application II	2
DA 126	Dental Sciences for Dental Assistants	1
DA 127	Dental Practice Management and Professionalism	3
DA 128	Dental Communication Skills	2
DA 195A	Dental Assisting Practicum I	1
DA 195B	Dental Assisting Practicum II	3
DA/DH 110	Dental Radiography	4
DN 140	Introduction to Nutrition (2)	2-3
	or	
DN 203	Normal Nutrition (3)	
PSY 100	Understanding People (3)	3
	or	
PSY 150	Human Development (3)	
	or	
PSY/HUMS 153	Human Relations (3)	

2. A total of 60-61 credits is required for the degree.

DENTAL HYGIENE

INTRODUCTION

The registered dental hygienist is a licensed oral health educator and clinical operator who, as an auxiliary to the dentist, uses preventive educational and therapeutic methods which aid individuals and groups to attain and maintain optimum oral health. Dental hygiene services are utilized in general and specialty dental practices, in the armed services, and in programs for research, professional education, public health, school health, industrial health, and institutional and hospital care.

Clinical dental hygiene requires the ability to sit for long periods of time, good to excellent eye-hand coordination, and excellent fine hand motor skills. Use of protective glasses, face masks and surgical type gloves is required.

The Dental Hygiene program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education. The Associate of Applied Science degree is a three-year endeavor comprising one year of prerequisite and general education courses and two years of course work in dental hygiene. The program prepares graduates clinically and academically to take the National and Western Regional Examining Boards for licensure.

The Dental program application form asks a question concerning conviction of a misdemeanor felony. While conviction of a felony does not automatically bar a student from consideration for or selection to the Dental Hygiene program, conviction of a felony within five years of licensure application is evidence of unacceptable moral character and may result in denial of licensure. (Alaska Statutes 28.910, April 1991)

Due to the nature of the work of the dental hygienist, students are not permitted to work in the laboratory or clinic when under the influence of intoxicants, drugs or medications affecting psychomotor responses. Students suspected of substance abuse may be subjected to a drug test.

Possible transfer of credits is available to graduates of an ADA accredited dental assisting program. Contact the Dental Hygiene program advisor for details.

Expenses beyond tuition generally include activity fees, instruments, uniforms, lab fees, student organization membership, graduation pin, immunizations, cost of a yearly BCLS class, licensure fees, student health insurance, and malpractice insurance for the Western Regional Examining Boards.

Once enrolled as a dental hygiene student, the student can anticipate a four-semester, 40-hour-per-week endeavor. Some evening classes and clinics are scheduled. Students are responsible for securing both adult and child volunteers to satisfy clinical requirements.

UNDERGRADUATE DEGREE

Associate of Applied Science, Dental Hygiene

Admission Requirements

Information given here is for general guidance only. Completion of the UAA admission requirements does not guarantee selection into the Dental Hygiene program. Due to accreditation requirements, a limited number of positions are available for each entering class.

Prospective students must contact the Dental Hygiene program for specific application procedures. Applications may be obtained from the Dental Programs Office. Application may be made at any time; however, May 20th is the application deadline for entry in the fall semester.

Minimum admission criteria are outlined below. Contact the Dental Hygiene program for specific additional criteria.

1. Proof of age. The student must be 18 years of age or older by November of the year enrolling. This age requirement complies with the Alaska Radiation Protection Regulation regarding occupational exposure to radiation.
2. An official transcript or record showing proof of completion of high school or GED.
3. Proof of admittance into the University of Alaska Anchorage.
4. Completion of a current application to the Dental Hygiene program indicating the year the student wishes to apply.
5. An official transcript showing a cumulative GPA of at least 2.50 in the following courses. These courses must be completed by the application deadline.

   CHEM 103 and CHEM 104
   BIOL 111 and BIOL 112
   BIOL 240
6. An official transcript showing a cumulative GPA of at least 2.50 in the following courses. The courses must be completed by the application deadline.

   SPCH 111* or SPCH 241
   PSY/HUMS 153 or PSY 111
   SOC 101
   ENGL 111

   *Recommended

Students completing non-dental course work must confirm their intention to enter the dental hygiene phase of the program by May 20th for the upcoming Fall class. Information and applications can be obtained by writing:

UAA Dental Hygiene Program
Allied Health Science Building, Room 124
3211 Providence Drive
Anchorage AK 99508-4670
Please call: (907) 786-1353 or 786-1701

Immunizations and Basic Cardiac Life Support (BCLS) certification are required by November of the first year enrolled in clinical courses. BCLS certification and immunizations must be current throughout the program.

Academic Progress

Students must earn at least 75 percent or higher in each dental hygiene course.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67. (ENGL 212 is recommended.)

Major Requirements

1. Complete the following required courses:

BIOL 111	Human Anatomy and Physiology I	4
BIOL 112	Human Anatomy and Physiology II	4
BIOL 240	Introductory Microbiology for Health Sciences	4
CHEM 103	Introduction to General and Organic Chemistry	4
CHEM 104	Introduction to Organic Chemistry and Biochemistry	4
Fall Semester - 1st year		
DH/DA 110	Dental Radiography	4
DH 111	Periodontics I	2
DH 112	Techniques I for Dental Hygienists	7
DH 113	Issues for Dental Hygiene	1
DH 114	Anatomy of the Orofacial Structures	2
DN 140	Introduction to Nutrition (2) or	2-3*
DN 203	Normal Nutrition (3)	

**Recommended. Due to a heavy credit load, it is recommended that the nutrition course be taken prior to formal admission into the Dental Hygiene program.*

Spring Semester - 1st year		
DH 121	Periodontics II	2
DH 122	Techniques II for Dental Hygienists	4
DH 165	Pharmacology for Dental Hygienists	2
DH 192	Clinical Seminar I	1
DH 195	Clinical Practicum I for Dental Hygienists	4
Fall Semester - 2nd year		
DH 211	Current Periodontal Therapies	2
DH 212	Techniques III for Dental Hygienists	3
DH 214	Pathology of Oral Tissues	2
DH 270	Local Anesthesia for Dental Hygienists	2
DH 292A	Clinical Seminar II	1
DH 295A	Clinical Practicum II for Dental Hygienists	5
Spring Semester - 2nd year		
DH 224	Principles of Dental Health	3
DH 292B	Clinical Seminar III	1
DH 295B	Clinical Practicum III for Dental Hygienists	6

2. A total of 91-92 credits is required for the degree.

ELECTRONICS TECHNOLOGY

INTRODUCTION

The electronic industry continues to be one of the fastest growing in the world. Technological changes, the demand for improved communications, and computer/microprocessor equipment provide many opportunities for well-trained and motivated technicians. Both men and women are welcomed by the industry and UAA's program.

The Electronics Technology program offers a certificate for those who complete technical courses only. However, students are encouraged to complete the Associate of Applied Science degree for further career advancement.

The Anchorage Campus Electronics program is conventionally structured, and students attend class four hours per day, five days a week. Students may enter the Electronics Technology program in the fall or spring semester. Those who enter in the spring must attend classes during the summer session to complete the program in 4 consecutive semesters. Fall and spring semesters are 15 weeks, while the summer session is usually 14 weeks in duration.

The Matanuska-Susitna College Campus Electronics program is not structured in the conventional manner. Instead it is designed primarily as a self-paced, open-entry evening program for the student who requires more flexible scheduling. The program offers self-paced courses along with open laboratories for either full-time or part-time students. The program is adaptable to various work schedules.

The MSC Electronics Technology program offers a certificate of training following the second, third, or fourth semesters in addition to the Associate of Applied Science (AAS) degree.

The Electronics Technology program provides a thorough background in electronics preparing graduates for entry-level positions in most phases of the industry in Alaska. The Federal Aviation Administration has identified Electronics Technology at the Anchorage Campus as a "Pre-Hire" program which will enhance qualified graduates' placement with the FAA.

CERTIFICATES

Electronics Technology

Anchorage Campus

1. Complete the following requirements:

ET 103	Electronic Calculations I	4
ET 104	DC Circuits	4
ET 105	Introduction to Computer Electronics	4
ET 106	Electronics Laboratory I	4
ET 124	Electronic Calculations II	4
ET 125	AC Circuits	4
ET 126	Principles of Logic and Gating	4
ET 128	Solid State Electronics: Theory and Laboratory	4
ET 230	Telecommunications	4
ET 231	Audio	4
ET 232	Applied ICs	4
ET 233	Computer Systems I	4
ET 250	Transmitters and Receivers	4
ET 251	Video Systems Analysis	4
ET 252	Computer Systems II	4
ET 253	Computer Systems III	4

2. A total of 64 credits is required for the Anchorage Campus certificate.

Matanuska-Susitna College Campus

To receive a One-Year Certificate of Training, students must satisfactorily complete the following courses:

1. Complete the following requirements:

ET 104	DC Circuits	4
ET 106	Electronics Laboratory I	4
ET 111	Electronics Laboratory II	4
ET 122	Introduction to Electronic Devices	3
ET 123	Electronic Circuit Fundamentals	3
ET 125	AC Circuits	4
ET 126	Principles of Logic and Gating	4
ET 127	Microprocessor Fundamentals	3

2. A total of 29 credits is required for the MSC certificate.

To receive a One and One-Half Year Intermediate Certificate of Training, students must satisfactorily complete the following courses in addition to those indicated for the One-Year Certificate:

1. Complete the following requirements:

ET 205	Transmitter Circuitry	3
ET 209	Receiver Circuitry	3
ET 211	Amplifiers	3
ET 215	Modulation, Mixing, and Detection	3

2. A total of 41 credits is required for the MSC certificate.

To receive a Two-Year Advanced Certificate of Training, students must satisfactorily complete the following courses in addition to those indicated for the One-Year and One and One-Half Year Certificate:

1. Complete the following requirements:

ET 220	Wideband Systems I	3
ET 221	Wideband Systems II	3
ET 225	Principles of Microwave Electronics	3
ET 226	Industrial Electronics	3

2. A total of 53 credits is required for the MSC certificate.

UNDERGRADUATE DEGREE

Associate of Applied Science, Electronics Technology

Admission Requirements

See Open Admission on page 65.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science Requirements (15 credits) listed on page 67.

MAJOR REQUIREMENTS

Anchorage Campus

1. Complete the following requirements (64 credits):

ET 103	Electronic Calculations I	4
ET 104	DC Circuits	4
ET 105	Introduction to Computer Electronics	4
ET 106	Electronics Laboratory I	4
ET 124	Electronic Calculations II	4
ET 125	AC Circuits	4
ET 126	Principles of Logic and Gating	4
ET 128	Solid State Electronics: Theory and Laboratory	4
ET 230	Telecommunications	4
ET 231	Audio	4
ET 232	Applied ICs	4
ET 233	Computer Systems I	4
ET 250	Transmitters and Receivers	4
ET 251	Video Systems Analysis	4
ET 252	Computer Systems II	4
ET 253	Computer Systems III	4

2. A total of 79 credits is required for the Anchorage Campus degree.

Matanuska-Susitna College Campus

1. Complete the following requirements (53 credits):

ET 104	DC Circuits	4
ET 106	Electronics Laboratory I	4
ET 111	Electronics Laboratory II	4
ET 122	Introduction to Electronic Devices	3
ET 123	Electronic Circuit Fundamentals	3
ET 125	AC Circuits	4
ET 126	Principles of Logic and Gating	4
ET 127	Microprocessor Fundamentals	3
ET 205	Transmitter Circuitry	3
ET 209	Receiver Circuitry	3
ET 211	Amplifiers	3
ET 215	Modulation, Mixing, and Detection	3
ET 220	Wideband Systems I	3
ET 221	Wideband Systems II	3
ET 225	Principles of Microwave Electronics	3
ET 226	Industrial Electronics	3

2. A total of 68 credits is required for the MSC degree.

FIRE SERVICE ADMINISTRATION

INTRODUCTION

The Fire Service Administration program provides entry-level knowledge and skills for students desiring careers in fire protection. The program enhances the ability of current fire department employees.

The Associate of Applied Science degree focuses on structural fire control. Students usually complete either two or three courses in Fire Service Administration each semester. Course rotation is dependent on sufficient enrollment. Generally, three years or six semesters are needed to complete the requirements and the electives. The degree cannot be completed in two years. The AAS degree is available at the Anchorage and Matanuska-Susitna College campuses.

A baccalaureate degree in Fire Service Administration is available through the Western Oregon State College Open Learning Fire Service Program. This is a 186 quarter-hour program. Up to 72 semester credits (108 quarter-hours) including all FSA courses taken at UAA can transfer into this program. The remaining 78 quarter-hours, including the professional upper-division core curriculum courses, can be completed through Western's open learning program via correspondence courses.

Information may be obtained through the UAA Fire Service Program or by calling Western's Fire Service Programs at 800-451-5767.

UNDERGRADUATE DEGREE

ASSOCIATE OF APPLIED SCIENCE, FIRE SERVICE ADMINISTRATION

ADMISSION REQUIREMENTS

See Open Admission on page 65.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

MAJOR REQUIREMENTS

1. Complete the following required courses (21 credits):

FSA 101	Introduction to Fire Science	3
FSA 105	Fundamentals of Fire Prevention	3
FSA 107	Fire Tactics and Strategy	3
FSA 111	Fire Company Organization and Management	3
FSA 117	Rescue Practices	3
FSA 202	Fire Hydraulics	3
FSA 204	Hazardous Materials I	3

2. Complete 9 credits from the following courses or other FSA courses as approved by program coordinator: 9

EMT 130	Emergency Medical Technician I (6)
FSA 115	Fire Apparatus and Equipment (3)
FSA 121	Introduction to Fire Chemistry (3)
FSA 123	Fire Investigation I (3)
FSA 151	Wild Land Fire Control I (3)
FSA 206	Building Construction for Fire Protection (3)
FSA 210	Hazardous Materials II (3)
FSA 212	Related Codes and Ordinances (3)
FSA 214	Fire Protection Equipment and Systems (3)
FSA 217	Advanced Rescue Practices (3)

3. Complete an additional 15 credits of electives. 15
4. A total of 60 credits is required for the degree.

FOODSERVICE TECHNOLOGY

INTRODUCTION

The Foodservice Program provides students the opportunity to acquire the culinary skills needed to develop a career in the ever expanding commercial foodservice industry. An array of career possibilities are available to graduates in the areas of culinary

production and foodservice management in restaurants, clubs, bakeries, hotels, hospitals, camps, catering facilities, institutions and other operations that provide foodservice.

The Associate of Applied Science degree (AAS) generally requires two years to complete. After completing foodservice requirements students may select foodservice electives and specialize in the area of culinary/bakery production or management.

Foodservice workers who wish to take foodservice courses randomly, in an effort to update skills and knowledge, are welcomed to do so. (However, some courses have prerequisites or require faculty permission).

Students who wish to prepare to take the national examination for the Dietary Manager's Certificate issued by the Dietary Managers Association may take certain courses. See below for information on UAA's Dietary Manager Nontranscripted Departmental Certificate of Completion.

UNDERGRADUATE DEGREE

Associate of Applied Science, Foodservice Technology

Admission Requirements

See Open Admission on page 65.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

Major Requirements

1. Complete the following required courses:

FST 102	Food and Nutrition	3
FST 103	Culinary Production I	4
FST 104	Sanitation	2
FST 105	Orientation to Food Science	3
FST 107	Culinary Cost Control	2
FST 110	Food Standards	2
FST 111	Bakery Production I	4
FST 201	Culinary Production II	4
FST 202	Bakery Production II	4
FST 224	Hospitality Service	3
FST 230	Foodservice Management	3
FST 295C	Foodservice Internship	3

2. Complete a minimum of 8 credits from the following: 8

FST 113	Culinary Meats and Charcuterie (3)
FST 114	Beverages (2)
FST 220	Foodservice Operations (3)
FST 223	Advanced Foods: Buffet and Garde Manger (3)
FST 225	Menu Making/Facility Layout and Design (3)
FST 233	Advanced Pastry (3)
*FST 490	Current Topics in Foodservice and Nutrition (1-6)

**Only 3 credits of FST 490 may be applied to the AAS Foodservice Technology degree.*

3. A total of 60 credits is required for the degree.

Nontranscripted Departmental Certificate of Completion

Dietary Manager

A Dietary Manager is a skilled and experienced generalist capable of assuming responsibility for all aspects of foodservice operations in consultation with a Registered Dietitian. Dietary Managers are employed by hospitals, nursing homes, schools, hotels, correctional facilities, pipeline camps, child care centers, senior citizen meal programs, and residential or retirement centers. The Joint Commission on the Accreditation of Health Care Organizations requires all hospital and nursing home foodservice supervisors to be Certified Dietary Managers.

The Dietary Manager component of the Foodservice program at UAA is a twenty credit group of courses designed to provide quality education and training to individuals currently employed in the foodservice industry or for college students who have completed Foodservice Technology courses. One hundred and ninety hours of on-the-job work experience in health care related institutional foodservice is required by the Dietary Managers Association. The lectures are enhanced by the practicum experiences that reinforce foodservice skills, managerial operations, and nutritional care applications.

This program is accredited by the Dietary Managers Association of Lombard, Illinois. Upon completion, the student is eligible to: (1) apply for membership in the Dietary Managers Association (DMA) and (2) take the DMA certification examination.

Admission Requirements

Students must complete the following admission procedure:

1. Submit proof of graduation from high school or equivalent (GED).
2. Submit completed application form (obtained from Foodservice Technology, Cuddy Center 123).
3. Request official transcripts from high school (and college, if applicable). Send to:

   UAA Dietary Manager Program
   FST, Cuddy Center 123
   3211 Providence Drive
   Anchorage AK 99508
   Please call: (907) 786-1362

4. Schedule ASSET screening test with Testing Coordinator, Advising and Counseling Center, please call (907)786-4500. The Center forwards test results to the Foodservice Technology Office. If test score is low, remedial course work will be recommended.

Application to the program may be made at any time. Certain courses may be offered every two years. For more information, contact the Foodservice Technology Department.

Certificate Requirements

1. Complete the following required courses:

FST 102	Food and Nutrition	3
FST 105	Orientation to Food Science	3
FST 107	Culinary Cost Control	2
FST 220	Foodservice Operations	3
FST 230	Foodservice Management	3
FST 295A	Foodservice Operations Practicum	1.5
FST 295B	Foodservice Management Practicum	.5
DN 140	Introduction to Nutrition	2
DN 150	Introduction to Diet Therapy	1
DN 195	Nutritional Care Practicum	1

2. A total of 20 credits is required for the nontranscripted departmental certificate of completion.

FORESTRY TECHNOLOGY

INTRODUCTION

The Associate of Applied Science degree in Forestry Technology is a two-year program primarily designed to train students to work in Alaska's forests at the technical level.

This program will equip the graduate for work with federal or state forestry agencies or with forest-owning Native corporations or forest industry. The pre-professional curriculum should include more mathematics and science than are specified for the technician study. Some of the forest technician courses will help in obtaining summer jobs and add to the student's professional background. Only some of them, however, are accepted for transfer to a professional forestry school.

This program is offered at the Alaska Vocational Technical Center (AVTEC) in Seward, though the degree is awarded through Kenai Peninsula College in Soldotna. Contact Bob Kesling at AVTEC for more information, (907) 224-3322.

UNDERGRADUATE DEGREE

Associate of Applied Science, Forestry Technology

This program is only offered through Kenai Peninsula College.

Admission Requirements

1. ASSET placement at the MATH 100 entry-level or above.
2. ASSET placement for reading at the ENGL 107 level or above.
3. Students placing below these math and reading levels on ASSET must see a faculty advisor in forestry technology prior to registering for forestry technology courses.

General University Requirements

Complete the associate degree requirements listed on page 66.

Communication and General Requirements

1. Communication Requirements

ENGL 111	Methods of Written Communication	3
ENGL 212	Technical Writing	3
SPCH 111	Fundamentals of Oral Communication	3

2. General Requirements

BIOL 105	Fundamentals of Biology I	4
	Any other Natural Sciences course with advisor's approval	3

Major Requirements

1. Complete the following required courses (41 credits):

BA 285	Supervision/Management by Objectives	3
FORT 105	Introduction to Forestry	3
FORT 110	Land Surveying/Mapping	3
FORT 120	Forest Ecology and Dendrology	3
FORT 125	Forest Regeneration	2
FORT 130	Forest Entomology and Pathology	3
FORT 195	Forestry Practicum	3
FORT 205	Cruising and Scaling	2
FORT 215	Forest Growth and Silviculture	3
FORT 220	Wildlife Management	3
FORT 225	Forest Recreation	3
FORT 230	Remote Sensing	3
FORT 235	Timber Harvesting and Sale Administration	4
FSA 151	Wild Land Fire Control I	3

2. Electives 3
3. A total of 60 credits is required for the degree.

HOME ECONOMICS

INTRODUCTION

Home Economics encourages the personal and professional growth and creative talent of students pursuing a variety of careers in today's global and technologically challenging society. The discipline's integrated themes and interdisciplinary focus help all students improve their quality of life.

Home Economics courses meet the academic needs of students with other majors as well. Students may also enroll in courses to satisfy professional objectives or personal interest.

Students can earn an Associate of Applied Science degree in Home Economics through two emphasis areas:

1. Fashion Merchandising prepares students for opportunities in design, display, retail sales and operations in the fashion industry.
2. Assistive Care prepares students with skills and knowledge required of caregivers in a residential setting. Course work is approved by the State Board of Nursing for recertification of health care aides, personal care attendants, homemakers and other similar caregiver classifications.

Please note: No new certificate or degree-seeking students will be admitted pending curriculum changes. Students should meet with department advisor for information.

CERTIFICATES

FASHION MERCHANDISING

ADMISSION REQUIREMENTS

See Open Admission Requirements listed on page 65.

1. Complete the following required courses (29 credits):

BA 151	Introduction to Business	3
BA 264	Personal Selling	3
CIOS 161	Business Math	3
HEFM 181	Fashion Merchandising I	2
HEFM 183	Fashion History and Trends	3
HEFM 187	Display/Visual Merchandising	2
HEFM 281	Fashion Merchandising II	3
HEFM 295	Merchandising Field Internship	4
HETC 121	Basic Clothing Construction	3
HETC 130	Textiles	3

2. Complete at least 1 course from the following: 1-3

ART 105	Beginning Drawing (3)
HEFM 185	Home Economics Entrepreneurship (2)
HETC 180	Personal Profile (1)
HETC 234	Pattern Drafting: Design (2)
THR 257	Costume Design and Construction I (3)

3. A minimum of 30 credits is required for the certificate.

NONTRANSCRIPTED DEPARTMENTAL CERTIFICATES OF COMPLETION

A. Professional Floral Design

Students can earn a nontranscripted departmental certificate of completion in Professional Floral Design from the Home Economics Department. Through the three courses listed below, this 8 credit program prepares students with beginning skills and experience required in the floral design industry.

Complete the following required courses (8 credits):

HEID 161	Professional Floral Design I	2
HEID 162	Professional Floral Design II	3
HEID 195	Professional Floral Design Practicum	3

B. Assistive Care

A nontranscripted departmental certificate of completion in Assistive Care is available to students successfully completing at least 15 credits of HECH 192, Selected Topics in Assistive Care.

UNDERGRADUATE DEGREE

ASSOCIATE OF APPLIED SCIENCE, HOME ECONOMICS

ADMISSION REQUIREMENTS

See Open Admission on page 65.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

CIOS 161, Business Math, and PSY 153/HUMS 153, Human Relations, or PSY 100, Understanding People, are recommended for the Fashion Merchandising emphasis. CHEM 103, Introduction to General and Organic Chemistry, and CHEM 104, Introduction to Organic Chemistry and Biochemistry, are highly recommended for students wishing to specialize in nutrition-related course work for the Assistive Care emphasis.

MAJOR REQUIREMENTS

1. Complete the following required core courses (6 credits):

BA 131	Personal Finance	3
HECH 276	Managing Home Resources	3

2. Choose one emphasis area below:

Assistive Care Emphasis (39 credits):

Complete the following required courses:

DN 140	Introduction to Nutrition	2
HECH 192	Selected Topics in Assistive Care	9-15*

**May be taken for 9 to 15 credits within the degree program*

HECH 277	Family and Parenting	3
HECH 295	Practicum in Assistive Care	3

Complete 11-14 credits from the following: 11-14

DN 145	Child Nutrition (2)
DN 245	Nutrition for the Second Fifty Years (3)
HUMS 101	Introduction to Human Services (3)
HUMS/PSY 223	Introduction to Paraprofessional Counseling I (3)
PSY 150	Human Development (3)
PSY 245	Child Development (3)

Complete remaining credits (2-11) from any of the courses listed below or from other related course work with permission of the department. 2-11

ECD Methods	Courses 111, 112, 113, 121, 122, 123, 124, 131, 132, 211, 221 with faculty permission.
HEFM 185	Home Economics Entrepreneurship (2)
HETC 180	Personal Profile (1)
HUMS 150	Marriage, Divorce and Intimate Relationships in the 90's (3)
HUMS 231	Applied Behavioral Analysis I (2)
SOC 242	An Introduction to Marriage, Family and Intimate Relationships (3)

Fashion Merchandising Emphasis (39 credits):

Complete the following required courses:

BA 151	Introduction to Business	3
BA 264	Personal Selling	3
CIOS 161	Business Math	3
HEFM 181	Fashion Merchandising I	2
HEFM 183	Fashion History and Trends	3
HEFM 187	Display/Visual Merchandising	2
HEFM 281	Fashion Merchandising II	3
HEFM 295	Merchandising Field Internship	4
HETC 121	Basic Clothing Construction	3
HETC 130	Textiles	3
ID 141	Interior Design	3

Complete 7 credits from the following: 7

ART 105	Beginning Drawing (3)
HEFM 185	Home Economics Entrepreneurship (2)
HETC 180	Personal Profile (1)
HETC 234	Pattern Drafting: Design (2)
HUMS 231	Applied Behavioral Analysis I ((2)
THR 257	Costume Design and Construction I (3)

3. A total of 60 credits is required for the degree.

HUMAN SERVICES

INTRODUCTION

The Human Services program leads to an Associate of Applied Science degree preparing students for entry-level employment with a variety of human services agencies. The primary emphasis is on enabling students to work effectively in any human services setting. The program also offers some specialization in substance abuse, family and youth services, home-based care, or disabilities. In addition, the program provides courses for employed persons to upgrade skills, and for community persons to learn more about human services.

Human Services students acquire:

1. Knowledge of human behavior and human relationships, helping resources and their utilization, social problem areas, and human services client populations;
2. Skills in interviewing, assessment, paraprofessional counseling and other helping approaches.

The program offers students the opportunity to apply knowledge and skills through a two- or three-semester practicum in a local human services agency.

An important part of the program is Human Services advising. Prospective students should contact a Human Services advisor before entering the program. Students enrolled in the introductory courses will be assigned an official advisor. Entrance into the Human Services Practicum requires the recommendation of the advisor. The AAS is articulated with the UAA baccalaureate degree in Psychology. Contact the Human Services advisor for more information.

UNDERGRADUATE DEGREE

Associate of Applied Science, Human Services

Admission Requirements

See Open Admission on page 65.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67. SPCH 111 and ENGL 211, 212, or 213 strongly recommended.

Major Requirements

1. Complete the following required courses (32 credits):

ANTH 200	Natives of Alaska (3)	3
	or	
ANTH 202	Cultural Anthropology (3)	
HUMS 101	Introduction to Human Services	3
HUMS/SOC/SWK 106	Introduction to Social Welfare	3
HUMS/PSY 223	Introduction to Paraprofessional Counseling I	3
HUMS 262	Human Services Practicum I	4
HUMS 263	Human Services Practicum II	4
HUMS/PSY 324	Introduction to Paraprofessional Counseling II	3
PSY 111	General Psychology	3
PSY 150	Human Development	3
SOC 101	Introduction to Sociology	3

2. Complete 6 credits from one of the emphasis areas: 6

General Human Services Emphasis

Complete 6 credits from the following:

HUMS 150	Marriage, Divorce and Intimate Relationships in the 90's (3)
HUMS 255	Group Facilitation for Human Service Workers (3)
HUMS 256	Groups and Organizations (3)
HUMS 350	Men and Masculinity (3)
PSY 245	Child Development (3)
PSY 261	Introduction to Experimental Psychology (4)
PSY 265	Psychology of Abnormal Behavior (3)
SOC 202	The Social Organization of Society (3)
SOC 242	An Introduction to Marriage, Family and Intimate Relationships (3)
SOC 246	Adolescence (3)
SOC/PSY 353	Application of Statistics to Social Sciences (3)

Substance Abuse Emphasis

Complete 6 credits from the following:

HUMS 122	Substance Abuse as a Contemporary Problem (3)
HUMS 123	Public Education and Prevention in Substance Abuse (3)
HUMS 235	Substance Abuse Counseling for Paraprofessionals (3)

Family and Youth Emphasis

Complete 6 credits from the following:

HUMS 150	Marriage, Divorce and Intimate Relationships in the 90's (3)
HUMS 231	Applied Behavioral Analysis I (2)
HUMS 232	Applied Behavioral Analysis II (2)
HUMS 350	Men and Masculinity (3)
PSY 245	Child Development (3)
SOC 242	An Introduction to Marriage, Family and Intimate Relationships (3)
SOC 246	Adolescence (3)

Disabilities Emphasis

Complete 6 credits from the following:

ASL 121	American Sign Language I (3)
ASL 131	American Sign Language II (3)
ASL 221	American Sign Language III (3)
HUMS 231	Applied Behavioral Analysis I (2)
HUMS 232	Applied Behavioral Analysis II (2)

Home-based Care Emphasis

Complete 6 credits from the following:

HECH 192	Selected Topics in Assistive Care (1-5)*
HECH 276	Managing Home Resources (3)
HECH 277	Family and Parenting (3)

**Check class schedule for topics which vary each semester.*

3. Choose 9 credits of electives in consultation with faculty advisor. 9
4. A total of 62 credits is required for the degree.

INDUSTRIAL PROCESS INSTRUMENTATION

INTRODUCTION

Industrial Process Instrumentation is a specialized technical degree. Strong math and science skills are emphasized. Students must work closely with advisors to complete this program in two years. A fifth semester of course work may be necessary.

Students are prepared for employment as instrument technicians. Instrument technicians are responsible for the repair, maintenance, adjustment, and calibration of automatic controls used in refineries, chemical plants, pipelines, production facilities, and other industries where automatic control is used.

UNDERGRADUATE DEGREE

ASSOCIATE OF APPLIED SCIENCE, INDUSTRIAL PROCESS INSTRUMENTATION

The Industrial Process Instrumentation program is offered only at Kenai Peninsula College.

ADMISSION REQUIREMENTS

1. ASSET placement at the MATH 100 entry-level or above.
2. ASSET placement for reading at the ENGL 107 level or above.
3. Students placing below these math and reading levels on ASSET must see a faculty advisor in the Industrial Process Instrumentation program prior to registering for instrumentation courses.

GENERAL UNIVERSITY REQUIREMENTS

Complete the associate degree requirements listed on page 66.

COMMUNICATION AND GENERAL REQUIREMENTS

1. Communication Requirements

ENGL 111	Methods of Written Communication	3
ENGL 212	Technical Writing	3
SPCH 111	Fundamentals of Oral Communication	3

2. General Requirements

MATH 105	Intermediate Algebra	3
PHYS 115	Physical Science for Technicians I (4)	8
	and	
PHYS 116	Physical Science for Technicians II (4)	
	or	
PHYS 123	Basic Physics I (4)	
	and	
CHEM 105	General Chemistry I (4)	

MAJOR REQUIREMENTS

1. Complete the following required courses (48 credits):

ET 101	Basic Electronics: DC Physics (4)	4
	or	
ET 151	Basic Electricity (4)	
ET 126	Principles of Logic and Gating	4
ET 175	Technical Introduction to Microcomputers	3
ET 240	Application of Integrated Circuits	3
ET 241	Microcomputer Interfacing	3
ET 245	Basic Electronics	4
ET 246	Electronic Industrial Instrumentation	3
PETR 106	Petroleum Science II	3
PETR 140	Industrial Process Instrumentation I	3
PETR 144	Industrial Process Instrumentation II	3
PETR 150	Mechanical Drafting for the Petroleum Industry (3)	3
	or	
PETR 155	Blueprint Reading (3)	
PETR 230	Practical Distillation (3)	3
	or	
PETR 231	Production Plant Operations (3)	
PETR 240	Industrial Process Instrumentation III	3
PETR 244	Industrial Process Instrumentation IV	3
PETR 270	Industrial Mechanical Equipment	3

2. A total of 68 credits is required for the degree.

MECHANICAL TECHNOLOGY

INTRODUCTION

The one-year certificate in Mechanical Technology provides the student with experience in the maintenance of most major types of rotating equipment and the operation of common machine tools. This program prepares students for employment as entry-level mechanics or millwrights in all types of industrial plants. This certificate may take more than two semesters to complete due to staggered course offerings.

CERTIFICATE

MECHANICAL TECHNOLOGY

The Mechanical Technology Program is offered only at Kenai Peninsula College.

1. Certificate Requirements

MATH 101	Technical Mathematics	3
MECH 101	Introduction to Machine Shop	4
PETR 155	Blueprint Reading	3
*PETR 270	Industrial Mechanical Equipment	3
WELD 101	Gas and Arc Welding	4

**The students entering may have to take a hands-on test and may be required to take PETR 170 if the score is below an acceptable level.*

2. Choose a minimum of 14 credits from the following electives:

MECH 102	Intermediate Machine Shop	4
MECH 115	Gasoline Engine Rebuilding	3
MECH 201	Advanced Machine Shop	4
ET 151	Basic Electricity	4
ET 207	Rotating Machinery	3
WELD 108	Wire Welding	4
WELD 109	TIG Welding	4
EDD 288	Computer Aided Drafting	4

3. A total of 31 credits is required for the certificate.

MEDICAL ASSISTING

INTRODUCTION

The Medical Assisting program prepares students for employment in physicians' offices or medical clinics. This program is nationally accredited by the Committee on Allied Health Education and Accreditation (CAHEA), a division of the American Medical Association. Training includes clinical duties such as assisting with examinations, preparing patients for various procedures, sterilizing instruments, and caring for examining rooms. Instruction is given in secretarial and administrative responsibilities of medical offices, such as completing health insurance forms, scheduling appointments, handling correspondence, preparing medical and financial records, and other office management tasks.

Other employment opportunities for which the Medical Assisting program provides training include medical transcriptionist, medical receptionist, health insurance clerk, and medical secretary. Medical terminology courses are valuable for all health science students and may be taken by anyone entering a health occupation. Formal admission to the Medical Assisting program is not required for all courses. Call the Medical Assisting Office for information.

A nontranscripted departmental certificate of completion for a one year course of study in medical assisting is available. Obtain brochure from the Medical Assisting Office.

Medical assisting courses are offered in fall and spring semesters. A 6-week office practice (externship) begins in May. Most courses are offered only once per year. Students who wish to obtain an Associate of Applied Science degree must complete additional courses. Part-time students are welcome.

UNDERGRADUATE DEGREE

Associate of Applied Science, Medical Assisting

Admission Requirements

The following prerequisites must be met by all students applying for admission to the Medical Assisting program:

1. High school graduation or equivalent (GED).
2. Keyboarding speed of 45 words per minute. Students who can type but have not reached this speed may enter the program and add a keyboarding course to their schedule.
3. Average or better spelling and English abilities.
4. Good health. A recent physical examination and Basic Cardiac Life Support (BCLS) certification are required before externship.
5. Adult and child/infant CPR certifications are required prior to the start of externship.

Students must complete the following admission procedure:

1. Obtain an application from the Medical Assisting Office.
2. Have high school and college transcripts sent to the Medical Assisting program.
3. Apply to Advising and Counseling for the ASSET test, Math placement, and DAT Spelling Test. Have results sent to the Medical Assisting program.
4. Make an appointment for an interview with Medical Assisting advisor.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

Major Requirements

1. Complete the following required courses (49 credits):

ACCT 120	Bookkeeping for Business I	3
BIOL 100	Human Biology	3
CIOS 115D	Introduction to WordPerfect in DOS (1)	1
	or	
CIOS 215D	Advanced WordPerfect in DOS (1)	
CIOS 160	Business English	3
CIOS 170	Calculators	1
DN 140	Introduction to Nutrition	2
MA 101	Medical Terminology I	3
MA 104	Medical Terminology II	3
MA 120	Medical Office Procedures I	4
MA 125	Medical Office Procedures II	4
MA 140	Medical Transcription I	3
MA 141	Medical Transcription II	3
MA 150	Clinical Procedures I	4
MA 155	Clinical Procedures II	4
MA 195	Medical Office Externship	5
PSY 150	Human Development	3

2. A total of 64 credits is required for the degree.

MEDICAL LABORATORY TECHNOLOGY

INTRODUCTION

The Medical Laboratory Technology (MLT) program prepares students for employment as Medical Laboratory Technicians. Students receive an Associate of Applied Science degree and are eligible to sit for national certification exams offered by the American Society of Clinical Pathologists and the National Certification Association for Medical Laboratory Personnel. The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) under the auspices of the Committee on Allied Health Education and Accreditation (CAHEA). Both NAACLS and CAHEA are recognized by the United States Department of Education and the Council on Postsecondary Accreditation.

Graduates are prepared with the technical skills and comprehensive working knowledge to perform all routine laboratory tests which aid in the diagnosis/treatment of disease and to judge and access

performance of quality control procedures. Examples of tests performed are microscopic blood cell counts and identification of normal and abnormal cells, testing of blood for transfusions, culture of microorganisms, and tests such as glucose and cholesterol run on automated instrumentation. The MLT Program can be completed in 5 semesters. The final semester is a clinical practicum in an area hospital which emphasizes correlation of practice and theory.

Students may enter the program in the fall or spring semester. Part-time students are also accepted. Non-program students are encouraged to enroll (on space-available basis) in MLT courses if prerequisites are met or previous clinical experience has occurred. Students are accepted on a first-come, first-served basis after completion of file with the MLT program showing proof of admission requirements. Students may receive a conditional acceptance into the MLT program based on the expectation of successful completion of admission requirements.

Additional expenses include lab coat, vaccinations, name tag, student professional organization fee (optional), and graduation pin (optional).

UNDERGRADUATE DEGREE

ASSOCIATE OF APPLIED SCIENCE, MEDICAL LABORATORY TECHNOLOGY

ADMISSION REQUIREMENTS

Students must complete the following admission requirements:

1. Submit an admission application to the MLT program.
2. Graduate from high school or equivalent (GED).
3. Earn a grade of "C" or better in CHEM 105 and one of: BIOL 105, 106, 111, 112, or 240.
4. Personal interview with MLT advisor.
5. Current immunization status for diphtheria-tetanus, rubella, hepatitis, and current screening test for tuberculosis. (Required immediately following acceptance into program).
6. Sign agreement to abide by MLT safety and policy manual during training.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

MAJOR REQUIREMENTS

1. Complete the following required courses (52 credits):

CHEM 105	General Chemistry I	4
MEDT 132	Introduction to Medical Laboratory Technology	3
MEDT 202	Clinical Chemistry	6
MEDT 203	Clinical Microbiology	6
MEDT 204	Hematology	4
MEDT 205	Advanced Hematology	3
MEDT 206	Serology	3
MEDT 207	Immunohematology	4
MEDT 208	Urine Analysis	3
MEDT 209	Parasitology and Mycology	2
MEDT 210	Instrumentation in Clinical Laboratory	2
MEDT 295	Clinical Practicum	12

2. Complete one of the following courses: 4

BIOL 105	Fundamentals of Biology I (4)
BIOL 106	Fundamentals of Biology II (4)
BIOL 111	Human Anatomy and Physiology I (4)
BIOL 112	Human Anatomy and Physiology II (4)
BIOL 240	Introductory Microbiology for Health Sciences (4)

Note: CHEM and BIOL courses must have been completed within the last five years. MEDT transfer courses must be approved by MEDT faculty.

3. A total of 71 credits is required for the degree.

PARAMEDIC TECHNOLOGY

INTRODUCTION

Paramedic Technology is not offered on a regular basis. This program is only conducted as job availability and student interest warrant. For further information, contact the College of Career and Vocational Education at 786-1184.

The AAS degree prepares individuals to meet DOT National Standards for paramedics and to take the National Registry Certificate Examination. Graduates of the two-semester program are qualified to administer emergency care in the field under Standing Orders protocol or under remote supervision of a physician.

The faculty are highly skilled professionals from the community, including physicians, appointed hospital staff, certified paramedics, and a program coordinator.

PETROLEUM ENGINEERING AIDE

INTRODUCTION

Students learn to assist professionals in all phases of oil and gas recovery. Degree graduates are prepared for engineering technician positions while others transfer into four-year engineering programs.

UNDERGRADUATE DEGREE

Associate of Applied Science, Petroleum Engineering Aide

The Petroleum Engineering Aide program is offered only through Kenai Peninsula College.

Admission Requirements

1. Placement at the MATH 107 level or above by test or courses taken.
2. ASSET placement for reading at the ENGL 107 level or above.
3. Students placing below these math and reading levels on ASSET must see a faculty advisor in Petroleum Technology prior to registering for petroleum engineering courses.

General University Requirements

Complete the associate degree requirements listed on page 66.

Communication and General Requirements

1. Communication Requirements

ENGL 111	Methods of Written Communication	3
ENGL 211	Intermediate Exposition with Readings in Literature (3)	3
	or	
ENGL 212	Technical Writing (3)	
	or	
ENGL 213	Intermediate Exposition with Readings in Nonfiction (3)	
SPCH 111	Fundamentals of Oral Communication	3

2. General Requirements

MATH 200	Calculus I	4
MATH 201	Calculus II	4

Major Requirements

1. Complete the following required courses (34 credits):

CS 105	FORTRAN Programming	3
CHEM 105	General Chemistry I (4)	8
	and	
CHEM 106	General Chemistry II (4)	
	or	
GEOL 111	Physical Geology (4)	
	and	
GEOL 112	Historical Geology (4)	
PETR 106	Petroleum Science II	3
PETR 120	Surface Oil Field Equipment I	3
PETR 140	Industrial Process Instrumentation I	3
PETR 228	Petroleum Reservoir Engineering I	3
PETR 229	Production Engineering	3
PHYS 123	Basic Physics I	4
PHYS 124	Basic Physics II	4

2. Choose 6 credits from the following courses: 6

PETR 144	Industrial Process Instrumentation II (3)
PETR 227	Logging and Log Analysis (3)
PETR 230	Practical Distillation (3)
PETR 240	Industrial Process Instrumentation III (3)

3. Choose 4 credits from the following courses: 4

ET 101	Basic Electronics: DC Physics (4)
ET 102	Basic Electronics: AC Physics (4)
ET 151	Basic Electricity (4)
ET 245	Basic Electronics (4)

4. A total of 61 credits is required for the degree.

PETROLEUM TECHNOLOGY

INTRODUCTION

Kenai Peninsula College offers a one-year certificate program and a two-year Associate of Applied Science (AAS) degree in Petroleum Technology. The certificate provides specific training in petro/chemical plant operations or instrumentation. The instrumentation option requires students to take Industrial Process Instrumentation III during a third semester. The degree program allows students to gain an understanding of refinery, chemical plant, oil production, and pipeline operations. Students are prepared for employment as chemical plant operators, pump station operators, production operators, water flood operators, service company technicians, or lab technicians.

Petroleum Technology

The Petroleum Technology program is offered only through Kenai Peninsula College.

CERTIFICATE

Petroleum Technology

Operations Option

1. Complete the following requirements:

ENGL 111	Methods of Written Communication	3
MATH 101	Technical Mathematics	3
PETR 105	Petroleum Science I	3
PETR 106	Petroleum Science II (3)	3
	or	
PETR 155	Blueprint Reading (3)	
PETR 120	Surface Oil Field Equipment I	3
PETR 140	Industrial Process Instrumentation I	3
PETR 144	Industrial Process Instrumentation II	3
PETR 230	Practical Distillation	3
PETR 231	Production Plant Operations	3
PETR 270	Industrial Mechanical Equipment	3

2. A total of 30 credits is required for the certificate.

Instrumentation Option

1. Complete the following requirements:

ENGL 111	Methods of Written Communication	3
ET 151	Basic Electricity	4
ET 245	Basic Electronics	4
ET 246	Electronic Industrial Instrumentation (3)	3
	or	
PETR 244	Industrial Process Instrumentation IV (3)	

MATH 101	Technical Mathematics	3
PETR 140	Industrial Process Instrumentation I	3
PETR 144	Industrial Process Instrumentation II	3
PETR 155	Blueprint Reading	3
PETR 230	Practical Distillation	3
PETR 240	Industrial Process Instrumentation III	3

2. A total of 32 credits is required for the certificate.

UNDERGRADUATE DEGREE

Associate of Applied Science, Petroleum Technology

Admission Requirements

1. ASSET placement at the MATH 100 entry-level or above.
2. ASSET placement for reading at the ENGL 107 level or above.
3. Students placing below these math and reading levels on ASSET must see a faculty advisor in Petroleum Technology prior to registering for petroleum technology courses.

General University Requirements

Complete the associate degree requirements listed on page 67.

Communication and General Requirements

1. Communication Requirements

ENGL 111	Methods of Written Communication	3
ENGL 212	Technical Writing	3
SPCH 111	Fundamentals of Oral Communication	3

2. General Requirements

MATH 101	Technical Mathematics (3)	3
	or	
MATH 105	Intermediate Algebra (3)	
PHYS 115	Physical Science I for Technicians (4)	8
	and	
PHYS 116	Physical Science II for Technicians (4)	
	or	
PHYS 115	Physical Science I for Technicians (4)	
	and	
CHEM 105	General Chemistry I (4)	
	or	
PHYS 123	Basic Physics I (4)	
	and	
CHEM 105	General Chemistry I (4)	
*CIOS 105	Introduction to PC Computers and Applications (3)	3
	or	
*CIOS 110	Computer Concepts in Business (3)	

**If student has demonstrated computer background, please see advisor about recommended substitute course.*

Major Requirements

1. Complete the following required courses (21 credits):

PETR 105	Petroleum Science I	3
PETR 106	Petroleum Science II	3
PETR 120	Surface Oil Field Equipment I	3
PETR 140	Industrial Process Instrumentation I	3
PETR 144	Industrial Process Instrumentation II	3
PETR 230	Practical Distillation (3)	3
	or	
PETR 231	Production Plant Operations (3)	
PETR 270	Industrial Mechanical Equipment	3

2. Choose 3 courses from the following (9-11 credits): 9-11

ET 101	Basic Electronics: DC Physics (4)
	or
ET 151	Basic Electricity (4)
ET 245	Basic Electronics (4)
PETR 121	Surface Oil Field Equipment II (3)
PETR 150	Mechanical Drafting for the Petroleum Industry (3)
	or
PETR 155	Blueprint Reading (3)
PETR 170	Fundamentals of Mechanics (3)
PETR 227	Logging and Log Analysis (3)
PETR 230	Practical Distillation (3)
	or
PETR 231	Production Plant Operations (3)
PETR 235	Petroleum Laboratory Standards (3)
PETR 240	Industrial Process Instrumentation III (3)
PETR 244	Industrial Process Instrumentation IV (3)

3. With advisor approval, complete an additional 5-7 elective credits. 5-7
4. A total of 60 credits is required for the degree.

PROFESSIONAL PILOTING

INTRODUCTION

The Professional Piloting program is a course of study designed to prepare graduates for entry-level pilot positions in the aviation industry. In addition to the required major specialty courses, graduates are required to fulfill the general university requirements and the general education requirements. Ground school and flight courses required for the degree are approved under Federal Aviation Regulations, Part 141.

There are no special admission requirements. However, students must be able to meet all certification requirements established by the Federal Aviation Administration. Strong math and reading abilities are highly recommended.

Students must be formally admitted to the university, and have declared Professional Piloting as their Associate of Applied Science program, or Technology as their intended Bachelor of Science program major. The Associate of Applied Science degree may be completed in four semesters. Flying courses may be scheduled during any semester: fall, spring, or summer. Regular attendance is required in all university academic courses, and mandatory in those ground schools operated under Part 141 of the Federal Aviation Regulations.

Once formally enrolled at the University of Alaska Anchorage (UAA), all subsequent flight training must be completed in residence at UAA. An "enrolled" student is any student who has been admitted to UAA, started the Professional Piloting curriculum and has not formally transferred to another institution or officially withdrawn from UAA. Flight training through other programs while enrolled at UAA is not permitted. Enrolled students who receive flight training outside UAA that is required under specific curricula will not receive credit for the corresponding UAA courses.

Costs for flight training are not included in tuition and fees. These costs are in addition to normally charged university tuition and fees, with the student required to pay the full amount for each course at the beginning of the enrollment period. Failure to make the required payment will prevent enrollment in the desired course.

To obtain credit for pilot certificates/ratings held prior to entering the program, a student will be required to demonstrate proficiency for each certificate/rating. The proficiency check will be completed by a representative of the flight training department before credit will be allowed to satisfy UAA curriculum requirements. Military pilots currently, or within the preceding 12 months, on active flight status may petition to have appropriate curriculum requirements awarded without a proficiency check. It is the student's responsibility to make arrangements for the required flight check(s). However, all students are required to complete one advanced flight course while enrolled at the University of Alaska Anchorage.

UNDERGRADUATE DEGREE

ASSOCIATE OF APPLIED SCIENCE, PROFESSIONAL PILOTING

ADMISSION REQUIREMENTS

See Open Admission on page 65.

This degree requires computer competency which may be demonstrated in one of three ways:

1. A 3 credit course in a computer language or an introductory course in data processing or microcomputers.
2. Work-related experience verifying computer competency as approved by the faculty advisor.
3. Self-initiated computer competency as approved by the faculty advisor.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

MAJOR REQUIREMENTS

1. Complete the following required courses:
   A. Ground school and lecture courses (33 credits required):

AT 100	Private Pilot Ground School	4
AT 116	Instrument Ground School	4
AT 117	Commercial Ground School	4
AT 132	Survey of Aviation	3
AT 133	Aviation Law and Regulations	3
AT 221	CFI Ground School (3)	3
	or	
AT 229	ATP Ground School (3)	
AT 231	Search, Survival, and Rescue	3
AT 233	Aviation Safety	3
AT 235	Elements of Weather	3
AT 236	Management: Airline	3

   B. Flight instruction courses (9 credits required):

AT 101	Pre-Professional Flying	2
AT 216	Instrument Flying (2)	5
	and	
AT 217	Commercial Flying (3)	
	or THE NEXT SIX COURSES:	
AT 113	Commercial Flying Maneuvers (1)	
AT 114	Basic Instrument Flying (.5)	
AT 115	Commercial X-C Flying (1.5)	
AT 213	Intermediate IFR Flying (.5)	
AT 214	Advanced IFR Flying (.5)	
AT 215	Comm/IFR Review and Certification (1)	
AT 223	CFI Flying (2)	2
	or	
AT 230	ATP Flying (2)	

2. Complete the following (12 credits):

A.	A Humanities elective*	3
B.	A Social Sciences elective (PSY 111 recommended)	3
C.	MATH 105 Intermediate Algebra	3
D.	PHYS 101 Survey of Physics	3

3. A total of 63 credits is required for the degree.

**Any English courses used to satisfy the Humanities general requirement must be different from the written communications requirement and have a course number higher than ENGL 111.*

REFRIGERATION AND HEATING TECHNOLOGY

INTRODUCTION

A two-year certificate program and an associate of applied science degree in Refrigeration and heating are available. Students satisfactorily completing this program will possess a background in heating, air conditioning refrigeration, applied physics, mathematics, mechanical drawing, electricity, and the technical skills needed to diagnose and repair the modern commercial and domestic heating, refrigeration, air conditioning, and ventilation systems.

All students intending to enroll in the R & H program must successfully pass a standardized placement test in reading, writing, and mathematics. Successful completion is considered to be 50 percentile or above on each of the three tests.

Emphasis of the program is to prepare the student with job entry-level skills. Additional training must take place on the job. Students must complete required courses with a "C" (2.00) average.

The Refrigeration and Heating Technology program is offered only at Matanuska-Susitna College.

CERTIFICATE

REFRIGERATION AND HEATING TECHNOLOGY

1. Complete the following requirements:

First Year

RH 101	Refrigeration and Air Conditioning I	4
RH 103	Technical Math for Refrigeration and Heating I	3
RH 105	Electrical Circuits for Refrigeration and Heating I	3
RH 107	Physics for Refrigeration and Heating I	3
RH 122	Refrigeration and Air Conditioning II	4
RH 124	Domestic Refrigeration and Heating I	3
RH 126	Electrical Circuits for Refrigeration and Heating II	3
RH 128	Drafting for Refrigeration and Heating I	3

Second Year

RH 201	Commercial and Ammonia Refrigeration	4
RH 202	Physics for Refrigeration & Heating II	3
RH 203	Control Systems for Refrigeration and Heating II	3
RH 207	Drafting for Refrigeration & Heating II	3
RH 225	Heating Plants I - Residential	4
RH 226	Heating Plants II - Commercial	4
RH 229	Solid State Electronics for Refrigeration and Heating	3

2. A total of 50 credits is required for the certificate.

UNDERGRADUATE DEGREE

ASSOCIATE OF APPLIED SCIENCE, REFRIGERATION AND HEATING TECHNOLOGY

ADMISSION REQUIREMENTS

See Open Admission on page 65.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

MAJOR REQUIREMENTS

1. Complete the following required courses:

RH 101	Refrigeration and Air Conditioning I	4
RH 103	Technical Math for Refrigeration and Heating I	3
RH 105	Electrical Circuits for Refrigeration and Heating I	3
RH 107	Physics for Refrigeration and Heating I	3
RH 122	Refrigeration and Air Conditioning II	4
RH 124	Domestic Refrigeration and Heating I	3
RH 126	Electrical Circuits for Refrigeration and Heating II	3
RH 128	Drafting Refrigeration and Heating I	3
RH 201	Commercial and Ammonia Refrigeration	4
RH 202	Physics Refrigeration and Heating II	3
RH 203	Control Systems for Refrigeration and Heating II	3
RH 207	Drafting Refrigeration and Heating II	3
RH 225	Heating Plants I - Residential	4
RH 226	Heating Plants II - Commercial	4
RH 229	Solid State Electronics for Refrigeration and Heating II	3

2. A total of 65 credits is required for the degree.

SURVEYING AND MAPPING

INTRODUCTION

The Survey and Mapping Department offers two degrees: an Associate of Applied Science and a Bachelor of Science in Surveying and Mapping. Since Alaska poses unique surveying challenges, the curriculum emphasizes northern surveying principles and practices, making UAA graduates highly recruited in the Alaska marketplace and eligible for employment worldwide. The science-based curriculum includes field surveying and mapping techniques, surveying computations, automated mapping, and legal principles of surveying. Professional predictors indicate that surveying and mapping employment will be strong in Alaska and the Pacific Rim well into the 21st century. Jobs are abundant for the surveying and mapping of transportation corridors, Native land claims, pipelines, residential and industrial developments, mining claims, petroleum reserves, forest selections, harbors, and government and military projects.

Employment and advancement opportunities are excellent for both women and men. While enrolled in the program, students are eligible for cooperative employment programs with government agencies and private enterprise during the summer and for intern programs during the school year.

Students are encouraged to consult the Surveying and Mapping faculty for assistance in designing their program. All students, and especially those contemplating graduate programs, are encouraged to pursue a course of studies that includes MATH 202 and calculus-based science courses.

The Associate of Applied Science degree in Surveying and Mapping creates survey and design technicians whose work will help professional surveyors and mappers determine the quality of the physical environment. Surveying and mapping technicians frequently work outdoors, travel to various job locations, and enjoy an independent life style. Associate degree graduates are employed at the technician level in private enterprise or within governmental agencies performing field surveying, computations, or mapping.

The Bachelor of Science degree in Surveying and Mapping creates design professionals whose work will determine the quality of the physical environment. Surveyors and mappers enjoy responsibility, independence, and frequent opportunities to work outdoors. By determining land boundaries, by creating aesthetically pleasing land developments, and by wisely positioning industrial improvements, surveyors and mappers balance the needs of growth and development with those of environmental concerns. Baccalaureate degree

recipients find immediate professional-level employment in private enterprise or within governmental agencies performing traditional surveying and mapping activities or specializing in the newer technologies of remote sensing, photogrammetry, automated mapping, global positioning systems, geographic information systems, and land registration systems.

UNDERGRADUATE DEGREES

Associate of Applied Science, Surveying and Mapping

Admission Requirements

See Open Admission on page 65.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67. ENGL 212 and SPCH 111 are recommended.

Major Requirements

1. Complete the following required courses:

First Semester

MATH 107	College Algebra	4
SMS 135	Introduction to Surveying and Mapping	2
SMS 136	Survey Measurements and Computations	3-4
SMS 137	Fundamentals of Automated Mapping	3
SMS 138	Survey Computer Fundamentals	2

Second Semester

CS 106	BASIC Programming	3
ENGL 111	Methods of Written Communication	3
MATH 108	Trigonometry	3
SMS 145	Topographical Surveying and Mapping	4
SMS 146	Geometric Computations	3

Third Semester

SMS 235	Construction Surveying and Mapping	4
SMS 236	Cadastral Boundary Law	4
Elective: ENGL 211, 212, 213 or CIOS 262		3
Elective: Social Sciences, Natural Sciences, Math, Humanities		3

Fourth Semester

SMS 245	Specialized Survey and Plat Applications	4
SMS 246	Geodetic Computations	3
SMS 247	Remote Sensing	3
SPCH 111	Fundamentals of Oral Communication (3) or	3
SPCH 241	Public Speaking (3)	
Elective: Social Sciences, Natural Sciences, Math, Humanities		3

2. A total of 61 credits is required for the degree.

Bachelor of Science, Surveying and Mapping

Admission Requirements

Complete the undergraduate admission requirements listed on page 64.

Graduation Requirements

Students must complete the following graduation requirements:

A. University-Wide Requirements

Complete the baccalaureate degree requirements listed on page 69.

B. General Education Requirements

Complete the baccalaureate general education requirements listed on page 70. ENGL 212, Technical Writing, is recommended to fulfill the 200-level written communication requirement.

C. Major Requirements

1. Complete the following required courses (69 credits):

SMS 135	Introduction to Surveying and Mapping	2
SMS 136	Survey Measurements and Computations	3-4
SMS 137	Fundamentals of Automated Mapping	3
SMS 138	Survey Computer Fundamentals	2
SMS 145	Topographical Surveying and Mapping	4
SMS 146	Geometric Computations	3
SMS 235	Construction Surveying and Mapping	4
SMS 236	Cadastral Boundary Law	4
SMS 245	Specialized Survey and Plat Applications	4
SMS 246	Geodetic Computations	3
SMS 247	Remote Sensing	3
SMS 335	CADD Mapping and Programming	4
SMS 336	Photogrammetric Mapping	3
SMS 345	Land Development and Design	4
SMS 346	Writing and Interpreting Legal Descriptions	4
SMS 435	Geographical/Land Information Systems	4
SMS 436	Survey Adjustments and Analysis	4
SMS 445	Positioning Systems	4
SMS 446	Professional Survey Practice	3
SMS 450	Senior Survey Project	3

2. Complete the following support courses (13 credits):

AS 307	Probability and Statistics	3
BA 306	Real Estate Fundamentals (Principles)	3
MATH 201	Calculus II	4
MATH 314	Linear Algebra	3

3. Complete electives to total 120 credits.
4. A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

TECHNOLOGY

INTRODUCTION

The Bachelor of Science in Technology degree offers qualified applicants the opportunity to expand upon their technical education. With the proper academic advising the student may complete the requirements for an Associate of Applied Science degree while meeting the requirements for the baccalaureate degree. Depending on the applied science field, the baccalaureate electives, or the need for qualifying prerequisite work, the Bachelor of Science in Technology degree could take longer than four years to complete. The Bachelor of Science in Technology degree allows students to choose one of four areas of study: Teacher Education prepares you for a Type A teaching certificate. Business enhances your managerial/entrepreneurial skills. Science and Technology advances your technological skills. Airway Science prepares you for careers in the aviation industry. Government agencies, school districts, corporations, and small businesses provide a ready market for graduates of this program.

Note: The technology program is undergoing curriculum changes. Contact department.

UNDERGRADUATE DEGREES

Bachelor of Science, Technology

Admission Requirements

Complete the undergraduate admission requirements listed on page 64.

Students must complete an Associate of Applied Science major specialty area, or have earned equivalent credits, to achieve Junior status in the baccalaureate program. Because of professional accreditation standards or the availability of UAA baccalaureate degrees, the following Associate of Applied Science recipients are not accepted into this program: Nursing, Medical Laboratory Technology, Paramedic Technology, and Surveying and Mapping.

This degree requires computer competency which may be demonstrated in one of the following ways:

1. A 3 credit course in a computer language or an introductory course in data processing or microcomputers.
2. Work-related experience verifying computer competency as approved by the faculty advisor.
3. Self-initiated computer competency as approved by the faculty advisor.

Careful academic advising will ensure fulfillment of the degree requirements. Consult the specific Associate of Applied Science program faculty advisor for assistance in designing your program of studies.

Academic Progress

Students who select the Teacher Education Option must meet the following requirements prior to starting their student teaching:

1. 3.00 GPA in education and vocational education courses.
2. 2.50 overall GPA.
3. Recommendation from the Vocational Teacher Education faculty.
4. Current medical exam and tuberculosis skin test.

Graduation Requirements

Students must complete the following graduation requirements:

A. University-Wide Requirements

Complete the baccalaureate degree requirements listed on page 69.

B. General Education Requirements

Complete the baccalaureate general education requirements listed on page 70.

C. Major Requirements

1. Complete an Associate of Applied Science major specialty area, or have earned equivalent credits, and elective requirements (45 credits minimum). 45
2. Complete the following BST core requirements (19 credits):

ENGL 312	Advanced Technical Writing	3
MATH 108	Trigonometry	3
MATH 200	Calculus I	4
Natural Science*		9

**Choose 9 credits of Natural Science courses (in addition to the 7 credit Natural Science General Education Requirement) from the following; higher courses (or other courses for which prerequisites have been met) may also be acceptable with faculty advisor approval:*

BIOL 105	Fundamentals of Biology I (4)
BIOL 106	Fundamentals of Biology II (4)
BIOL 111	Human Anatomy and Physiology I (4)
BIOL 112	Human Anatomy and Physiology II (4)
BIOL 371	Principles of Ecology (4)
BIOL 373	Environmental Biology (3)
BIOL 375	Terrestrial Ecosystems (3)
BIOL 378	Marine Biology (3)
CHEM 105	General Chemistry I (4)
CHEM 106	General Chemistry II (4)
CHEM 321	Organic Chemistry I (4)
CHEM 322	Organic Chemistry II (4)
GEOL 111	Physical Geology (4)
GEOL 112	Historical Geology (4)
GEOL 304	Geomorphology (4)
GEOL 306	Structural Geology (4)
GEOL 308	Sedimentation (4)
PHYS 123	Basic Physics I (4)
PHYS 124	Basic Physics II (4)
PHYS/GEOG 109	Fundamentals of Meteorology (3)

Complete one of the following BST Options:

Teacher Education Option (37-38 credits):

1. Complete these required courses:

ED 210	American Schools	2
ED 211	Observation of Learning	1
ED 212	Human Development and Learning (2)	2-3
	or	
PSY 150	Human Development (3)	
	or	
PSY 245	Child Development (3)	
ED 313	Designing Instruction	2
ED 314	Creating Effective Learning Environments	2
ED 332	Diagnosis and Assessment of Learning	1

ED 334	Diagnosis and Assessment of Intermediate and Transescent Learning	1
ED 335	Diagnosis and Assessment of Adolescent Learning	1
ED 410	Language and Cognition	4
VE 395	Practicum in Vocational Education	3
VE 411	Philosophical Foundations of Vocational Education	3
VE 443	Methods of Instruction in Vocational Education	3
VE 452	Student Teaching: Vocational Education	12

2. A minimum of 132 credits is required for the Teacher Education Option, of which 42 credits must be upper-division.

Note: Students need to take up to 7 credits of upper-division work in conjunction with fulfilling General Education and Natural Science Requirements; otherwise, total credits needed for graduation may increase.

Business Option (34 credits):

1. Complete the required courses:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
Any upper-division BA courses for which prerequisites are met		9
Other upper-division electives (TECH 443 Total Quality Leadership is recommended)		13

2. A total of 123 credits is required for the Business Option, of which 42 credits must be upper-division.

Note: Students need to take up to 17 credits of upper-division work in conjunction with fulfilling General Education and Natural Science Requirements; otherwise, total credits needed for graduation may increase.

Science and Technology Option (27 credits):

PLEASE NOTE: The curriculum for the Science and Technology option is being revised. Students should contact the department advisor for information. Courses may not be the same as listed.

1. Complete the following required courses:

TECH 402	Operational Safety	3
VE 301	Principles of Technology	3
VE/TECH 412	Advanced Technical Experiences (1-9)* and/or	3-6
VE/TECH 495	Technical Internship (3)*	
Upper-division electives**		6

**VE/TECH 412 is limited to 6 credits. The maximum number of total credits for VE/TECH 412 and VE/TECH 495 is 9.*

***For some technical fields, majors must choose their upper-division electives from certain courses: (Contact the Technology Program faculty advisor.)*

Dental Hygiene Majors Choose 6 credits from the following: 6

ANTH 355	Medical Anthropology (3)
HS 303	Preventive and Therapeutic Nutrition (3)
HS/SOC 370	Medical Sociology (3)
HS 379	Health Data Analysis (4)
HS 380	Research Methods in Health Sciences (3)
HS 400	Public Health and Epidemiology (3)
HS/NS 433	Health Education: Theory and Practice (3)
HS 483	Policy and Prevention in Health (3)
HS 489	Program Evaluation in Health Services (3)

2. Select a minimum of 9 credits from the following technical electives: 9

AET 381	Geographic Information Systems: Technology and Applications (4)
AT 332	Transport Aircraft Systems (3)
AT 361	Federal Aviation Administration Inspection Authorization (3)
AT 362	Aerodynamics and Flight Performance (4)
AT 363	Aerodynamics and Flight Performance Laboratory (4)
AT 364	Avionics Systems (3)
AT 420	Overview of U.S. Civil Aviation (6)
AT 464	Advanced Avionics Systems (4)
DH 320	Dental Health Services (2)
DH 395	Clinical Practicum IV for Dental Hygienists (1-3)
DH 420	Community Dental Health (3)
DH 495	Alternative Practicum for Dental Hygienists (2)
ET 340	Digital Systems (4)
ET 420	Applied Electronic Instrumentation (4)
TECH 310	NDE for Managers and Technicians (3)
TECH 415	Accident Investigation (4)
TECH 416	Safety Appraisal Methodology (3)
TECH 422	Senior Project (3)
TECH 433	Product Design, Implementation and Control (3)
TECH 443	Total Quality Leadership (3)
VE/TECH 412	Advanced Technical Experiences*(3)
WELD 310	Applied Evaluation of Components and Materials (3)
WELD 410	Advanced Nondestructive Testing (3) (or other approved upper-division electives)

3. A total of 122 credits is required for the Science and Technology Option, of which 42 credits must be upper-division.

Note: Students need to take up to 12 credits of upper-division work in conjunction with fulfilling General Education and natural science requirements; otherwise, total credits needed for graduation may increase.

Airway Science Option (44 credits):

This option is a specialized program available to Aviation Administration and Air Traffic Control students only. Additional course work in the AAS specialty may be required.

Management Concentration:

1. Complete the following required courses:

AS 252	Elementary Statistics (3) or	3
AS 307	Probability and Statistics (3)	
AT 331	Human Factors in Aviation	3
BA 300	Organizational Theory and Behavior	3
BA 335	Management Principles and Practices	3
BA 361	Human Resource Management	3
BA 461	Negotiations and Conflict Management	3
CIOS 110	Computer Concepts in Business*	3*
CS 100	Introduction to Computers	3
PSY 111	General Psychology	3
PHYS 123	Basic Physics I	4
PHYS 124	Basic Physics II	4

**6 credits which develop computer skills are required in addition to the basic computer competency required for this degree (see Admissions Requirements). If CS 100 or CIOS 110 is used to satisfy the basic computer competency requirement, an additional 3 credit CS/CIOS course must be selected with faculty advisor approval.*

2. Select a minimum of 3 credits from the following: 3

AT 332	Transport Aircraft Systems (3)
AT 362	Aerodynamics and Flight Performance (4)
AT 363	Aerodynamics and Flight Performance Laboratory (4)
AT 420	Overview of U.S. Civil Aviation (6)
TECH 402	Operational Safety (3)
VE/TECH 412	Advanced Technical Experiences** (3)

***Discipline area must be aviation-related.*

3. Select a minimum of 6 upper-division credits from psychology, (PSY), human behavior (SOC), or communications (JPC) or (SPCH). 6
4. A total of 128 credits is required for the Airway Science Option, of which 42 credits must be upper-division.

Note: Students need to take up to 15 credits of upper-division work in conjunction with fulfilling General Education and Natural Science requirements; otherwise, total credits needed for graduation may increase.

WELDING TECHNOLOGY

INTRODUCTION

A Welding Technology program prepares students for employment in welding and nondestructive inspection as entry-level technicians.

Training includes basic theory, research procedure development, welding applications, weld testing, and a variety of welding skills. Students are required to certify in three welding processes and one nondestructive testing process. Although there are no special admission requirements for the Associate of Applied Science degree program, students are encouraged to contact the Welding Technology department before enrolling. Students may enter the program in either fall or spring semester (fall preferred). In some classes, enrollment is limited due to equipment, laboratory, and safety requirements.

Courses are also open to qualified persons who wish to upgrade present job skills. Special material fees are charged for laboratory courses and students are required to purchase personal safety gear and tools. Nontranscripted departmental certificates of completion are offered to students in the Anchorage campus welding program.

CERTIFICATE

Welding Technology

This certificate is offered only at Kenai Peninsula College.

The one-year certificate in welding technology provides a student with specific training for structural and pipe welding certification. Students gain a well-rounded education in the use of the latest welding technology, blueprint reading, layout, and fabrication. Graduates of this program will be prepared for employment as structural or pipe welders, and will have a solid welding background for many mechanical trades.

Note: Experienced welders have the option of bypassing the first semester courses by completing written and practical examinations on first semester work. This will allow experienced welders to enter the program at an appropriate level.

1. Complete the following requirements (24 credits):

MATH 101	Technical Mathematics	3
WELD 102	Gas Welding	2
WELD 103	Arc Welding	4
WELD 104	Arc Welding: Low-Hydrogen Electrodes	4
WELD 105	Pipe Welding	4
WELD 106	Pipe Certification	4
WELD 110	Blueprint Reading for Pipe Welders	3

2. Complete one of the following (4 credits): 4

WELD 108	Wire Welding (4)
WELD 109	TIG Welding (4)

All students must pass structural and pipe certification tests before receiving a certificate in Welding Technology.

3. A total of 28 credits is required for the certificate.

UNDERGRADUATE DEGREE

Associate of Applied Science, Welding Technology

Admission Requirements

See Open Admission on page 65.

General University Requirements

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67. ENGL 212, MATH 105, and MATH 107 are recommended.

Major Requirements

1. Complete the following required courses (47 credits):

WELD 112	Shielded Metal Arc Welding	4
WELD 157	Technical Blueprints for Welders	3
WELD 161	Gas Metal Arc Welding	4
WELD 162	Flux Cored Welding	4
WELD 172	Physics for Welding	4
WELD 174	Basic TIG Welding	4
WELD 175	Welding Processes and Equipment	4
WELD 261	Ultrasonic Testing	4
WELD 262	General Nondestructive Testing	3
WELD 263	X-ray and Radioisotope Radiography	4
WELD 281	Welding Inspection and Code Review	4
WELD 287	Welding Metallurgy Applications	5

2. Complete 2 credits of any WELD or CIOS course(s) (100 level or above). 2
3. Students are required to certify in three welding processes and one nondestructive testing process.
4. A total of 64 credits is required for the degree.

SCHOOL OF EDUCATION

INTRODUCTION

In its mission to provide instruction, service, and research to the Alaska community, the School of Education offers curricula and programs designed to prepare personnel for various professional roles related to teaching in a variety of learning environments.

For students interested in pursuing such studies, several types of curricula and programs are available:

1. Undergraduate and graduate curricula leading to accredited degrees and/or endorsement for educational certification in the State of Alaska.
2. Undergraduate and graduate curricula leading to accredited degrees which do not lead to endorsement for educational certification in the State of Alaska.

In each of these curricula and programs, students are introduced to fundamental problems of education in the contemporary world through courses designed to develop perspective and understanding of the relationship of education to society. Courses provide theory and practice in the development of instructional materials and an understanding of methods of instruction. Students are formally admitted to an appropriate program on the basis of multiple criteria, including their ability to make a positive contribution to the educational profession.

Minimum credits required for the Bachelor of Education degree are 130. Students should be advised that total credits frequently exceed minimums because of prerequisite requirements, individually selected majors and minors, and areas of specialization and/or emphasis.

HIGH SCHOOL PREPARATION

The following high school courses are recommended in preparation for admission to the School of Education:

1. English composition and writing
2. Verbal communication
3. Mathematics through algebra
4. Computer-related course work
5. Background in social sciences

EARLY CHILDHOOD DEVELOPMENT

INTRODUCTION

The Early Childhood Development program at UAA brings together the theory and practice of quality child care and the education of young children. The program is based on the nationally recognized Child Development Associate (CDA). Easy and clear articulation occurs from the nontranscripted CDA credential (20 credits) to the campus awarded Early Childhood Development Certificate (31 credits) to the Associate of Applied Science in Early Childhood Development (61 credits).

Students taking Early Childhood Development courses must be employed or volunteer in a child development setting such as a child care center, preschool, Head Start, family child care home, etc. for at least four hours each week.

CERTIFICATE

EARLY CHILDHOOD DEVELOPMENT

ADMISSION REQUIREMENTS

See Admission Requirements on page 64. Students taking Early Childhood Development courses must be employed or volunteer in a child development setting such as a child care center, preschool, Head Start, family child care home, etc. for at least four hours each week.

CERTIFICATE REQUIREMENTS

1. Complete the following required courses:

ECD 105	Introduction to the Field of Early Childhood	3
ECD 111	Safe Learning Environments	1
ECD 112	Healthy Learning Environments	1
ECD 113	Learning Environments	1
ECD 121	Physical Activities for Young Children	1
ECD 122	Cognitive Activities for Young Children	1
ECD 123	Communication	1
ECD 124	Creative Activities for Young Children	1
ECD 131	Guidance and Discipline	1
ECD 132	Social Development	1
ECD 211	Development of a Sense of Self	1
ECD 221	Families	1
ECD 222	Program Management	1
ECD 223	Exploring and Developing Personal Capabilities in Teaching	1
ECD 224	Professionalism	1
ECD 235	Young and Special: Basic Development and Developmental Disabilities (3) or the following 3 courses:	3
ECD 231	Screening (1)	
ECD 232	Assessment/Recording (1)	
ECD 233	Mainstreaming Preschool Children with Special Needs (1)	
ECD 295A	Practicum I	3
ECD 295B	Practicum II	3
DN 145	Child Nutrition	2
PSY 245	Child Development	3

2. A total of 31 credits is required for the certificate.

UNDERGRADUATE DEGREE

ASSOCIATE OF APPLIED SCIENCE, EARLY CHILDHOOD DEVELOPMENT

ADMISSION REQUIREMENTS

See Admission Requirements on page 64. Students taking Early Childhood Development courses must be employed or volunteer in a child development setting such as a child care center, preschool, Head Start, family child care home, etc. for at least four hours each week.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67.

MAJOR REQUIREMENTS

1. Complete the following required courses:

ECD 105	Introduction to the Field of Early Childhood	3
ECD 111	Safe Learning Environments	1
ECD 112	Healthy Learning Environments	1
ECD 113	Learning Environments	1
ECD 121	Physical Activities for Young Children	1
ECD 122	Cognitive Activities for Young Children	1
ECD 123	Communication	1
ECD 124	Creative Activities for Young Children	1
ECD 131	Guidance and Discipline	1
ECD 132	Social Development	1
ECD 211	Development of a Sense of Self	1
ECD 221	Families	1
ECD 222	Program Management	1
ECD 223	Exploring and Developing Personal Capabilities in Teaching	1
ECD 224	Professionalism	1
ECD 235	Young and Special: Basic Development and Developmental Disabilities (3) or the following 3 courses:	3
ECD 231	Screening (1)	
ECD 232	Assessment/Recording (1)	
ECD 233	Mainstreaming Preschool Children with Special Needs (1)	
ECD 295A	Practicum I	3
ECD 295B	Practicum II	3
DN 145	Child Nutrition	2
PSY 245	Child Development	3

2. Complete an additional 15 credits of electives; 12 credits are to be selected from any of the baccalaureate General Education Requirements and 3 credits may be selected from any area. 15
3. A total of 61 credits is required for the degree.

EDUCATION

CERTIFICATION PROGRAM

The Alaska State Department of Education issues certificates under the "approved program" approach to certification. The University of Alaska Anchorage has the responsibility of recommending for certification persons who successfully complete one or more of its approved programs to the Commissioner of Education. The Dean of the School of Education is the only person authorized to endorse students for the appropriate certificate. The approved programs at the University of Alaska Anchorage are as follows:

- Elementary Education
- *Secondary Education
- Physical Education
  - Elementary
  - Secondary
  - K-12
- Reading Specialist
- Counseling and Guidance
- Public School Administration
  - Elementary Principal
  - Secondary Principal
  - Superintendent
- Special Education
  - Mild Disabilities

An alternative program is available where graduate students may obtain initial teacher certification by completing the Master of Arts in Teaching (M.A.T.) program.

All students desiring certification through an undergraduate or graduate program must apply for admission into the School of Education.

The course work required for the Elementary, Secondary and Physical Education certificates is identical to that required by the Bachelor of Education degree. Students holding a baccalaureate degree may obtain certification through an appropriate certification program or a second baccalaureate degree or in the case of secondary certification, through the Masters of Arts in Teaching (M.A.T.) program.

Students who have taken all or part of an approved program at another university must take at least nine credits of approved education courses at the University of Alaska Anchorage prior to being admitted to student teaching, advanced practicum, or internship, one of which is a requirement in every certification program.

UNDERGRADUATE DEGREE

BACHELOR OF EDUCATION WITH TEACHER CERTIFICATION

Options: Elementary Education
Secondary Education
Physical Education

ADMISSION REQUIREMENTS: ALL MAJORS

Complete the undergraduate admission requirements listed on page 64.

ACADEMIC PROGRESS: ALL MAJORS

All courses in the School of Education Core must be completed with a grade of "C" or higher in order to obtain teacher certification. Additionally, Elementary and Secondary majors must complete all methods courses and their teaching specialty/major courses with a grade of "C" or higher in order to obtain teacher certification. Physical Education majors must complete all major requirements with a grade of "C" or higher in order to obtain teacher certification.

GRADUATION REQUIREMENTS: ALL MAJORS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS: ALL MAJORS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS: ALL MAJORS

Complete the baccalaureate general education requirements listed on page 70.

C. SCHOOL OF EDUCATION CORE REQUIREMENTS: ALL MAJORS

1. Complete the following core courses (18-19 credits):

ED 210	American Schools	2
ED 211	Observation of Learning	1
ED 212	Human Development and Learning (2)	2-3
	or	
PSY 150	Human Development (3)	
	or	
PSY 245	Child Development (3)	
ED 313	Designing Instruction	2
ED 314	Creating Effective Learning Environments	2
ED 332	Diagnosis and Assessment of Learning	1
and 2 credits from:		2
ED 333	Diagnosis and Assessment of Early Childhood and Primary Learning (1)	
ED 334	Diagnosis and Assessment of Intermediate and Transescent Learning (1)	
ED 335	Diagnosis and Assessment of Adolescent Learning (1)	
ED 336	Classroom Management	1
and 2 credits from:		2
ED 337	Classroom Management in Early Childhood and Primary Settings (1)	
ED 338	Classroom Management in Intermediate and Transescent Settings (1)	
ED 339	Classroom Management in Older Adolescent Settings (1)	
ED 423	Philosophical Foundations of Education	3

2. Complete the School of Education computer competency checklist.

D. MAJOR REQUIREMENTS

Please refer below for the major requirements of Elementary Education, Secondary Education, or Physical Education Options.

ELEMENTARY EDUCATION OPTION

A student interested in elementary education may obtain a B.Ed. in Elementary Education with teacher certification, a B.Ed. in Elementary Education without teacher certification, or an Alaska Teacher Certification for Elementary Education.

The B.Ed. in Elementary Education is a professional degree. A unique feature of the program is the integration of practicum experiences with the methods courses, enabling students to work in classrooms throughout their last two years of study.

ADMISSION REQUIREMENTS:

ELEMENTARY TEACHER CERTIFICATION PROGRAM

In order to be admitted to the teacher certification program, students must:

1. Obtain and complete an application to the program.
2. Complete a minimum of 45 semester credits (transfer credits may be used) with a minimum GPA of 2.75.
3. Pass the School of Education proficiency exams in Reading, Writing and Mathematics.

Elementary Student Teaching

Faculty will have the responsibility of determining a student's readiness to enroll in ED 452E, Student Teaching. The student must realize that standards set forth below constitute minimum preparation, and it may be the judgment of the committee that the candidate needs further work to develop either content or methodological competencies.

In order to be admitted to student teaching, students must:

1. Meet all requirements for and be admitted to the Teacher Certification program.
2. Earn a minimum GPA of 2.75 in major and teaching specialty requirements.
3. Submit verification of physical examination, including tine test.
4. Submit an application form for student teaching by the appropriate date: fall semester by March 1; spring semester by October 15.

ELEMENTARY TEACHER CERTIFICATION PROGRAM

Students must complete the Elementary Education methods courses and an approved teaching specialty.

A. Complete the General University Requirements, the School of Education Core Requirements and the following prerequisite:

MATH 205	Mathematics for Elementary School Teachers I (3)	3

MAJOR REQUIREMENTS:

B. Complete the following methods courses* (42 credits)

ED 401	Social Studies for Elementary Teachers	3
ED 404	Teaching Science in Elementary Schools	3
ED 407	Teaching of Elementary Mathematics	3
ED/PE 408	Elementary School Physical and Health Education	3
ED/ART418	Methods: Art in the Elementary School	3
ED 421	Development of Reading in Elementary School	6
ED 422	Teaching Language Arts and Literature	6
ED/MUS 471	Elementary Music Methods	3
ED 452E	Student Teaching—Elementary**	12

**Practicum in public schools required as part of each course.*

***See Admission Requirements for Elementary Student Teaching.*

C. Teaching Specialty
Elementary education majors (B.Ed. degree candidates only) must complete a School of Education approved teaching specialty. Teaching specialty course work must be taken outside the School of Education and a minimum of 18 credits is required. Approved specialties are on file in the School of Education and in the appropriate Dean's offices.

D. A minimum of 130 credits is required for the degree, of which 42 credits must be upper-division.

SECONDARY EDUCATION OPTION

Students interested in Secondary Education may obtain a B. Ed. in Secondary Education with recommendation for certification, or a M.A.T. in Secondary Education with recommendation for certification.

The course work required for the Secondary certification is identical to that required by the Bachelor of Education degree. Students holding a

baccalaureate degree may obtain certification recommendation through a second baccalaureate degree; a certification only program; or through a graduate program, the Master of Arts in Teaching.

The B.Ed. and M.A.T. are professional degrees that require extensive preparation in a content area with a broad foundation in the liberal arts. Because of the extensive content preparation required for Secondary Education, it is recommended that students earn a baccalaureate degree in their content area and a second baccalaureate degree or M.A.T. in education. In order to receive accurate advising in both areas, students may apply for both degree programs concurrently.

Practicum experiences in the public schools are an integrated part of the methods sequence, enabling students to work extensively in classrooms prior to student teaching.

ADMISSIONS REQUIREMENTS:

SECONDARY TEACHER CERTIFICATION PROGRAM

In order to enter the program, students must:

1. Earn a cumulative GPA of 2.50 or a BA degree with cumulative GPA of 2.50.
2. Have earned 45 credit hours, including the 34 credits of general education courses.
3. Have declared an approved teaching major.
4. Pass the School of Education competency tests in English, Writing, and Mathematics.
5. Complete the courses under School of Education requirements.

In order to enter the Methods block, students must:

1. Be admitted to Secondary B.Ed. or M.A.T. program.
2. Be interviewed by Secondary faculty.
3. Earn a 3.00 GPA in education courses, a 2.50 GPA in teaching major, and a 2.50 GPA overall.
4. Have completed all course work in the teaching major.
5. Have completed the School of Education computer competency checklist.

Secondary Student Teaching

In order to be admitted to student teaching, students must:

1. Earn a 3.00 GPA in education courses, a 2.50 GPA in teaching major, and 2.50 GPA overall.
2. Pass the teaching major proficiency test (NTE).
3. Be recommended by the Secondary Education faculty.
4. Submit verification of physical examination and tine test.

SECONDARY TEACHER CERTIFICATION PROGRAM

Students must complete an approved teaching major area and the Secondary Education methods courses.

A. Complete the General University Requirements and the School of Education Core Requirements.

MAJOR REQUIREMENTS:

B. Teaching Major Areas

Secondary majors must declare and complete a teaching major in one or more of the approved areas. Credit requirements vary according to the selected area. Specific requirements for each area are available, along with the worksheet/checklist, in the School of Education. The teaching major must be completed before the student begins the Secondary Education Requirements. Approved majors include:

Art	Geology
Biology	History
Chemistry	Mathematics
Computer Science	Music
English	Social Sciences
General Science	

C. Complete the following methods courses (23-24 credits):

ED 400	Practicum in Secondary Education	4
ED 410	Language and Cognition	4
And one of the following:		3-4
ED 402	Secondary Methods: Science (4)	
ED 403	Secondary Methods: Social Studies (4)	
ED/ENGL 413	Secondary Methods: English (4)	
ED 411	Secondary Methods: Mathematics (4)	
ED/ART 442	Curriculum and Instruction in Secondary Art (3)	
ED/MUS 472	Secondary Music Methods (3)	
ED 452S	Student Teaching-Secondary*	12

**See Admission Requirements for Secondary Student Teaching.*

D. A minimum of 130 credits is required for the degree, of which 42 credits must be upper-division.

PHYSICAL EDUCATION OPTION

Physical Education is both a discipline and a profession. The discipline of Physical Education is reflected in the sub-disciplinary research areas of Exercise Physiology, Sport Psychology, Biomechanics, Motor Learning, and Sports Medicine, to name only a few. The professional nature of the field is reflected in the preparation of teachers and practitioners in the areas of human movement.

ADMISSION REQUIREMENTS:

PHYSICAL EDUCATION TEACHER CERTIFICATION PROGRAM

In order to enter the program, students must:

1. Earn a cumulative GPA of 2.50 or a BA degree with a cumulative GPA of 2.50.
2. Have earned 45 credits including the 34 credits of general education courses. The 45 credits may include as many as 11 education requirements.
3. Pass the School of Education competency tests in English, Writing, and Mathematics.
4. Complete the courses under School of Education core requirements.

In order to enter methods courses, students must:

1. Be interviewed by Physical Education Committee.
2. Earn a 3.00 GPA in education courses; a 2.50 GPA in teaching major; and a 2.50 GPA overall.

3. Complete all course work in Physical Education.
4. Have completed the School of Education computer competency checklist.

Physical Education Student Teaching

In order to be admitted to student teaching, students must:

1. Earn a 3.00 GPA in education courses; a 2.50 GPA in teaching major; and 2.50 GPA overall.
2. Pass the approved School of Education proficiency test.
3. Be recommended by the Physical Education faculty.
4. Submit verification of physical examination and tine test.

PHYSICAL EDUCATION TEACHER CERTIFICATION PROGRAM

A. Complete the General University Requirements and the School of Education Core Requirements (except ED 332-335).

MAJOR REQUIREMENTS:

B. Complete the following courses (73 credits):

DN 203	Normal Nutrition	3
PE 150	Orientation to Physical Education	2
PE 151	Sports Proficiency Recreational Sports	2
PE 152	Sports Proficiency Team Sports	2
PE 153	Sports Proficiency Individual Sports	2
PE 246	Advanced First Aid	3
PE 303	Techniques in Team Sports	2
PE 305	Techniques in Individual and Dual Sports	2
PE 306	Techniques in Gymnastics	2
PE 309	Techniques in Aquatics	2
PE 310	Techniques in Rhythms and Dance	2
PE 332	Tests and Measurements in Physical Education	3
PE/HS 360	Introduction to Exercise Physiology	3
PE/HS 361	Biomechanics	3
PE 363	Introduction to Athletic Training	3
PE 400	Physical Education Fieldwork	3
PE 406	Methods of Teaching Physical Education	3
ED/PE 408	Elementary School Physical and Health Education	3
ED 410	Language and Cognition	4
PE 425	Organization and Administration of Physical Education	3
PE 430	Adaptive Physical Education	3
PE 460	Socio-Psychological Bases of Physical Education and Sport	3
PE 470	Human Motor Learning and Performance	3
ED 452P	Student Teaching-Physical Education*	12

**See Admission Requirements for Physical Education Student Teaching.*

C. A minimum of 130 credits is required for the degree, of which 42 credits must be upper-division.

BACHELOR OF EDUCATION WITHOUT TEACHER CERTIFICATION

Students who wish to receive the Bachelor of Education without teacher certification may substitute 12 credits of general course work approved by the School of Education in lieu of student teaching requirements.

EDUCATION AS A MINOR

The following minors are available for students outside the School of Education. A minimum of 18 credits is required for the minor at least 6 of which must be upper-division.

A. Non-Certification Minor in Education (18 credits):

ED 210	American Schools	2
ED 211	Observation of Learning	1
ED 313	Designing Instruction	2
ED 314	Creating Effective Learning Environments	2
ED 332	Diagnosis and Assessment of Learning	1
ED 336	Classroom Management	1
ED 423	Philosophical and Foundations of Education	3
Education electives by advisement		6

B. Non-Certification Minor in Physical Education (20 credits):

PE 150	Orientation to Physical Education	2
PE 246	Advanced First Aid	3
PE 425	Organization and Administration of Physical Education	3
Education electives by advisement		12

C. Non-Certification Minor in Special Education (18-19 credits):

ED 460	Exceptional Learner	3
ED 482	Mainstreaming	3
ED 484	Language Development and Disorders	3
ED 485	Rural Special Education	3
ED 486	Organization and Management: Special Education	4
ED 487	Field Experience/Special Education (1-6)	2-3

SCHOOL OF ENGINEERING

INTRODUCTION

Professional engineering embraces the wide range of cultural and technical subjects related to the planning, design, and construction of works necessary for civilization. An engineer is an innovator, a builder, and a problem solver. The engineer turns scientific knowledge into goods and services useful to people and is responsible to society for the decisions that are made. The engineer is interested in creating, works with people, and is willing to work as a member of a professional team in a position of leadership. Engineers are concerned about people and how to provide society with a better standard of living.

In addition to providing the training necessary for entrance into the professional practice of engineering, an undergraduate degree in engineering provides an excellent background for those desiring analytical and quantitative skills useful in their disciplines. The engineering programs at the University emphasize northern problems and principles; therefore, engineering graduates from the University receive training appropriate for the Alaskan engineering job market.

Since engineering is based on the physical sciences of mathematics, chemistry, and physics, engineering students are introduced to the basic principles in these areas during their first two years of study. The third year of study is largely devoted to courses in the engineering sciences—extensions of the basic sciences forming the foundation for engineering analysis and design. In the senior year, students specialize within their disciplines and draw upon previous learning to focus their studies on creative design and analysis through simulated projects. Since engineers must be able to effectively communicate in written, oral and graphic form and must be aware of their social responsibilities and roles in modern society, courses in communication, humanities, and social sciences are taken throughout the four-year engineering programs.

HIGH SCHOOL PREPARATION

Specific courses of high school work a freshman student must have completed for admission without deficiency to engineering are:

English	3 years
Mathematics	
Algebra	2 years
Trigonometry	1/2 year
Natural Sciences	
Physics	1 year
Chemistry	1 year

It is recommended that the students graduating from high school without the preparation indicated above enroll in the necessary courses to make up deficiencies during the summer session, so they can begin the fall semester with the complete freshman curriculum in engineering.

For those students required to take MATH 106 during the fall, ES 111 will be offered during the spring semester.

CIVIL ENGINEERING

INTRODUCTION

Civil Engineering deals with environmental control; bridges, buildings, dams, and harbor facilities; water resource development and waste disposal; water power, irrigation works, and drainage; air, water, highway, and railway transportation; construction and management; topographic surveying and geodesy; city management and developmental planning.

The Bachelor of Science Degree in Civil Engineering is accredited by the Engineering Accreditation Commission of the Accreditation Board of Engineering and Technology (ABET).

The School of Engineering offers the course of study leading to the four-year Bachelor of Science Degree in Civil Engineering. The first two years of the program also generally apply to most other fields of engineering. Students desiring to enter other fields can begin an engineering program here, but should plan to transfer at the end of their second year. Each student is expected to consult an advisor for proper course selection.

UNDERGRADUATE DEGREE

BACHELOR OF SCIENCE, CIVIL ENGINEERING

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64, as well as those previously listed under High School Preparation.

ACADEMIC PROGRESS

All prerequisites for Engineering courses must be completed with a grade of "A", "B", or "C". Students who are unable to earn a grade of "C" or better may repeat the course one additional time, on a space-available basis, in order to earn a satisfactory grade.

A student who has a semester GPA in Engineering courses below 2.00 will be placed on academic warning by the School of Engineering. If a student on academic warning receives a semester GPA in Engineering courses of at least 2.00, that student will be removed from academic warning status by the School. Otherwise, he/she will be disqualified from further study in the School of Engineering and will not be permitted to attend Engineering courses.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate General Education Requirements (GER) listed on page 70. Of the 15 credits required for Social Sciences, Humanities and Fine Arts, at least 6 credits must be completed at an advanced level (200) or above; however, this 6 credit advanced level course requirement could also be met by taking sequence courses at the 100 level or above. For example, HIST 101 may be followed by HIST 102, in which case HIST 102 would count as 3 credits of the 6 credit advanced level course requirement.

C. MAJOR REQUIREMENTS

1. Complete these required courses (105 credits):

CE 112	Elementary Surveying for Civil Engineers	3
CE 334	Properties of Materials	2
CE 344	Water Resources Engineering	3
CE 402	Transportation Engineering	3
CE 422	Foundation Engineering	3
CE 431	Structural Analysis	4
CE 432	Steel Design	3
CE 433	Concrete Design	3
CE 435	Soil Mechanics	3
CE 438	Design of Engineering Systems	3
CE 441	Sanitary Engineering	3
CHEM 105	General Chemistry I	4
CHEM 106	General Chemistry II	4
ENGL 111	Methods of Written Communication	3
ENGL 211	Intermediate Exposition w/ Readings in Literature	3
ES 103	Engineering Graphics	3
ES 111	Engineering Science	3
ES 201	Computer Techniques	3
ES 209	Engineering Statics	3
ES 210	Engineering Dynamics	3
ES 301	Engineering Analysis	3
ES 309	Elements of Electrical Engineering	3
ES 331	Mechanics of Materials	4
ES 341	Fluid Mechanics	4
ES 346	Basic Thermodynamics	3
ESM 450	Economic Analysis and Operations	3
MATH 200	Calculus I	4
MATH 201	Calculus II	4
MATH 202	Calculus III	4
MATH 302	Ordinary Differential Equations	3
PHYS 211	General Physics I	4
PHYS 212	General Physics II	4

2. A Natural Science elective (3 credits) must be taken in addition to the 7 credit Natural Science General Education Requirement and may be selected from the following list: 3

ASTR 103	Introductory Astronomy I (4)
ASTR 104	Introductory Astronomy II (4)
BIOL 105	Fundamentals of Biology I (4)
BIOL 371	Principles of Ecology (4)
CHEM 450	Environmental Chemistry (3)
GEOL 111	Physical Geology (4)
GEOL 115	Environmental Geology (3)
GEOL 261	General Geology for Engineers (3)

3. Technical electives (6 credits). The following courses (which include design credits) may be used for the technical electives requirement in the BSCE degree. Graduate courses may not be applied to both a baccalaureate and a masters degree. With prior approval, 600-level courses may be used to meet graduation requirements for some baccalaureate degrees by petition. 6

CE 415	Advanced Surveying (3)
CE 434	Timber Design (3)
CE 632	Advanced Structural Design (3)
CE 676	Coastal Engineering (3)
CE 681	Frozen Ground Engineering (3)
CE 682	Ice Engineering (3)
CE 684	Arctic Utility Distribution (3)
EQE 605	Chemical and Physical Water and Wastewater Treatment Processes (3)
EQE 606	Biological Treatment Processes (3)

4. A total of 132 credits is required for the degree, of which 42 credits must be upper-division.

Baccalaureate degree candidates in the School of Engineering must have a minimum GPA of 2.00 for all required 300- and 400-level Engineering courses taken at UAA.

RECOMMENDED COURSE SEQUENCE

To accommodate course prerequisites and scheduling, it is highly recommended students follow this course sequence:

FIRST YEAR

Fall Semester (17 credits):

CHEM 105	General Chemistry I	4
ES 103	Engineering Graphics	3
ES 111	Engineering Science	3
ENGL 111	Methods of Written Communication	3
MATH 200	Calculus I	4

Spring Semester (17 credits):

CHEM 106	General Chemistry II	4
CE 112	Elementary Surveying for Civil Engineers	3
ES 201	Computer Techniques	3
MATH 201	Calculus II	4
SPCH 111	Fundamentals of Oral Communication	3

SECOND YEAR

Fall Semester (17 credits):

ES 209	Engineering Statics	3
ENGL 211	Intermediate Exposition w/ Readings in Literature	3
MATH 202	Calculus III	4
PHYS 211	General Physics I	4
Social Sciences/Humanities/Fine Arts GER area		3

Spring Semester (17 credits):

ES 210	Engineering Dynamics	3
ES 331	Mechanics of Materials	4
MATH 302	Ordinary Differential Equations	3
PHYS 212	General Physics II	4
Social Sciences/Humanities/Fine Arts GER area		3

THIRD YEAR

Fall Semester (15 credits):

CE 334	Properties of Materials	2
ES 301	Engineering Analysis	3
ES 309	Elements of Electrical Engineering	3
ES 341	Fluid Mechanics	4
Social Sciences/Humanities/Fine Arts GER area		3

Spring Semester (16 credits):

CE 344	Water Resources Engineering	3
CE 402	Transportation Engineering	3
CE 431	Structural Analysis	4
ES 346	Basic Thermodynamics	3
Social Sciences/Humanities/Fine Arts GER area		3

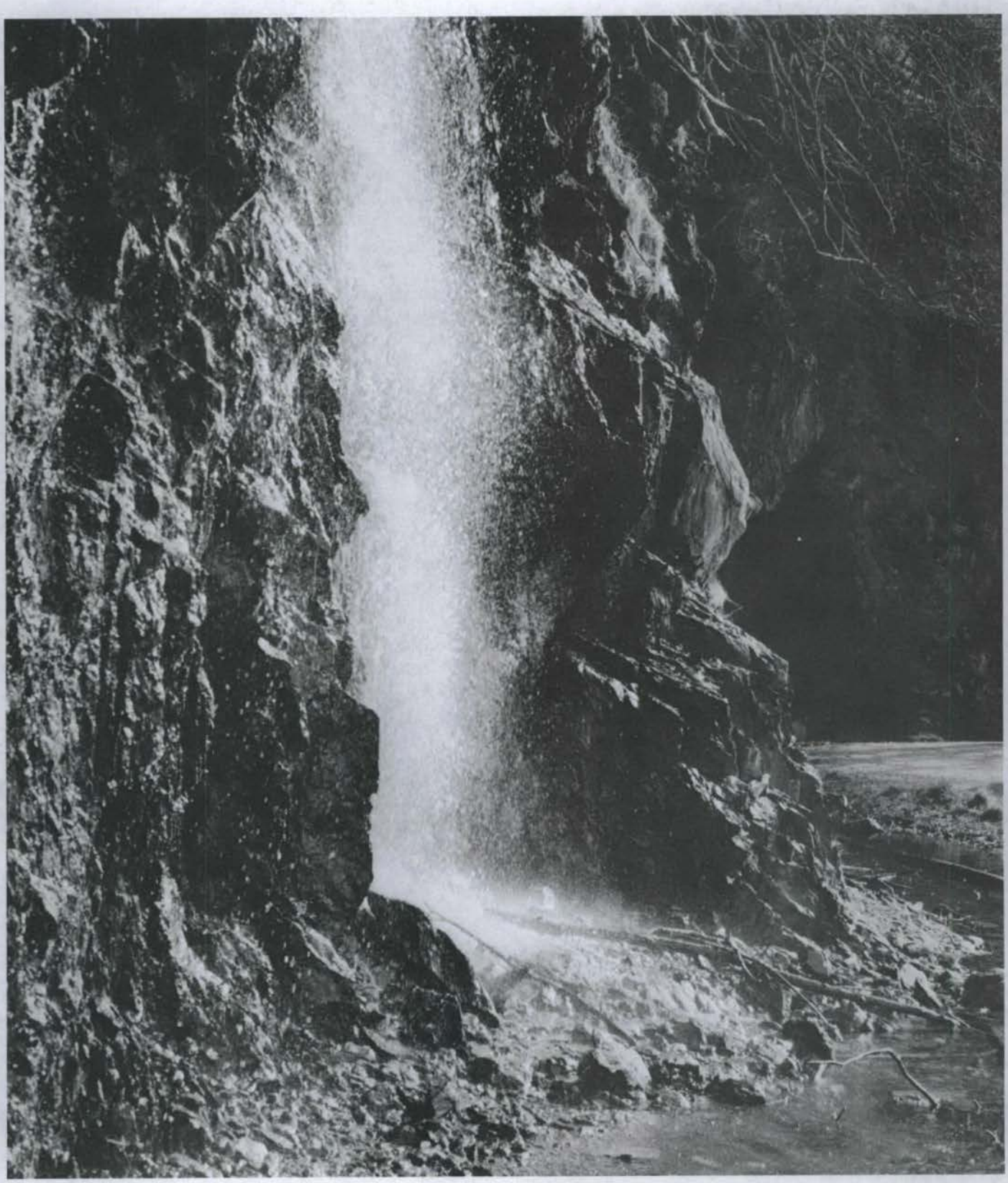
FOURTH YEAR

Fall Semester (18 credits):

CE 432	Steel Design	3
CE 435	Soil Mechanics	3
CE 441	Sanitary Engineering	3
Natural Sciences Elective		3
Technical Elective		3
Social Sciences/Humanities/Fine Arts GER area		3

Spring Semester (15 credits):

CE 422	Foundation Engineering	3
CE 433	Concrete Design	3
CE 438	Design of Engineering Systems	3
ESM 450	Economic Analysis and Operations	3
Technical Elective		3



SCHOOL OF NURSING AND HEALTH SCIENCES

HEALTH SCIENCES
INTRODUCTION

The mission of the Health Sciences program is to provide instruction, initiate research and offer professional service with the common goal of improving the health status of individuals and populations. The School's unique location contributes to a specialized focus on health issues related to living in the north and functioning under conditions of high altitude. The programs of study are designed to (a) introduce students to the field of health science; (b) advance students' knowledge and skills in specialized disciplines in the health sciences, and (c) prepare students for advanced study in a health science or health science-related discipline. The Bachelor of Science in Health Science is a four-year undergraduate degree that provides students with the academic preparation for pursuing advanced study in a health science or health-related field, or for preparing for entry-level positions in a health-related setting. Students working toward completion of the degree in Health Science can choose a course of study from among two specializations: (1) Addiction Studies and (2) Human Performance.

Students from other disciplines in the university can enhance their education by either taking electives in Human Performance or Addiction Studies, or choosing to minor in either specialization.

HIGH SCHOOL PREPARATION

The following high school courses are recommended in preparation for pursuing a program of study in the Health Sciences:

Algebra
Anatomy and Physiology
Computer Science
General Biology
General Chemistry
Verbal and Written Communication Skills

UNDERGRADUATE DEGREE

BACHELOR OF SCIENCE, HEALTH SCIENCE

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

SPECIAL ADMISSION REQUIREMENTS

Admission to the Health Sciences program requires a minimum cumulative GPA of 2.50 from high school or from prior undergraduate credit. Students enrolled in the Health Sciences program will have laboratory fees, in addition to regular tuition, for courses that have a laboratory unit.

ACADEMIC PROGRESS

In order to progress within the Health Sciences program students must earn a grade of "C" or higher in each required Health Science course, and must maintain a minimum grade point average (GPA) of 2.50. Students placed on probation by the Health Sciences program have two semesters, or a maximum of 24 credits to achieve a minimum GPA of 2.50 before removal from the School of Health Sciences. Students seeking advanced study beyond the baccalaureate degree should maintain a minimum GPA of 3.00 to meet minimum graduate school admission requirements.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. MAJOR REQUIREMENTS

1. Complete the following support courses (23 credits): (Required support courses may be used to fulfill General Education Requirements where applicable).

MATH 107	College Algebra	4
BIOL 111*	Human Anatomy and Physiology I	4
BIOL 112	Human Anatomy and Physiology II	4
CHEM 103	Introduction to General and Organic Chemistry	4
CHEM 104	Introduction to Organic Chemistry and Biochemistry	4
PSY 150	Human Development	3

**BIOL 102 is recommended prior to BIOL 111-112 for students with limited biology background.*

2. Complete the following core courses (25 credits):

HS 220	Core Concepts in the Health Sciences	3
HS 250	Health Promotion	3
HS 379	Health Data Analysis	4
HS 380	Research Methods in the Health Sciences	3
HS 400	Public Health and Epidemiology	3
HS 483	Policy and Prevention in Health	3
HS 492	Health Problems of the North	3
HS 495	Practicum (3-6)	3

3. Students working towards a degree in Health Sciences may choose from one of two options:

A. Addiction Studies Option (24 credits)

Complete the following required courses:

HS/PSY 350	Introduction to Addiction Studies	3
HS/PSY 381	Substance Abuse Treatment	3
HS 385	Drugs and Youth	3
HS 480	Contemporary Issues in Addiction Studies (1-3)	3
HS 486	Substance Abuse in Alaska	3
Approved electives*		9

B. Human Performance Option (29 Credits)

Complete the following required courses:

PHYS 123**	Basic Physics I	4
PHYS 124**	Basic Physics II	4
HS/PE 360	Introduction to Exercise Physiology	3
HS/PE 361	Biomechanics	3
HS 362	Introduction to Sports Medicine	3
HS 460	Advanced Exercise Physiology	3
HS 465	Seminar in Human Performance	3
Approved electives*		6

***Must be in addition to the 7 credit Natural Science General Education Requirement.*

Approved Electives

In addition to the specific electives below, courses listed in the alternate option may also be used to satisfy elective requirements.

DN 203	Normal Nutrition (3)
HS 303	Preventive and Therapeutic Nutrition (3)
HS/SOC 370	Medical Sociology (3)
HS/NS 433	Health Education: Theory and Practice (3)
HS 462	Advanced Sports Medicine (3)
HS 466	Human Performance in the Cold (3)
HS 471	Muscular Adaptation to Human Performance (3)
HS 487	Substance Abuse and the Family (3)
HS 488	Physiology and Pharmacology of Alcohol and Other Drugs (3)
HS 489	Program Evaluation in Health Services (3)
HS 491	Assessment and Treatment Planning in Substance Abuse (3)
HS 495	Practicum (3-6)
ANTH 355	Medical Anthropology (3)
HUMS 122	Substance Abuse as a Contemporary Problem (3)
HUMS 123	Public Education and Prevention in Substance Abuse (3)
HUMS/PSY 223	Introduction to Paraprofessional Counseling I (3)
HUMS/PSY 324	Introduction to Paraprofessional Counseling II (3)

(Other courses may be used as electives with approval of an advisor).

4. Complete a minimum of 17 credits of general electives (Addiction Studies Option) or 12 credits (Human Performance Option). 12-17
5. A minimum of 120 credits is required for the degree, of which 42 credits must be upper-division.

HEALTH SCIENCE AS A MINOR

Students majoring in another subject who wish to minor in Health Science may choose from two options:

Addiction Studies Option

A total of 18 credits is required for the minor in Addiction Studies.

HS 220	Core Concepts in the Health Sciences	3
HS/PSY 381	Substance Abuse Treatment	3
HS 385	Drugs and Youth	3
HS 480	Contemporary Issues in Addiction Studies	3
HS 486	Substance Abuse in Alaska	3
Health Science elective		3

Human Performance Option

A total of 18 credits is required for the minor in Human Performance.

HS 250	Health Promotion	3
HS/PE 360	Introduction to Exercise Physiology	3
HS/PE 361	Biomechanics	3
HS 362	Introduction to Sports Medicine	3
HS 460	Advanced Exercise Physiology	3
HS 465	Seminar in Human Performance	3

NURSING

INTRODUCTION

The mission of the Nursing program is to educate students for productive citizenship, personal growth, and professional nursing practice. The department offers potential students interested in becoming qualified to practice as a Registered Nurse two options: The Associate of Applied Science degree in Nursing and the Bachelor of Science degree in Nursing Science. The programs are designed to reflect Alaska's needs and health care delivery systems, although graduates are prepared for beginning practice positions in other geographic areas as well. A baccalaureate completion program is available for individuals who already hold the RN license in Alaska.

The nursing programs are approved by the Alaska Board of Nursing and accredited by the National League for Nursing. Graduates of the programs are eligible to write the National Council Licensing Examination (NCLEX) for licensure as a Registered Professional Nurse in Alaska and other nursing jurisdictions. The baccalaureate program also provides students with the academic base for graduate study in nursing.

UNDERGRADUATE DEGREES

ASSOCIATE OF APPLIED SCIENCE, NURSING

Graduates of the Associate Degree Nursing (ADN) program are prepared to use the nursing process to provide effective nursing services to individuals receiving care in inpatient settings and in structured outpatient settings. The academic program provides students with a closely related mix of theory and clinical practice; students gain experience in hospitals, nursing homes, clinics, and community agencies.

ADMISSION REQUIREMENTS

Students may complete the Associate Degree Nursing (ADN) program in two academic years (four semesters); admission to the clinical sequence occurs prior to the fall semester and is selective. In addition to applying for admission to the University, students interested in pursuing an Associate of Applied Science Degree in Nursing must apply specifically to the Associate Degree Nursing program. Specific information is available by contacting Associate Degree Nursing Program, School of Nursing & Health Sciences, 3211 Providence Drive, Anchorage, AK 99508 or by calling (907)786-1273.

Prior to being admitted to clinical nursing courses, students must:

1. Provide documentation of successful completion of the following courses with grades of "C" or better: Algebra, Chemistry with laboratory, and Biology with laboratory. Courses may have been taken at the high school or college level. Students who have not completed such course work may meet the requirement by earning a grade of "C" or better in the following courses: MATH 055, CHEM 055, BIOL 102, and BIOL 103.
2. Provide three letters of reference (mailed directly to the Associate Degree Nursing Program);
3. Have an interview with a member of the Associate Degree Nursing Faculty;
4. Provide their scores on the Nursing Entrance Test.

Once admitted to associate degree clinical nursing courses, students will be required to provide the following before actually beginning clinical course work:

1. Evidence of immunity to rubella and rubeola, and freedom from active tuberculosis; students must also provide proof of immunity to Hepatitis B or documentation of in progress vaccination.
2. Evidence of current student nursing malpractice insurance (which must be maintained until graduation).
3. Evidence of current infant, child and adult CPR certification. Student will have until the 6th week of the semester to complete this certification which then must be kept current until graduation.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements listed on page 66.
2. Complete the Associate of Applied Science requirements (15 credits) listed on page 67. At least 3 of the 6 credits of general requirements must be a social science course.

MAJOR REQUIREMENTS

1. Complete the following required courses:

BIOL 111	Human Anatomy and Physiology I	4
BIOL 112	Human Anatomy and Physiology II	4
BIOL 240	Introductory Microbiology for Health Sciences	4
DN 203	Normal Nutrition	3
NURS 120	Nursing Fundamentals	7
NURS 125	Adult Nursing I	7
NURS 180	Basic Nursing Pharmacology	3
NURS 220	Perinatal Nursing	5
NURS 222	Pediatric Nursing	4
NURS 225	Adult Nursing II	6
NURS 250	Psychiatric Nursing	4
NURS 255	Staff Nurse: Legal, Ethical, and Organizational Issues	1
PSY 150	Human Development	3

2. A total of 70 credits is required for the degree.

BACHELOR OF SCIENCE, NURSING SCIENCE

Students pursuing the baccalaureate degree in nursing science are provided both the theory and clinical base to enable them to assess plan, implement, and evaluate health care to meet the needs of individuals, families, groups, and communities whose health status varies qualitatively and quantitatively.

Registered Nurse Option

Registered nurses returning to complete the baccalaureate degree in nursing science must fulfill the same academic requirements as basic students. "RN-only" sections within the upper-division clinical major are designed to build upon the RN's basic preparation and experience and to facilitate progress in meeting program objectives through a combination of credit by examination and clinical course work. Previous college credits are evaluated for comparability to established requirements within the program and may be accepted for transfer; in addition, credit by examination options are available to satisfy some General Education Requirements.

For students who hold current licensure as a Registered Professional Nurse in the State of Alaska, the Department offers the opportunity to earn credit in selected clinical nursing courses by examination. Students attempting to earn credit by examination in such courses are evaluated on both theoretical and clinical competency. Additional information is available upon request.

ADMISSION REQUIREMENTS

Students who apply to the baccalaureate nursing major and who qualify for admission to baccalaureate study are admitted as pre-nursing majors. Admission as a pre-nursing major does not guarantee admission to the Nursing program. There are a limited number of seats available in each nursing course; students are considered for admission to nursing courses during the semester in which they are completing the final prerequisites for the first nursing courses, NS 301 and HS 216. Formal admission to the Nursing program is based on the student's relative standing on the following minimum requirements:

1. A minimum grade point average of 2.70. The grade point average will be calculated using grades from all courses which are required for the nursing major and have been completed at the time of application;
2. A School of Nursing and Health Sciences Application on file in the School.
3. A grade of "C" or better in all specified courses required for the nursing major;

4. Completion of specified prerequisite courses (17 Credits):

ENGL 111	3
SPCH 111, ENGL 120, PHIL 101, PHIL 201, or PSY 150	3
CHEM 103	4
BIOL 111	4
General Education Requirement	3

For students not required to take ENGL 111, a 200-level English composition course will be substituted. For transfer students with previous degrees, grades from equivalent courses will be substituted.

5. Selection will be contingent on enrollment in, or credit for,

ENGL 211, 212, or 213	3
PHIL 101, 201, or ENGL 120	3
BIOL 112	4
CHEM 104	4

at the time of application, on achieving a "C" or better in the specified courses for the major that are in progress when admission is sought (i.e., CHEM 104, BIOL 112), and on maintaining a minimum 2.70 grade point average until beginning nursing courses.

6. Three letters of reference;
7. A current Plan of Study signed by a Nursing advisor and on file with the School of Nursing and Health Sciences;
8. Evidence of satisfactory health status (including immunity to rubella, rubeola, and Hepatitis B, freedom from active tuberculosis, and diptheria/tetanus vaccination within the last ten years);
9. Current certification in Cardiopulmonary Resuscitation (good for a full year); CPR certification must be renewed annually.

Students seeking admission to RN-only clinical nursing course sections must ALSO present evidence of current licensure as a Registered Professional Nurse in the State of Alaska and at least one year of clinical practice following completion of their basic education program in nursing. RN students desiring to earn credit by examination must earn that credit prior to beginning RN-only clinical courses.

All students who are admitted to clinical nursing courses are required to provide documentation of personal liability insurance prior to actually beginning those courses. Liability insurance must be maintained through the duration of the student's enrollment in clinical nursing courses.

Students enrolled in clinical courses must provide their own transportation to clinical assignments and will be required to purchase uniforms and specialized equipment. The School assumes no responsibility for illnesses and injuries experienced by students in conjunction with their clinical course work; students who are injured while completing clinical activities are responsible for all associated medical costs. It is strongly recommended that students maintain personal medical insurance.

ACADEMIC PROGRESS

In order to progress within the baccalaureate nursing program, students must earn a minimum grade of "C" in all nursing courses. Students who are unable to earn a grade of "C" or better in any nursing course may attempt to earn a satisfactory grade one additional time on a space available basis. The five-semester clinical sequence must be completed in eight semesters and no more than a one-semester delay between sequential clinical courses will be permitted without validation of continued competence and currency.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. MAJOR REQUIREMENTS

Students working on a degree in Nursing Science may choose from two options:

Basic Student Option

1. Complete support courses for the Nursing Science major (36 credits). Some of these courses may be used to satisfy General Education Requirements. Courses marked with an asterisk (*) must be completed prior to admission to clinical nursing courses:

AS 252	Elementary Statistics (3)	3
	or	
AS 307	Probability and Statistics (3)	
*BIOL 111	Human Anatomy and Physiology I	4
*BIOL 112	Human Anatomy and Physiology II	4
BIOL 240	Introductory Microbiology for Health Sciences	4
*CHEM 103	Introduction to General and Organic Chemistry	4
*CHEM 104	Introduction to Organic Chemistry and Biochemistry	4
PSY 150**	Human Development	3
*Reasoning Skills:**	ENGL 120, or PHIL 101, or PHIL 201	3
DN 203	Normal Nutrition	3
HS 216	Pathophysiology	4

***Must be in addition to the required General Education Requirements.*

2. Complete required nursing courses for the Nursing Science major (63 credits) Courses marked with an asterisk (*) must be completed prior to admission to clinical nursing courses:

*NS 301	Processes of Professional Nursing	3
NS 305	Health Assessment of Individuals	3
NS 306	Fundamentals of Nursing	4
NS 309	Pharmacology in Nursing	3
NS 310	Medical Surgical Nursing	7
NS 311	Care of the Childbearing Family	4
NS 312	Care of the Childrearing Family	4
NS 318	Professional Perspectives in Nursing	3
NS 319	Research in Nursing	3
NS 320	Ethical-Legal Implications in Nursing	3
NS 403	Community Nursing I	4
NS 404	Community Nursing II	3
NS 405	Psychiatric-Mental Health Nursing	6
NS 407	Advanced Medical Surgical Nursing	3
NS 415	Nursing Management	3
NS 416	Concentration in Clinical Nursing	4
Nursing elective (upper-division NS 420-NS 499)		3

3. Complete electives to total 126 credits. 3

4. A total of 126 credits is required for the degree; 42 credits of which credits must be upper-division.

Registered Nurse Options

Two options are available for Registered Nurses seeking to complete the baccalaureate degree in nursing.

RN Challenge Exam Option

This option offers challenge examinations to enable the RN student to receive university credit for previously learned knowledge and skills.

1. Complete support courses for the Nursing Science major (36 credits). Some of these courses may be used to satisfy General Education Requirements. Courses marked with an asterisk (*) must be completed prior to admission to clinical nursing courses:

AS 252	Elementary Statistics (3)	3
	or	
AS 307	Probability and Statistics (3)	
*BIOL 111	Human Anatomy and Physiology I	4
*BIOL 112	Human Anatomy and Physiology II	4
*BIOL 240	Introductory Microbiology for Health Sciences	4
*CHEM 103	Introduction to General and Organic Chemistry	4
*CHEM 104	Introduction to Organic Chemistry and Biochemistry	4
*PSY 150**	Human Development	3
*Reasoning Skills:**		3
	ENGL 120, or PHIL 101, or PHIL 201	
DN 203	Normal Nutrition	3
*HS 216	Pathophysiology (Exam for Credit available)	4

***Must be in addition to the required General Education Requirements.*

2. Complete the following required courses for the Nursing Science major (28 credits) by taking the course or by passing an examination for credit.

NS 306	Fundamentals of Nursing	4
NS 309	Pharmacology in Nursing	3
NS 310	Medical Surgical Nursing	7
NS 311	Care of the Childbearing Family	4
NS 312	Care of the Childrearing Family	4
NS 407	Advanced Medical Surgical Nursing	3
NS 409	Psychiatric-Mental Health Nursing I (Exam for Credit Only)	3

3. Complete the following required nursing courses within the Nursing Science major (32 credits). Courses marked with an asterisk (*) must be completed prior to admission to clinical nursing courses:

*NS 302	Processes of Professional Nursing for RN's	3
*NS 305	Health Assessment of Individuals	3
NS 319	Research in Nursing	3
NS 403	Community Nursing I	4
NS 404	Community Nursing II	3
NS 410	Psychiatric-Mental Health Nursing II	3
NS 414	Ethical, Legal and Professional Issues in Nursing	4
NS 417	Management in Nursing	3
Nursing electives (upper-division)		6

4. Complete elective credits to total 126 credits. 6
5. A total of 126 credits is required for the degree; 42 credits must be upper-division.

RN Prior College Credit Option

This option offers utilization of prior college degree credit to fulfill 26 elective credits, for which the RN student may use Associate Degree Nursing lower-division credits.

1. Complete support courses for the Nursing Science major (36 credits). Some of these courses may be used to satisfy General Education Requirements. Courses marked with an asterisk (*) must be completed prior to admission to clinical nursing courses:

AS 252	Elementary Statistics (3)	3
	or	
AS 307	Probability and Statistics (3)	
*BIOL 111	Human Anatomy and Physiology I	4
*BIOL 112	Human Anatomy and Physiology II	4
*BIOL 240	Introductory Microbiology for Health Sciences	4
*CHEM 103	Introduction to General and Organic Chemistry	4
*CHEM 104	Introduction to Organic Chemistry and Biochemistry	4
*PSY 150**	Human Development	3
*Reasoning Skills:**		3
	ENGL 120, or PHIL 101, or PHIL 201	
DN 203	Normal Nutrition	3
*HS 216	Pathophysiology (Exam for Credit available)	4

***Must be in addition to the required General Education Requirements.*

2. Complete the following required courses for the Nursing Science major (40 credits). Courses marked with an asterisk (*) must be completed prior to admission to clinical nursing courses:

*NS 302	Processes of Professional Nursing for RN's	3
*NS 305	Health Assessment of Individuals	3
NS 309	Pharmacology in Nursing (Exam for Credit available)	3
NS 319	Research in Nursing	3
NS 331	Current Issues and Trends in Maternal-Child Nursing	2
NS 403	Community Nursing I	4
NS 404	Community Nursing II	3
NS 407	Advanced Medical Surgical Nursing	3
NS 410	Psychiatric-Mental Health Nursing II	3
NS 414	Ethical, Legal and Professional Issues in Nursing	4
NS 417	Management in Nursing	3
Nursing electives (upper-division)		6

3. Complete elective credits to total 126 credits. 26
4. A total of 126 credits is required for the degree; 42 credits of which must be upper-division.

SCHOOL OF PUBLIC AFFAIRS

INTRODUCTION

The School of Public Affairs provides high-quality undergraduate and graduate instruction and professional training in the fields of economics, justice, paralegal studies, public policy analysis, and public administration. Faculty also do research in these fields and provide professional public service at the local, state, and national levels. The School's programs integrate theoretical and practical perspectives on critical economic, justice, administrative, and public policy issues confronting regions, states, and nations, with an emphasis on northern regions. The curriculum develops the insights, knowledge, and skills necessary to understand, analyze, and address these issues.

The faculty of the school consists of economists, political scientists, and specialists in justice and public administration and policy. The faculty staffs the undergraduate programs in Economics, Justice, and Paralegal Studies, and the master's degree program in Public Administration. Many of the faculty hold joint appointments with the Institute of Social and Economic Research, the Justice Center, the Environmental and Natural Resources Institute, and the Center for Economic Education. The Institutes, Centers, and ISER are allied with the school. These interrelated programs and units effectively link instruction, policy research, and public service activity. They also integrate fundamental academic concepts with the types of practical information and tools needed for work as a professional in or with the public sector or in the market economy.

The school's location in Anchorage—the State's largest concentration of government, business, and cultural activities—affords access to a wide range of clientele groups and to public and private officials who are served by and who participate in instruction, research, and service programs. The many federal, state, and local agencies and corporate organizations in Anchorage also provide ample opportunities for student research, internships, and employment.

HIGH SCHOOL PREPARATION

The following high school courses are recommended in preparation for undergraduate admission to the School of Public Affairs:

English
Four full years , including courses that emphasize comprehension and writing skills.
Mathematics
Two years of algebra, one year of geometry, and one additional math elective.
Science
Three years of science, including some laboratory experience.
Social Sciences
A minimum of three years, including one semester of economics.

ECONOMICS

INTRODUCTION

The Economics program provides students with a systematic way of understanding activity in the world around them. Economics is a social science which studies how individuals, organizations, and governments make choices about the use of resources. A degree in economics gives students career opportunities in many fields and provides excellent preparation for those who wish to pursue advanced study in a variety of disciplines. The Economics program offers courses for both degree and non-degree-seeking students at the undergraduate and graduate levels. Students who wish to major in Economics may choose either the Bachelor of Arts or Bachelor of Business Administration degrees. A minor in Economics is also available.

UNDERGRADUATE DEGREES

BACHELOR OF ARTS, ECONOMICS

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. MAJOR REQUIREMENTS

1. Complete the following required courses (36-37 credits):

BA 273	Introduction to Statistics for Business and Economics	3
ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
ECON 321	Intermediate Microeconomics	3
ECON 324	Intermediate Macroeconomics	3
ECON 350	Money and Banking	3
ECON 412	Econometrics (3)	3
	or	
ECON 430	Mathematics for Economists (3)	
MATH 272	Calculus for Managerial Sciences (3)	3-4
	or	
MATH 200	Calculus I (4)	
	*Upper-division Economics electives	12

**No more than a total of 6 credits earned in independent study or ECON 454, Economics Internship, may be used to satisfy requirements for the major.*

Note: Math skills are important in the study of economics. For this reason majors are to complete their math requirements early in their program. Students planning on graduate school are advised to take the entire calculus sequence (MATH 200, 201, 202).

2. Students must complete at least 12 credits of their Economics courses in residence at UAA.
3. A total of 120 credits is required for the degree, of which 48 credits must be upper-division.

BACHELOR OF BUSINESS ADMINISTRATION, ECONOMICS

The BBA in Economics is offered in cooperation with the School of Business. The degree is intended to provide students who have a strong interest in economics an opportunity to major in economics and at the same time acquire a professional degree in the field of business administration. See page 105 for information on BBA degree requirements.

ECONOMICS AS A MINOR

Students majoring in another subject who wish to minor in Economics must complete the following requirements. A total of 18 credits is required for the minor, 12 of which must be upper-division.

ECON 201	Principles of Macroeconomics	3
ECON 202	Principles of Microeconomics	3
Upper-division Economics electives		12

JUSTICE

INTRODUCTION

The Justice Center has statewide responsibility for higher education and research related to the areas of crime, law, and the administration of justice. The Center offers a Justice baccalaureate degree program for students whose plans include a career or substantial policy interest in police, law, or corrections areas. In addition, a Paralegal Studies Certificate is provided for qualified students who wish to pursue a paralegal career.

The Bachelor of Arts degree in Justice satisfies the educational prerequisites for a variety of administrative, operational, research, and planning positions related to crime and the administration of justice. Those graduates with records of high achievement in the Justice undergraduate program will be prepared to pursue advanced education in graduate and professional degree programs at the University of Alaska Anchorage and other universities.

The Paralegal Studies Certificate constitutes professional certification for careers as legal assistants in both the public and private sectors. The certificate has been approved by the American Bar Association. The courses required for the Paralegal Studies Certificate can be used to satisfy many of the requirements for a Bachelor of Arts degree in Justice.

Justice faculty have unique professional research and service obligations beyond classroom teaching. The Center is an organized research unit which has the authority to, at its own initiative or in response to requests from outside the university, conduct research and action programs. Efforts are made to ensure that all undergraduate students who major in Justice have opportunities to work with faculty members on Justice Center research and service projects.

Graduates who receive a Bachelor of Arts degree in Justice have both broad educational preparation for productive citizenship, and the specialized knowledge and skills required for the evaluation, administration and improvement of police, court, and correctional policies and organizations.

UNDERGRADUATE DEGREE

BACHELOR OF ARTS, JUSTICE

ADMISSION REQUIREMENTS

Complete the undergraduate admission requirements listed on page 64.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the baccalaureate degree requirements listed on page 69.

B. GENERAL EDUCATION REQUIREMENTS

Complete the baccalaureate general education requirements listed on page 70.

C. MAJOR REQUIREMENTS

1. Complete the following required courses (52 credits):

*AS 252	Elementary Statistics	3
JUST 110	Introduction to Justice	3
JUST 221	Justice Organization and Management	3
JUST 250	Development of Law	3
JUST 251	Criminology	3
JUST 330	Justice and Society	3
JUST 360	Justice Processes	3
JUST 451	Research and Policymaking	4
Upper-division Justice electives		15
**Humanities electives		6
***Justice electives, any level		6

**Can also satisfy the Quantitative Skills General Education Requirement.*

***Select courses from the General Education Requirements on page 70 (must be in addition to the 6 credit Humanities General Education Requirement). Substitutions may be made with advisor approval.*

****Paralegal Studies Certificate courses can be counted as Justice electives.*

2. Complete a University-approved minor in another discipline. Specific requirements for minors are listed in the catalog by school or department. 18

3. A total of 120 credits is required for the degree of which 48 credits must be upper-division.

JUSTICE AS A MINOR

Students majoring in another subject who wish to minor in Justice must complete the following requirements. A total of 18 credits is required for the minor, 9 of which must be upper-division.

JUST 110	Introduction to Justice	3
JUST 251	Criminology	3
Upper-division Justice electives		9
Justice electives, any level		3

PARALEGAL STUDIES

CERTIFICATE
PARALEGAL STUDIES

ADMISSION REQUIREMENTS

Students must have completed ENGL 111 (or equivalent), and one of the following: ENGL 211, 212, 213, 312, or 414 with a minimum grade of "B" in each class and must have a 2.00 overall GPA to be admitted to the Paralegal Studies Certificate program. Students must apply and be admitted to the program on the Goose Lake campus before completing 12 credits of the paralegal core curriculum.* Students interested in the Paralegal Studies Certificate should consult a faculty advisor in the Justice Center before enrolling in paralegal courses.

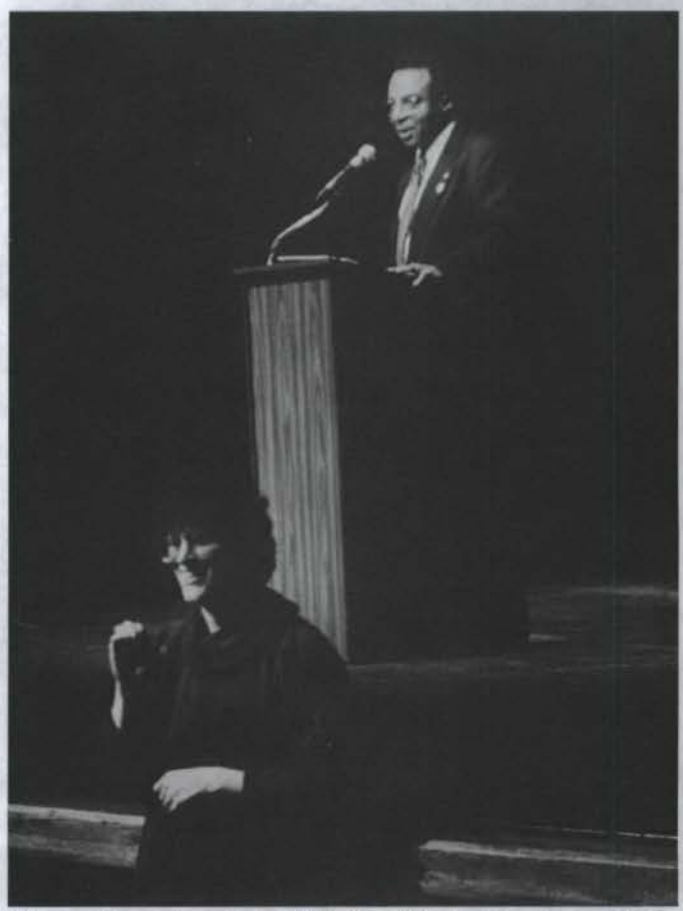
**Special admission requirements for this certificate are enforced and certificates cannot be completed at extended campuses. Certain courses required for the certificate must be taken only at the Goose Lake campus.*

CERTIFICATE REQUIREMENTS

1. Complete 6 credits in Written Communications (ENGL 111, and one of the following: ENGL 211, 212, 213, 312, or 414) with a minimum grade of "B" in each class. 6
2. Complete the following required core courses (31 credits):

PARL 101	Introduction to Law	3
PARL 215	Paralegal Studies	3
PARL 235	Factual Investigation and Interviewing	2
PARL 236	Ethics and Paralegals	1
PARL 238	Civil Procedure	3
PARL 256	Legal Research I	3
PARL/JUST 352	Substantive Criminal Law (3)	3
	or	
PARL/JUST 354	Criminal Procedure (3)	
	or	
PARL 362	Commercial Law (3)	
PARL 375	Litigation	3
PARL 456	Advanced Legal Analysis and Writing	4
PARL 470	Law of Government Regulation	3
JUST 495	Justice Agency Internship (1-6)	3
	or	
PARL 295	Paralegal Internship (3)	

3. Complete at least 20 credits, in addition to the preceding courses, from the Baccalaureate General Education Requirements list or from courses that meet the general requirements in humanities, social sciences, and math/natural sciences for the associate degree.
4. Complete 3 credits of any elective at the 100 level or above.
5. Students must achieve a minimum grade of "C" in each paralegal core course to receive the certificate. Courses may be repeated to improve grades according to University policy.
6. A total of 60 credits is required for the certificate.



***Clarence Page**, winner of the 1989 Pulitzer Prize for commentary, spoke at UAA in 1994 as a guest of the Bartlett Lecture Series.*



CHAPTER 10

GRADUATE ADMISSION AND DEGREE PROGRAM

Admission to Graduate Programs
General University Requirements for Graduate Programs
Major Program Requirements for Graduate Programs

Graduate students are subject to other relevant policies contained elsewhere in this catalog as well as individual program requirements.

ADMISSION TO GRADUATE PROGRAMS

Students who are near completion or who have earned a baccalaureate degree from a regionally accredited institution may apply for admission to graduate study or to fifth year certification programs at the University of Alaska Anchorage (UAA). Generally, the graduate programs require applicants to have at least a 3.00 (B) average in their undergraduate programs.

Many graduate programs require the Graduate Record Exam (GRE), the Graduate Management Admission Test (GMAT) or other achievement or aptitude tests. Some graduate programs have additional admission requirements. Refer to specific certificate and degree program sections of this catalog for details.

It is the responsibility of the individual student to become familiar with the policies and regulations of UAA printed in this catalog. The final responsibility for meeting all requirements rests with the student.

APPLYING FOR ADMISSION

Prospective graduate students must submit a Graduate Application for Admission along with official transcripts, official scores from any required admission tests (GRE or GMAT), and a non-refundable fee of $45 to Enrollment Services.

Deadlines for application vary by program. Refer to individual program sections of this catalog for more information.

Enrollment Services will forward an admission packet consisting of the academic records and test scores to the appropriate program chair for consideration once all of the above requirements have been received. All materials submitted to UAA for admission become the property of the University. They cannot be re-released or copied.

Some programs have additional requirements, such as department applications, letters of recommendation or portfolios. If required, these materials should be submitted directly to the department chair. Prospective graduate students are encouraged to make early contact with the department for further information.

TEST SCORES AND TRANSCRIPTS

Official copies of test scores and transcripts must be sent by the school or testing service directly to Enrollment Services. Student supplied copies are not acceptable.

An applicant with a transcript from an institution outside the United States or Canada must also provide an official statement of equivalency from a recommended credentials evaluation service and an English translation of the transcript, if necessary. A fee is normally required by the service and is paid directly to them. The amount varies depending upon the type and complexity of the evaluation.

FORMAL ACCEPTANCE TO GRADUATE PROGRAMS

Once all required admission documents have been received by Enrollment Services, the package is forwarded to the dean of the individual program. The acceptance decision is made by the dean, director and/or faculty of the program, who inform Enrollment Services of the decision. Enrollment Services sends the official letter of acceptance directly to the applicant. Acceptance does not establish candidacy in a graduate program (see Advancement to Candidacy).

CONDITIONAL ADMISSION

Students who expect to receive their baccalaureate degrees from regionally accredited institutions within two semesters may apply for admission to graduate programs. Formal acceptance becomes final only after the baccalaureate degree is completed and conferred, and all other requirements for admission are met.

Students who show potential for success in graduate studies but do not meet all the admission requirements of a program may be conditionally admitted. Conditions are established by the dean and faculty of the program, who are responsible for monitoring conditional status. Enrollment Services sends the letter of conditional admission directly to the applicant. If the requirements to remove the terms of conditional admission are not satisfied the student may be removed from Graduate Degree-Seeking Status. All terms of conditional admission must be satisfied prior to the advancement to candidacy.

NON-DEGREE-SEEKING STUDENTS

Non-degree-seeking students who wish to register for graduate courses must have the department chair or faculty member signature. Registration as a non-degree-seeking student implies no commitment by the University to the student's later admission to a degree program. Non-degree-seeking students may not qualify for some financial aid benefits or the International Student Form I-20A.

TRANSFER CREDITS

Up to nine semester credits not used toward any other degree or certificate may be transferred to UAA from a regionally accredited institution and counted toward a graduate degree or certificate. Quarter credits will be converted to semester credits by multiplying quarter credits by two-thirds. Acceptance of transfer credits toward program requirements is at the discretion of the individual program.

CHANGING DEGREE PROGRAMS , MAJORS , OR CERTIFICATES

Graduates who wish to change degree or certificate programs or majors must formally apply for admission to the new program through Enrollment Services. This applies to changes between schools, such as from an MBA in the School of Business to an MPA in the School of Public Affairs. Any additional documents required by the new program must be submitted.

Students who wish to change majors within a school, such as from an M.Ed. in Adult Education to an M.Ed. in Special Education, may do so by following the procedures listed below for "Changing Emphasis." The revised Graduate Studies Plan must be accompanied by a memo from the dean or program director to the Associate Vice Chancellor for Student Services specifying and approving the change of major.

Students may pursue concurrent degrees as long as they have formally applied and been accepted to each program through Enrollment Services.

CHANGING EMPHASIS

Changing areas of emphasis within a degree program requires the submission of a revised Official Graduate Studies Plan. The revised plan should be submitted to Enrollment Services through the Graduate Advisor/Committee (See Official Graduate Studies Plan section below).

GRADUATE ADVISOR

The dean or designee of the appropriate school/college offering the graduate program appoints a Graduate Advisor for each student accepted to a graduate program. In some graduate programs not requiring a thesis or major research project, the advisor may fill the role of the Graduate Studies Committee.

ADVANCEMENT TO CANDIDACY

After a graduate student has demonstrated an ability to succeed in graduate study as defined by the relevant graduate program, he/she may apply for advancement to candidacy status through the program. A student may apply if he/she is in satisfactory academic standing as defined in the Satisfactory Academic Standing section and has:

1. Satisfied specific program requirements for candidacy.
2. Demonstrated competence, such as in the use of research tools or foreign language, as required by the individual graduate program.
3. Received approval of the thesis or major research project proposal from the student's Graduate Studies Committee.
4. Satisfied all prerequisites and removed all deficiencies in his/her academic background.
5. Satisfied all terms of a conditional admission.
6. Submitted an approved Official Graduate Studies Plan.

Advancement to candidacy status, which is a prerequisite to graduation, is determined by the dean, director and/or faculty of the program. If more than seven years have elapsed since advancement to candidacy, the student may reapply for candidacy under the catalog requirements which are in effect at that time.

OFFICIAL GRADUATE STUDIES PLAN

The Official Graduate Studies Plan formally establishes the specific program requirements which will, upon satisfactory completion, entitle the student to receive the graduate degree or certificate. The plan is based upon the catalog requirements for the graduate degree or certificate program to which the student has been accepted. The plan becomes official once approved by the dean, director and/or faculty of the program and filed with Enrollment Services. Students are expected to complete all requirements listed on their Official Graduate Studies Plan. However, should changes become necessary after the plan has been filed a revised plan must be prepared and sent to Enrollment Services.

GRADUATE STUDIES COMMITTEE

For most graduate programs with a thesis or major research project, the student must select a Graduate Studies Committee as part of the advancement to candidacy process. The committee must consist of at least three University of Alaska Anchorage (UAA) faculty including the chair, who shall normally be a full-time faculty member. Additional members who are not UAA faculty, but have appropriate professional credentials, may be included with the approval of both the dean or designee and the student. The student is responsible for recruiting members of the committee. The committee members and chair must agree to serve and must be approved by the dean or designee. For most programs, the committee chair will assume supervisory functions formerly performed by the advisor. Changes in committe membership require the approval of the new committee member, the committee chair, the student, and the dean or designee.

RESPONSIBILITIES OF GRADUATE ADVISOR AND/OR COMMITTEE

The division of responsibility between the advisor and/or committee is determined at the program level. The graduate advisor and/or committee will:

1. Review the graduate student's Official Graduate Studies Plan, insuring that it includes: the Graduate General University Requirements; all courses required for the degree or certificate; a thesis or major research project, if required; any special program requirements; and arrangements to remove any deficiencies in the student's academic background.
2. Approve the Official Graduate Studies Plan and application for candidacy at the time of advancement to candidacy.
3. Monitor the student's progress and timely completion of all requirements in the Official Graduate Studies Plan.
4. Monitor the timely submission of the Official Graduate Studies Plan and other documents to Enrollment Services.
5. Review and approve changes to the Official Graduate Studies Plan, directing timely submission of the revised plan to Enrollment Services.
6. Review and approve the thesis or major research project proposal according to procedures established by the individual graduate program.
7. Review and approve requests for temporary leave of absence which, if approved, results in the student being placed on inactive status.

EXTENDED REGISTRATION

Graduate students not on approved inactive status must be registered in at least one course applicable to their degree or certificate program within each 12 month period in which they are actively working toward a degree.

Graduate students whose only remaining requirement is completion of a thesis or project and/or removal of a deferred grade must either register for a course or initiate an extended registration each fall and spring semester.

Extended registration requires a fee and can be processed during each semester's registration period at Enrollment Services. The deadline for processing an extended registration is the end of week twelve of the semester. With completion of extended registration, a graduate student is considered active for the current semester.

Graduate students who fail to register in a course, extend their registration, or obtain a leave of absence (see Leave of Absence) may be removed from the graduate program.

APPLICATION FOR GRADUATION

The graduate student must submit an Application for Graduation to Enrollment Services with a fee of $20 no later than the end of week two of the semester in which he/she intends to graduate. Applications received after the deadline will be processed for the following semester. Students who apply for graduation but do not

complete degree or certificate requirements by the end of the semester must reapply for graduation. A $20 fee is required with each Application for Graduation.

LEAVE OF ABSENCE

Graduate students are expected to make continuous satisfactory progress toward completing their graduate programs. Students who need to temporarily suspend their studies for more than one semester (excluding summer), must apply for a leave of absence through their advisor or committee which, if approved, places the student on inactive status. Inactive status does not negate the policy which requires all credits counted toward the degree or certificate, including transfer credits, to be earned within a consecutive seven-year period prior to graduation. Students who fail to register in a course, extend their registration, or obtain a leave of absence may be removed from the graduate program.

SATISFACTORY ACADEMIC STANDING

Graduate students will be in satisfactory academic standing if they maintain a 3.00 (B) GPA in all relevant course work and are not on academic probation. For those not yet advanced to candidacy, all relevant course work includes all courses completed since acceptance to the graduate program. For students admitted to candidacy, all relevant course work includes those courses identified on the Official Graduate Studies Plan.

ACADEMIC PROBATION

A graduate student whose GPA falls below 3.00 (B) in courses applicable to his/her graduate program, or a graduate student who, for reasons specified in writing by the student's advisor/committee and/or dean or designee, is not making continuous satisfactory progress toward completing the program requirements, will be placed on academic probation. If the requirements to remove academic probation are not satisfied within one semester (excluding summer), the student may be removed from graduate degree-seeking status.

REMOVAL FROM GRADUATE DEGREE-SEEKING STATUS

A graduate student's academic status may be changed to "non-degree-seeking" if the requirements to remove conditional admission or academic probation are not satisfied or if minimum academic standards are not met. In some cases, students may be removed from graduate degree-seeking status without having first been placed on academic probation. Students who have been removed from graduate degree-seeking status will be allowed to register as non-degree-seeking students. Such students who wish to register for graduate credits must have the signatures of the appropriate dean(s) or designee(s). (See Non-Degree-Seeking Students.)

ACADEMIC APPEALS

Students have the right to appeal academic actions. (See Academic Appeals in the Academic Policies section of this catalog.)

REINSTATEMENT TO GRADUATE DEGREE-SEEKING STATUS

Graduate students may apply for reinstatement to graduate degree-seeking status after one calendar year from the semester in which they are removed from a graduate program. Upon reapplying to graduate study, it is the student's responsibility to demonstrate his/her ability to succeed in the graduate program.

Reinstated students must reapply for candidacy and meet the program requirements which are in effect at the time of reinstatement.

FULL-TIME/PART-TIME STATUS

A graduate student who is enrolled at UAA for nine or more 600-level credits is classified as full-time. 300- or 400-level courses will count toward full-time status only if they are applicable to the degree program. A graduate student enrolled at UAA for less than nine credits is classified as part-time.

Audited courses, Continuing Education Units (CEUs), and graduate extended registration are not included in the computation.

DETERMINING PROGRAM REQUIREMENTS

A student's program is based upon the catalog requirements for the graduate degree or certificate programs to which the student has been accepted.

Reinstated students must reapply for candidacy and meet the program requirements which are in effect at the time of reinstatement.

GENERAL UNIVERSITY REQUIREMENTS—GRADUATE

General University Requirements for graduate degrees are as follows:

1. A Grade Point Average (GPA) of at least 3.00 (B) must be earned in courses identified in the Official Graduate Studies Plan in order to graduate.
2. Only 300-, 400- and 600-level courses approved by the graduate student's Graduate Advisor or Graduate Studies Committee may count toward graduate program requirements.
3. In 300- and 400-level courses, a minimum grade of "B" is required for the course to count toward the program requirements.
4. 500-level courses which are for professional development, and Continuing Education Units (CEU) are not applicable toward any degree.
5. In 600-level courses, a grade of "C" is minimally acceptable provided the student maintains a cumulative GPA of 3.00 (B) in all courses applicable to the graduate program. At least 21 credits must be taken at the graduate level for any master's degree, including thesis and research credits. For performance comparison only, in 600-level courses a grade of "P" (Pass) is equivalent to a "B" or higher, but does not enter into the GPA calculation.
6. Up to 9 semester credits not used toward any other degree or certificate may be transferred to UAA from an accredited institution and counted toward a degree or certificate. Quarter credits will be converted to semester credits by multiplying quarter credits by two-thirds. Acceptance of transfer credit toward program requirements is at the discretion of the individual program.

7. Individual program deans may allow credit earned at other universities in the Statewide system (i.e., University of Alaska Fairbanks and University of Alaska Southeast), excluding thesis credit and not used toward another degree or certificate, to be transferred to UAA as long as at least 9 credits are earned at UAA after acceptance to the program.
8. Courses taken by correspondence, credit by examination, or graded Credit/No Credit (CR/NC) do not count toward graduate program requirements. They may, however, be used to satisfy prerequisites or to establish competency in a subject, thus allowing the advisor or committee to waive certain courses in an established program as long as the total credits in the program remain the same.
9. All credits counted toward the degree or certificate, including transfer credits, must be earned within a consecutive seven-year period prior to graduation.

UNIVERSITY REQUIREMENTS FOR MASTER'S DEGREES

In addition to the Graduate General University Requirements, students must complete the following requirements:

1. Complete at least 30 approved semester credits beyond the baccalaureate degree.
   a. In programs for which a thesis or project is not required, at least 3, but not more than 6, credits earned for research may count toward the degree.
   b. For programs with a thesis or project, no more than 12 credits earned for thesis and/or research may count toward the degree.
2. Pass a written or oral comprehensive exam, as established by the program, and complete all the other requirements established by the program.
3. When an oral comprehensive examination and/or thesis defense is required, the student may select an outside observer approved by the dean or designee of the program to participate in the oral comprehensive examination to assure that the examination or defense is fair and appropriate. The outside observer is a faculty member from another department in the University or other qualified individual in the area in which the student is seeking his/her degree.
4. All theses must meet general UAA requirements for format as determined by the UAA Consortium Library.

UNIVERSITY REQUIREMENTS FOR CERTIFICATES

Some graduate level certificates are available. The School of Education offers certificates in certain programs through the Department of Education. Requirements vary and applicants are expected to be aware of and meet the requirements of the program in which they are accepted.

PH.D. DEGREES

The University of Alaska Anchorage does not confer Ph.D. degrees at this time; however, several cooperative programs exist with other universities allowing some course work to be completed at UAA and the degree to be granted by the other university.

SCHOOL OR PROGRAM REQUIREMENTS

Requirements vary by individual program. Some program requirements may be more restrictive than the Graduate General University Requirements or the university requirements for master's degrees and certificates. Contact the individual program for details.

ADDITIONAL MASTER'S DEGREES

Persons who have received a master's degree from a regionally accredited college or university may earn another master's degree by completing an additional 21 resident credits beyond the previous master's degree if the student meets all the Graduate General University Requirements, university requirements for graduate degrees, school or college and program requirements. If the 21 additional credits have been earned for each additional degree, two or more degrees may be awarded simultaneously.

INTERDISCIPLINARY GRADUATE DEGREES

A student who has received a baccalaureate degree from a regionally accredited institution may develop an interdisciplinary MA or MS degree program. He/she must apply for admission and meet all requirements for admission to graduate programs. The proposed program must differ significantly from established degree programs and may not substitute for a UAA degree program. At least half the required credits must come from courses which are part of approved UAA master's degree programs. Courses must come from two or more disciplines (i.e. prefixes). The student may select no more than one-half of his or her program from an existing discipline area. A minimum of 21 credits must be drawn from existing, approved 600-level courses. No more than 9 credits of directed study, independent study and/or individual research may be included in the Interdisciplinary Studies degree.

Interdisciplinary degree programs are not transferable to other University of Alaska campuses. To receive a master's degree in Interdisciplinary Studies from UAA, the student must follow the established UAA graduate policies and procedures, as well as additional procedures outlined below.

1. The student will develop a proposal specifying the degree (MA or MS), title, and program plan. In developing this plan, the student should review general graduate degree policies and procedures.
2. The student will select a Graduate Studies Committee of at least three faculty members from appropriate academic disciplines. The committee members and chair must: (a) represent all affected academic schools and colleges; (b) agree to serve; and (c) be approved by all (the) affected dean(s) or designee(s).
3. The student will select one faculty member to chair the committee and serve as his/her graduate advisor with the approval of the affected dean or designee.
4. The student will present the proposal to the committee for preliminary review and approval. If the committee supports the proposal, it will be forwarded to the appropriate academic dean(s) or designee(s). If the proposal and committee structure are approved, the proposal will be forwarded to the Office of Academic Affairs. If approved, it will be forwarded to Enrollment Services. Once all admission documents have been received, the student will be notified of the acceptance decision.

5. If accepted to graduate study, the student will work with the graduate advisor/committee to insure that satisfactory progress is made toward completing degree requirements.

WESTERN REGIONAL GRADUATE PROGRAM

The University of Alaska participates in the Western Regional Graduate Program (WRGP), a program of the Western Interstate Commission for Higher Education (WICHE). This program makes many high-quality graduate programs available to WICHE-state students at a reasonable cost. More importantly, WRGP includes a wide range of the West. Through WRGP, residents of Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming are eligible to enroll at resident rates of tuition in theses graduate programs in the 14 states. Currently, there are approximately 128 programs, although additional programs may be approved.

Information about the available Western Regional Graduate Programs may be obtained from the Office of Enrollment Services. A brochure describing these opportunities is also available from:

WICHE Student Exchange Program
P.O. Drawer P
Boulder, CO 80301-9752
Telephone (303) 541-0210



COLLEGE OF ARTS AND SCIENCES

BIOLOGICAL SCIENCES

INTRODUCTION

The graduate program in Biological Sciences offers two programs of study leading to the Master of Science degree. One, the thesis option, requires a thesis that is the result of research performed either under the supervision of UAA faculty or under the supervision of a qualified and approved adjunct advisor from outside the University community. The other, the non-thesis option, requires from 3-6 credits of research and a research report instead of a thesis.

MASTER OF SCIENCE, BIOLOGICAL SCIENCES

ADMISSION REQUIREMENTS

See page 160 for graduate admission requirements and deadlines. Students must also submit the following documents:

1. Three letters of recommendation;
2. A one-page statement of intent and goals;
3. Test scores for the GRE General Aptitude Test and for the Biology or the Chemistry subject tests; and
4. Official transcripts of all college level work.

Acceptance is based on a faculty member's decision to personally sponsor and direct a prospective student and acceptance by the Biology/Chemistry Graduate Admissions Committee. Prospective graduate students are strongly advised to contact all faculty members at an early stage of their admission process.

The choice of degree program options should be declared as part of a student's statement of research or study goals during the admission process and can be revised later as circumstances dictate. Although there is a choice of options, this decision should be made following either consultation with an advisor or initial meeting with each member of the Biology faculty. Additional information is provided in the Graduate Student Guidelines which is available upon request from the secretary of the Department of Biological Sciences.

GRADUATION REQUIREMENTS

See page 162 for master's level graduation requirements.

PROGRAM REQUIREMENTS

1. Students working toward a graduate degree in Biological Sciences can choose one of the following options:

A. Thesis Option

600-level	Science Credits	No Less Than 9
BIOL 692	Graduate Seminar (1)	2
BIOL 698-699	Research and Thesis (1-6)	No More Than 12
Electives approved by advisor to total		Minimum of 30

B. Non-Thesis Option

600-level	Science Credits	No Less Than 13-16
BIOL 692	Graduate Seminar (1)	2
BIOL 698	Research (1-6)	3-6
Electives approved by advisor to total		Minimum of 30

2. Students are required to teach two undergraduate laboratory sections.
3. A minimum of 21 (600-level) credits is required for the degree.
4. A total of 30 credits is required for the degree.

DOCTORAL PROGRAM, BIOLOGICAL SCIENCES

Pursuit of a doctoral degree is possible in selected areas of biological sciences through a cooperative program with the University of Alaska Fairbanks. For more information, please contact the UAA Department of Biological Sciences or the University of Alaska Fairbanks, Office of Graduate Studies.

ENGLISH

MASTER OF ARTS, ENGLISH

ADMISSION REQUIREMENTS

See page 160 for graduate admission requirements and deadlines.

Students must submit scores of the GRE General Aptitude Test and the Advanced Test in Literature in English. Conditional admission may be granted pending receipt of these scores.

CANDIDACY REQUIREMENTS

See page 161 for master's level candidacy requirements. No more than two-thirds of the credits applied to the degree may have been completed prior to the submission of a candidacy application.

GRADUATION REQUIREMENTS

See page 162 for master's level graduation requirements.

PROGRAM REQUIREMENTS

1. Complete the following before advancing to candidacy:

ENGL 601	Introduction to Graduate Studies in English	3

2. Complete 6 credits in period studies from the following: 6

ENGL 615	Studies in Medieval Literature (3)
ENGL 620	Studies in Renaissance Literature (3)
ENGL 625	Studies in Neoclassical Literature (3)
ENGL 630	Studies in Literature of Romanticism (3)
ENGL 640	Studies in Victorian Period (3)
ENGL 641	Studies in Modern Literature: 1890-1920 (3)
ENGL 642	Studies in Literature of Modernism (3)
ENGL 643	Studies in Contemporary Literature (3)

3. Complete 6 credits in genre studies from the following: 6
   - ENGL 651 Poetry (3)
   - ENGL 661 Studies in the Novel (3)
   - ENGL 663 Studies in the Short Story (3)
   - ENGL 681 Studies in Drama (3)
4. Complete either the Thesis Option or the Non-Thesis Option. Under the Thesis Option, the program will include at least 6 credits of ENGL 699 and a thesis defense. Under the Non-Thesis Option other course work will be substituted for the thesis credits and an examination on a reading list and a literary period will be substituted for the defense.
5. English electives approved by advisor 9-15
6. A total of 30 credits is required for the degree.

Master of Arts in Teaching, English

Students not currently admitted to the MAT should consult with English faculty before applying to this program. This degree is designed to serve baccalaureate graduates who have qualified or who can qualify for the Alaska Secondary School Certificate, who intend to make secondary school classroom teaching their career, and who wish to take additional work in their teaching major as well as in Education.

Admission Requirements

See page 160 for graduate admission requirements and deadlines.

Students must submit scores of the GRE General Aptitude Test and the Advanced Test in Literature in English. Conditional admission may be granted pending receipt of these scores.

Graduation Requirements

See page 162 for master's level graduation requirements.

Program Requirements

1. Complete at least 15 credits in approved English courses, at least 9 of which must be graduate level courses.
2. Complete an additional 15 credits of English and Education electives approved by advisor.
3. A total of 30 credits is required for the degree.

Master of Fine Arts, Creative Writing

Admission Requirements

See page 160 for graduate admission requirements and deadlines.

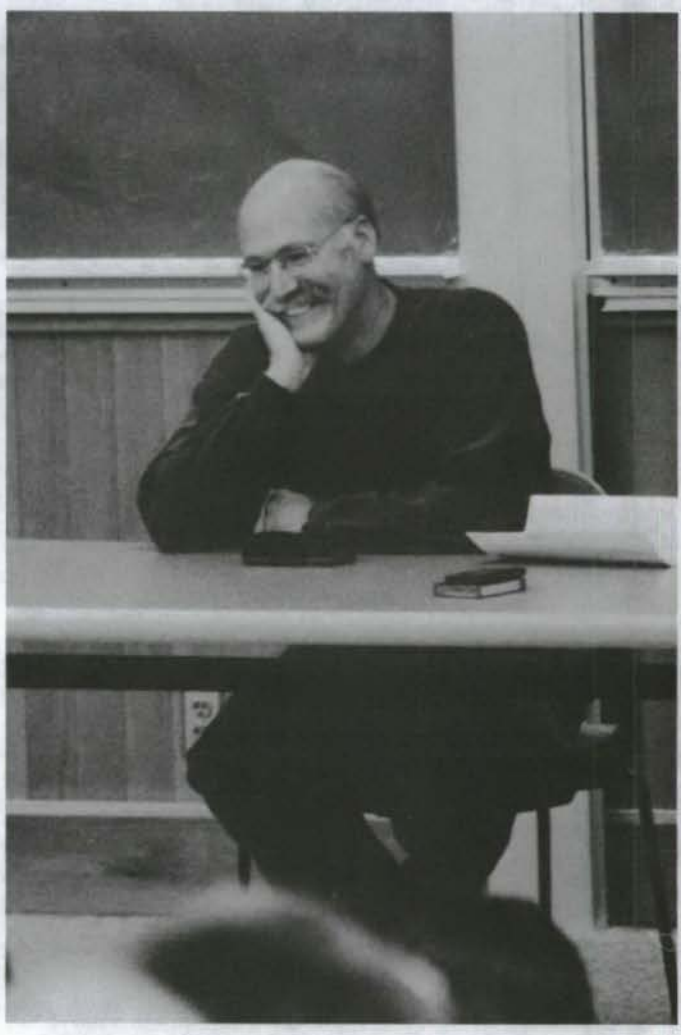
At the time of application for admission, students must submit a portfolio of their work to the English Department. Admission is contingent upon evaluation of the portfolio.

Graduation Requirements

See page 162 for master's level graduation requirements.

Program Requirements

1. Complete 12 credits from the following. Note that at least two areas must be studied: 12
   - ENGL 652 Graduate Writers' Workshop: Poetry (3)
   - ENGL 662 Graduate Writers' Workshop: Fiction (3)
   - ENGL 672 Graduate Writers' Workshop: Prose Nonfiction (3)
   - ENGL 682 Graduate Writers' Workshop: Drama for Stage and Screen (3)
2. Complete 9 credits from the following. If the student has earned credit for any of these courses prior to admission to the program, approved upper-division and graduate-level course work will be substituted: 9
   - ENGL 351 Poetry (3)
   - ENGL 361 The Novel (3)
   - ENGL 363 The Short Story (3)
   - ENGL 381 Drama (3)
   - ENGL 383 Film Interpretation (3)
3. Graduate-level literature elective 3
4. Thesis — a book-length creative work 9
5. Upper-division and graduate-level courses which complement the thesis project. 12
6. Successful defense of the thesis to include an essay that puts the thesis in "critical perspective."
7. A total of 45 credits is required for the degree.



CLINICAL PSYCHOLOGY

INTRODUCTION

The MS degree in Clinical Psychology is designed to be responsive to the needs of a variety of Alaska mental health service settings and to meet prerequisites for licensing requirements at the master's level in psychology for the state of Alaska. The degree is structured to allow students to focus on one of three specialty areas: clinical services, public services, and research (doctoral program preparation).

1. Research track: training in psychotherapy, research and program evaluation with the goal of leading students toward the pursuit of a doctoral degree in psychology.
2. Clinical track: preparation for a master's level career in psychotherapy, appreciation of research and critical evaluation of research conducted by others.
3. Public Service track: preparation for a master's level career in community public service provision, appreciation of research and critical evaluation of research conducted by others.

All program tracks have three general components. First, a program "core" provides competencies essential to the professional mental health service provider and scientist/practitioner. Second, the basics are extended to different application tracks with an emphasis on supervised practice. Third, the student develops a research competency by completing a thesis.

MASTER OF SCIENCE, CLINICAL PSYCHOLOGY

ADMISSION REQUIREMENTS

1. Deadline: April 1 for fall admission. This is the only admission date each year.
2. Compliance with General University (graduate) Requirements and admission to graduate study as given in the University of Alaska Anchorage catalog is required. A major in psychology is preferred.
3. Undergraduate training in personality theories, psychological testing, research methods, clinical psychology, and behavior modification (at UAA specific qualifying courses are PSY 368, 420, 425, 445, and 473 respectively) is necessary. Although students may be conditionally admitted to the program without these course experiences, undergraduate course work in these areas must be taken to meet the prerequisite structure of specific graduate courses.
4. Submission of scores on the Graduate Record Examination (GRE) for both the general aptitude test and the Psychology Subject Test is mandatory. Applications without these scores are generally not considered. Successful applicants typically have GRE general aptitude scores on the quantitative and verbal subtests that sum to 1000 or more and scores on the Psychology Subject Test that exceed the 50th percentile. The Psychology Subject Test is waived for graduates who obtained a baccalaureate degree in Psychology within the last seven years with a psychology GPA of 3.00 or above.
5. Submission of a letter of intent describing the applicant's interest and purpose in studying psychology, and the reasons why an MS degree in Clinical Psychology at UAA is sought at this point in the applicant's professional development, is required of a complete application.
6. A minimum of two (preferably three) professional references must be submitted with all applications.
7. Documentation of academic, research, and practical experiences other than course work, vocational and professional experiences, special projects and activities, and recognitions or honors must be provided. The format for this documentation is flexible, but a vita is preferred.
8. Demonstration of professionalism, understanding of APA ethical guidelines, and appropriate professional ethical behavior is expected. Applicants should provide evidence of professional goals and aspirations that reflect understanding of the profession of psychology as it is governed by licensure and accreditation laws and as it relates to the UAA program in particular. Applicants should ask their professional referees to comment on these issues. Applicants may be requested to complete an interview with faculty to provide additional evidence of these skills and features.

Department approval for admission to graduate study is contingent upon the applicant's qualifications, interests, and available space.

Fully admitted status is prerequisite for:

a. registering for PSY 665 Psychotherapy Practicum
b. registering for PSY 670 Psychotherapy Internship
c. preference in T.A. and R.A. appointments
d. preference in registration for psychology classes

CANDIDACY REQUIREMENTS

See UAA catalog page 161 for master's level candidacy requirements. Students are eligible to apply for advancement to candidacy when they have completed the following courses:

PSY 611	Professional Seminar A
	or
PSY 612	Professional Seminar B
PSY 623	Psychotherapy Skills
PSY 633	Psychological Assessment

One course from the Specialty Track requirements list.

Candidacy status is a prerequisite to the following experiences:

PSY 670 Psychotherapy Internship
Participation in Comprehensive Exams
Receipt of academic credit for Thesis (PSY 699A, B, or C)

GRADUATION REQUIREMENTS

See UAA catalog page 162 for master's level graduation requirements. A minimum grade of "B" or better is required of all course work applied to the degree. Strict compliance with APA Ethical Guidelines is required throughout participation in the degree program. Violations can result in immediate dismissal from the program.

PROGRAM REQUIREMENTS

1. Required core courses for all three tracks (28 Credits):

PSY 611	Professional Seminar A	3
PSY 612	Professional Seminar B	3
PSY 622	Psychopathology	3
PSY 623	Psychotherapy Skills	3
PSY 633	Psychological Assessment	3
PSY 639	Advanced Research Methods	3
PSY 665A	Psychotherapy Practicum: Psychological Assessment	1
PSY 665B	Psychotherapy Practicum: Psychological Services Center	3
PSY 670	Psychotherapy Internship (3-6)	6

Specialty Track Courses

A. Research Track

Required:

PSY 698	Individual Research (1-4)	3
PSY 699A	Thesis: Research (1-6)	6
HS/NS 625	Biostatistics for Health Professionals	3
Select two of the following three:		6
PSY 624	Group Therapy (3)	
PSY 626	Family Therapy (3)	
PSY 645	Advanced Psychotherapy Skills (3)	
Electives		4

B. Clinical Track

Required:

PSY 624	Group Therapy	3
PSY 626	Family Therapy	3
PSY 645	Advanced Psychotherapy Skills	3
PSY 689	Advanced Psychological Assessment	3
PSY 699C	Thesis: Creative Component (1-6)	3
Select one of the following three:		3
PSY 631	Cognitive Behavior Therapy (3)	
PSY 635	Advanced Psychodynamic Theory and Therapy (3)	
PSY 638	Child-Clinical Psychology (3)	
Electives		4

C. Public Service Track

Required:

PSY 624	Group Therapy	3
PSY 631	Cognitive Behavior Therapy	3
PSY 637	Organizational Environments	3
PSY 699B	Thesis: Public Service	3
Select two of the following four:		6
PSY 626	Family Therapy (3)	
PSY 638	Child-Clinical Psychology (3)	
PSY 641	Applications of Community Psychology (3)	
PSY 645	Advanced Psychotherapy Skills (3)	
Electives		4

2. Electives:
   Any 600-level course not required by the student's chosen track may be chosen as an elective. Any 400-level course offered by the department may serve as an elective with a maximum of 6 elective credits at the 400-level as approved by the student's advisor. 400-level courses may not be applied to both a baccalaureate and a masters degree.

3. Thesis and Creative Component:
   Only students in the research track have to choose a traditional empirical thesis project. Students in the public service track will conduct a thesis of a slightly lesser work involvement than the research track thesis. Students in the clinical track will complete a Creative Component which is a professional project of their choice (approved by the thesis committee) that has relevance to their anticipated career. Under all circumstances, the student's work has to be defended in front of a committee chaired by the student's advisor.

4. Comprehensive Exam:
   All three tracks will require the student to pass a Comprehensive Examination. The examination will be tailored to the student's chosen emphasis.

5. A total of 50 credits is required for the degree.

SOCIAL WORK

UAA is in the process of developing a Council on Social Work Education accredited Master's of Social Work degree program. Depending upon legislative funding, Board of Regents and Council on Social Work Education approval, the MSW could be implemented fall 1994. Please contact the social work department for current status and admissions information.

SCHOOL OF BUSINESS

BUSINESS ADMINISTRATION

INTRODUCTION

The Master of Business Administration degree is designed to provide students with the perspectives and skills which will prepare them for increasingly significant managerial leadership roles in their organizations during the 1990's and on into the next century.

The focus of the program is on management practice, but this focus is based on a recognition that sound practice requires a thorough understanding of underlying management principles and techniques. The MBA graduate should be thoroughly grounded in state-of-the-art management theory and practice, aware of the complex global environment in which modern organizations operate, adaptive to change, articulate, and ethical in dealing with others.

The program serves both full and part-time students, and classes are generally scheduled for evenings and Saturdays. While most students are from the greater Anchorage area, the program also attracts students from the rest of the United States and from foreign countries—particularly from those on the Pacific Rim. The School of Business has entered into an agreement with Kung Hee University in Seoul, Korea under which students may satisfy part of their MBA course requirements at either the University of Alaska Anchorage or at Kung Hee University.

Students may enter the program in either the fall or spring semester. A limited number of courses are also offered during the summer. Current application deadlines, as well as other detailed program information may be obtained by contacting the School of Business.

MASTER OF BUSINESS ADMINISTRATION

ADMISSION REQUIREMENTS

See page 160 for graduate admission requirements and deadlines.

Admission to the MBA program is restricted to students holding a baccalaureate degree from an accredited university, or foreign equivalent. In addition, it is highly desirable for incoming MBAs to have three years of full-time work experience. The majority of students meeting these conditions will be admitted, up to the limits of program capacity, based on their potential for success in graduate business studies. In general, two formulas using undergraduate performance as measured by the grade point average (GPA) on a 4.00 scale and the score on the Graduate Management Admission Test (GMAT) will be used to assess an applicant's potential for success in the MBA program:

1. Undergraduate GPA x 200 + GMAT ≥ 1050
   OR
2. Upper-division GPA x 200 + GMAT ≥ 1100

These formulas are minimums, and may not guarantee admission in cases where either the GPA or the GMAT scores are unusually low. Additional indicators for predicting success in individual cases may be provided through documented performance in outside activities, evidence of creativity and leadership, and a record of accomplishment in business or other professional activity.

Applicants whose native language is not English are required to score at least 550 on the TOEFL exam or otherwise demonstrate competency in English.

Students may apply to enter the program at the beginning of either the fall or spring semester. Application deadlines will be established several months before the start of these semesters. In some cases students may be admitted conditionally while their paperwork is completed. Students in conditional admission status are restricted in the number of courses that they can take before full admission.

MBA Program Structure

The MBA program is divided into two parts. Program length varies from 36 to 54 credits, depending upon previous business studies. Students without undergraduate business or accounting degrees will take seven core courses (18 credits) designed to provide a basic foundation for further graduate work. These foundation courses are:

ACCT 601	Accounting Foundations for Executives	3
BA 601	Business Statistics and Data Analysis	2
BA 603	Fundamentals of Finance	3
BA 604	Marketing Management	3
BA 606	Fundamentals of Production/ Operations Management	2
CIOS 605	Information Systems for Managers	2
ECON 602	Introduction to Economics for Managers	3

In some cases students may have fulfilled the core foundation requirements in part through undergraduate courses, or some students holding undergraduate business or accounting degrees may not have covered all of the foundation material in their degree program. Thus foundation requirements will be evaluated on an individual student basis to insure each student is properly prepared for the courses in the main body of the MBA, and foundation courses may be waived or added to an individual student's program based on previous preparation.

In addition, entering students are expected to have basic mathematical, computer, and communication skills. Students deficient in basic skills will be required to improve them through independent study, non-credit courses, undergraduate course work, and/or seminars or workshops.

The main body of the MBA which will be taken by all students will consist of the following courses (36 credits):

ACCT 650	Seminar in Executive Uses of Accounting	3
BA 631	Business Environment Analysis	3
BA 632	Organizational Behavior and Human Resource Management	3
BA 633	Problem Formulation and Decision Analysis	3
BA 634	Creating the Successful Organization	3

BA 635	Current Marketing Issues Seminar	3
BA 636	Financial Decision Making	3
BA 655	Strategic Management Seminar	3
BA 656	Management Project	3
Electives		9

In certain cases, where warranted by previous education or experience, a main body MBA course may be waived and an elective substituted. BA 656, Management Project, is required for every student, and the oral presentation of the project to the student's committee serves as the final comprehensive examination in the MBA program.

It is possible for full-time students to complete the main body of the MBA in one calendar year, although most students will take longer. Core foundation requirements normally add a minimum of two semesters to the program completion time for full-time students. All of the MBA course requirements must be completed within 7 years.

Students must maintain a minimum 3.00 GPA on all course work in the MBA program, including core foundation courses. A "C" in a graduate course is minimally acceptable if it is offset with an "A" in another course. Students with a GPA below 3.00 will be placed on probation, and may be dropped from the program if the GPA is not brought up to 3.00 within a reasonable time period. Students are also expected to make reasonable progress toward completion of the degree, and may be placed on probation if they do not complete at least one required course within any 12 month period.

The faculty reserves the right, where warranted by an evaluation of a student's progress and apparent knowledge, to require additional course work or other preparation to insure that the degree recipient possesses adequate professional skills and capabilities. This includes the ability to reason and communicate effectively—both verbally and quantitatively.

PROGRAM ADMINISTRATION AND POLICIES

The MBA program is the responsibility of the School's graduate faculty, which acts as a policy-setting body, and as an appeals board. The complete MBA program policies, requirements, and procedures may be obtained from the School's MBA office. Students are expected to be familiar with and adhere to both the MBA program requirements and procedures, and the general UAA requirements for graduate degrees.

Full program information, including application forms and procedures may be obtained by contacting the:

MBA Office
School of Business
University of Alaska Anchorage
3211 Providence Drive
Anchorage, AK 99508
U.S.A.
Telephone: (907) 786-4129

COLLEGE OF CAREER AND VOCATIONAL EDUCATION

VOCATIONAL EDUCATION

INTRODUCTION

The Vocational Teacher Education program at UAA exists to provide graduate instruction and professional development for vocational teachers in secondary and postsecondary institutions in Alaska. Department faculty and administrative offices are maintained at UAA in the College of Career and Vocational Education, but instruction is delivered across the State through the use of audio-conferencing, computer-assisted instruction, and traveling instructional faculty. The curriculum is competency-based, individualized and transportable.

The program is designed primarily for the practicing vocational teacher. Each student's program is designed cooperatively by the student and a vocational teacher education advisor.

A portion of the degree program utilizes Performance Based Teacher Education (PBTE) modules. These modules allow for a personalized program to meet the professional needs of each student.

Master of Science, Vocational Education

Admission Requirements

See page 160 for graduate admission requirements and deadlines.

Graduation Requirements

See page 162 for master's level graduation requirements.

Degree Requirements

A. Technical Competency

Students must demonstrate technical competency appropriate to vocational education using one of the following methods:

1. An undergraduate major in vocational education, business, industrial arts, nursing, or similar area.
2. An occupational credential that documents at least one year's experience beyond the apprentice level. Examples include journey union card, registered surveyor, certified dental assistant, etc.
3. Three or more years of documented experience beyond the apprentice level in a field of employment such as automobile mechanics, building contracting, accounting, or foodservice.
4. An associate degree in a vocational area.
5. At least 30 semester credits of subject matter course work corresponding to a major. Up to 9 credits may be applied toward the Master of Science degree.

B. Computer Competency

Students must demonstrate computer competency appropriate to vocational education using one of the following methods:

1. A 3-credit or equivalent course in one of the computer languages (FORTRAN, BASIC, COBOL), or an introductory course in data processing or microcomputers.
2. Work-related experience in computer competency as approved by the student's graduate advisor.
3. Self-initiated computer competency as approved by the student's graduate advisor.

Program Requirements

1. Complete the Vocational Education core courses (15 credits):

ED 627	Education Research	3
VE 611	Philosophical Foundations of Vocational Education	3
VE 622	Organization and Administration of Vocational Education	3
VE 633	Current Issues in Vocational Education	3
VE 698	Individual Research (1-6)	3

2. Complete a minimum of three PBTE areas totaling 9 credits. PBTE modules earn 0.50-1.00 credits. (A minimum grade of "B" is required for 400-level courses to count toward a graduate program.) 9

Note: Students are encouraged to substitute formal courses for PBTE course work. All substitutions must be approved by the student's graduate advisor. The PBTE course work is designed primarily for the distance learner.

VE 400	Program Planning	Modules A1-A11
VE 410	Instructional Planning	Modules B1-B6
VE 415	Implementing Competency-Based Education	Modules K1-K6
VE 420	Instructional Execution	Modules C1-C29
VE 425	Assisting Students in Improving Basic Skills	Modules M2-M6
VE 430	Instructional Evaluation	Modules D1-D6
VE 435	Teaching Adults	Modules N1-N6
VE 440	Instructional Management	Modules E1-E9
VE 450	Guidance	Modules F1-F5
VE 455	Serving Special Needs Students	Modules L1-L3
VE 460	School/Community Relations	Modules G1-G10
VE 470	Student Vocational Organization	Modules H1-H6
VE 480	Professional Role and Development	Modules I1-I8
VE 490	Coordination of Cooperative Education	Modules J1-J10

3. Complete 12 credits of electives jointly selected with the graduate advisor. Electives may be in a technical area. 12
4. A total of 36 credits is required for the degree.

SCHOOL OF EDUCATION

INTRODUCTION

The School of Education offers both master's programs and certification programs at the graduate level. Students admitted to master's programs work with a three-member committee comprised of full-time faculty from the major and related areas. The committee develops an individual graduate program for each student based upon transfer credits, program requirements and elective courses. The program may or may not include certification requirements. The approved program becomes the contract between the student and the University and if it includes a degree it must be earned within a consecutive seven year period prior to graduation.

The Master of Arts in Teaching program course requirements are the same for all students. However, within the curriculum of the M.Ed. program are several options, each with its own set of specific requirements. Each is designed to provide the student with advanced preparation in professional education. Some also lead to endorsement for education certification in the State of Alaska. M.Ed. options are:

A. Master Teacher (Speciality Options)
- Elementary Education
- Middle School Education
- Secondary Education
- Reading
- Classroom Literacy
- Curriculum and Instruction

B. Counseling and Guidance

C. Public School Administration
- Elementary Principal
- Secondary Principal
- Superintendent

D. Special Education
- Mild Disabilities
- Early Childhood Special Education

E. Adult Education (Selected Specializations)

F. Master of Arts in Teaching

GRADUATE CERTIFICATION PROGRAM

The School of Education endorses for certification to the Department of Education upon successful completion of graduate programs in Master Teacher (Reading Specialist Option); Counseling and Guidance; Public School Administration (Principals and Superintendent); Special Education (Mild Disabilities and Early Childhood Special Education); and the Master of Arts in Teaching. Students admitted only to a graduate certification program are assigned to a standing committee comprised of the department chair and faculty involved in the delivery of that program. Students must meet the course requirements approved by the Department of Education.

PROFESSIONAL FIELD PRACTICE

Prior to permitting the student to enter the final stage of preparation, which is characterized by participation in a practicum or internship, the faculty committee will evaluate the student's performance in the program. Admission into this final phase of professional preparation is a faculty decision and is separate from entry into the graduate program. Difficulties including minimal academic performance, attitude problem, poor field reports or other factors may result in denial of entry to practicum or internship.

Performance in practicum and internship is closely monitored, with stated minimum competencies and the development of individual objectives. Since this is the practice and application phase of professional development, it is assumed that students will demonstrate maturity in professional actions, attitude and performance. The State of Alaska issues certificates as a result of successful program completion as attested by the department program chair and the dean.

MASTER OF EDUCATION

ADMISSION REQUIREMENTS

See page 160 for admission to graduate programs.
Students applying for the Master of Education must also complete the following:

1. Prepare materials for a file in the School of Education by completing an application form and obtaining letters of recommendation or completing a field experience rating form describing recent pertinent professional experience. The forms and materials vary across programs. Forms are available for each major from the receptionist and/or advisors in the School of Education. Students without recent pertinent experience in the field may be required to sign up for one credit of supervised practicum. Completed forms should be submitted following this experience.
2. See an advisor in the School of Education.
3. Take the General Aptitude and the Advanced Education portions of the Graduate Record Examination (GRE), or Miller's Analogy Test (MAT) as required. Contact each academic department for specific tests.

ADMISSION PROCEDURES

When all official transcripts, examination scores, and other pertinent materials have been received by the Enrollment Services, a copy of the student's file is forwarded to the School of Education and combined with the School of Education materials for consideration by a Graduate Committee. Individual programs may have additional admissions requirements which must be completed before the file is reviewed by the Graduate Committee. Students may be contacted for scheduling personal interviews with the Committee after their completed files have been received. Written notification of committee action will be sent to the student.

One of the following actions can be expected from the Graduate Committee:

1. Unconditional admission.
2. Conditional admission to include such requirements as taking a specified minimum of education course work, maintaining a specified performance in course work, and/or retaking portions of the Graduate Record Examination.
3. Denial of admission for stated reasons.

CRITERIA FOR ADMISSION

Minimum Qualifications:

1. Hold a baccalaureate degree.
2. Have a grade point average of 3.00 (on a 4 point scale) in the last 30 credits.*
3. Graduate Record Examination with a combined verbal and quantitative score of 800 plus a performance on the Advanced Education portion at or above the 60th percentile, or the Miller's Analogy Test with scores at or above the 40th percentile.**

**The degree programs in Special Education have different requirements. Contact the department for further information.*

***The degree programs in Adult Education, Special Education, and the Master of Arts in Teaching have different requirements. Contact the respective departments for further information.*

Competitive Qualifications:

Applicants who meet the above criteria will be considered for program admission on a competitive basis, taking into account that higher scores are preferable to lower scores, good recommendations are preferable to marginal ones, a good interview is preferable to a poor one, and a match on personal and institutional goals is preferred. All things being equal, the Graduate Screening Committee will attempt to select the best candidates for available openings in all programs.

CANDIDACY REQUIREMENTS

See page 161 for advancement to candidacy requirements.

When the student is in his/her final course work, the Graduate Committee will review the student's progress for admission to candidacy. Candidacy allows the student to enter the final program phase which includes a written or oral comprehensive examination and, in some programs, the development of a thesis or investigative project. Students must have completed their course work with the minimum of a "B" average. No "C" grade earned in an undergraduate course can be counted toward a master's program. In addition, the Committee will seek evidence of a student's acceptable performance in written expression prior to entering the final phase of the advanced academic degree.

The chair of the Graduate Committee works closely with the student during this final phase, preparing for comprehensive evaluation and assisting in the development of a project or thesis, if appropriate.

GRADUATION REQUIREMENTS

See page 162 for general university requirements for graduate degrees and master's level graduation requirements.

Students working towards the Master of Education degree must also complete the following requirements:

1. All programs, with the exception of Adult Education, require at least one year successful contract teaching, the Principal's certificate requires three years successful contract teaching and the Superintendent's certificate requires 5 years. (Minimum three years as a teacher and one as an administrator.)
2. An official program must be approved before completion of 9 credits of course work.
3. Completion of a minimum of 18 credits in a program at the graduate (600) level.
4. Completion of a minimum of 36 credits of approved course work in a program.
5. At least 18 credits must be completed after the semester in which the student was admitted and approved by his/her graduate committee.
6. Pass a comprehensive written examination on the education "core" studies and the area of specialization. An oral examination may also be required by the student's committee.
7. Completion of the School of Education computer competency requirement.

Cautionary Note: Graduate courses completed prior to being admitted as a graduate student will not necessarily be applicable toward a specific graduate degree program. Since recency of credits is of concern to the candidate's committee when developing the graduate program, course work must be completed within a consecutive seven year period prior to graduation in order to fulfill the requirements of the degree.

CERTIFICATION ENDORSEMENT REQUIREMENTS

1. Completion of the certification requirements. Only courses with a grade of "C" or better may be applied to meet certification requirements.
2. Completion of the School of Education computer competency requirement.
3. Recommendation of the appropriate chair.
4. Approval of the dean.

PROGRAM REQUIREMENTS (M.ED.)

Complete one of the following courses of study:

A. Master Teacher with Specialty Options

Programs can be planned in such areas as:

Elementary Education	Reading
Middle School Education	Classroom Literacy
Secondary Education	Curriculum and Instruction

Planned programs must include the following:

1. Foundation Core:

ED 621	Culture, Language and Literacy	3
ED 622	Philosophy of Education	3
ED 627	Education Research	3
ED 631	Advanced Educational Psychology	3
ED 651	Curriculum Theory and Development	3
ED 698	Individual Research (1-6)	3

2. Select a speciality option consisting of a minimum of 18 credits.

B. Counseling and Guidance

1. Prerequisites:

ED 419	Exceptionalities: Culture and Learning	3
	or	
ED 480	Education of Culturally Different Youth	3

2. Foundation Core:

ED 622	Philosophy of Education	3
ED 627	Education Research	3
ED 631	Advanced Educational Psychology	3

3. Required Courses:

Elementary Endorsement-

ED 611	Roles and Responsibilities of the Elementary Counselor	3
ED 612	Human Relations in Education	3
ED 616	Counseling Theories	3
ED 623	Counseling Skills	3
ED 624	Group Counseling	3
ED 628	Responsibility Models/Cooperative Discipline	3
ED 632	Assessment and Career Information for Counselors	3
ED 633	Abuse and Minor: Sources and Solutions	3
ED 634	Counseling Practicum I	3
ED 636	Counseling Practicum II	3

Secondary Endorsement-

ED 612	Human Relations in Education	3
ED 615	Roles and Responsibilities of the Secondary Counselor	3
ED 616	Counseling Theories	3
ED 623	Counseling Skills	3
ED 624	Group Counseling	3
ED 628	Responsibility Models/Cooperative Discipline	3
ED 632	Assessment and Career Information for Counselors	3
ED 633	Abuse and Minors: Sources and Solutions	3
ED 634	Counseling Practicum I	3
ED 636	Counseling Practicum II	3

Students wanting K-12 Counseling and Guidance endorsement would need to take both ED 611 and ED 615 and have practicums at both the elementary level and the secondary (Middle School, Junior High, or High School) level.

C. Public School Administration

Principal's Endorsement-

1. Prerequisites:

ED 313	Designing Instruction	2
ED 314	Creating Effective Learning Environments	2
ED 332	Diagnosis and Assessment of Learning	1
ED 336	Classroom Management	1

2. Foundation Core:

ED 622	Philosophy of Education	3
ED 627	Education Research	3
ED 631	Advanced Educational Psychology	3

3. Required Courses:

ED 612	Human Relations in Education	3
ED 635	Restructuring Education: Crisis and Opportunity	3
ED 637	Public School Administration	3
ED 638	Supervision for Improvement of Instruction	3
ED 639	Public School Finance	3
ED 641	School Law	3
ED 643	Administrative Skills (1-6)	3
ED 651	Curriculum Theory and Development	3
ED 660	Practicum: Principal (1-6)	3-6
Electives by advisement		3

Superintendent's Endorsement-

Students wanting a superintendent's endorsement must have completed the above or a comparable principal preparation program, possess a master's degree, and be eligible for a principal's certificate. In addition, they must take the following or verify comparable course work:

ED 645	School Building Planning	3
ED 646	School Business Management	3
ED 659	Personnel Management and Negotiations	3
ED 661	Internship: Superintendent (1-6)	6

A minimum of 60 graduate credits is required for the superintendent's endorsement, including the principal preparation program.

D. Special Education

Mild Disabilities*

1. Foundation Core:

ED 622	Philosophy of Education	3
ED 627	Education Research	3
ED 631	Advanced Educational Psychology	3

2. Required Courses:

ED 460	Exceptional Learner	3
ED 485	Rural Special Education	3
ED 676	Theories of Behavior Disorders	3
ED 680	Theories of Mild Disabilities	3
ED 688	Collaborative Consultation	3
ED 698	Individual Research (1-6)	3-6
	or	
ED 699	Thesis (1-6)	
Electives by advisement		3-6

**Certification requirements may be completed in conjunction with the Master of Education degree or as a separate program of certification requirements. Consult with the School of Education.*

Early Childhood Special Education-

1. Prerequisites:

ED 474	Special Children from Birth through Five	3

Students must show documentation of course work in developmentally appropriate practices (DAP) for the education of young children.

2. Foundation Core:

ED 622	Philosophy of Education	3
ED 627	Education Research	3
ED 631	Advanced Educational Psychology	3

3. Required Courses:

ED 674	Families of Exceptional Youth	3
ED 681	Issues in Early Childhood Special Education	3
ED 682Y	Assessment: Early Childhood Special Education	4
ED 683Y	Strategies: Early Childhood Special Education	4
ED 687	Advanced Practicum: Education (1-12)	6
Electives by advisement		8

E. Adult Education**

The M.Ed. in Adult Education program is designed to serve baccalaureate graduates who have selected a career as a reflective practitioner, who strive to enhance their knowledge and skills in serving adult learners, and who have a commitment to lifelong learning. The program encompasses theory, research, and practice relating to adult learners, adult educators, leadership, adult education processes, providers and programs.

***This program has special admission requirements. Contact School of Education for further information.*

1. The Adult Education core differs from the foundation core required in the other M.Ed. degrees. The following core courses are required (minimum 12 credits):

ED 627	Education Research	3
ED 655	The Adult Learner	3
ED 665	History and Philosophy of Adult Education	3
ED 698	Individual Research(1-6)	3-6
	or	
ED 699	Thesis (1-6)	

2. Select one of the following three options:

Distance Learning and Technology

ED 677	Distance Learning and Adult Education	3
ED 687	Advanced Practicum: Education	1-12
Electives by advisement		6-19

Education Leadership and Organization

ED 657	Adult Education Leadership	3
ED 658	Organization and Administration in Adult and Continuing Education	3
ED 687	Advanced Practicum: Education (1-12)	1-9
Electives by advisement		6-17

Curriculum and Instruction

ED 678	Curriculum and Program Planning in Adult Education	3
ED 679	Methods and Materials in Adult Education	3
ED 687	Advanced Practicum: Education	1-12
Electives by advisement		6-17

3. For the comprehensive examination, students in the M.Ed. in Adult Education program will prepare a portfolio throughout their study process to verify their knowledge and skill of each of the adult education excellencies specified in their program. At the conclusion of their master's work, students will make a presentation of their portfolio to their committee members.
4. A total of 36 credits is required for the degree.

MASTER OF ARTS IN TEACHING

The Master of Arts in Teaching degree (M.A.T.) is an intensive experience for the exceptional graduate student who has both academic preparation in the content area taught in the public schools and significant life experience. M.A.T. candidates must meet subject area requirements for each certification endorsement requested.

Approved teaching endorsement areas for the M.A.T. are:

Art	Computer Science
General Science	English
Biology	Math
Geology	Music
Chemistry	Social Studies
History	

ADMISSION REQUIREMENTS

See page 160 for admission to graduate programs.

Students applying for the Master of Arts in Teaching must also meet these requirements:

1. Baccalaureate degree with a GPA of 3.00 in baccalaureate major.
2. Combined score of 800 on the verbal and quantitative sections of GRE exam.
3. Three letters of recommendation.
4. Interview with Secondary Education Committee. Conditional admission may be granted prior to receipt of GRE scores.

CANDIDACY REQUIREMENTS

See page 161 for advancement to candidacy requirements. Students must also complete the School of Education computer competency requirement.

PROGRAM REQUIREMENTS

1. Prerequisites (8 credits):

ED 313	Designing Instruction	2
ED 314	Creating Effective Learning Environments	2
ED 332	Diagnosis and Assessment of Learning	1
And, depending on the teaching level anticipated, either		
ED 334	Diagnosis and Assessment of Intermediate and Transescent Learning (1)	1
	or	
ED 335	Diagnosis and Assessment of Adolescent Learning (1)	
ED 336	Classroom Management	1
And, depending on the teaching level anticipated, either		
ED 338	Classroom Management in Intermediate and Transescent Settings (1)	1
	or	
ED 339	Classroom Management in Older Adolescent Settings (1)	

2. Required Courses (15 credits):

ED 419	Exceptionalities: Culture and Learning	3
ED 622	Philosophy of Education	3
ED 627	Education Research	3
ED 651	Curriculum Theory and Development	3
ED 631	Advanced Educational Psychology (3)	3
	or	
ED 654	Brain Theories: Development and Learning (3)	

3. Secondary Methods Block (11-12 credits):

ED 410/610	Language and Cognition	4
ED 687	Advanced Practicum: Education (1-12)	4
And, one of the following		3-4
ED 402	Secondary Methods: Science (4)	
ED 403	Secondary Methods: Social Studies (4)	
ED 411	Secondary Methods: Mathematics (4)	
ED/ENGL 413	Secondary Methods: English (4)	
ED/ART 442	Curriculum and Instruction in Secondary Art (3)	
ED/MUS 472	Secondary Music Methods (3)	

4. Students must receive passing scores on the National Teachers Examination (NTE) subject area test for each area of endorsement prior to acceptance into student teaching.
5. Student Teaching (9 credits). See School of Education requirements for acceptance into Student Teaching. 9
6. A written comprehensive examination over both education core studies and the area of endorsement must be completed by the candidate prior to graduation. The written competency examination may be taken either before or after completion of the final phase of ED 687, Advanced Practicum: Education (student teaching).
7. A total of 35-36 credits is required for the degree.

SCHOOL OF ENGINEERING

INTRODUCTION

The School of Engineering offers graduate degrees in Arctic Engineering, Civil Engineering, Engineering Management, Science Management, Environmental Quality Engineering and Environmental Quality Science. The four engineering degree programs require a baccalaureate degree in engineering for admission while the two science degree programs require a baccalaureate degree in science as an entrance requirement. The graduate offerings of the School of Engineering are scheduled to accommodate evening students. As a result the graduate programs normally require two or more years for completion.

A project or thesis is required as a part of each graduate program within the School of Engineering. A lecture course may, with the approval of the student's graduate committee, be substituted for the project. For this option, students must have completed the equivalent of a master's research project.

ARCTIC ENGINEERING

INTRODUCTION

The Arctic Engineering program is designed to provide graduate education for engineers who must deal with the unique challenge of design, construction, and operations in the cold regions of the world. The special problems created by the climatic, geological and logistical conditions of the Arctic and sub-Arctic require knowledge and techniques not usually covered in the normal engineering courses. Of primary importance is a thorough knowledge of heat transfer processes and properties of frozen ground and frozen water, which are basic to most engineering activities in the Arctic. The areas of hydraulics, hydrology, materials and utility operations are also uniquely affected by Arctic considerations.

The Arctic Engineering program requires a set of core courses that will prepare an engineer to understand and adapt to problems of cold regions. The program also allows students to study electives and advanced courses in their particular area of interest. Research activities carried out by faculty associated with this program can provide opportunities for project papers dealing with the most current Arctic knowledge.

Development of petroleum and other natural resources has accentuated the demand for engineers trained in northern operations, both from private industries involved in development and government agencies planning or regulating these activities.

MASTER OF SCIENCE, ARCTIC ENGINEERING

ADMISSION REQUIREMENTS

See page 160 for admission to graduate programs. All students must hold a baccalaureate degree in an engineering discipline.

GRADUATION REQUIREMENTS

See page 162 for general university requirements for graduate degrees. Students must pass the State of Alaska Engineering-in-Training examination. Examinations of other states accepted by the Alaska State Board of Examiners will meet this requirement.

PROGRAM REQUIREMENTS

1. Complete 15 credits of core courses from the following: 15

CE 603	Arctic Engineering (3)
CE 681	Frozen Ground Engineering (3)
CE 682	Ice Engineering (3)
CE 683	Arctic Hydrology and Hydraulic Engineering (3)
CE 684	Arctic Utility Distribution (3)
ME 685	Arctic Heat and Mass Transfer (3)
ME 687	Arctic Materials Engineering (3)

2. Complete 3 credits of a Civil Engineering Project. 3
3. Complete 12 credits of electives in areas related to or supportive of the student's degree program and approved by the student's graduate committee. 12
4. A total of 30 credits is required for the degree.

CIVIL ENGINEERING

INTRODUCTION

Engineering embraces the wide range of cultural and professional subjects having to do with the planning, design, and construction of works necessary for civilization. Civil Engineering in particular deals with environmental control; bridges, buildings, dams, and harbor facilities; water resource development and waste disposal; water power, irrigation works, and drainage; air, water, highway, and railway transportation; construction and management; topographic surveying and geodesy; city management and development planning.

Graduate students should enter one of two programs: those whose goal is broad professional practice will ordinarily choose the curriculum leading to the Master of Civil Engineering degree; those whose interests or background favor a specialized program with emphasis on research and/or advanced specialized study will ordinarily select the Master of Science in Civil Engineering degree.

A degree program can include courses in Environmental Quality Engineering, Engineering Management, and other areas in addition to the Civil Engineering courses.

MASTER OF SCIENCE, CIVIL ENGINEERING

ADMISSION REQUIREMENTS

See page 160 for admission to graduate programs. All students must hold a baccalaureate degree in an engineering discipline.

GRADUATION REQUIREMENTS

See page 162 for master's general University requirements for graduate degrees.

PROGRAM REQUIREMENTS

Complete 30 credits of course work approved by the student's graduate committee, of which 6 to 12 credits will be thesis.

MASTER OF CIVIL ENGINEERING

ADMISSION REQUIREMENTS

See page 160 for admission to graduate programs. All students must hold a baccalaureate degree in an engineering discipline.

GRADUATION REQUIREMENTS

See page 162 for general University requirements for graduate degrees. Students must pass the State of Alaska Engineering-in-Training examination. Examinations of other states accepted by the Alaska State Board of Examiners will meet this requirement.

PROGRAM REQUIREMENTS

Complete 30 credits of course work beyond the Bachelor of Science degree. All course work must be approved by the student's graduate committee.

ENGINEERING MANAGEMENT AND SCIENCE MANAGEMENT

INTRODUCTION

The Engineering Management and Science Management curriculum is designed for graduate engineers and scientists who hold or will hold executive or managerial positions in engineering, construction, industrial, or governmental organization. It includes human relations, financial, economic, quantitative, technical, and legal subjects useful in solving problems of management.

The curriculum includes graduate level core courses in subjects named above, plus additional course work either directed toward special problems such as Arctic Engineering or toward one of the more general fields of engineering or science through projects or research in the application of management principles.

MASTER OF SCIENCE, ENGINEERING MANAGEMENT

MASTER OF SCIENCE, SCIENCE MANAGEMENT

ADMISSION REQUIREMENTS

See page 160 for admission to graduate programs. Students who are working toward the Master of Science in Engineering Management must hold a Bachelor of Science or Master of Science in an engineering discipline. Students enrolling in the Master of Science in Science Management must hold a Bachelor of Science or Master of Science in a scientific field. Students are expected to be proficient in the use of computers for word processing, spreadsheet analysis, and scientific calculations.

In addition to an undergraduate degree, a candidate should have had on-the-job experience in engineering or science.

Students must formally apply for admission to the program. No more than 9 semester credits may be taken before applying for admission.

GRADUATION REQUIREMENTS

See page 162 for general University requirements for graduate degrees. Students must earn a 3.00 GPA in graduate courses that are part of the program. Students who are earning a second MS degree (see University Requirements for Master's degrees) must have a program of at least 21 credits and, depending on the student's background, an additional 3 credits may be required. A student may not repeat a course that is part of his/her program if he/she has received a "C" or better in that course.

PROGRAM REQUIREMENTS

1. Complete the following Area requirements (21 credits):
   A. Management Area (9 credits minimum):

ESM 601	Engineers in Organizations	3
Choose one course from the following:		3
ESM 609	Project Management (3)	
	or	
ESM/BA 617	Technical Policy and Strategy (3)	
Choose one course from the following:		3
ESM 602	Marketing for ESM (3)	
ESM 608	Legal Environment for Engineering Management (3)	
ESM 609	Project Management (3)	
ESM 613	Management of Technical People (3)	
ESM/BA 617	Technical Policy and Strategy (3)	

   B. Fiscal Area (6 credits minimum):

Complete two of the following courses:		6
ESM 605	Engineering Economy (3)	
ESM 606	Advanced Engineering Economy (3)	
ESM 610	Cost Estimating (3)	
ESM 611	Cost and Managerial Accounting (3)	

C. Quantitative Area (6 credits minimum):

Choose one course from the following:		3
ESM 620	Statistics for ESM (3)	
ESM 621	Operations Research (3)	
Choose one course from the following:		3
ESM/BA 619	Computer Simulation of Systems (3)	
ESM 620	Statistics for ESM (3)	
ESM 621	Operations Research (3)	
ESM 622	Management Decisions Under Uncertainty (3)	

Note: Substitutions for one or more of the courses listed above are permitted if similar courses are included in the student's previous academic background. No more than 9 semester credits of appropriate graduate 3 level course work completed at other institutions with a grade of "A" or "B" may be transferred and applied toward the total 30 credits of required and elective courses. Both substitutions and transfer of credit must be approved by the department.

2. A. Non-Thesis Option. Complete ESM 684 and 6 credits of electives in the student's technical specialty and/or additional courses in A, B, or C above. Electives must have the approval of the department and may include advanced courses in computer science.
   B. Thesis Option. Complete 6-9 credits of ESM 699 and 0-3 credits of electives in the student's technical specialty and/or additional courses in A, B or C above. Electives must have the approval of the department and may include advanced courses in computer science.
3. A total of 30 credits is required for the degree.

ENVIRONMENTAL QUALITY ENGINEERING AND ENVIRONMENTAL QUALITY SCIENCE

INTRODUCTION

The Environmental Quality Engineering curriculum is designed for graduate engineers and scientists who wish to pursue a career in the areas of water supply, treatment, and distribution; waste treatment; stream pollution; air pollution; and solid waste management. Consideration is given for broad study of the environment, prevention and abatement of quality deterioration, and solutions to environmental problems.

Graduates will be prepared to hold positions in federal, state, and municipal agencies as well as in consulting engineering offices. The Environmental Quality Engineering degree requires a baccalaureate degree in engineering. For students having non-engineering degrees, an interdisciplinary program is available leading to the Master of Science in Environmental Quality Science.

MASTER OF SCIENCE, ENVIRONMENTAL QUALITY ENGINEERING

MASTER OF SCIENCE, ENVIRONMENTAL QUALITY SCIENCE

ADMISSION REQUIREMENTS

See page 160 for admission to graduate programs. Students who are working toward the Master of Science in Environmental Quality Engineering must have a baccalaureate degree in an engineering discipline.

GRADUATION REQUIREMENTS

See page 162 for general university requirements for graduate degrees.

PROGRAM REQUIREMENTS

1. Complete 18 credits from the following required courses:

EQE 601	EQS Measurements	3
EQE 602	Water Quality Management	3
EQE 603	Solid Waste Management (3)	3
	or	
EQE 609	Measure and Control of Air Pollution (3)	
EQE 604	Environmental Quality Evaluation	3
EQE 605	Chemical and Physical Water and Wastewater Treatment Processes	3
EQE 606	Biological Treatment Processes	3

2. Students working toward the MS in EQE or EQS may choose from one of the following options. All electives must be approved by the student's graduate committee. 12

   A. Thesis Option:
   Thesis (6)
   Electives (6)

   B. Non-Thesis Option:
   Special Project (3)
   Electives (9)

3. A total of 30 credits is required for the degree.

SCHOOL OF NURSING AND HEALTH SCIENCES

INTRODUCTION

Graduate studies at the master's level place primary emphasis upon advanced professional nursing practice, theory, research, and health care delivery systems. Students may develop a specialized practice focus in Community Health Nursing, Psychiatric-Mental Health Nursing, Health Care Administration, or as a Family Nurse Practitioner. Master's level studies provide the student with a basis for further study at the doctoral level. The graduate program is accredited by the National League for Nursing. Graduates in the Family Nurse Practitioner emphasis area are eligible to write the national certification examination for Advanced Professional Practice as a Family Nurse Practitioner.

MASTER OF SCIENCE, NURSING SCIENCE

ADMISSION REQUIREMENTS

See page 160 for graduate admission requirements and deadlines.

Students applying to the Master of Science program in Nursing Science must also submit documentation of having met the following requirements:

1. Earned baccalaureate degree in nursing from a program accredited by the National League for Nursing.
2. Undergraduate (and graduate, if applicable) grade point average of 3.00 on a 4.00 scale.
3. Scores from the Graduate Record Examination or Miller's Analogy Test (within last five years).
4. Grade of 2.00 ("C" or higher) in a research methods course and a statistics course which covers descriptive and inferential statistics.
5. Licensure as a registered professional nurse in the State of Alaska concurrent with enrollment in first clinical course.
6. For the Family Nurse Practitioner option, preparation in history taking, and physical assessment within the last five years (preparation may be documented by an academic course, continuing education units or a challenge exam).
7. The School of Nursing and Health Sciences graduate admission application must be submitted to the School of Nursing and Health Sciences.
8. Three letters of reference submitted directly to the School of Nursing and Health Sciences. References may be contacted by a member of the Admissions Committee.
9. Essay relative to career goals, career development plans and personal/professional philosophy submitted directly to the School of Nursing and Health Science.
10. Minimum of one year of half-time clinical experience as a Registered Nurse.

Application deadlines:

November 1	GRADUATE STUDY only.
March 1	GRADUATE STUDY and/or CLINICAL SPECIALTY.

Special consideration may be given to candidates with clinical expertise and a proven record of professional contributions. Such candidates will need to submit documentation of their expertise and contributions along with their petition to graduate faculty for special consideration.

ACADEMIC PROGRESS

A grade point average (GPA) of at least 3.00 (B) must be earned in courses identified on the official graduate studies plan in order to graduate. Only two grades of "C" will be allowed in graduate level courses applied towards the degree. Grades below "C" will not be allowed in courses applied towards the degree.

Clinical courses: A grade of "B" or higher must be earned in all clinical courses. If a grade lower than "B" is earned in a clinical course, the course must be repeated, on a space available basis, the next time the course is offered. A clinical course may be repeated only once. Noncompliance with this policy may result in academic probation and/or possible removal from the Nursing Science degree program.

GRADUATION REQUIREMENTS

See page 162 for master's level graduation requirements.

PROGRAM REQUIREMENTS

1. Complete the following required courses (19 credits):

NS 620	Nursing Research Methods	4
NS 621	Nursing Theory	3
NS 625/625L	Biostatistics for Health Professionals/Lab	3/1
NS 642	Professional Nursing in Perspective	3



NS 699	Thesis (2-3)	5

2. Complete one of the following options (21-24 credits):

A. Family Nurse Practitioner Option (24 credits):

NS 610	Pharmacology for Primary Care	2
NS 622	Family Theory for Advanced Nursing Practice	3
NS 660	Family Nurse Practitioner I	4
NS 661	Family Nurse Practitioner II	4
NS 662	Family Nurse Practitioner III	5
NS 663	Family Nurse Practitioner, Clinical Concentration	3
Elective		3

B. Psychiatric-Mental Health Nursing Option (22 credits):

NS 622	Family Theory for Advanced Nursing Practice	3
NS 670	Advanced Psychiatric/ Mental Health Nursing I	3
NS 671	Advanced Psychiatric/ Mental Health Nursing II	3
NS 672	Advanced Psychiatric/ Mental Health Nursing III (3/6)	6
NS 674	Topics in Advanced Psychiatric/ Mental Health Nursing	4
Elective		3

C. Community Nursing Option (21 credits):

NS 626	Principles of Epidemiology	3
NS 650	Advanced Community Health Nursing I	4
NS 651	Advanced Community Health Nursing II	4
NS 652	Advanced Community Health Nursing III	4
Electives		6

D. Health Care Administration Option (22-23 credits):

NS 681	Analysis of Health Services	3
NS 682/682L	Administrative Services/Field Work	3/1
NS 695	Practicum in Health Care Administration	4
PADM 610	Organizational Theory and Behavior	3
Elective		3
Choose two courses from the following:		6
PADM 601	Public Administration in the Contemporary Society (3)	
PADM 624	Human Resources Administration (3)	
PADM 628	Administration of Financial Resources (3)	

3. Students enrolled in the Graduate Nursing Program must maintain a "B" average in all required course work. Students must earn a grade of "B" or higher in all clinical courses. If a student earns less than a "B" in a clinical course, that student may, on a space available basis, retake the course the next time it is offered. A course may be retaken only once. A student's Graduate Nursing Program transcript may include a maximum of two "C" grades. Grades below a "C" will not be applied to degree requirements.
4. A total of 5 credits of thesis are required for the degree. Students who are unable to complete the thesis while registered for 5 credits may be given a DF (deferred) grade for one semester; those students will be required to complete the Graduate Extended Registration procedures (page 161) and pay all fees. Students who are unable to complete the thesis during these three semesters will be required to register for 2 credits of NS 699 Thesis every semester thereafter (excluding summer sessions) until the thesis is satisfactorily completed. There is no limit to the number of thesis credits that may be accrued; however, no more than 13 credits of thesis may be accrued without the student being required to take additional course work at the graduate level. Specific requirements for additional course work will be determined by the Director of the Graduate Program in Nursing and the Thesis Chair.
5. A total of 40-43 credits is required for the degree.

SCHOOL OF PUBLIC AFFAIRS

INTRODUCTION

The Master of Public Administration (MPA) degree provides students with knowledge and skills needed for professional careers in public service. MPA students learn new techniques and add to their expertise in organizational and program management, policy analysis, and related areas with emphasis on policy and administrative issues in the North. Students specialize in one of the following emphasis areas: Public Management; Policy Analysis; or Health Administration.

The Public Management emphasis is designed for those working for or planning to work for executive agencies of local, state, and federal government; for private, non-profit organizations; and in government relations units of private corporations. It provides basic tools of public management, understanding of the structure and processes of public organizations, and the history and context of the field of public administration.

The Policy Analysis emphasis is intended to provide the professional staffs of executive and legislative departments of local, state, and federal governments with the capability to analyze the effects of a broad range of actual or hypothetical government policies. It emphasizes the application of economic analysis and other quantitative and qualitative methods to Alaska and national policy issues.

The Health Administration emphasis prepares students to function as health administrators in state, local, or federal agencies, non-profit organizations, and private companies that do health-related work. Students develop knowledge and skills necessary for effective public management in the health care area: planning; decision-making; and managing people, money and programs.

Upon approval of the student's advisor and respective deans, and by completing additional course work and meeting other degree requirements, an MPA student may receive both the MPA and the Master of Business Administration (MBA) degrees. The MBA degree is offered by the School of Business.

MASTER OF PUBLIC ADMINISTRATION

ADMISSION REQUIREMENTS

See page 160 for graduate admission requirements and deadlines. Students applying for admission to the MPA program must take the Graduate Record Examination (GRE). They must submit with the UAA Application for Admission to Enrollment Services a 300-500 word statement on their career goals and how the MPA degree relates to them.

Students entering the MPA program area are expected to have introductory-level knowledge of American government, statistics, and micro and macroeconomics. Students deficient in any of these subjects must make up these deficiencies by completing equivalent undergraduate courses.

The Master's in Public Administration represents more than an accumulation of credit. Qualified students may take graduate courses without being formally admitted to the program, but students seeking a degree should apply for admission before accumulating more than 9 credits in the program. Students normally will not be allowed to enroll for additional credits (beyond 9) without admission to the program.

ACADEMIC PROGRESS

To maintain satisfactory progress toward the degree, a student in the MPA program is expected to complete a minimum of 6 semester credits each calendar year, commencing with the first term of enrollment. The 6 semester credits may consist of either undergraduate prerequisite courses or graduate program courses. Failure to comply with the 6 credit minimum each calendar year may result in the student being dropped from the program.

GRADUATION REQUIREMENTS

See page 162 for master's level graduation requirements.

PROGRAM REQUIREMENTS

1. Complete the MPA core courses (15 credits):

ECON 625	Economics and Public Policy	3
PADM 601	Public Administration in the Contemporary Society	3
PADM 602	Seminar in Public Management	3
PADM 604	Research Methods in Administration	3
PADM 606	The Policymaking Process	3

2. Complete one of the following emphasis areas:

A. Public Management Emphasis (18 credits):

PADM 603	Management Analysis	3
PADM 610	Organizational Theory and Behavior	3
PADM 624	Human Resources Administration	3
PADM 628	Administration of Financial Resources	3
Plus two 600-level electives		6

B. Policy Analysis Emphasis (18 credits):

ECON 607	Public Finance and Taxation	3
ECON 628	Applied Economics	3
PADM 632	Quantitative Approaches to Policy Analysis	3
PADM 635	Policy Analysis and Program Evaluation	3
Plus two 600-level electives		6

C. Health Administration Emphasis (18 credits):

PADM 624	Human Resources Administration	3
PADM 628	Administration of Financial Resources	3
Plus one 600-level elective		3
Choose 3 courses from the following:		9
NS 626	Principles of Epidemiology (3)	
NS 658	Public Health Policy (3)	
NS 681	Analysis of Health Services (3)	
NS 682	Administrative Services (3)	

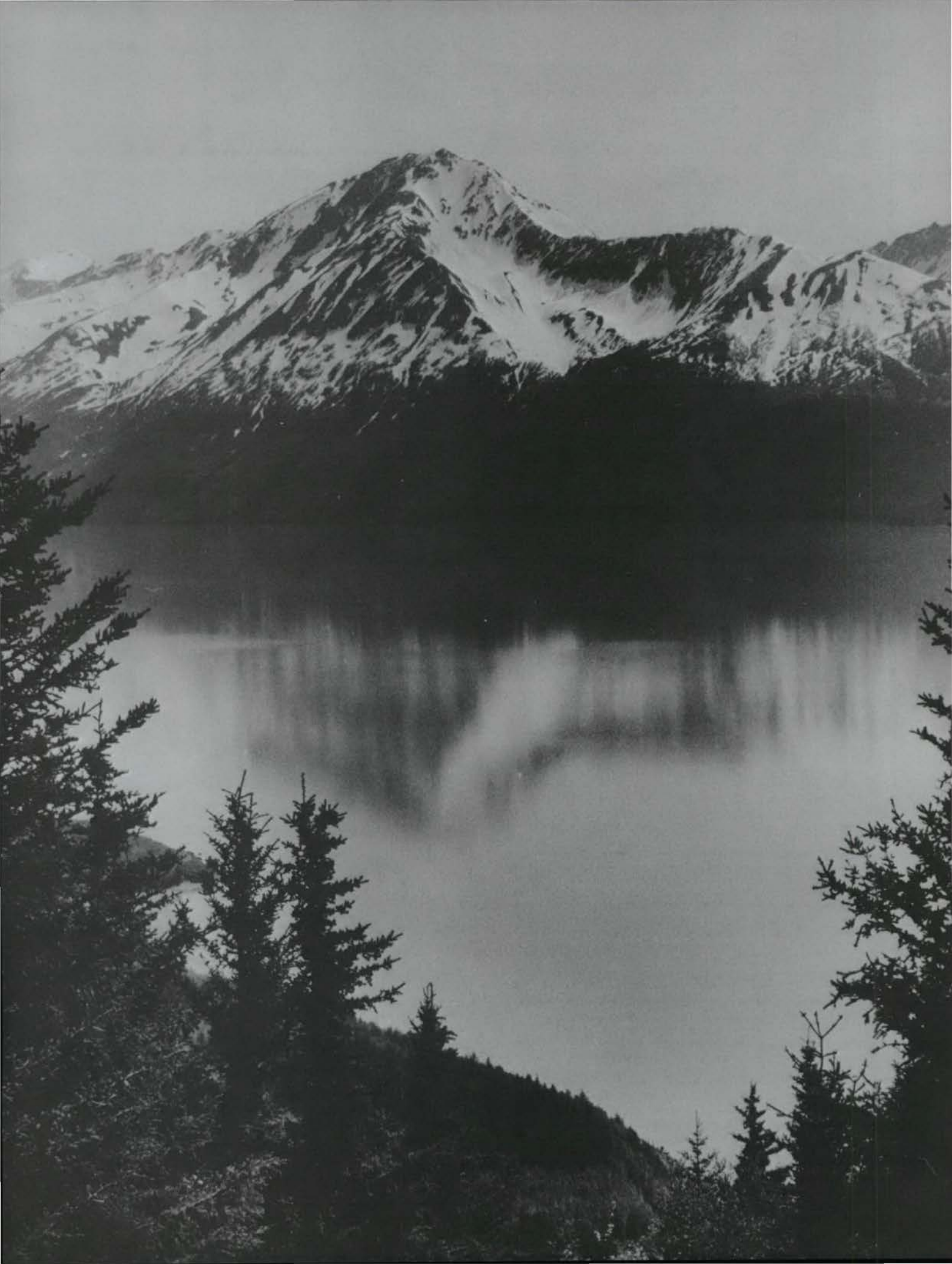
3. Candidates for the MPA who do not have public administration work experience must complete 1 additional course (3 credits):

PADM 620	Internship in Public Administration/Policy	3

4. Take the core comprehensive exam after completing the core courses. This exam must be passed before the student may enroll in the capstone course.
5. Complete the capstone project course (3 credits):

PADM 659	Administrative Policy Seminar	3

6. A total of 36-39 credits is required for the degree.



CHAPTER 11

COURSE DESCRIPTIONS

Alternative Learning Options
Contact Hours
Course Level Expectations
Course Numbering System
Course Descriptions

ALTERNATIVE LEARNING OPTIONS

FLEXIBLE TIME COURSES

Certain courses are offered in flexible formats. They include:

1. Self-Paced. These courses offer an alternative to the traditional lecture class and are especially suited to motivated, self-directed learners. Self-paced courses allow students to work in a low-anxiety, supportive environment. They include some or all of the following:
   a. group study
   b. tutorial study
   c. scheduled lectures
   d. diverse learning aids such as video, audio, computer, and library resources.
2. Open Entry/Open Exit. These courses permit students to enter and exit anytime during the semester. Students generally work at their own pace to complete the required course content.
3. Variable Credit. These courses may be taken for a variable number of credits with prior approval of the faculty member. Workload and tuition depend on the number of credits selected.
4. Short. Short courses offer the content of a full semester course in a shorter timeframe.
5. Mini. Mini-courses are offered for fewer than three (3) credits and usually in a shorter time period than a full semester.

DIRECTED STUDY

A Directed Study course is a permanent catalog course delivered on an individual basis when the course is not offered that semester. It provides the opportunity for the student to take a permanent course on an individual basis when the course is not being offered that semester. For additional information, refer to the Directed Study policy located in chapter 8.

INDEPENDENT STUDY

An Independent Study course is a course consisting of topics or problems chosen by the student with the approval of the department concerned, with the supervision of an instructor, and final approval by the dean. These courses are not duplications of and must differ significantly from the catalog course. It provides the opportunity for the student who has completed most of the required courses in their program to study topics which are not offered. For additional information, refer to the Independent Study policy located in chapter 8.

INTERDISCIPLINARY/MULTIDISCIPLINARY COURSES

Courses that explore the broader meaning and significance of concepts, principles, or research techniques common to several disciplines are called interdisciplinary. Courses that examine a common topic or problem by drawing upon the perspectives of many disciplines are called multidisciplinary.

STACKED COURSES

Occasionally two or more courses are scheduled in the same classroom at the same time. These are referred to as "stacked courses." Catalog descriptions of these courses include the statement "May be stacked." The semester class schedule will indicate if a class is being offered in stacked format and list which course(s) are being stacked.

TELECOURSES

UAA telecourses are college-level credit courses offered in televised format. Courses can be viewed on Channel 7/KAKM (Anchorage PBS), on Channel 45/Anchorage TeleCampus (Sonic Cable of Alaska), or by videotape on campus.

Telecourses are organized learning systems which include video lessons, a textbook, a study-guide, learning exercises, and organized exams. Most coursework can be completed in the convenience of a student's home. Students come to campus only for orientation, discussion/lab sessions, and examinations. Students can communicate with telecourse faculty and other class members via telephone, office appointments, computer, or mail.

Telecourses are listed in each semester Class Schedule. Tuition is charged at the current UAA per-credit rate. Certain telecourses also carry a royalty fee charged by the telecourse producer. Fees are listed after the course description. Students follow regular UAA procedures for telecourses.

CONTACT HOURS

UAA academic policy has established the following minimum contact times. Most lecture/discussion courses require a minimum of 750 minutes of contact time and a minimum of 1500 minutes completed outside the classroom to award one (1) credit. Some courses require more than 750 minutes of contact time and more than 1500 minutes completed outside the classroom.

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

Courses scheduled for less than a full semester may not be offered for more than one (1) credit each week.

One (1) Continuing Education Unit (CEU) may be granted for satisfactory completion of 10 contact hours of classroom instruction or for 20 contact hours of laboratory or clinical instruction.

Alternative learning modes are subject to the instructional objectives and outcomes of comparable, traditionally taught courses, but contact hour standards may differ.

COURSE LEVEL EXPECTATIONS

Students are expected to demonstrate learning skills commensurate with the appropriate course level.

Students are expected to meet prerequisites for all courses prior to registering. Prerequisites are listed with course descriptions. Prerequisites indicate the preparation and/or background necessary to undertake academic study. If a student has not taken and passed the necessary prerequisites, but feels confident of performing the course work, the student may request permission from the instructor of the course to enroll in the class. An instructor withdrawal may be initiated for those students who enroll without either prerequisites or instructor permission.

Courses numbered 001-049 are career development courses intended to fulfill special needs of students or the community and are not designed as preparation for 100-level college work. They are offered for Continuing Education Units (CEU) or for non-credit.

Courses numbered 050-099 usually cover basic or developmental material and are intended to help prepare students to enter 100-level college courses. They are applicable to some vocational certificates.

100-level courses generally require learning basic concepts. 200-, 300-, and 400-level courses require increasing sophistication in the

ability to extract, summarize, evaluate, and apply relevant class material. 500-level courses are specifically designed for professional development. 600-level courses demand rigorous analysis, synthesis, and research skills.

COURSE NUMBERING SYSTEM

Each course offered by the University is identified by the department designator and a three-digit course number. The designator commonly abbreviates the name of a discipline or department (for example, ENGL for English). In general, the first numeral of the three-digit course number indicates the year in which the course is ordinarily taken. For example, ENGL 111 is ordinarily taken by first-year students, and ENGL 318 is taken by third-year students. More specifically, course numbers have the following meanings:

001-049

Continuing Education Units (CEU). (Career development courses.) One (1) CEU is granted for satisfactory completion of 10 contact hours of classroom instruction or for 20 contact hours of laboratory or clinical instruction. Also indicates community interest courses not offered for credit. Not applicable to any degree requirements (even by petition).

050-099

Courses applicable to some vocational certificates but not to associate or associate of applied science degrees, baccalaureate degrees, master's degrees, or professional certificates.

100-199

Freshman-level, lower-division courses. Applicable to certificates, associate, and baccalaureate degrees.

200-299

Sophomore-level, lower-division courses. Applicable to certificates, associate, and baccalaureate degrees.

300-399

Junior-level, upper-division courses. Applicable to associate and baccalaureate degrees. May also be applied to graduation requirements for some master's degrees with prior approval of the student's Graduate Study Committee. May not be applied to both a baccalaureate and a master's degree.

400-499

Senior-level, upper-division courses. Applicable to associate and baccalaureate degrees. May also be applied to graduation requirements for some master's degrees with prior approval of the student's Graduate Study Committee. May not be applied to both a baccalaureate and a master's degree.

500-599

Professional development courses. Designed to provide continuing education for various professional groups. Courses are neither graduate nor undergraduate in nature. Not applicable to any degree requirements (even by petition). Restricted to Pass/No Pass grading system. 500 level courses shall not be stacked with any credit courses numbered 050-499 or 600-699.

600-699

Graduate-level. Applicable to master's degrees with approval of the student's Graduate Study Committee. With prior approval, may also be used to meet graduation requirements for some baccalaureate degrees by petition. May not be applied to both a baccalaureate and a master's degree.

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

-90 selected topics--umbrella courses
-92 seminars and workshops
-93 special topics courses, to be offered only once*
-94 trial (experimental) courses intended to become permanent; may only be offered a maximum of three times as a trial course before requesting a permanent course number*
-95 practicums, internships, and cooperative education courses
-96 directed study
-97 independent study
-98 individual research
-99 thesis

**Courses ending with 93 or 94 will not satisfy General Education Requirements.*

ACCT: ACCOUNTING

Offered through the School of Business, Business Education Building (BEB), Room 309, 786-4100

Each student taking any School of Business course will be charged a single lab fee of $20 for the semester. (Does not apply to Eagle River, Ft. Richardson, Elmendorf, or extended site offerings.)

ACCT 051 Recordkeeping for Small Business 1.0 CR
Provides an overview of what a bookkeeper does and the role he/she provides to a small business. Includes basic accounting and bookkeeping practices in reconciliation of bank accounts, payroll, payroll taxes, application for Federal I.D. numbers, State ESC numbers, business licenses, quarterly and annual reports, accounts receivable, depreciation, inventory, financial statements and income taxes.
Offered at Matanuska-Susitna College only.
Special Notes: Does not satisfy any degree requirements even as an elective.

ACCT 060 Personal Tax Preparation 2.0 CR
A review of significant tax information for intelligent preparation of one's own tax return. Includes an overview of the latest legislation, tax forms, and practical exercises in figuring personal tax returns.
Special Notes: Does not satisfy any degree requirements even as an elective.

ACCT 101 Principles of Financial Accounting I 3.0 CR
Prerequisite: MATH 055 with grade of C or better or equivalent Math Placement Test.
First semester principles of accounting. Introduces concepts and procedures for financial accounting. Emphasis on accounting cycle, recording, summarizing, and interpreting accounting data through presentation of formal financial statements.
Special Notes: ACCT 101 and ACCT 102 will satisfy requirement for ACCT 201. AAS accounting majors must take ACCT 101 and ACCT 102.

ACCT 102 Principles of Financial Accounting II 3.0 CR
Prerequisite: ACCT 101.
Second semester principles of accounting. Includes long-term debts and investments, analysis and preparation of cash flow statement. Provides overview of managerial accounting.
Special Notes: ACCT 101 and ACCT 102 will satisfy requirement for ACCT 201. AAS accounting majors must take ACCT 101 and ACCT 102.

ACCT 120 Bookkeeping for Business I 3.0 CR
Basic concepts and procedures of practical bookkeeping. Fundamental principles and practices necessary to record and report financial data in a service and merchandising business for manual systems and computerized systems.
Special Notes: May be offered as either classroom or open-entry, individualized course.

ACCT 121 Bookkeeping for Business II 3.0 CR
Prerequisite: ACCT 120.
Second semester college bookkeeping. Introduces bookkeeping concepts and procedures for the financial accounting for corporations with a general coverage of payroll accounting, special journals, voucher system, petty cash system, inventory bookkeeping procedures, uncollectible accounts receivable, plant assets and depreciation, notes and interest, and accrued items. Coverage of financial bookkeeping as related to the merchandising firm is used as an environment for bookkeeping topics.
Offered at Matanuska-Susitna College only.
Special Notes: May be offered as either classroom or open-entry, individualized course.

ACCT 201 Principles of Financial Accounting 3.0 CR
Prerequisite: MATH 105 or successful completion of placement test.
Introduction to financial accounting concepts and principles. Emphasis on the accounting cycle, recording and summarizing accounting data through the presentation of formal financial statements.
Special Notes: ACCT 101 and ACCT 102 will satisfy requirement for ACCT 201. AAS accounting majors must take ACCT 101 and ACCT 102.

ACCT 202 Principles of Managerial Accounting 3.0 CR
Prerequisite: ACCT 101 and ACCT 102, or ACCT 201; plus CIOS 110 or equivalent.
Studies the uses of accounting data internally by managers in directing the affairs of business and nonbusiness activities. Planning and control techniques include budgeting, product costing, breakeven analysis, and relevant costing decision analysis.

ACCT 210 Income Tax Preparation 3.0 CR
Prerequisite: ACCT 101 and 102; or ACCT 201.
Elements of federal income taxation applied with an individual emphasis, including preparation of forms.
Special Notes: ACCT 210 is not a prerequisite for ACCT 310 nor is it a substitute for ACCT 310.

ACCT 222 Introduction to Computers and Accounting 3.0 CR
Prerequisite: ACCT 101 and ACCT 102, or ACCT 201; plus CIOS 110 or faculty permission.
Identifies necessary accounting controls in a computerized environment; illustrates conversion of manual to computerized accounting system; demonstrates processing of accounting data on a computer.

ACCT 225 Accounting for Payroll, Receivables and Payables 3.0 CR
Prerequisite: ACCT 101 and ACCT 102, or ACCT 201; plus CIOS 110 or faculty permission.
Considers in detail, special accounting problems associated with processing and reporting on payroll, receivables and payables cycles. Covers manual and computerized applications.

ACCT 230 Financial Statement Preparation and Presentation 3.0 CR
Prerequisite: ACCT 101 and 102, or ACCT 201.
Emphasizes preparation and analysis of work papers to support year-end corporate financial statements. Includes an in-depth analysis of major balance sheet accounts and a study of financial statement presentation formats and requirements.

ACCT 240 Introduction to Cost Accounting 3.0 CR
Prerequisite: ACCT 202 or faculty permission.
Covers fundamentals of cost accounting and practical problems in the analysis of material, labor, and overhead costs. Emphasis on job cost system, the process cost system, and standard cost accounting.
Offered at Kenai Peninsula College only.

ACCT 270 Introduction to Governmental Accounting 3.0 CR
Prerequisite: ACCT 101 and 102, or ACCT 201.
Introduction to governmental accounting, including fund accounting. Emphasizes the differences between the purposes of financial and governmental accounting.
Special Notes: This course is not a prerequisite nor substitute for ACCT 402.

ACCT 301 Intermediate Accounting I 3.0 CR
Prerequisite: ACCT 202 and School of Business majors must be admitted to upper-division standing.
In-depth study of the accounting sequence, principles and rules governing financial statements and balance sheet accounts including cash, receivables, inventory, property, plant and equipment and intangibles.

ACCT 302 Intermediate Accounting II 3.0 CR
Prerequisite: ACCT 301 and School of Business majors must be admitted to upper-division standing.
A continuation of the study of intermediate accounting including the principles governing financial reporting of investments, liabilities, stockholders' equity, revenues and cash flows.

ACCT 310 Income Tax 3.0 CR
Prerequisite: ACCT 202 and School of Business majors must be admitted to upper-division standing.
The federal income tax law as it applies to individuals, sole proprietors, property transactions. Emphasizes research, theory and tax planning.

ACCT 316 Accounting Information Systems 3.0 CR
Prerequisite: ACCT 202 and School of Business majors must be admitted to upper-division standing.
A study of the role of the accounting information system within the organization including the components of personnel, hardware, software and data. Exposure to the design and maintenance of effective systems for internal and external information needs. Includes coverage of concepts of internal control, EDP auditing and emerging technology. Includes hands-on experience with a general accounting software package.

ACCT 342 Managerial Cost Accounting 3.0 CR
Prerequisite: ACCT 202 and School of Business majors must be admitted to upper-division standing.
Accounting as a planning and control device is studied by applying the concepts of cost flow, job order and process costing, flexible budgeting, standard cost analysis and relevant costing models.

ACCT 401 Advanced Accounting I 3.0 CR
Prerequisite: ACCT 302 and School of Business majors must be admitted to upper-division standing.
A study of accounting for expanded business entities. Includes accounting of joint ventures, partnerships, branches and parent-subsidiary consolidated statements.

ACCT 402 Advanced Accounting II 3.0 CR
Prerequisite: ACCT 302 and School of Business majors must be admitted to upper-division standing.
Selected topics to include the accounting for fiduciaries, franchises, real estate developments, pensions, deferred taxes, bankruptcies, earnings per share and complex inventory valuation methods.

ACCT 410 Advanced Income Tax 3.0 CR
Prerequisite: ACCT 302 and ACCT 310 and School of Business majors must be admitted to upper-division standing.
The study of the federal income tax law as it applies to partnerships and corporations. Emphasizes research, tax planning, and compliance procedures.

ACCT 411 Estate and Trust Tax Law 3.0 CR
Prerequisite: ACCT 302 and ACCT 310 and School of Business majors must be admitted to upper-division standing.
The study of transfer and income taxes involved with estate and trusts. Emphasizes research and tax planning.

ACCT 420 Natural Resource Accounting 3.0 CR
Prerequisite: ACCT 301 and ACCT 342 and School of Business majors must be admitted to upper-division standing.
A study of the unique accounting issues involved with the development and extraction of natural resources with emphasis on Alaskan issues. Topics include timber, mining, fisheries, oil and gas.

ACCT 425 Accounting for Alaskan Industries 3.0 CR
Prerequisite: ACCT 301 and ACCT 342 and School of Business majors must be admitted to upper-division standing.
Accounting issues dealing with basic Alaskan industries such as construction, regulated activities and petroleum.

ACCT 430 Governmental Accounting 3.0 CR
Prerequisite: ACCT 301 and School of Business majors must be admitted to upper-division standing.
Accounting and financial reporting for governmental entities including municipalities, states and the federal government. The municipal fund structure provides the foundation for understanding.

ACCT 435 Accounting for Not-For-Profit Organizations 3.0 CR
Prerequisite: ACCT 301 and School of Business majors must be admitted to upper-division standing.
The principles and practices of not-for-profit accounting for school districts, hospitals, colleges and universities, voluntary health and welfare, and other nonprofit organizations. Includes the latest pronouncements and contemporary issues.

ACCT 442 Advanced Cost Accounting and Controllership 3.0 CR
Prerequisite: ACCT 342 and School of Business majors must be admitted to upper-division standing.
Emphasis on accounting data for internal management decisions. Covers cost analysis for investment decisions, cost allocation processes, transfer pricing, and performance measures for decentralizing organizations. Includes contemporary cost accounting issues.

ACCT 452 Auditing 3.0 CR
Prerequisite: ACCT 302 and ACCT 316 and School of Business majors must be admitted to upper-division standing.
Study of professional standards applicable to independent auditor's examination of financial statements and related expression(s) of opinion.

ACCT 453 Internal Auditing 3.0 CR
Prerequisite: ACCT 302 and ACCT 342 and School of Business majors must be admitted to upper-division standing.
Covers auditing techniques (gathering and evaluating evidence) within a company, or governmental unit, to evaluate internal controls, compliance with policy and operational efficiency.

ACCT 454 Accounting Internship 3.0 CR
Prerequisite: Junior standing, GPA 2.5 or better in major, GPA 2.5 or better overall.
Work experience in an approved position with supervision and training in various phases of accounting.

ACCT 462 Contemporary Accounting Problems 6.0 CR
Prerequisite: ACCT 452, Senior standing and School of Business majors must be admitted to upper-division standing, or faculty permission.
Covers accounting, statistical, and ethical topics either not covered or covered superficially in the program requirements leading to the BBA-Accounting degree. Develops the additional proficiency necessary to meet entry level requirements for a career as a public accountant.

ACCT 480 Accounting Theory 3.0 CR
Prerequisite: ACCT 302 and School of Business majors must be admitted to upper-division standing.
Develops the unifying principles that explain the "whys" of accounting. Special emphasis on income measurement valuation problems and technical definitions.

ACCT 601 Accounting Foundations for Executives 3.0 CR
Prerequisite: Graduate standing.
A traditional survey of accounting for the core requirement in the MBA program. Covers common financial and managerial topics with brief exposure to systems, auditing, non-profit, partnerships and joint ventures.

ACCT 615 Tax Planning and Research 3.0 CR
Prerequisite: ACCT 410 and graduate standing or faculty permission.
Tax planning for individuals, business organizations, estates, and trusts explored by study of taxes which affect such plans. Special emphasis on planning for business organizations.

ACCT 620 Advances in Financial and Cost Management Accounting 3.0 CR
Prerequisite: ACCT 202 or ACCT 601.
A study of the state of the art advances in accounting that are reflective of the dynamics of today's highly competitive global business environment. Topics include financial accounting treatments that improve the financial reporting practices of current and emerging business organizations, and cost management issues that arise from innovative structures and operational processes.

ACCT 630 International Accounting 3.0 CR
Prerequisite: ACCT 202 or ACCT 601.
A study of the international dimensions of accounting. Topics include comparative financial accounting practices, the international standard setting structure, the analysis of foreign financial statements and international managerial accounting issues.

ACCT 650 Seminar in Executive Uses of Accounting 3.0 CR
Prerequisite: ACCT 601 and graduate standing or faculty permission.
Examines correct use and interpretation of accounting data. This involves the examination of financial statements, financial analysis, simulations, budgeting, examination of variances from budgets and forecasting the results of decisions.

ADT: AUTO-DIESEL TECHNOLOGY

Offered through the College of Career and Vocational Education, Auto/Diesel Building, Room J-207, 786-1461

ADT 071 Fundamentals of Diesel Engines 2.0 CR
Survey of different types, uses, operating conditions, and maintenance of diesel engines.
Offered at Kodiak College only.

ADT 081 Small Engine Repair 3.0 CR
Fees.
Teaches how to diagnose problems and make repairs.
Special Notes: Students usually supply own project engines and tools.
Offered at Matanuska-Susitna College only.

ADT 102 Auto Basics and Careers 3.0 CR
Prerequisite: Formal acceptance as ADT major.
Fees.
Provides information about careers in automotive and diesel industry. Instruction in shop safety, right to know, and MSDS, hand tools, fasteners and fittings, LOF service, cooling systems, wheel bearing service, drive shaft service, and precision measuring devices.

ADT 105 Beginning Diesel Engines 3.0 CR
Fees.
Fundamentals of basic diesel operation. Includes troubleshooting and preventive maintenance.

ADT 111 Power Trains I 3.0 CR
Prerequisite: Corequisite: ADT 102.
Fees.
Teaches theory , diagnosis and repair of automotive power train systems to include clutches, drive lines and all wheel drive systems.

ADT 112 Outboard Motors/Rigging 2.0 CR
Introduces outboard motors and boat rigging. Covers motor installation, propellers, boat design, and troubleshooting and repair of outboard motors. Includes the use of special tools related to boats and motors.
Offered at Matanuska-Susitna College only.

ADT 114 Power Trains II 3.0 CR
Prerequisite: ADT 111.
Fees.
Theory, diagnosis, and repair of automotive power train systems to include manual transmission, transaxles, drive axles, and differentials.

ADT 115 Automotive Technology—ASSET I 13.0 CR
Prerequisite: Formal acceptance into the UAA/FORD ASSET program.
Fees.
Provides the ASSET student with the prerequisite knowledge necessary to function effectively in the dealership environment and perform service related to

predelivery, minor "quick service" maintenance, and electrical charging systems.
Special Notes: Includes 280 hours of on-the-job training.

ADT 121 Auto Electrical I 3.0 CR
Prerequisite: Corequisite: ADT 102.
Fees.
History and origins of electrical theory through the generation of electricity. Diagnose, minor repair, and general service of alternators, starters, and batteries.

ADT 130 Basic Auto Engines 3.0 CR
Prerequisite: ADT 102.
Fees.
Theory of operation of major systems, partial disassembly and reassembly of a wide variety of modern automotive engine types. Focuses on engine system relationship and valve service. Not an engine overhaul course.

ADT 131 Auto Electrical II 3.0 CR
Prerequisite: ADT 121 and computer competency.
Fees.
Theory, diagnosis and repair of automotive electrical systems, to include testing tools, schematics, and computers.

ADT 135 Automotive Technology—ASSET II 13.0 CR
Prerequisite: Formal acceptance into the UAA/FORD ASSET program.
Fees.
Presents the fundamentals of Ford brake, suspension and steering systems operation and repair. Includes electronically controlled ABS (anti-lock brake systems), EVO (electronic variable orifice) steering systems, and electronically controlled suspension systems. Covers brake system overhaul and machining operations, wheel alignment service and tire balancing. Emphasizes safety in the diagnosis and repair of brake, suspension and steering systems using Ford approved methods and equipment.
Special Notes: Includes 280 hours of on-the-job training.

ADT 150 Brake Systems 4.0 CR
Prerequisite: ADT 121; concurrent enrollment in ADT 131.
Fees.
Theory, diagnosis, and repair of automotive brake systems.

ADT 162 Suspension and Alignment 4.0 CR
Prerequisite: ADT 121; concurrent enrollment in ADT 131.
Fees.
Modern automotive suspension, alignment, and steering theory, inspection, service, and adjustments including four wheel alignment.

ADT 195 Automotive Practicum I 6.0 CR
Prerequisite: At least 12 credits of advisor approved ADT program technical courses; valid Alaska driver's license.
Provides supervised workplace experience in selected industry settings. Integrates knowledge and practice to achieve basic skill competencies.

ADT 211 Auto Fuel Systems 4.0 CR
Prerequisite: ADT 195; concurrent enrollment in ADT 212 and ADT 214.
Fees.
Current fuel system theory and practice on modern vehicles. Includes fuels, fuel tanks and lines, pumps, fuel control devices, including carburetion, feedback carburetion, fuel injection, and supercharging.
Special Notes: Specialty tools required.

ADT 212 Engine Performance 6.0 CR
Prerequisite: ADT 131; concurrent enrollment in ADT 211 and ADT 214.
Fees.
Current methods of engine performance testing, diagnosis, and adjustment. Includes basic engine diagnosis, use of diagnostic scopes, scanners, and electronic engine controls.
Special Notes: Specialty tools required.

ADT 214 Emission Systems 4.0 CR
Prerequisite: ADT 130; concurrent enrollment in ADT 211 and ADT 212.
Fees.
Introduces current emission system operations, diagnosis, service, and effect on tailpipe emissions. Prepares student for current MOA/State test for I/M certification.
Special Notes: Specialty tools required.

ADT 215 Automotive Technology—ASSET III 13.0 CR
Prerequisite: Formal acceptance in the UAA/FORD ASSET program.
Fees.
Covers the theory, diagnosis, service and repair of automotive engines and Ford climate control systems. Provides the ASSET student with the prerequisite knowledge necessary to function effectively in the dealership environment and perform service related to engine diagnosis and repair, climate control system diagnosis and repair.
Special Notes: Includes 280 hours of on-the-job training.

ADT 225 Auto Heating and A/C 3.0 CR
Prerequisite: ADT 131.
Fees.
Theory, diagnosis and repair of automotive heating and air conditioning systems.

ADT 227 Auto Electrical III 3.0 CR
Prerequisite: ADT 131.
Fees.
Theory, diagnosis and repair of automotive electrical and electronic systems, to include accessories.
Special Notes: Speciality tools required.

ADT 235 Automotive Technology—ASSET IV 13.0 CR
Prerequisite: Formal acceptance into the UAA/FORD ASSET program.
Fees.
Covers the theory, diagnosis, service an repair of Ford electronic engine control systems, ignition, fuel and emission control systems. Provides the ASSET student with the prerequisite knowledge necessary to function effectively in the dealership environment and perform service related to electronic engine control systems and perform
diagnosis of driveability concerns related to electronically controlled ignition, fuel and emission systems.
Special Notes: Includes 280 hours of on-the-job training.

ADT 241 Diesel Fuel Systems 2.0 CR
Prerequisite: Third semester diesel student or faculty permission. Requires concurrent enrollment in ADT 245 and ADT 246.
Fees.
Develops working knowledge needed for proper servicing of major diesel fuel systems used in northwestern United States.

ADT 243 Heavy-Duty Electrical Systems 3.0 CR
Prerequisite: Knowledge of basic electricity and/or experience with electrical systems.
Fees.
Provides students with theory and diagnostic skills for heavy-duty starters, alternators, and circuits. Integral part of third semester diesel technology program.

ADT 245 Diesel Engines 2.0 CR
Prerequisite: Third semester diesel student or faculty permission. Requires concurrent enrollment in ADT 241 and ADT 246.
Fees.
Provides students and technicians with exposure to two- and four-stroke diesel engines, and related systems such as airspace induction, coolant, and lubrication.

ADT 246 Diesel Service Laboratory I 5.0 CR
Prerequisite: Third semester diesel student or faculty permission. Requires concurrent enrollment in ADT 241 and ADT 245.
Fees.
Gives student technicians hands-on experience in structured laboratory setting. Provides students with ability to diagnose and correct functional problems related to fuel, electrical, and diesel components.
Special Notes: Basic tool set and diesel tool set required.

ADT 248 Diesel Service Laboratory II 6.0 CR
Prerequisite: Fourth semester diesel student or faculty permission. Requires concurrent enrollment in ADT 261, ADT 263 and ADT 265.
Fees.
Provides the related laboratory/shop experience to learn how to diagnose and correct functional problems related to power trains, chassis and hydraulics.
Special Notes: Basic tool set and diesel tool set required.

ADT 255 Automotive Technology—ASSET V 13.0 CR
Prerequisite: Formal acceptance into the UAA/FORD ASSET program.
Fees.
Covers the theory, diagnosis, service and repair of Ford automatic and manual transmissions, transaxles, clutches, all wheel drive systems, drive lines and differentials. Provides the ASSET student with the prerequisite knowledge necessary to function effectively in the dealership environment and perform service related to automatic and manual transmissions, transaxles, clutches, all wheel drive systems, drive lines and differentials.
Special Notes: Includes 280 hours of on-the-job training.

ADT 261 Hydraulics 2.0 CR
Prerequisite: Fourth semester diesel student or faculty permission. Requires concurrent enrollment in ADT 263, ADT 265 and ADT 248.
Fees.
Provides working knowledge for proper troubleshooting and servicing of hydraulic systems.

ADT 263 Heavy-Duty Power Trains 2.0 CR
Prerequisite: Fourth semester diesel student or faculty permission. Requires concurrent enrollment in ADT 261, ADT 265 and ADT 248.
Fees.
Expands knowledge and skills of light-duty technicians in field of heavy-duty power trains.

ADT 265 Heavy-Duty Chassis 2.0 CR
Prerequisite: Fourth semester diesel student. Requires concurrent enrollment in ADT 261, ADT 263 and ADT 248.
Fees.
Provides technical background to diagnose and repair heavy-duty airbrake and chassis components.

ADT 282 Power Trains III 3.0 CR
Prerequisite: ADT 114 and ADT 131.
Fees.
Theory, diagnosis and repair of automotive power train systems to include automatic transmissions and transaxles.
Special Notes: Specialty tools required.

ADT 295 Automotive Practicum II 3.0 CR
Prerequisite: ADT 195, Dept. approval, and valid Alaska driver's license.
Provides supervised workplace experience in industry settings. Integrates advanced level knowledge and practice to achieve skill competencies.

AET: ARCHITECTURAL AND ENGINEERING TECHNOLOGY

Offered through the College of Career and Vocational Education, Classroom Building (K), Room 208A, 786-1669

AET 100 Fundamentals of Drafting 3.0 CR
Fees.
Basic course in college drafting, designed to provide students with the fundamental skills and knowledge necessary to communicate using language of industry.
Special Notes: For non-majors only.
Offered at Matanuska-Susitna College only.

AET 101 Fundamentals of Drafting for Building Construction 3.0 CR
Fees.
Basic drafting skills necessary in survey and civil engineering, architectural, mechanical, structural, and electrical drafting within the building construction fields. Introduction to building construction industry, including relationships between architects, engineers, drafters, and technicians.

AET 102 Specifications and Materials for Building Construction 4.0 CR
Fees.
Investigation of building specification types, language style, writing formats, and information sources, including the CSI Masterformat. Analysis of building materials, structural components, code requirements, construction processes, and assemblies. Community field project involving team research of current Alaskan building types.

AET 111 Topography and Land Development Drafting 3.0 CR
Prerequisite: AET 101 and 102, or faculty permission.
Fees.
Introduction to United States rectangular descriptions and written land descriptions in mapping. Construction of topography maps using interpolating methods and extensive ink drafting in plat preparation.

AET 121 Architectural Working Drawings and Office Practice 3.0 CR
Prerequisite: AET 101 and 102, or faculty permission.
Fees.
Introduction to technical skills needed by architectural drafters and technicians to work with architects. Includes office practices, staff relationships, and architectural working drawing production. Develops technical skills in architectural drawing symbols, conventions, dimensioning systems, reference systems, sheet organization, code requirements, and research methods for detailing light commercial buildings.

AET 122 Architectural Presentation Techniques 3.0 CR
Prerequisite: AET 121 or faculty permission.
Fees.
Technical training for architectural drafters or technicians with special emphasis on economical, time-efficient presentation drawings. Includes reproduction processes and art media for graphic communication of architectural projects. Develops technical skills in use of pencil, ink, and design markers for plan, elevation, and perspective drawings. Delineation techniques for building materials, entourage, cars, people, and composition layout.

AET 131 Structural Working Drawings and Office Practice 3.0 CR
Prerequisite: AET 101 and 102, or faculty permission.
Fees.
Introduction to technical skills needed by structural drafters and technicians to work with structural engineers. Includes office practices, staff relationships, and structural working drawing production. Develops technical drafting skills in symbols, conventions, dimensioning systems, reference systems, sheet organizations, code analysis and research methods for steel, wood, and reinforced concrete building structures.

AET 141 Mechanical Building Equipment Systems Design and Drafting 3.0 CR
Prerequisite: AET 101 and 102, or faculty permission.
Fees.
Application of technical computer analysis, theory, drafting, and code requirements to design and produce working drawings for mechanical building systems. Includes water supply, liquid waste, heating, ventilation, and air conditioning. Develops technical drafting skills in mechanical symbols, conventions, dimensioning systems, reference systems, and research methods for residential and light commercial mechanical building equipment.

AET 151 Electrical Building Equipment Systems Design and Drafting 3.0 CR
Prerequisite: AET 101 and 102, or faculty permission.
Fees.
Application of technical computer analysis, theory, drafting and code requirements to design and produce working drawings for electrical building systems. Includes fundamentals of electricity, AC/DC circuits, servicing, relay/distribution panels, branch circuiting, lighting, sound and signal communication systems. Develops technical drafting skills in electrical symbols, conventions, dimensioning systems, reference systems, and research methods for residential and light commercial electrical building equipment.

AET 161 Blueprint Reading for the Construction Industry 1.0 CR
Prerequisite: High school reading and writing skills and math including addition and subtraction of fractions and decimals.
Fees.
Introduction to skills and techniques needed to correctly interpret working drawings used in construction field.
Special Notes: Does not meet AET certificate or degree requirements.

AET 162 Cost Estimating for General Contractors 2.0 CR
Prerequisite: High school math, reading, and writing skills. AET 161, field experience, or faculty permission.
Fees.
For general contractors, subcontractors, and tradespeople. Introduction to skills and techniques needed to produce cost-effective bid proposals for residential and light commercial building projects. Emphasis on quantity/material take-offs, bid proposal forms, and scheduling.
Special Notes: Does not meet AET certificate or degree requirements.

AET 171 Building Your Own Home 3.0 CR
Prerequisite: Basic high school English and math skills recommended.
Fees.
Introduces practical techniques and methods for planning, designing, constructing and remodeling owner-built single-family houses.
Special Notes: Does not meet AET certificate or degree requirements.

AET 211 Subdivision Design and Land Classification 4.0 CR
Prerequisite: AET 111 or faculty permission.
Fees.
Elements of subdivision design using federal, state, and municipal platting regulations for subdivisions. All stages of office work, including topographic mapping. Covers preservation, conservation, utilization, and classification of land.

AET 212 Advanced Site Development Techniques 3.0 CR
Prerequisite: AET 101, 102, 111, 211, or faculty permission.
Fees.
Introduction to procedures, terminology, and skills necessary for application of surveying, topography, and plotting software packages for the HP80 series computers and hand-held programmable calculators used by civil engineering and survey technicians. Projects include earthwork, topography, surface modeling and plotting.

AET 221 Design Development for Architectural Technicians 4.0 CR
Prerequisite: AET 121 and 122, or faculty permission.
Fees.
Analysis and use of design methodology, processes, and vocabulary needed by architectural technicians to work with architectural designers during schematic and design development. Includes graphic skills in schematic drawings for small Alaskan residences and office buildings. Develops technical skills in research and systematic design methods, documentation, graphic layout, binding, and reproduction techniques for design proposal reports.

AET 231 **Structural Design and Detailing for Engineering Technicians** **3.0 CR**

Prerequisite: AET 131, or faculty permission. High school or college trigonometry recommended.
Fees.

Methods of analysis and communication for structural technicians working with structural engineers. Includes statics and stability of simple structural systems, development of stress/strain relationships, beam and truss mechanics. Introduction to trigonometric, graphic, and computer analysis with focus on connection detailing and code requirements for wood, concrete, and steel construction.

AET 281 **Basic 2-D CADD** **4.0 CR**

Prerequisite: High school completion and freshman level reading, writing, and math skills. AET 101, 102 plus 3 additional AET credits; or previous drafting experience with faculty permission.
Fees.

Introductory 2-dimensional computer-aided drafting/design (CADD) course covering system organization, vocabulary/terminology, and creation/manipulation of 2-D drawings through hands-on experience with minicomputer-based drafting/design software. Projects taken from building construction fields of architecture, civil engineering, surveying, structural engineering, mechanical engineering, and electrical engineering.

AET 295 **Architectural and Engineering Tech Internship** **1.0-3.0 CR**

Prerequisite: Sophomore standing and faculty permission.
Fees.
Grading Policy: Pass/No Pass.

Places students in generalized and specialized architectural, engineering or building construction offices related to student educational program and occupational objectives. Direct supervision by architect, engineer, or contractor professional, program faculty, and cooperative education director.

AET 381 **Geographic Information Systems: Technology and Applications** **4.0 CR**

Prerequisite: CS 202, MATH 200, AS 252.
Fees.

Current Geographic Information Systems theoretical/technical basis and application of commercially available GIS computer software and hardware, diversity in GIS application and approaches, reliability and validity of data systems.

AGRI: AGRICULTURE

Offered through Matanuska-Susitna College, Glenn Massay, Director, P.O. Box 2889, Palmer, 99645, 745-9721

AGRI 100 **Survey of Agriculture (Agriculture in Our Lives)** **3.0 CR**

Concepts and techniques of agriculture; past, present and future agricultural industry; food and fiber production; land grant university system; agriculture careers; overview of world, U.S. and Alaskan agriculture.
Offered at Matanuska-Susitna College only.

AGRI 101 **Introduction to Plant Science I** **3.0 CR**

Prerequisite: High school biology and chemistry recommended.

Principles of identification, adaptation, management and utilization of field and horticultural crops for food and fiber. Fundamentals of crop management, breeding, weed control and crop quality.
Offered at Matanuska-Susitna College only.

AGRI 102 **Introduction to Plant Science II** **3.0 CR**

Prerequisite: AGRI 101 or faculty permission.

Principles of plant science as related to production of economic crops with special attention to management and marketing of those grown in Alaska.
Offered at Matanuska-Susitna College only.

AGRI 103 **Introduction to Soil Science** **3.0 CR**

Prerequisite: High school biology and chemistry recommended.

Stresses properties of soils and how they affect plant growth, soil texture, structure, moisture retention, chemistry, fertility, temperature, biological activity and organic matter. Covers liming, fertilization, nutrient deficiencies, and irrigation for agricultural plants.
Offered at Matanuska-Susitna College only.

AGRI 104 **Conservation of Natural Resources** **3.0 CR**

Consideration of natural resources including discussion of their biological and physical nature, social and economic aspects of use, conflicts of use, and alternative means for conservation.
Special Notes: Majors in all fields are welcome.
Offered at Matanuska-Susitna College only.

AGRI 109 **Mini-Ranch Livestock Production** **3.0 CR**

Designed for the backyard animal producer. Emphasis on animal and poultry production, practices and skills necessary for enjoyment of successfully raising and using them to benefit mini-farm operator and family.
Offered at Matanuska-Susitna College only.

AGRI 110 **Introduction to Animal Science** **3.0 CR**

Prerequisite: High school biology and chemistry recommended.

Basic course in animal husbandry including importance and place of livestock in agriculture; types, market classes and grades of beef, sheep and swine; origin and characteristics of breeds, and judging of beef, sheep and swine.
Offered at Matanuska-Susitna College only.

AGRI 113 **Practical Horsemanship I** **3.0 CR**

Basic health, feeding, and physical care. Coupled responsibilities of horse ownership. Fundamental behavior and training for the beginner.
Offered at Matanuska-Susitna College only.

AGRI 115 **Basic Horse Behavior and Training I** **3.0 CR**

Introduces principles necessary for understanding horse behavior and physical development of the riding horse. Presents principles and procedures of communication, and horse training from halter training to mounted work. Includes actual handling and training of horses.
Offered at Matanuska-Susitna College only.

AGRI 120 **Introduction to Agriculture Business** **3.0 CR**

Economics of agriculture production. The management principles in agriculture and the demand for farm products, principles of marketing and price determination. Identification of individual problems and alternative approaches to their solution.
Offered at Matanuska-Susitna College only.

AGRI 121 **Marketing Alaska Farm Products** **3.0 CR**

Covers organization and function of nation's food system. Emphasis on farm commodities produced in Alaska, and organizational and infrastructural problems encountered in marketing of farm commodities. Food marketing problems treated from vantage points of producers, processors, distributors and consumers.
Offered at Matanuska-Susitna College only.

AGRI 133 **Motors and Controls** **3.0 CR**

Cross-Listed: RH 120 and ET 120.

Provides understanding of principles of operation of motors, generators, transformers and motor control apparatus. Study of definitions, symbols, diagrams and illustrations gives a sound background in the language and basic principles associated with electricity, electrical equipment, electrical apparatus and electrical code principles.
Offered at Matanuska-Susitna College only.

AGRI 136 **Introduction to Horticulture** **3.0 CR**

Reviews plant structure and growth; soils; plant nutrition; plant propagation; potting media; fertilizers; indoor plant care; light management; container gardening; interior landscaping; greenhouse growing and plant forcing.
Offered at Matanuska-Susitna College only.

AGRI 138 **Organic Gardening** **1.0-3.0 CR**

Grading Policy: Pass/No Pass.

Introduces organic methods and materials for ecological agriculture covering soil management, crop rotations, weed control, pest management, garden planning, planting, harvesting, storage, French intensive methods, and compost.

AGRI 139 **Modern Home Gardening** **3.0 CR**

Fees.

Principles of gardening—comprehensive coverage of plants, soils and climates, the basic elements with which the gardener must deal. Practices of gardening—the manipulation of the basic elements; growing of important vegetables, herbs, perennial food plants and flowers.
Offered at Matanuska-Susitna College only.

AGRI 140 **Crop Production** **3.0 CR**

The adaptation, production, utilization, and improvement of cereal grains and forage crops for food, feed, soil improvement, and conservation purposes in the Alaskan environment.
Offered at Matanuska-Susitna College only.

AGRI 200 **Agriculture in Alaska: Past, Present, and Future** **3.0 CR**

Historical review of development of agriculture in Alaska from the time the Russians settled Alaska until present. Study of development problems such as climatic limitations, economic feasibility, and problems of production and marketing. Covers both progression and regression of Alaskan agriculture from Russian era to present. In-depth analysis of present agricultural production and development emphasizing support provided by the state of Alaska. Considers Alaska's agricultural potential, i.e., basic agricultural resources, systems for using the basic resources, and the effects of economic factors and markets on agricultural development. Briefly

looks at Alaska's forests including a general description, past history and future potential.
Offered at Matanuska-Susitna College only.

AGRI 201 Forage Management 3.0 CR
Prerequisite: AGRI 101 and 103.
Distribution, morphology, identification, physiology, management and utilization of forage crops for hay, silage, and pasture for livestock, and for soil improvement and soil conservation.
Offered at Matanuska-Susitna College only.

AGRI 209 Apiculture and Pollination 2.0 CR
Biology of honeybee and some wild bees. Relationship between bees and flowering plants. Value of bees in crop production. Introduction to management and skills necessary for keeping bees. Visit to local apiary when feasible.
Offered at Matanuska-Susitna College only.

AGRI 210 Applied Animal Nutrition 3.0 CR
Prerequisite: AGRI 110 and either CHEM 105 or BIOL 105 or faculty permission.
Study of digestion, absorption, assimilation and utilization of nutrients, principle feeds, minerals and vitamins, rations and nutritive ration as utilized by domestic animals.
Offered at Matanuska-Susitna College only.

AGRI 212 Beef Production 3.0 CR
Introduces feeding, breeding management, and marketing. Emphasizes growth and development; costs and returns; feed requirements; reproduction and crossbreeding; performance testing; housing; and diseases.
Offered at Matanuska-Susitna College only.

AGRI 213 Practical Horsemanship II 3.0 CR
Introduces fundamentals of training and care of light horses. Covers theories of horse behavior as related to training and performance. Emphasizes health and care of horses in Alaska's environment. Intended to be academic but practical course with hands-on training.
Offered at Matanuska-Susitna College only.

AGRI 215 Basic Horse Behavior and Training II 3.0 CR
Focuses on practical psychology of riding, and introduces basic principles and methods of training the performance horse from mounting of the horse to training skills under saddle. Includes the actual starting and training of green horses.
Offered at Matanuska-Susitna College only.

AGRI 216 Basic Horse Behavior and Training III 3.0 CR
Prerequisite: AGRI 215.
Focuses on the advanced psychology of riding to include principles and methods of training the performance horse from mounting of the horse to training skills under saddle. Includes the actual training of horses and implementation of skills learned in AGRI 215.

AGRI 220 Agricultural Business 3.0 CR
Prerequisite: AGRI 120.
Application of fundamental principles of records and accounting in organization and management of agricultural enterprises.
Offered at Matanuska-Susitna College only.

AGRI 227 Landscape Design: A Home Owner's Approach 3.0 CR
Prerequisite: AGRI 101 and 139 recommended.
Designed for the beginning home landscaper. Covers landscape design techniques, plant selection and use, and plant and site relationships. Considers user/designer interactions. Some elementary drafting will be integrated into the planning, preparation and interpretation of a landscape plan.
Offered at Matanuska-Susitna College only.

AGRI 231 Essentials of Forestry Practice 3.0 CR
Introduction to basic concepts and practical methods of forestry; characteristics and growth requirements of forest trees; operations and practices in forest management, logging, processing of wood products, marketing and forest protection. Fieldwork is an essential part of the course.
Offered at Matanuska-Susitna College only.

AGRI 234 Land Resource Economics 3.0 CR
A systematic description and study of economic concepts relating to the use and possession of land resources. Surveys Alaska's land resources and their importance to the state's development and economy.
Offered at Matanuska-Susitna College only.

AGRI 240 Greenhouse Operation and Management 3.0 CR
Covers principles of management and operation of both home and commercial greenhouses. Includes greenhouse construction, heating, cooling, root media, root media pasteurization, watering, fertilization, carbon dioxide fertilization, light and temperature management, chemical growth regulation, insect and disease control, and the management of several selected crops.
Offered at Matanuska-Susitna College only.

AGRI 241 Bedding Plant Production 2.0 CR
Covers fundamentals of raising bedding plants; seed sowing; soil media and soil sterilization, containers, transplanting, and fertilization. Discusses different systems of raising bedding plants.
Offered at Matanuska-Susitna College only.

AGRI 250 Poultry Science 3.0 CR
Introduces poultry in the agricultural economy. Covers fundamental principles of anatomy, physiology and body systems, diseases, their prevention and control; and management practices and procedures in producing poultry, meat and eggs.
Offered at Matanuska-Susitna College only.

AGRI 260 Horticultural Practices 3.0 CR
Fees.
Culture, morphology and cultivars of vegetables, potatoes and ornamental crops. Emphasis directed to garden, field, greenhouse and nursery production in Alaska. Special emphasis on bedding plant production.
Offered at Matanuska-Susitna College only.

AGRI 295 Individualized Practicum 1.0-3.0 CR
Prerequisite: Faculty permission.
Individual work on a field, laboratory, or library research problem of special interest to the student.
Offered at Matanuska-Susitna College only.

AGRI 337 Plant Propagation 3.0 CR
Prerequisite: AGRI 102 or faculty permission.
Includes sexual and asexual propagation of plants; hybrid seed production; pollination and fertilization along with seed cleaning, drying, dormancy, germination and certification. Covers vegetative cuttings, stock plant production, the use of growth regulators, rooting and grafting, plus bulbs, corms and tubers. Considers micro-propagation and environmental control of root development.
Offered at Matanuska-Susitna College only.

AKNS: ALASKA NATIVE STUDIES

Offered through the College of Arts and Sciences, Classroom Building (K), Room 101, 786-1123.

AKNS 101 Alaska Native Languages I 4.0 CR
Fees.
Introductory course to a selected Alaska Native language for beginners with no, or little, prior knowledge of the specific language. Aural/oral skills are stressed and TPR (Total Physical Response) and/or other communicative approaches used. Emphasis is on everyday vocabulary, structure, and phonetics. A brief history of Alaska Native languages is included.
Special Notes: May be repeated for credit if the language varies. Languages currently available: Central Yup'ik (AKNS 101A), Siberian Yupik (AKNS 101B), and Tlingit (AKNS 101C).

AKNS 102 Alaska Native Languages II 4.0 CR
Prerequisite: AKNS 101 in the respective language.
Fees.
Continuation of introductory course to a selected Alaska Native language for students with some prior knowledge of the specific language. Aural/oral skills are stressed and TPR (Total Physical Response) and/or other communicative approaches used to increase comprehension and speaking proficiency. Continued emphasis on pronunciation, everyday vocabulary, structure and communication in survival situations. Introduction to reading and writing in the language.
Special Notes: May be stacked with AKNS 109 in the respective language. Languages currently available: Central Yup'ik (AKNS 102A), Siberian Yupik (AKNS 102B), and Tlingit (AKNS 102C).

AKNS 109 Alaska Native Language Orthography 4.0 CR
Prerequisite: Native or near-native oral proficiency in the respective language.
Fees.
An introduction to reading and writing a selected Alaska Native language for students with Native or near-native oral proficiency in the respective language. Students are introduced to alphabet and phonetic classification, to dialect differences, and to the history of the written language. Students practice reading and writing the language.
Special Notes: May be stacked with AKNS 102 in the respective language. May be repeated for credit if language varies. Languages currently available: Central Yup'ik (AKNS 109A), Siberian Yupik (AKNS 109B), and Tlingit (AKNS 109C).

AKNS 201 Native Perspectives 3.0 CR
Prerequisite: AKNS 101 or 102 or 109.
Fees.
Introduction to Alaska Native perspectives on time, philosophy and spirituality, communication, justice, and their ecology, and their relationship to contemporary issues. Includes overviews of Alaska Native peoples and of language groups necessary to an understanding of the diversity of Native perspectives.

AKNS 401 Seminar: Cultural Knowledge of Native Elders 3.0 CR
Prerequisite: AKNS 201.
Fees.
Provides students exposure to and interaction with prominent Alaska Native tradition bearers in order to ascertain knowledge of the traditional values, culture, and world views which comprise the heritage of Alaska Native people. Students will gather information on traditional values, governance, and leadership by eliciting accounts of the elders' experiences, and by comparing Native and "western" culture, will better understand the significance of cultural differences in world view, heritage, and communication.

ANTH: ANTHROPOLOGY

Offered through the College of Arts and Sciences, Beatrice McDonald Building (BMB), Room 214, 786-1344

ANTH 101 Introduction to Anthropology 3.0 CR
Introduction to fundamentals of the four subfields of anthropology: archaeology, cultural anthropology, biological anthropology and anthropological linguistics. The course introduces basic ideas, methods and findings of anthropology.
Special Notes: Recommended for majors and non-majors.

ANTH 200 Natives of Alaska 3.0 CR
Introduction to culture and history of Alaska Natives. Includes environmental settings, linguistic subdivisions, traditional sociocultural organization and subsistence patterns, contact with non-native groups, and contemporary issues.

ANTH 202 Cultural Anthropology 3.0 CR
Introduction to the methods, theories, and fundamental concepts for the study of cultural systems. Includes social relationships, economic organization, political systems, symbols and beliefs. Serves as foundation for more specialized courses in cultural anthropology.

ANTH 205 Biological Anthropology 3.0 CR
Introduction to human behavior, genetics, classification and evolution with comparisons to other primates. Examines distribution, morphological and physiological adaptations of human populations.

ANTH 210 Introduction to Anthropological Linguistics 3.0 CR
Introduction to concepts in anthropological linguistics. This course examines approaches to representing structures of the language of the world and such topics as folk taxonomies, typologies, kinship, communicative interaction, and language change and variation, all in relation to cultures and societies.

ANTH 211 Fundamentals of Archaeology 3.0 CR
Introduction to basic concepts, theories, and methods of archaeology with overview of historical development and major findings. Prepares students for summer field schools and more specialized courses.

ANTH 250 The Rise of Civilization 3.0 CR
A survey of the emergence of civilization in human cultural development. Covers development of domestication, urbanization, trade, and state formation in a comparative framework. Emphasizes non-western civilizations: China, India, Southeast Asia, Mesoamerica, South America and Africa.

ANTH 260 Old World Archaeology 3.0 CR
Tracing human developments in Asia, Africa, and Europe from the origins of humanity to the rise of the first civilizations.

ANTH 270 Cross-Cultural Perspectives on Women 3.0 CR
Surveys women cross-culturally exploring the nature of the relationship between gender and sex roles. Factors determining the status of women are sought in subsistence, mobility and access to power. Follows the female from subhuman primate, to the roles they've played as gatherers and goddesses, to movements such as the Chinese revolution and western feminism.

ANTH 312 North American Archaeology 3.0 CR
Prerequisite: ANTH 211 recommended.
Tracing human developments in the New World north of Mexico up to European contact.

ANTH 316 Arctic Archaeology 3.0 CR
Prerequisite: ANTH 211 recommended.
Origins and development of the prehistoric cultures of northern North America.

ANTH 324 Culture and Personality 3.0 CR
Prerequisite: ANTH 202 or SOC 101 recommended.
Examination of the relationship between culture, social institutions, and psychological variables on a cross-cultural basis.

ANTH 325 Cook Inlet Anthropology 3.0 CR
Study of the peoples and cultures of the Native, Russian and American periods of the Cook Inlet region. Includes original archaeological studies and ethnohistoric documents.

ANTH 326 Arctic Ethnology 3.0 CR
Ethnic groups and cultures of the circumpolar area, Siberia to Greenland.

ANTH 330 Ancient Civilizations of Mexico and Guatemala 3.0 CR
Study of the origin, development and collapse of prehistoric cultural systems in Mexico and Guatemala. Includes basic description and theoretical analysis of different cases.

ANTH 333 Peoples and Cultures of Southeast Asia 3.0 CR
Prerequisite: ANTH 202 recommended.
Cultural variation and unifying traditions of Southeast Asian peoples, including their prehistory, early cultural influences, effects of European contact, major cultural traditions and selected current issues.

ANTH 335 Native North Americans 3.0 CR
Prerequisite: ANTH 202 recommended.
Traditional cultures of Native North Americans, effects of contact with Europeans and contemporary adaptations.

ANTH 340 Urban Anthropology 3.0 CR
Prerequisite: ANTH 202 recommended.
Evolution of urban society: the preconditions of urban life technologically, demographically, and organizationally. The development of urban anthropology. A consideration of the major theories related to urban ecology and urbanization in the developing world, with special attention to the impact of migration. Current problems and research methods examined.

ANTH 354 Culture and Ecology 3.0 CR
Prerequisite: ANTH 202.
Anthropological approaches to the relationships between cultural and ecological systems. The notion of culture as an adaptive system and the role of various cultural subsystems in different adaptations. Intensive study of selected cases provides empirical grounding for theoretical formulations.

ANTH 355 Medical Anthropology 3.0 CR
Study of the relationship of human culture to health and disease. Includes ancient disease and impact on human evolution, interrelationship between biology and culture, alternative health systems and applicability to contemporary problems.

ANTH 361 Language and Culture 3.0 CR
Study of the relationship between language and culture with coverage of such topics as language variation, meaning in culture, taxonomies, and phonemic principles.

ANTH 371 Selected Topics 1.0-3.0 CR
Topic varies.
Special Notes: May be repeated for credit.

ANTH 400 Anthropology of Religion 3.0 CR
Prerequisite: ANTH 202 recommended.
Descriptive and comparative study of religious phenomena in traditional societies including myth, ritual, magic, witchcraft, and shamanism.

ANTH 403 Anthropological Perspectives on Education 3.0 CR
Prerequisite: ANTH 202 recommended.
Anthropological approaches to education as behavioral transmission. The role of formal and non-formal educational systems in different cultural systems. Anthropological perspectives on "schooling" including extensive use of case study materials.

ANTH 410 History of Anthropology 3.0 CR
Prerequisite: ANTH 202 or faculty permission.
Development of the science of anthropology, stressing the leaders in the field and the theories developed.

ANTH 420 Economic Anthropology 3.0 CR
Prerequisite: ANTH 202 recommended.
Anthropological approaches to the production, distribution, and consumption of resources in human cultural systems. The organization and operation of preindustrial economics in relation to other cultural subsystems. Internal and external models of economic development.

ANTH 430 Field Methods in Cultural Anthropology 3.0 CR
Prerequisite: ANTH 202.
Methods for field work in cultural anthropology, focusing on both quantitative and qualitative research strategies.

ANTH 431 Field Methods in Archaeology 1.0-8.0 CR
Prerequisite: Faculty permission.
Introduction to the basic techniques of archaeological data recovery and recording, laboratory processing and preliminary analysis of archaeological material.
Special Notes: May be repeated once for credit.
Taught summers in a field situation.

ANTH 435 Northwest Coast Cultures 3.0 CR
Prerequisite: ANTH 202 or faculty permission.
An intensive appraisal of peoples of the Northwest Coast, emphasizing various interpretations of cultural history, cultural variation and cultural contact.

ANTH 436 Aleut Adaptations 3.0 CR
Intensive study of traditional and post-contact Aleut culture. Includes origins, prehistory, biological and cultural adaptations. Also considers contemporary Aleut social, economic and political status.

ANTH 456 Anthropology and the Law 3.0 CR
Cross-Listed: JUST 456.
This course will study variations cross-culturally in forms of social control or law, including traditional Alaskan Native forms. Moving beyond the purely theoretical concerns of law cross-culturally, this course will investigate legal service delivery problems in cross-cultural settings, drawing upon both anthropological knowledge and jurisprudence in cross-cultural settings. Ways for improving legal service delivery systems will be examined.

ANTH 480 Analytical Techniques in Archaeology 3.0 CR
Prerequisite: Faculty permission.
Methods and techniques of description, classification, and analysis of archaeological data. Laboratory work with archaeological specimens and data is emphasized.
Special Notes: May be repeated once for credit.

ART: ART

Offered through the College of Arts and Sciences, Arts Building (ARTS), Room 302A, 786-1783

ART 100 Studio Art Activities 1.0-3.0 CR
Fees.
Individual studio projects, lectures, and field trips to introduce possible areas for concentrated study. Recommended for students seeking initial exposure to arts such as but not limited to ceramics, photography, design, printmaking, weaving, sculpture, and painting.
Special Notes: Does not satisfy BA in Art or BFA degree requirements. May be repeated for credit.

ART 105 Beginning Drawing 3.0 CR
Fees.
Introduction to elements of drawing. Dry and wet media such as pencil, charcoal, and ink. Class and homework assignments in drawing objects, still lifes, perspective effects, and human forms.
Special Notes: May be stacked with ART 205, ART 305, and ART 405.

ART 111 Two-Dimensional Design 3.0 CR
Fees.
Study of organization, structure, and composition of form through use of basic design elements such as line, shape, and value. Emphasis is on development of design as related to two-dimensional art.

ART 112 Color Design 3.0 CR
Fees.
Two-dimensional study of fundamentals of color and visual perception. Design projects will emphasize evaluation and mixing of color and include development of a color wheel to acquire understanding of contrast in hue, value, and intensity.

ART 113 Three-Dimensional Design 3.0 CR
Fees.
Exploration of three-dimensional design, employing such materials as paper, card, wood, sheet metal, plastic and wire using simple hand and machine techniques. Analysis and discussion of three-dimensional perception will be directed by projects that develop awareness. Seeks to stimulate discussion and analysis of three-dimensional perception.

ART 160 Art Appreciation 3.0 CR
Fees.
Development of an appreciation of all the visual arts. Course emphasis is on the theories, practice, materials, and techniques of the visual arts.
Special Notes: Course meets general degree requirement except for Art majors.

ART 180A Beginning Stained Glass 3.0 CR
Fees.
Introduces techniques including pattern designing, cutting, and lead came.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.

ART 180B Intermediate Stained Glass 1.0 CR
Prerequisite: ART 180A.
Fees.
Continuation of ART 180A emphasizing advanced use of lead came and copper foil.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.

ART 181A Beginning Calligraphy 3.0 CR
The art of lettering. Writing and practicing the Roman alphabet and formal Italic, emphasis on writing position, order of pen strokes, spacing, practice, suggestion, and exercises. Introduction to various tools, including pens, inks, papers, and watercolors. Students learn the following alphabet: Bookhand, Italic and/or Uncial and cover numbering, color usage and design.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.

ART 182 The Art of Skin Sewing 3.0 CR
Basic techniques of sewing skins, including skin selection, preparation, patterns, cutting, stitching, applied designs as sewn by natives of the northern regions of Alaska.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.

ART 183A Beginning Woodcarving 3.0 CR
Introduction to the tools and basic methods used in woodcarving. Use of knives and gouges. Selection of patterns. Proper tool sharpening. Emphasis on relief carvings but also covers carving in the round and other areas of interest.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.

ART 183B Intermediate Woodcarving 3.0 CR
Prerequisite: ART 183A.
Continuation of ART 183A using knives and gouges, selection of patterns, proper tool sharpening. Emphasis on carving in the round and relief carving.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.

ART 185A Nelson Island Eskimo Basket Weaving 3.0 CR
The gathering, curing, dyeing, and weaving of grasses will be discussed. Major concentration will be on the Nelson Island system of Eskimo basket weaving with in-depth student participation.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.

ART 185B Aleut Basket Weaving 1.0 CR
A crafts involvement in the authentic, fine-twined basketwork of the Aleution Islands.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.
Offered at Kodiak College only.

ART 187A Oil Painting for Pleasure 3.0 CR
Fees.
Designed for beginning and intermediate painters. Emphasizes individual growth. Subject matter includes Alaskan scenes as well as other selections.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.

ART 187B Wildlife Painting 3.0 CR
Prerequisite: ART 105.
Emphasizes accurate rendition of wildlife and close attention to the proper habitat scenes. Students will illustrate native and foreign mammals and birds in their natural habitats.
Special Notes: Does not satisfy BA in Art or BFA degree requirements.

ART 201 Beginning Handbuilt Ceramics 3.0 CR
Prerequisites: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Introduction to ceramic materials and process. Emphasis on handbuilding forming methods. Includes clays, clay bodies, slips, glazes, and the firing process. Exposure to idea development and creative problem solving.
Special Notes: May be repeated once for credit.

ART 202 Beginning Wheelthrown Ceramics 3.0 CR
Prerequisite: ART 201.
Fees.
Introduction to ceramic materials and process. Emphasis on wheelthrowing techniques. Includes clays, clay bodies, slips, glazes and the firing process. Exposure to the history and aesthetics of the pottery tradition.
Special Notes: May be repeated once for credit.

ART 205 Intermediate Drawing 3.0 CR
Prerequisite: ART 105.
Fees.
Drawing in class from live models. Emphasizes expanding visual awareness through drawing.
Special Notes: May be stacked with ART 105, ART 305, and ART 405.

ART 209 Beginning Metalsmithing and Jewelry 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Introduces basic techniques of metalsmithing and jewelry.
Special Notes: May be repeated once for credit. May be stacked with ART 309 and ART 409.

ART 211 Beginning Sculpture 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Exploration of fundamental elements of form, mass, volume, scale, material and surface. Introduction to aesthetics and history of modern sculpture. Acquaints student with the tools, techniques and materials available to the sculptor.
Special Notes: May be repeated once for credit. May be stacked with ART 311 and ART 411.

ART 213 Beginning Painting 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Introduction to basic materials and techniques in oil or acrylic painting. Emphasizes understanding form in space and light, and the interaction of form with color, value, and texture in paint.
Special Notes: May be repeated once for credit. May be stacked with ART 313 and ART 413.

ART 215 Beginning Printmaking (Intaglio) 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Intaglio, collograph and relief techniques. Encourages creativity and craftsmanship in the development of plates and their printing, augmented by an awareness of traditional and contemporary methods and skills.
Special Notes: May be stacked with ART 315 and ART 415.

ART 216 Beginning Printmaking (Lithography) 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Lithography printing from stone using black and white techniques. Encourages creativity and craftsmanship in printing, augmented by an awareness of traditional and contemporary methods and skills.
Special Notes: May be stacked with ART 316 and ART 416.

ART 224 Beginning Photography 3.0 CR
Fees.
Cross-Listed: JPC 224.
Basic principles including camera functions and the utilization of these functions for artistic expression through the processing and printing of black and white film.

ART 231 Watercolor Painting 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Exploration of aquarelle techniques. Emphasizes composition as affected by color, value, stylistic considerations, and individual expression; exhibition procedures are included.
Special Notes: May be repeated once for credit.

ART 252 Graphic Design 3.0 CR
Prerequisite: ART 111.
Fees.
Concentrated study of graphic design problems. Class work will involve the basic elements of design including color, pictorial image and the written word. The development of an idea from sketch to the preparation of black and white artwork for reproduction is the basis of this course; field trips to printers, typesetters, etc. are required.
Special Notes: May be repeated for credit. May be stacked with ART 352.

ART 254 Preparing Art for Printing 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others..
Fees.
Study of the technology and technical skills, including computers, needed to prepare artwork to be printed. Covers production of single color and color separated art for various media, such as advertising and graphic design.

ART 256 Drawing for Illustration I 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Drawing from live models. Outside class projects will include development of illustrations in varied wet and dry media for the advertising/graphic design student.
Special Notes: May be repeated once for credit. May be stacked with ART 356.

ART 258 Illustration I 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Development of commercial portfolio. Includes limited color illustrations in wet and dry media and mechanical overlays.
Special Notes: May be stacked with ART 259.

ART 259 Illustration II 3.0 CR
Prerequisite: ART 258.
Fees.
Illustration through use of full color media and techniques. Includes the use of inks, gouache, acrylic, and colored pencils.
Special Notes: May be stacked with ART 258.

ART 261 History of World Art I 3.0 CR
Fees.
Origins and development of painting, sculpture, and architecture. Covers history of art from Prehistory through the Medieval Period emphasizing art of the Western World.
Special Notes: May be used for general degree requirements.

ART 262 History of World Art II 3.0 CR
Fees.
Origins and development of painting, sculpture, and architecture. Covers history of art from the Renaissance through the Modern Period emphasizing art of the Western World.
Special Notes: May be used for general degree requirements.

ART 271 Beginning Surface Design 3.0 CR
Prerequisites: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Introduction to resist dyeing processes using directly applied resists (wax, rice paste) in designing the art fabric surface.
Special Notes: May be stacked with ART 371 and ART 471.

ART 272 Beginning Fiber Structures 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Introduction to hand-constructed textiles, adapting traditional methodology to the production of contemporary art.
Special Notes: May be stacked with ART 372 and ART 472.

ART 273 Beginning Woven Forms 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Introduction to European floor loom. Various on-loom techniques will be utilized in the production of the art fabric.
Special Notes: May be stacked with ART 373 and ART 473.

ART 290 Promotional Skills for Artists 3.0 CR
The promotion of art skills and products. Includes presentation, portfolios, resumes, copyright laws; opportunities and subjects related to self promotion and the selling of art works.
Special Notes: Not applicable to either BBA degree or AAS degrees in the School of Business. Does not satisfy BA in Art or BFA degree requirements.

ART 301 Intermediate Handbuilt Ceramics 3.0 CR
Prerequisite: ART 202.
Fees.
Continued and intensified development of handbuilding forming methods with more emphasis on form, content, and creative problem solving. Includes all forming methods, low fire through high fire clay bodies, slips, glazes, and firing techniques.
Special Notes: May be repeated once for credit. May be stacked with ART 401.

ART 302 Intermediate Wheelthrown Ceramics 3.0 CR
Prerequisite: ART 202.
Fees.
Continued and intensified development of wheelthrowing techniques with more emphasis on the history and aesthetics of functional pottery. Includes low fire through high fire clay bodies, slips, glazes and firing techniques.
Special Notes: May be repeated once for credit. May be stacked with ART 402.

ART 305 Advanced Drawing 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Development and refinement of individual problems in drawing.
Special Notes: May be repeated once for credit. May be stacked with ART 105, ART 205, and ART 405.

ART 307 Life Drawing and Composition 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Drawing from live models to explore possibilities in design composition. Emphasizes form and space using charcoal, pen, brush, and other media.
Special Notes: May be repeated once for credit.

ART 309 Intermediate Metalsmithing and Jewelry 3.0 CR
Prerequisite: ART 209.
Fees.
Further investigation of material processes and techniques for metalsmithing and jewelry with more emphasis on design.
Special Notes: May be repeated for credit. May be stacked with ART 209 and ART 409.

ART 311 Intermediate Sculpture 3.0 CR
Prerequisite: ART 211.
Fees.
Further exploration of sculptural concepts and processes with emphasis given to the aesthetics and history of modern sculpture. Continued development of construction skills with access to more advanced machine tools and processes.
Special Notes: May be repeated for credit. May be stacked with ART 211 and ART 411.

ART 313 Intermediate Painting 3.0 CR
Prerequisite: ART 213.
Fees.
Continued and intensified development of expressive skills in painting. Reviews techniques and refines materials usage with the emphasis on individual approaches to pictorial and conceptual problems in oil and acrylic.
Special Notes: May be repeated for credit. May be stacked with ART 213 and ART 413.

ART 315 Intermediate Intaglio 3.0 CR
Prerequisite: ART 215.
Fees.
Continued development of intaglio techniques and creative interpretation. Addresses color printing; multiple plate printing; relief, viscosity and reduction methods.
Special Notes: May be repeated for credit. May be stacked with ART 215 and ART 415.

ART 316 Intermediate Lithography 3.0 CR
Prerequisite: ART 216.
Fees.
Continued development of lithography techniques and creative interpretation. Addresses multiple color drops and relief printing.
Special Notes: May be repeated for credit. May be stacked with ART 216 and ART 416.

ART 323 Color Photography 3.0 CR
Prerequisite: ART/JPC 224.
Fees.
Cross-Listed: JPC 323.
Advanced techniques in color transparencies, color negatives, and color printing.
Special Notes: May be repeated for credit.

ART 324 Intermediate Photography 3.0 CR
Prerequisite: ART/JPC 224.
Fees.
Cross-Listed: JPC 324.
Further development of photographic skills. Includes photographic perception of awareness, ideas and concepts, and the "fine print."

ART 330 Photographic Design 3.0 CR
Prerequisite: ART/JPC 324.
Fees.
Photographic study of the elements of design. Addresses line, value, texture, shape, and color two-dimensionally and emphasizes exploration in the use of materials.
Special Notes: May be repeated for credit.

ART 331 Experimental Photography 3.0 CR
Prerequisite: ART/JPC 324.
Fees.
Cross-Listed: JPC 331.
Exploration of various special effects and techniques. Emphasizes creativity using various photographic processes.
Special Notes: May be repeated for credit.

ART 351 Typography 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others.
Fees.
Copyfitting, typesetter communication, and design.
Special Notes: May be repeated once for credit.

ART 352 Advanced Graphic Design 3.0 CR
Prerequisite: ART 252 and ART 254.
Fees.
Design problems, corporate identity programs, signage, annual reports, book design and architectural supergraphics.
Special Notes: May be repeated once for credit. May be stacked with ART 252.

ART 354 Advertising Design 3.0 CR
Prerequisite: ART 252.
Fees.
Creative solutions to advertising problems.
Special Notes: May be repeated once for credit.

ART 355 Airbrush 3.0 CR
Prerequisite: ART 205 or ART 256.
Fees.
Airbrush techniques. Includes use and maintenance of equipment, freehand masking techniques, and introduces photo retouching.
Special Notes: May be repeated once for credit.

ART 356 Drawing for Illustration II 3.0 CR
Prerequisite: ART 256.
Fees.
Refinement of drawing skills. Includes development of illustrations for a portfolio, personal interpretation, concept and design, and drawing from live models.
Special Notes: May be repeated once for credit. May be stacked with ART 256.

ART 357 Computer Art and Design 3.0 CR
Prerequisite: ART 256.
Fees.
Introduces techniques and tools pertinent to the graphic designer.
Special Notes: May be repeated once for credit.

ART 358 Children's Book Illustration 3.0 CR
Prerequisite: ART 256.
Fees.
Techniques and materials. Course work includes conceptualization and composition of visuals for individual pages, book layout, discussion of market presentation and portfolio organization.
Special Notes: May be repeated once for credit.

ART 361 History of Graphic Design 3.0 CR
Prerequisite: ART 261 and 262.
Fees.
Overview of the progression of graphic design from the invention of writing to current approaches.

ART 362 History of Modern Art 3.0 CR
Prerequisite: ART 262.
Fees.
Development of mid to late 19th century and 20th century art. Various visual arts are placed within the social and cultural contexts of this period.

ART 363 History of Contemporary Art 3.0 CR
Prerequisite: ART 262.
Fees.
Analysis of the work and thought of major artists in painting and sculpture from Post-World War II to the present. The relationship of visual art to social and cultural trends during this period will be examined.

ART 364 Italian Renaissance Art 3.0 CR
Prerequisite: ART 261 or faculty permission.
Fees.
Renaissance art from early Florentine beginnings to the High Renaissance of Venice.

ART 365 Native Art of Alaska 3.0 CR
Fees.
Art forms of the Eskimo, Indian, and Aleut; prehistory to the present.

ART 366 History of Asian Art 3.0 CR
Prerequisite: ART 261.
Fees.
Visual arts of Asiatic culture; prehistoric to the present. Surveys selected works of painting, sculpture, architecture and other visual arts in relation to the culture in which they were produced.

ART 367 History of Photography 3.0 CR
Cross-Listed: JPC 367.
Fees.
Evolution of photography; 1816 to the present. Surveys style, approach, content and form of the major trends in Europe and America.

ART 368 Artists' Views 3.0 CR
Fees.
Work and philosophy of local contemporary artists.

ART 371 Intermediate Surface Design 3.0 CR
Prerequisite: ART 271.
Fees.
Continued examination of resist dyeing as a culture-rooted art and its place in the contemporary fiber movement. Bound resists: shibori, fold dyeing, plangi and tritik are utilized as the basis for individual expression and design resolution.
Special Notes: May be stacked with ART 271 and ART 471.

ART 372 Intermediate Fiber Structures 3.0 CR
Prerequisite: ART 272.
Fees.
Explores traditional percussion textiles such as paper and felt making as interpreted in a contemporary context.
Special Notes: May be stacked with ART 272 and ART 472.

ART 373 Intermediate Woven Forms 3.0 CR
Prerequisites: ART 273.
Fees.
Emphasis on advanced floor loom techniques for the production of contemporary art.
Special Notes: May be stacked with ART 273 and ART 473.

ART 392 Seminars and Selected Topics in Art 1.0-6.0 CR
Prerequisite: The 18 lower-division Art core is required for Art majors, and recommended for others.
Fees.
Lecture course dealing with current issues in the arts. Seminars on various topics will depend upon student and faculty interest as well as areas of faculty expertise. Course may be of interest to students desiring assistance in developing their thesis topic and statement.

ART 401 Advanced Handbuilt Ceramics 3.0 CR
Prerequisite: ART 301.
Fees.
Clay as a sculpture medium. Emphasis on the ceramic process as a vehicle for personal statement. Includes large-scale, architectural freestanding installation projects. Low fire through high fire clay body, slip, and glaze development. Kiln design and firing.
Special Notes: May be repeated once for credit. May be stacked with ART 301.

ART 402 Advanced Wheelthrown Ceramics 3.0 CR
Prerequisite: ART 302.
Fees.
History and aesthetics of functional pottery as a vehicle for personal statement. Includes low through high fire clay body, slip, and glaze development. Kiln design and firing.
Special Notes: May be repeated once for credit. May be stacked with ART 302.

ART 405 Experimental Drawing 3.0 CR
Prerequisite: ART 305.
Fees.
Investigation, experimentation and development of ideas.
Special Notes: May be repeated once for credit. May be stacked with ART 105, ART 205, and ART 305.

ART 409 Advanced Metalsmithing and Jewelry 3.0 CR
Prerequisite: ART 309.
Fees.
Continued investigation of materials and processes with an introduction to hollowware skills and forging.
Special Notes: May be repeated for credit. May be stacked with ART 209 and ART 309.

ART 411 Advanced Sculpture 3.0 CR
Prerequisite: ART 311.
Fees.
Advanced exploration of sculptural concepts and processes with emphasis given to the aesthetics and history of contemporary sculpture. Continued development of construction skills with access to more advanced machine tools and processes including welding.
Special Notes: May be repeated for credit. May be stacked with ART 211 and ART 311.

ART 413 Advanced Painting 3.0 CR
Prerequisite: ART 313.
Fees.
Individual ideas, experimentation, and techniques in painting.
Special Notes: May be repeated once for credit. May be stacked with ART 213, ART 313, and ART 414.

ART 414 Senior Painting Projects 3.0 CR
Prerequisite: 6 credits of ART 413.
Fees.
Individualized development of imagery and techniques.
Special Notes: May be repeated once for credit. May be stacked with ART 413.

ART 415 Advanced Intaglio 3.0 CR
Prerequisite: ART 315.
Fees.
Individual development of techniques and creative processes. Includes individual portfolio development.
Special Notes: May be repeated for credit. May be stacked with ART 215 and ART 315.

ART 416 Advanced Lithography 3.0 CR
Prerequisite: ART 316.
Fees.
Individual development of techniques and creative processes. Includes individual portfolio development and establishes goals and criteria for the development of images.
Special Notes: May be repeated for credit. May be stacked with ART 216 and ART 316.

ART 418 Methods: Art in the Elementary School 3.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto, all general education degree requirements and admission to School of Education.
Fees.
Cross-Listed: ED 418.
Methods of teaching art principles, procedures and materials for the elementary school level. Explores a wide variety of art media basic to elementary art curricula. Students will be responsible for developing and evaluating curriculum activities.

ART 423 Advertising and Public Relations Photography 3.0 CR
Prerequisite: ART/JPC 324.
Fees.
Cross-Listed: JPC 423.
Emphasizes lighting for form, texture, and separation as advertising. Industrial and public relations photography is explored.
Special Notes: May be repeated for credit.

ART 424 Advanced Photography 3.0 CR
Prerequisite: ART/JPC 324.
Fees.
Cross-Listed: JPC 424.
Development of images that reflect individual expression. Provides for individual portfolio development.
Special Notes: May be repeated for credit.

ART 442 Curriculum and Instruction in Secondary Art 3.0 CR
Prerequisite: The 18 credit lower-division Art core is required for Art majors and recommended for others. ED 332. Admission to the School of Education.
Cross-Listed: ED 442.
Investigation, practice, and discussion of objectives, scope, sequence, evaluation and related readings dealing with teaching art at the secondary level.

ART 451 Internship/Graphic Design 1.0-6.0 CR
Prerequisite: Faculty permission.
Internship position. Placement is dependent upon interest, expertise, prerequisites, and appropriateness to the position.
Special Note: May be repeated for a maximum of 12 credits.

ART 455 3-D Illustration 3.0 CR
Prerequisite: ART 258 or ART 259.
Fees.
Study of the techniques related to three-dimensional illustration, collage, paper sculpture, stitchery, fiber sculpture, and sculptural techniques.
Special Notes: May be repeated once for credit.

ART 457 Internship/Illustration 1.0-6.0 CR
Prerequisite: Faculty permission.
Internship position. Placement is dependent upon interest, expertise, prerequisites, and appropriateness to the position.

ART 458 Illustration III 1.0-6.0 CR
Prerequisite: ART 259.
Emphasizes developing illustrations for a portfolio. Concerns will be for concepts and design of imagery, refinement of technical skills, and personal interpretation.
Special Notes: May be stacked with ART 459.

ART 459 **Illustration IV** **1.0-6.0 CR**
Prerequisite: ART 458.
Emphasizes developing illustrations for a portfolio. Concerns will be for concepts and design of imagery, refinement of technical skills, and personal interpretation.
Special Notes: May be stacked with ART 458.

ART 471 **Advanced Surface Design** **3.0 CR**
Prerequisite: ART 371.
Fees.
Development and refinement of individual problems in resist dyeing techniques.
Special Notes: May be stacked with ART 271 and ART 371.

ART 472 **Advanced Fiber Structures** **3.0 CR**
Prerequisite: ART 372.
Fees.
Development and refinement of individual problems in fiber structures with an emphasis on personalized imagery and techniques.
Special Notes: May be stacked with ART 272 and ART 372.

ART 473 **Advanced Woven Forms** **3.0 CR**
Prerequisite: ART 373.
Fees.
Further development of advanced loom weaving techniques and refinement of personal imagery and problems related to contemporary approaches to fiber art.
Special Notes: May be stacked with ART 273 and ART 373.

ART 499 **Thesis** **3.0 CR**
Prerequisite: Permission of BFA committee.
Grading Policy: Pass/No Pass.
One person exhibition.
Special Notes: May be repeated for a maximum of 6 credits.

ART 656 **Drawing** **1.0-6.0 CR**
Prerequisite: Four year undergraduate degree in art or faculty permission.
Class work will be comprised of drawing. Emphasis will be on individual development of advanced drawing skills.
Special Notes: May be repeated for a maximum of 12 credits.

AS: APPLIED STATISTICS

Offered through the College of Arts and Sciences, CAS Building, Room 154, 786-1742 or 786-4824

AS 251 **Applied Statistics** **3.0 CR**
Prerequisite: MATH 055 or faculty permission.
Survey course designed primarily for students who need to utilize statistics in their own fields. Includes basic theory and applications of statistics and probability; measures of central tendency and variability; basic concepts of statistical inference and hypotheses testing; chi-square, correlations and regression; and binomial and normal distributions.

AS 252 **Elementary Statistics** **3.0 CR**
Prerequisite: MATH 105 or two years of high school algebra with a grade of C or higher or Math Placement Test.
Fees.
Measurement, sampling, measures of central tendency, dispersion, position, frequency distributions, regression and correlation, probability, binomial and normal distributions, estimation, hypothesis testing, t-, chi-square, and F-distributions.
Special Notes: A student may apply no more than 3 credits from AS 252 or BA 273 toward the graduation requirements for a baccalaureate degree.

AS 307 **Probability and Statistics** **3.0 CR**
Prerequisite: MATH 200 or MATH 272 with a grade of C or higher.
Probability, applied combinatorics, random variables, multivariate random variables, discrete distributions, continuous distributions, expectations, descriptive statistics, correlation and regression, estimation, and hypothesis testing.

AS 308 **Intermediate Statistics** **3.0 CR**
Prerequisite: AS 252 or AS 307 or equivalent.
Introduction to statistical experimentation and research methods. Contingency tables and chi-square tests of association and independence. Introduction to analysis of variance (ANOVA); one-way and two-way factorial designs. Multiple regression and correlation. Introduction to nonparametric methods including sign test, runs test, Mann-Whitney U-test , etc. SPSS-X will be used as a tool to aid calculations required for many of the techniques. Each student will be expected to complete a research project as part of the course requirement.

AS 310 **Regression Analysis** **3.0 CR**
Prerequisite: AS 307.
Simple and multiple regression, statistical inferences in regression, matrix formulation of regression, polynomial regression, ridge regression, nonlinear regression, and normal correlation models. SPSS-X will be used as a tool to aid calculations required for many of the techniques.

AS 312 **Analysis of Variance** **3.0 CR**
Prerequisite: AS 308.
Single-factor models, factor effects, nonparametric tests, two-factor models, random and mixed effects models, multifactor studies, analysis of covariance, and selected experimental designs. SPSS-X will be used as a tool to aid calculations required for many of the techniques.

AS 315 **Nonparametric Statistics** **3.0 CR**
Prerequisite: AS 307.
Nonparametric methods including the binomial test and sign test. Contingency tables with chi-square tests and goodness-of-fit tests. Tests based on ranks including the Wilcoxon signed ranks test, Mann-Whitney U-test, Kruskal-Wallis test, Friedman test, and rank correlation. Kolmogorov-Smirnov type tests. SPSS-X will be used as a tool to aid calculations required for many of the techniques.

AS 400 **Selected Topics in Statistics** **3.0 CR**
Prerequisite: AS 252 or AS 307.
Topics in statistics including quality control, operations research, robust statistics, stochastic process, game theory, spectral analysis, Fourier analysis, and statistical packages.
Special Notes: Check schedules for specific offerings.

AS 402 **Scientific Sampling** **3.0 CR**
Prerequisite: AS 252 or AS 307.
Sampling methods including simple random, stratified, systematic, and cluster. Special emphasis is placed on estimation procedures including ratio and regression methods, and topics selected from: allocations, direct sampling, inverse sampling, randomized response sampling, computer simulation of random variates, bootstrap, jackknife, and cross validation.

AS 407 **Time Series Analysis** **3.0 CR**
Prerequisite: AS 307.
Decomposition of time series, seasonal adjustment methods, and index numbers. Forecasting models including causal models, trend models, and smoothing models. Autoregressive (AR) forecasting models, moving average (MA) forecasting models, and integrated (ARIMA) forecasting models. SPSS-X and SAS computer software packages will be used.

AS 408 **Multivariate Analysis** **3.0 CR**
Prerequisite: AS 308.
Multivariate statistical methods including exploratory data analysis, geometrical interpretation of multivariate data, multivariate tests of hypothesis, multivariate analysis of variance, multivariate multiple regression, principle components, factor analysis, discriminant analysis, and cluster analysis. SPSS-X and SAS computer packages will be used.

AS 601 **Statistical Methods** **3.0 CR**
Prerequisite: AS 252 or equivalent.
Introduction to statistical experimentation and research methods, measurement, sampling, measures of central tendency, dispersion, regression and correlation, hypothesis testing, contingency tables and chi-square tests, ANOVA, multiple regression, and nonparametric methods. SPSS-X will be used as a tool to aid calculations for many of the techniques. Each student will have a research project as a requirement.

ASL : AMERICAN SIGN LANGUAGE

Offered through the College of Arts and Sciences, Classroom Building (K) , Room 222B, 786-1552 or 786-1731

ASL 121 **American Sign Language I** **3.0 CR**
Fees.
Introduces American Sign Language as used by deaf people. Diligent students can learn 350-500 signs, basics of ASL grammar and syntax. Exposure to psychosocial and subcultural aspects of deafness.

ASL 131 **American Sign Language II** **3.0 CR**
Prerequisite: Successful completion of ASL 121 or equivalent, or faculty permission.
Fees.
Develops receptive and expressive skills in American Sign Language. Explanations and examples of 20 or more basic features of American Sign Language. Extensive student practice in class. Diligent students can learn 1,000 or more signs and idioms.

ASL 221 **American Sign Language III** **3.0 CR**
Prerequisite: ASL 131 or equivalent, or faculty permission.
Fees.
Continuation of insights into ASL structure. Exercises and practice, study of articles, and practical experience. Students practice advanced conversational skills in class. Use of previously learned vocabulary and grammar to explore 10 or more new features of ASL. Additional idioms and vocabulary.

ASL 231 **American Sign Language IV** **3.0 CR**
Prerequisite: ASL 221 or equivalent, or faculty permission.
Fees.
For experienced signers in the local community. Advanced instruction in ASL grammar, vocabulary, and conversational skills. Additional insights into deaf culture. Special practice with idioms and storytelling.

ASL 251 **Small Group Lessons: Interpreting** **3.0 CR**
Prerequisite: Minimum B average in ASL 121, 131 and 221, or equivalent knowledge of ASL, high average passing score on English Screening Exam. Commitment to study and participation.
Fees.
Flexible workshops covering basic theory and technique in American Sign Language interpreting. Includes skill building in listening, phrasing, self-correction, and exploration of ethical issues.
Special Notes: May be taken for up to 9 credits.

ASTR: ASTRONOMY

Offered through the College of Arts and Sciences, Engineering Building (ENGR), Room 333/335, 786-1238

ASTR 100 **Survey of Astronomy** **3.0 CR**
Prerequisite: High school or college algebra.
A brief survey of the science of astronomy; historical development, study of the solar system and planets, the sun, stellar astronomy, interstellar matter, evolution of stars, galaxies, and cosmology.

ASTR 103 **Introductory Astronomy I** **4.0 CR**
Prerequisite: High school algebra and trigonometry or equivalent.
Fees.
Introduction to solar system astronomy; emphasis on most recent results from space research. History of astronomy, instruments, planetary motion, physical properties of planets, satellites, comets, and solar system evolution; includes laboratory.

ASTR 104 **Introductory Astronomy II** **4.0 CR**
Prerequisite: ASTR 103; may be taken out of sequence, but not recommended.
Fees.
Introduction to stellar, galactic, extragalactic astronomy. Stars, clusters, galaxies, stellar evolution, the universe as a whole, and cosmology; includes laboratory.

AT: AVIATION TECHNOLOGY

Offered through the College of Career and Vocational Education, Aviation Complex, 2811 Merrill Field Dr., 276-3737

AT 053 **Preventive Maintenance for Pilots and Owners** **4.0 CR**
Grading Policy: Pass/No Pass.
Fees.
For pilots/owners to gain knowledge and experience in items of aircraft and engine maintenance that they may legally perform. Beneficial to people who intend to buy airplanes.

AT 100 **Private Pilot Ground School** **4.0 CR**
Preparation for FAA Private Pilot Written Exam. Includes aircraft and engine operation and limitations, aircraft flight instruments, navigation, navigation computers, national weather information, and dissemination services. FAA Regulations, FAA Airman's Information Manual, radio communications, and radio navigation.
Special Notes: Two hours of flight simulator required at Anchorage.

AT 101 **Pre-Professional Flying** **2.0 CR**
Prerequisite: Possess FAA Class II Medical Certificate and Dept. approval.
Corequisites: AT 100 and passing score on FAA Private Pilot Written Exam.
Fees.
Beginning flight instructions for students intending to become professional pilots. Covers Stages I through III of the FAA approved commercial pilot training course outline.
Special Notes: Open entry-open exit. Course credit may be extended to holders of a Private Pilot Certificate through the successful completion of a proficiency flight check administered by the Aviation Department.

AT 104 **Alaska Bush Flying** **3.0 CR**
Prerequisite: Private Pilot Certificate or higher rating.
Specialized instruction and discussion concerning unique flying conditions faced by Alaskan pilots. Basic aerodynamics, mountain flying, skis, floats, wheels, judgment of unimproved landing areas, characteristics of Alaska weather, external loads, airplane performance and limitations. Includes survival techniques.

AT 113 **Commercial Flying Maneuvers** **1.0 CR**
Prerequisite: AT 101 and Dept. approval. Corequisite: AT 117 and passing score on FAA Commercial Pilot Written Exam.
Fees.
Flight instruction to review basic private pilot maneuvers and to introduce the advanced flight maneuvers required of the commercial pilot. Covers Stage IV of the FAA approved Commercial Pilot Training Course Outline.
Special Note: Open entry-open exit.

AT 114 **Basic Instrument Flying** **0.5 CR**
Prerequisite: AT 113 and Dept. approval. Corequisite: AT 116 and passing score on FAA Instrument Rating Written Exam.
Fees.
Introduces precise airplane attitude control by instrument reference and covers basic instrument radio navigation. Covers Stage V of the FAA approved Commercial Pilot Training Course Outline.
Special Notes: Open entry-open exit.

AT 115 **Commercial X-C Flying** **1.5 CR**
Prerequisite: AT 114 and Dept. approval.
Fees.
Flight instruction and training for proficiency and experience in cross-country flying and night operations. Includes introduction to the complex airplane. Covers Stage VI of the FAA approved Commercial Pilot Training Course Outline.
Special Notes: Open entry-open exit.

AT 116 **Instrument Ground School** **4.0 CR**
Prerequisite: AT 100 or passing score on FAA Private Pilot Written Exam.
Fees.
Instrument operation in detail. Attitude instrument flying, air traffic control and navigation facilities, pilot responsibilities, IFR en route charts, approach plates, airspace and airway route system.
Special Notes: Two hours of flight simulator required at Anchorage.

AT 117 **Commercial Ground School** **4.0 CR**
Prerequisite: AT 116 or passing score on FAA Instrument Rating Written Exam.
Fees.
Advanced work in topics discussed in AT 100 and AT 116. Also advanced aircraft engines, systems, performance and limitations, radar environment, high performance aircraft, emergency procedures, pilot responsibilities, and maneuvers.
Special Notes: Two hours of flight simulator required at Anchorage.

AT 132 **Survey of Aviation** **3.0 CR**
Detailed tracing of aviation history with particular emphasis on evolution of heavier-than-air machines. Development and present status of aviation industry, including world airlines.

AT 133 **Aviation Law and Regulations** **3.0 CR**
History of laws influencing aviation. Case studies of aviation litigation. Organization, authority, responsibility, and functions of Dept. of Transportation, FAA, and Civil Aeronautics Board.

AT 134 **Principles of Aviation Administration** **3.0 CR**
Introduction to business administration in general, airline, and manufacturing segments of aviation industry. Emphasis on theories of corporate organization and management. Future trends in aviation administration.

AT 135 **Management: Airport** **3.0 CR**
Prerequisite: AT 134 or faculty permission.
Major functions of airport management including organization, zoning, financing, revenues and expenses, construction, expansion, evaluation techniques, and safety. Socioeconomic effects of airports on communities.

AT 136 **Management: Air Service Operation** **3.0 CR**
Prerequisite: AT 134 or faculty permission.
Functions of air service operations. Organization, financing, revenues and expenses, construction, expansion, safety, and relations with local agencies including airport management. Analysis of successful air service operations. Future trends.

AT 140 **Air Traffic Control History** **3.0 CR**
FAA role in development of air transportation. Begins with early air mail service and continues to present-day air traffic service. Includes current areas of responsibility and internal working of air traffic control facilities.

AT 141 **Aviation Weather** **3.0 CR**
Weather and its effects on air transport and air traffic control. Aviation weather reports and forecasts. Methods of weather information distribution including Teletype, voice lines, broadcasts, and other systems of the U.S. Government and other airways users.

AT 142 **Control Environment** **3.0 CR**
Basic navigation with emphasis on air navigations. Operations and function of radio aids to navigation (NAVAIDS). Basic airway structure. Use of air navigation charts, instrument approach plates, standard instrument arrival and departure routes, and Airman's Information Manual.

AT 143 Air Traffic Control Regulations 3.0 CR
Federal air regulations applying to air traffic control system. Introduction to regulations governing operation of air traffic control specialists within federal system.

AT 144 Air Traffic Control Airborne Lab 2.0 CR
Fees.
Designed for ATC majors. Explores flight planning, progress, and flight termination in both visual and instrument flight conditions. Includes 6-7 hours airborne demonstration.

AT 145 Principles of Flight 3.0 CR
Fees.
Basic aerodynamic principles. Theory of flight. Aircraft characteristics. Operation of aircraft in air traffic control system.
Special Notes: Six hours of flight simulator required. Fees payable through the Aviation Technology Division.

AT 146 Air Traffic Control Intern Program 4.0 CR
Prerequisite: AT 140, 141, 142 and 143 or Dept. permission.
Grading Policy: Pass/No Pass.
Practical experience at FAA air traffic control facilities.

AT 170 Acft Ground Operations and Safety 1.0 CR
Prerequisite: Formal acceptance into AMT certificate or degree program.
Fees.
Covers safety in aviation maintenance including aircraft ground operation and fuel servicing. Presents policies and procedures of the Aviation Maintenance Technology program, UAA and the FAA.

AT 171 Basic Aerodynamics 3.0 CR
Prerequisite: Formal acceptance into AMT certificate or degree program. Corequisite: AT 170.
Deals with the theory of aerodynamics and factors affecting flight of heavier than air, fixed and rotary wing aircraft. Emphasizes aircraft weight and balance, aircraft structures, aerodynamics, theory of flight and aircraft rigging.

AT 172 Publications, Regulations and Records 3.0 CR
Prerequisite: Formal acceptance into AMT certificate or degree program. Corequisite: AT 170.
Covers the government's involvement in aviation maintenance, and FAA regulations regarding aviation maintenance and approved training programs. Emphasizes the use of maintenance publications, maintenance forms and records, and technicians' privileges and limitations.

AT 173 Acft Electrical Hardware 3.0 CR
Corequisites: AT 170, AT 172, AT 174, AT 174L, and PHYS 110.
Fees.
Identifies and explains the use, operation and servicing of aircraft electrical components such as switches, relays, fuses, other circuit protection devices, wires, and connectors. Installation, testing, inspection and troubleshooting of these components is also covered.

AT 174 Acft DC Electrical Systems 3.0 CR
Prerequisite: MATH 055 with grade of C or better. Corequisite: AT 170. Concurrent enrollment in AT 174L.
Covers derivation and application of basic DC electrical concepts, definitions and laws. Introduces passive electrical components, schematic symbols and electrical wiring diagrams, and covers applications of DC electrical concepts to aircraft batteries and power generation and distribution systems.

AT 174L Acft DC Electrical Systems Lab 1.0 CR
Prerequisite: MATH 055 with a grade of C or better. Corequisite: AT 170. Concurrent enrollment in AT 174.
Fees.
Deals with the methods of safe and accurate measurement of DC electrical quantities using basic electrical test equipment. Connecting, testing, and operating a variety of circuit components, troubleshooting defective components, observing the characteristics of electrical components in test circuits, and wiring circuits from schematic diagrams. Installation, operation, testing and servicing of aircraft batteries and DC power generation and distribution systems is also covered.

AT 175 Drawing and Precision Measurement 2.0 CR
Prerequisite: Formal acceptance into AMT certificate or degree program. Corequisite: AT 170.
Covers the theory and techniques involved in making and reading aircraft drawings and blueprints, along with precision measurement and use of blueprint in formation.

AT 176 Acft Materials and Processes I 2.0 CR
Corequisite: AT 170.
Fees.
Covers aircraft cleaning, corrosion control, materials, and hardware; the selection of appropriate cleaning chemicals and processes; identification, selection and installation of aircraft hardware; and performance of aircraft processes such as heat treating and hardness testing.

AT 177 Recip Engine Theory 2.0 CR
Corequisites: PHYS 110, AT 170.
Introduces the theory of operation and construction of the internal combustion engine. Includes combustion processes, design rationale, cooling and lubrication of internal combustion reciprocating engines.

AT 178 Turbine Engine Theory 2.0 CR
Corequisites: PHYS 110, AT 170.
Covers the construction and operation of turbine engines. Thrust development and design and environmental factors that influence thrust, along with the construction details from inlet to exhaust are covered for representative aircraft turbine engines.

AT 181 Fuel Systems 3.0 CR
Prerequisite: AT 176, AT 177, AT 178; Concurrent enrollment in AT 181L.
Covers aircraft fuels, fuel/air mixtures, basic fuel systems and fuel metering devices. Applications of fuels and metering systems to aircraft and components of complex aircraft systems, such as tanks, valves, fuel lines, carburetors, fuel injection systems, turbo-chargers, and superchargers are included.

AT 181L Fuel Systems Lab 1.0 CR
Prerequisite: AT 176, AT 177, AT 178; Concurrent enrollment in AT 181.
Fees.
Covers identification, handling, inspection, servicing and troubleshooting aircraft fuels, basic fuel systems and fuel metering devices, including complex aircraft systems, tanks, valves, fuel lines, carburetors, fuel injection systems, turbo-chargers, and superchargers.

AT 183 Acft Electrical Machinery 2.0 CR
Prerequisite: AT 173, AT 174, AT 174L, AT 175; Corequisite: AT 183L, AT 184, AT 184L.
Identifies and explains the construction, inspection, operation and servicing of aircraft electrical components such as electric motors, generators, alternators, voltage controls, magnetos and ignition system components.

AT 183L Acft Electrical Machinery Lab 1.0 CR
Prerequisite: AT 173, AT 174, AT 174L, AT 175; Corequisite: AT 183, AT 184, AT 184L.
Fees.
Covers inspection, servicing, operation and testing of aircraft electrical components such as electric motors, DC generators, DC alternators, AC alternators, voltage regulators, reverse current relays, generator and alternator protection devices, magnetos and ignition system components.

AT 184 Acft AC Electrical Systems 3.0 CR
Prerequisite: At 174, AT 174L, PHYS 110; Concurrent enrollment in AT 184L.
Covers theory and application of basic concepts. definitions and laws governing circuits powered by an alternating current source. Includes AC waveforms, sources, components and circuits, electrical wiring diagrams, schematic symbols, and analysis of AC power generation and distribution systems used on aircraft.

AT 184L Acft AC Electrical Systems Lab 1.0 CR
Prerequisite: AT 174, AT 174L, PHYS 110; Concurrent enrollment in AT 184.
Fees.
Covers measurement of AC electrical quantities with basic electrical test equipment. Includes connecting, testing and operating a variety of AC circuits, troubleshooting defective components, wiring circuits according to schematic diagrams and analyzing the measurements taken.

AT 185 Sheetmetal Structures 3.0 CR
Prerequisite: Formal acceptance into AMT certificate or degree program. Corequisite: AT 170; Concurrent enrollment in AT 185.
Introduces sheetmetal, its properties and uses in fabrication of structural and nonstructural components of aerospace vehicles. Inspection techniques are addressed along with fabrication and repair processes of bending , cutting, forming, drilling, and riveting aluminum sheetmetal parts.

AT 185L Sheetmetal Structures Lab 2.0 CR
Prerequisite: Formal acceptance into AMT certificate or degree program. Corequisite: AT 170; Concurrent enrollment in AT 185L.
Fees.
Covers inspection, fabrication and repair of aircraft sheetmetal structures including the processes of bending, cutting forming, drilling and riveting aluminum sheetmetal parts.

AT 186 Non-destructive Inspection Methods 3.0 CR
Prerequisite: AT 176.
Fees.
Covers selection and use of appropriate non-destructive testing methods commonly employed in the aircraft industry such as visual, dye penetrant, magnetic particle, eddy current and ultrasound.

AT 187 Recip Engine Overhaul 3.0 CR
Prerequisite: AT 172, AT 175, AT 177; Corequisite: AT 186; Concurrent enrollment in AT 187L.
Covers the overhaul practices for aircraft internal combustion engines. Includes

disassembly, cleaning, non-destructive testing, measurement, lubrication, and assembly of engines.

AT 187L Recip Engine Overhaul Lab 2.0 CR
Prerequisite: AT 172, AT 175, AT 177; Corequisite: AT 186; Concurrent enrollment in AT 187.
Fees.
Provides practice in the performance of overhaul of aircraft internal combustion engine. Includes disassembly, cleaning, non-destructive testing, measurement, lubrication and assembly of internal combustion engines.

AT 210 Simulated Flight Instruction for Advanced Ratings 1.0 CR
Prerequisite: Dept. approval required.
Fees.
Required for all persons wanting to utilize single or twin engine flight simulators. Time accumulated may be used to meet requirements for advanced ratings as specified in Part-61 of FAA regulations.
Special Notes: Simulator fees payable through the Aviation Technology Division. Cannot be audited.

AT 211 Additional Aircraft Rating 1.0 CR
Prerequisite: Private or Commercial Pilot Certificate and Dept. approval.
Fees.
Flight instruction for professional piloting students seeking additional ratings for their pilot certification, e.g. float, multi-engine, type ratings, etc. Course completion requires awarding of rating sought.
Special Notes: Open entry-open exit. Course credit may be awarded to holders of various ratings through the successful completion of a proficiency flight check administered by the Aviation Department.

AT 213 Intermediate IFR Flying 0.5 CR
Prerequisite: AT 115 and Dept. approval.
Fees.
Introduces instrument approaches, missed approaches and holding patterns. Covers Stage VII of the FAA approved Commercial Pilot Training Course Outline.
Special Notes: Open entry-open exit.

AT 214 Advanced IFR Flying 0.5 CR
Prerequisite: AT 213 and Dept. approval.
Fees.
Combines IRF cross-country procedures with increased flight proficiency required of an instrument rated pilot. Covers Stage VIII of the FAA approved Commercial Pilot Training Course Outline.
Special Note: Open entry-open exit.

AT 215 Comm/IFR Review and Certification 1.0 CR
Prerequisite: AT 214 and Dept. approval.
Fees.
Reviews previous commercial and instrument flight maneuvers and develops proficiency required to take the commercial/instrument practical flight test. Covers Stage IX of the FAA approved Commercial Pilot Training Course Outline.
Special Notes: Open entry-open exit.

AT 216 Instrument Flying 2.0 CR
Prerequisite: AT 101 and Dept. approval. Corequisite: AT 116 and passing score on the FAA Instrument Rating Written Exam.
Fees.
Instrument flight instruction for students intending to become professional pilots. Covers Stages V, VII, and instrument portions of Stages VIII and IX of the FAA approved Commercial Pilot Training Course Outline and fulfills FAA requirements for the instrument airplane rating.
Special Notes: Open entry-open exit. Course credit may be awarded to holders of an instrument rating through the successful completion of a proficiency flight check administered by the Aviation Department.

AT 217 Commercial Flying 3.0 CR
Prerequisite: AT 101 and AT 216. Possess an FAA Class II Medical Certificate and Dept. approval. Corequisite: AT 117 and passing score on FAA Commercial Pilot Written Exam.
Fees.
Advanced flying maneuvers for the Commercial Pilot Certificate. For students who have completed a significant number of hours towards the completion of a Commercial Pilot Certificate.
Special Notes: Open entry-open exit. Course credit may be awarded to holders of a Commercial Pilot Certificate through the successful completion of a proficiency flight check administered by the Aviation Department.

AT 221 CFI Ground School 3.0 CR
Prerequisite: AT 215, or AT 216 and AT 217, or Commercial/Instrument Pilot Certificate.
Principles of teaching and learning, analysis of student motivation, flight training syllabus, flight instructor's role and responsibility, and aeromedical information. Performance and analysis of flight training maneuvers, advanced aerodynamics, fundamentals of instrument flight, flight training publications, and Federal Aviation Regulations.

AT 223 CFI Flying 2.0 CR
Prerequisite: Hold a Commercial or ATP Certificate with appropriate Medical Certificate. Dept. approval required. Corequisite: AT 221 and passing score on FARR CFI Written Exams.
Fees.
Flight instruction for students intending to become Certified D Flight Instructors. Course completion requires awarding of Certified Flight Instructor Certificate.
Special Notes: Open entry-open exit. Course credit may be awarded to holders of a Certified Flight Instructor Rating through the successful completion of a proficiency flight check administered by the Aviation Department.

AT 225 CFI: Additional Rating 1.0 CR
Prerequisite: AT 223 and Dept. approval required.
Fees.
Flight instruction for students seeking additional ratings such as instrument and multi-engine to their Certified Flight Instructor Certificate. Course completion requires awarding of rating sought.
Special Notes: Open entry-open exit. Course credit may be awarded to holders of additional flight instructor ratings through the successful completion of a proficiency flight check administered by the Aviation Department.

AT 229 ATP Ground School 3.0 CR
Prerequisite: Comply with FAR 61.151 and 61.155.
Preparation for FAA ATP Written Exam. Includes FAR Part 94 review, IFR and TERPS review, ILS review, ATC procedures review, and attitude instrument flying review. Covers Airman's Information Manual (AIM) and Jeppensen CR Series Computer, cross-country planning, performance charts, weight and balance, weather theory, interpreting high altitude weather charts, forecasts and applicable FARs.

AT 230 ATP Flying 2.0 CR
Prerequisite: Comply with FAR 61.151 and 61.155; Dept. approval. Corequisite: AT 229 and passing score on the FAA ATP Written Exam.
Fees.
Flight instruction for students intending to become professional pilots. Course completion requires awarding of Airline Transport Pilot Certificate.
Special Notes: Open entry-open exit. Course credit may be awarded to holders of an Airline Transport Pilot Certificate through the successful completion of a proficiency flight check administered by the Aviation Department.

AT 231 Search, Survival, and Rescue 3.0 CR
Prerequisite: AT 233 or faculty permission.
Deals with situations that develop from lost or downed aircraft. Survey of principles of survival in all types of climates, with emphasis on arctic environments. Organizations for search and rescue with emphasis on systems and operational methods used in Alaska.

AT 232 Aviation Navigation 3.0 CR
Prerequisite: AT 100 and Private Pilot Certificate or higher rating.
Earth's surface and mapping, aeronautical charts, fundamentals of navigation, navigational calculations and theory, and operation of ground and airborne navigational equipment. Future trends in navigation. Review for certified pilots.

AT 233 Aviation Safety 3.0 CR
Prerequisite: Basic knowledge of aviation terminology.
Survey of aviation safety to identify primary causes of aviation accidents. Develops and evaluates safety programs. Roles of National Transportation Safety Board and other agencies. Future concepts in aviation safety.

AT 235 Elements of Weather 3.0 CR
Definitions of weather elements and methods of measurement. Composition of atmosphere, description of atmospheric processes and their movement, general circulation of atmosphere, wind and secondary circulation, weather forecasts, and weather satellites.

AT 236 Management: Airline 3.0 CR
Prerequisite: AT 134 or faculty permission.
Study of airline organization and management. Analysis of classifications, management methods, governmental relationships, and financial positions. Functions of marketing in airline operations, market research, demand determination, and effects of FAA regulations.

AT 240 Operations in Flight Service Station 3.0 CR
Prerequisite: AT 144 and 146 or faculty permission.
Fundamentals of weather observation, use of FAA publications in flight planning, phraseologies, and radio frequencies used in air-ground communications. Use of civil notice to airmen system and familiarization with positions of operation in FSS.

AT 241 Airport Traffic Control 3.0 CR
Prerequisite: AT 144 and 146 or faculty permission.
Basic techniques in operating ATC airport facilities in visual conditions. Includes operation of airport lighting systems, proper phraseology. Separation requirements,

control techniques, and emergency actions. Preparation for operating simulated airport.

AT 242 Procedures for Control of Instrument Traffic (PCIT) I 3.0 CR

Prerequisite: AT 140, 141, 142, 143, 145 and 146 or faculty permission. Instrument pilots accepted. Concurrent enrollment in AT 243 may be approved.

Covers procedures of instrument traffic control in non-radar environment. Develops longitudinal, vertical, and lateral separation of air traffic. Introduction to airspace surrounding Weatherford International Airport.

AT 243 Procedures for Control of Instrument Traffic (PCIT) II 3.0 CR

Prerequisite: Extensive experience in ATC, Airline Transport rated Certificate, AT 242 or faculty permission.

Fees.

Introduction to working problems of air traffic separation. Develops routine problem solving processes for near-midair collisions, and other emergency occurrences. Primarily lab situations designed to adapt student controller to real life ATC environment.

AT 244 Procedures for Control of Instrument Traffic (PCIT) III 3.0 CR

Prerequisite: AT 243 or faculty permission.

Fees.

Fundamental radar theory and systems operation in ATC. Hands-on time at FAA radar facilities and in classroom simulators. Develops techniques of radar equipment operations and manipulation (separation of air traffic, vectoring, speed control). Radar development in areas of ARTS-2 and EARTS-3 when available.

AT 245 Pilot/Controller Techniques 3.0 CR

Prerequisite: Familiarity with aviation terminology and high school reading level recommended.

Explores methods of airport operations. Covers various levels of air traffic control ranging from uncontrolled bush strips to highly complex international airports.

AT 271 Aircraft Welding 4.0 CR

Grading Policy: Pass/No Pass.

Fees.

Provides concentrated practical experience in the operation and use of portable and stationary gas welding equipment. Subjects include layout and repair techniques for tubular steel aircraft structures, brazing on secondary structure, and the inspection of welds on tubular steel structures.

AT 272 Aircraft Covering and Finishing 4.0 CR

Grading Policy: Pass/No Pass.

Fees.

Identification and application of aircraft fabrics and finishing materials. Approximately 80 percent of class time spent in lab. Students inspect, test, and repair aircraft fabrics, install fabric, and apply appropriate finishing materials to aircraft structures, wings, and flight control surfaces.

AT 273 Fluid Power Systems 3.0 CR

Prerequisite: AT 171, AT 172, AT 183, AT 183L, AT 184, AT 184L, AT 186; Concurrent enrollment in AT 273L.

Introduces fluid power system basics of pressure, force, area, volume, flow and speed, and applications of fluid power to aircraft. Areas covered include fluids, seals, hoses, tubing, connections, component, identification and function, inspection, installation, and overhaul. System operation, inspection and troubleshooting are covered for hydraulic, pneumatic, and landing gear systems.

AT 273L Fluid Power Systems Lab 2.0 CR

Prerequisite: AT 171, AT 172, AT 183, AT 183L, AT 184, AT 184L, AT 186; Concurrent enrollment in AT 273L.

Fees.

Covers identification, installation, operation and servicing of fluid power systems and components such as fluids, seals, hoses, tubing, connections, pumps, valves, regulators, filters, reservoirs and actuators. Practice in system operation, inspection and troubleshooting are included for hydraulic, pneumatic, and landing gear systems.

AT 274 Acft Electronic Systems 5.0 CR

Prerequisite: AT 183, AT 183L, AT 184, AT 184L; Concurrent enrollment in AT 274L.

Covers the use of mechanical and electrical systems in sensing, communicating and displaying information, along with solid state and digital devices, sensors and special circuits used in instrumentation systems on aircraft.

AT 274L Acft Electronic Systems Lab 1.0 CR

Prerequisite: AT 183, AT 183L, AT 184, AT 184L; Concurrent enrollment in AT 274.

Fees.

Provides practice in creating, operating, testing and analyzing solid state and digital devices, sensors and special circuits used in instrumentation systems and the mechanical and electrical systems used in sensing, communicating and displaying information in aircraft.

AT 276 Propeller Systems 1.0 CR

Prerequisite: AT 171, AT 172, AT 175, AT 177, AT 178.

Fees.

Covers the installation, operation, performance testing and troubleshooting of aircraft propeller systems.

AT 277 Recip Engine Installation and Operations 3.0 CR

Prerequisite: AT 171, AT 181, AT 181L, AT 183, AT 183L, AT 187, AT 187L; Concurrent enrollment in AT 276 and AT 277L.

Covers the installation, operation, performance testing and troubleshooting of aircraft reciprocating engines.

AT 277L Recip Engine Installation and Operations Lab 2.0 CR

Prerequisite: AT 171, AT 181, AT 181L, AT 183, AT 183L, AT 187, AT 187L; Concurrent enrollment in AT 276 and AT 277.

Fees.

Provides practice in the installation, operation, performance testing and troubleshooting of aircraft reciprocating engines.

AT 279 Turbine Engine Repair and Overhaul 3.0 CR

Prerequisite: AT 172, AT 175, AT 181, AT 181L, AT 186; Concurrent enrollment in AT 279L.

Covers construction details of turbine engines from inlet to exhaust along with support systems, operational characteristics and repair and overhaul practices for typical engines.

AT 279L Turbine Engine Repair and Overhaul Lab 1.0 CR

Prerequisite: AT 172, AT 175, AT 181, AT 181L, AT 186; Concurrent enrollment in AT 279.

Fees.

Covers practice involved in the disassembly, assembly, inspection and repair of aircraft turbine engines. The proper use of technical data, appropriate tools and inspection devices is stressed along with special safety procedures related to the servicing, operation and repair of turbine engines.

AT 283 Acft Auxiliary Systems 3.0 CR

Prerequisite: AT 177, AT 178, AT 274, AT 274L; Concurrent enrollment in AT 283L.

Covers operation, maintenance servicing, inspection and troubleshooting of auxiliary systems on aircraft. These include environmental control systems, (heat, air-conditioning, pressurization, oxygen), ice and rain control systems, fire protection and associated indicating and warning systems.

AT 283L Acft Auxiliary Systems Lab 1.0 CR

Prerequisite: AT 177, AT 178, AT 274, AT 274L; Concurrent enrollment in AT 283.

Fees.

Covers operation, maintenance servicing, inspection and troubleshooting of auxiliary systems on aircraft including environmental control systems, (heat, air-conditioning, pressurization, oxygen), ice and rain control systems, fire protection and associated indicating and warning systems. Practice is provided in operating, servicing, and troubleshooting systems using system schematics, wiring diagrams and maintenance information.

AT 285 Bonded Structures 4.0 CR

Corequisite: AT 170; Concurrent enrollment in AT 285L.

Covers the theory of and techniques used in the fabrication, inspection and repair and finishing of bonded structures. Includes plastics, wood structures, advanced composite structures and painting.

AT 285L Bonded Structures Lab 1.0 CR

Corequisite: AT 170; Concurrent enrollment in AT 285.

Fees.

Provides practice in the fabrication, inspection and repair and finishing of bonded structures including plastics, fabric covering, honeycomb structures, and advanced composite structures, and painting.

AT 286 Acft Materials and Processes II 2.0 CR

Prerequisite: AT 172, AT 176.

Fees.

Covers theory of and techniques used in the repair of aircraft steel structures, and certain aluminum, magnesium and titanium components.

AT 289 Turbine Engine Installation and Operations 2.0 CR

Prerequisite: AT 183, AT 183L, AT 276, AT 279, AT 279L; Concurrent enrollment in AT 289L.

Covers the installation, operation, performance testing and troubleshooting of aircraft turbine engines.

AT 289L Turbine Engine Installation and Operations Lab 2.0 CR

Prerequisite: AT 183, AT 183L, AT 276, AT 279, AT 279L; Concurrent enrollment in AT 289.

Fees.

Provides practice in the installation, operation, performance testing and troubleshooting of aircraft turbine engines.

AT 331 Human Factors in Aviation 3.0 CR
Prerequisite: AAS in aviation field or Advanced Airman Certificate.
Students will become familiar with the following aspects of human factors: the meaning of human factors, human error, fatigue, body rhythms and sleep, fitness and performance, vision and visual illusions, motivation and leadership. Communication: language and speech, attitudes and persuasion, training and training devices, documentation, displays and controls, space and layout, the aircraft cabin and its human payload.

AT 332 Transport Aircraft Systems 3.0 CR
Prerequisite: Certificate, degree or professional experience in piloting, maintenance, administration, or air traffic control.
Describes and examines the components of transport aircraft systems, their design, performance, capabilities, limitations, interrelationships, and contribution to the operation, safety, efficiency and economy of the aircraft.

AT 361 Federal Aviation Administration 3.0 CR
Inspection Authorization
Prerequisite: FAA Mechanic Certificate, and Airframe and Powerplant License.
Fees.
Certified, experienced aviation maintenance technicians will become familiar with the privilege, limitations, authority and responsibilities of FAA inspection authorized mechanics. They will become proficient in the use of required data (regulations, specifications, service information, advisory circulars, etc.) and the application of that data to decisions involving airworthiness of certified products.

AT 362 Aerodynamics and Flight Performance 4.0 CR
Prerequisite: MATH 108 or higher and PHYS 103 or 110.
Students will learn principles and applications of the following aspects of aerodynamics and flight performance: basic aerodynamics, airplane performance, high speed aerodynamics, stability and control and operating strength limitations.

AT 363 Aerodynamics and Flight Performance 4.0 CR
Laboratory
Prerequisite: Prior completion of AT 362 or concurrent enrollment required.
Fees.
Students will conduct formal laboratory experiments that demonstrate aerodynamic principles and that illustrate and find solutions for airflow problems. During this time, they will also develop a research project in the area of airflow, aerodynamics, or aircraft performance.

AT 364 Avionics Systems 3.0 CR
Prerequisite: ET 128 or AT 274 and AT 274L.
Covers the fundamentals of design, installation, operation, testing and maintenance of airborne communication, navigation, instrument, and auto flight systems.

AT 367 Acft Assembly and Inspections 4.0 CR
Prerequisite: AT 185, AT 185L, AT 273, AT 273L, AT 277, AT 277L, AT 279, AT 279L; Corequisites: AT 274, AT 274L, AT 283, AT 283L; Concurrent enrollment in AT 367L.
Covers rules and procedures for performance of scheduled and non-scheduled aircraft inspections. Includes researching regulations and data, and planning, performing and recording findings of inspections. Also includes procedures for jacking and weighing of aircraft and disassembly and flight controls and evaluating the condition of aircraft, engines and systems to determine airworthiness.

AT 367L Acft Assembly and Inspections Lab 2.0 CR
Prerequisite: AT 185, AT 185L, AT 273, AT 273L, AT 277, AT 277L, AT 279, AT 279L; Corequisites: AT 274, AT 274L, AT 283, AT 283L; Concurrent enrollment in AT 367.
Fees.
Provides practice in the performance of scheduled and non-scheduled aircraft inspections. Includes jacking and weighing of aircraft, disassembly, balancing, reassembly, and rigging of aircraft assemblies and flight controls, researching data, inspecting systems and components, evaluating the condition of aircraft, engines and systems to determine airworthiness, recording findings in maintenance records.

AT 420 Overview of U.S. Civil Aviation 6.0 CR
Prerequisite: AAS in aviation discipline or Advanced Aviation Professional Certificate.
Advanced study of U.S. civil aviation history, regulations, airspace, airports, communication and navigation systems, air traffic control, flight service, airman certification, general aviation, air carriers, manufacturing and product certification, maintenance, weather and safety. Students analyze U.S. air transport system; identify strengths, weaknesses and areas and methods for improvement.

AT 464 Advanced Avionics Systems 4.0 CR
Prerequisite: AT 364 or ET 340 or equivalent.
Includes design, installation, operation, testing and maintenance of advanced avionics in use for instrumentation, navigation, communication, flight management and automatic control of aircraft and auxiliary systems. Also covers digital avionics, on-board computers and integrated flight management, performance management, indication and warning and autoflight systems.

AWS: ALASKA WILDERNESS STUDIES

Offered through the College of Community and Continuing Education, Classroom Building (K), Room 126, 786-1468

AWS 101 Wilderness Adventures 1.0-3.0 CR
Fees.
Survey course introducing a variety of wilderness skills including hiking, camping, canoeing, and skiing in a non-threatening manner. Designed for those new to the outdoors or Alaska.
Special Notes: One and two day weekend field trips.

AWS 102 Nature Observation and Tracking 1.0-3.0 CR
Prerequisite: Good health.
Fees.
Emphasis is on keen nature observation and investigative techniques, especially learning how to interpret signs (tracking) of our Alaskan wildlife. Field trips include studies of our state's mammal, bird, and plant species.
Special Notes: Students expected to be in fairly good shape. Able to ski or hike daily 5 miles with a light pack. Includes one day and/or two day weekend field outings. May be taken more than once for credit.

AWS 103 Introduction to Camping and Backpacking 3.0 CR
Fees.
Basic backpacking skills with an Alaskan emphasis. Covers equipment, trip planning, map and compass, campcraft, where to go, and outdoor safety. Designed for the beginner or those new to Alaska.
Special Notes: Weekend field trips. May be taken more than once for credit.

AWS 104 Backcountry Skiing 1.0 CR
Fees.
Development of cross-country and backcountry touring skills and skiing techniques in outdoor Alaska in the arctic environment.

AWS 105 Mountaineering I 3.0 CR
Fees.
Introduction to mountaineering for those with no or limited climbing experience. Instruction in equipment, knots, belay and rappel, ice axe use, and beginning rock and snow climbing with an emphasis on mountain safety.
Special Notes: Class meets alternating weeks. Weekend field trips twice monthly. May be taken more than once for credit.

AWS 106 Ice Climbing I 1.0 CR
Prerequisite: Good physical condition to allow climbing in possible inclement weather.
Condensed introduction to joys and challenges of ice climbing. Non-terrifying and fun! Covers equipment, knots, belaying, rappeling, and ice climbing techniques. Two full days intense experience on the ice.
Special Notes: May be taken more than once for credit.

AWS 107 Rock Climbing I 1.0 CR
Prerequisite: Good physical condition to allow climbing in possible inclement weather.
Condensed introduction to joys and challenges of rock climbing. Non-terrifying and fun! Covers equipment, knots, belaying, rappeling, and rock climbing techniques. Two full days intense experience on the rocks.
Special Notes: May be taken more than once for credit.

AWS 109 Beginning Cross-Country Skiing 1.0 CR
Fees.
Techniques of cross-country and trail skiing, equipment, waxing, and poling.
Special Notes: Not repeatable for credit.

AWS 110 Hiking Alaska 1.0 CR
Introduction to the trails of the local area. Basics of safe and enjoyable hiking with an emphasis on the region. Natural history, including climate, geology, ecology, culture, and resource issues of selected locales. Hikes up to 5 miles on varied terrain.

AWS 111 Alaska Winter Survival 3.0 CR
Prerequisite: Good physical condition to allow participation in overnight field trips in below freezing weather and snow conditions.
Fees.
Classroom and field training to prepare students for winter/arctic survival. Covers preparation, cold weather injuries, avalanche safety, map and compass, shelter construction, signaling, fire starting, and general outdoor safety.
Special Notes: Three to four weekend field trips. May be taken more than once for credit.

AWS 112 Alaska Summer Survival 3.0 CR
Prerequisite: Good physical condition to allow participation in overnight field trips and exposure to cold, wet summer weather.
Fees.
Classroom and field training to prepare students for wet weather/summer survival. Covers preparation for outings, map and compass, hypothermia, river safety, summer shelters, food gathering, fire starting, and general outdoor safety.
Special Notes: May be taken more than once for credit.

AWS 112A **Alaska Summer Survival** **2.0 CR**
Grading Policy: Pass/No Pass.
Prepares students for wet weather/summer survival. Covers preparation for outings, map and compass, hypothermia, river safety, summer shelters, food gathering, fire starting, and general outdoor safety.
Offered at Kenai Peninsula College only.

AWS 113 **Alaska Marine Survival** **1.0-3.0 CR**
Fees.
Preparation for serious survival situation on sea or coast. Survival aspects of cold water environment including safety and survival equipment, cold injuries, shelter, signaling, food procurement, and emergency flotation. All with a marine emphasis.
Special Notes: May be repeated for credit. Field trips.

AWS 114 **Winter and Alpine Backpacking** **1.0 CR**
Introduction to the skills and knowledge necessary for emergency survival. Survival gear, preparedness, emergency rations and health care, finding food, erecting shelter and building a fire.
Special Notes: May be taken more than once for credit.

AWS 115 **Glacier School** **2.0 CR**
Prerequisite: Good physical condition and backpacking experience.
Fees.
Covers basic skills for safe glacier travel, climbing, and camping. Emphasis on equipment, route finding, low angle snow and ice climbing, and crevasse rescue techniques. Classroom instruction and one week field school on glacier.
Special Notes: Special fee for transportation. May be taken more than once for credit.

AWS 116 **Discovering Wild Plants** **3.0 CR**
Grading Policy: Pass/No Pass.
Fees.
Introduces the flora of Alaska, its' diversity and myriad uses. Emphasis will be on the edible, poisonous, and medicinal species. Growing wild plants as ornamentals for home and garden will be explored. The first section will cover the edible mushrooms.
Offered at Kenai Peninsula College only.

AWS 117 **Woodscraft** **2.0 CR**
Grading Policy: Pass/No Pass.
An outdoor class that covers arts and crafts using native materials, working with diamond willow, tool making, collecting native pigments and dyes, making artist's charcoal.
Offered at Kenai Peninsula College only.

AWS 120 **Canoeing I** **1.0 CR**
Fees.
Introductory skills in canoe handling in both flat and moving water. Selection and use of special equipment, food, and clothing. Application of safety and rescue procedures. Trip planning with emphasis on minimum environmental impact and camping techniques.
Special Notes: May be taken more than once for credit.

AWS 121 **Kayaking I** **1.0 CR**
Prerequisite: Good health and basic swimming ability.
Introductory skills in kayak handling in both flat and moving water. Selection and use of special equipment, food, and clothing. Application of safety and rescue procedures. Trip planning with emphasis on minimum environmental impact and camping techniques.
Special Notes: May be taken more than once for credit.

AWS 122 **Rafting I** **1.0 CR**
Prerequisite: Good health and basic swimming ability.
Fees.
Introductory skills in raft handling in both flat and moving water. Selection and use of special equipment, food, and clothing. Application of safety and rescue procedures. Trip planning with emphasis on minimum environmental impact and camping techniques.
Special Notes: May be taken more than once for credit.

AWS 123 **Beginning Sea Kayaking** **1.0 CR**
Fees.
Introduces sea kayak paddle skills, basic rescue procedures, trip planning, equipment needs and options, and safety considerations. Held in classroom, pool, and on weekend field trips.
Special Notes: Kayak rentals available. Special fees will vary depending on equipment provided, transportation arrangements, field contact hours, pool time, and individual campus variables.

AWS 124 **Gun and Hunting Safety** **1.0 CR**
Handgun and rifle safety covering types of firearms and ammunition, legal considerations, shooting skills, proper handling and storage, hunting safety, and game rules. NRA/ADF&G Hunter Safety Certificate awarded upon successful completion of class. Includes range time.
Special Notes: Special fees will vary depending on equipment provided, transportation arrangements, field contact hours, and individual campus variables.

AWS 126 **Dog Mushing** **1.0 CR**
Fees.
History of dog mushing, types of equipment, training, care and feeding of race dogs, freighting and racing. Hands-on practical experience.

AWS 127 **Beginning Alpine Skiing** **1.0 CR**
Fees.
Introduces downhill skiing. Includes turns, stops, and control techniques, equipment and safety. Classroom and slope time.
Special Notes: May be taken more than once for credit.

AWS 128 **Scuba Diving** **2.0 CR**
Fees.
Lectures on diving techniques and gear safety with emphasis on crisis situations, supplemented with work in pool and ocean environment. Diver's certificate given upon successful completion.
Special Notes: May be taken more than once for credit.

AWS 152 **Beginning Sailing and Seamanship** **1.0 CR**
Hands-on sailing course with U.S. Coast Guard Licensed Skipper-Instructor. Includes "solo" sailing.
Special Notes: May be taken more than once for credit.

AWS 162 **Winter Emergency Care** **4.0 CR**
Prerequisite: CPR certification must be obtained by week 6 of class.
Fees.
Provides knowledge and skills necessary to administer emergency care in non-urban environment. Covers basic anatomy and physiology, assessment of injuries and appropriate short-term care. An approved emergency care course for entry into National Ski Patrol.

AWS 165 **Emergency Wilderness Medicine** **4.0 CR**
Prerequisite: EMT 119 or AWS 162 or faculty permission.
Fees.
For serious outdoor persons who must deal with medical emergencies in the field. An advanced program overviewing prevention, assessment, and care of illness and injuries commonly encountered in the northern wilderness. Emphasizes the use of limited resources in short- and long-term situations which are beyond the limits of urban emergency medical systems.

AWS 190 **Log Cabin Construction** **1.0-3.0 CR**
Fees.
Hands-on techniques and skills of log cabin construction. Covers planning and organization, estimating costs, and major phases of log building construction including foundation, floor, walls, roof, windows, doors and trim.

AWS 202 **Nature Observation Tracking II** **3.0 CR**
Prerequisite: AWS 102 or faculty permission and good physical health.
Classroom and field training to prepare students for advanced nature observation and tracking. Students track animals, stalk and follow tracks, both night and day.
Special Notes: Overnight camping and five to six mile rough terrain hiking required. May be taken more than once for credit.

AWS 203 **Advanced Backpacking** **2.0 CR**
Prerequisite: AWS 103 or basic backpacking skills. Ability to carry full pack for cross-country travel.
Fees.
Advanced backpacking/trekking skills. Emphasis on planning, equipment, route selection/finding, logistics, navigation, general off trail trekking, and safety.
Special Notes: May be taken more than once for credit.

AWS 204 **Ski Mountaineering** **2.0 CR**
Prerequisite: Intermediate cross-country skiing skills or faculty permission. Winter backpacking and camping skills. Good physical condition and ability to carry overnight winter pack.
Fees.
Backcountry skiing in the wilderness of Alaska's mountains. Covers equipment, avalanche awareness, telemarking, skiing with packs or sleds, and roped skiing.
Special Notes: May be taken more than once for credit.

AWS 205 **Mountaineering II** **3.0 CR**
Prerequisite: AWS 105 or basic mountaineering skills. Good physical condition.
Fees.
Review of basics, climbing steep snow and rock, anchors, protection placement, glacier travel, low-moderate angle ice climbing, and introduction to leading.
Special Notes: Weekend field trips twice monthly. May be taken more than once for credit.

AWS 206 **Ice Climbing II** **1.0 CR**
Prerequisite: AWS 106 or equivalent, and good physical condition.
Teaches skills of intermediate ice climbing. Includes basics review, anchors, ice protection placement, German (front point) crampon style, front point/ice axe technique, alpine and waterfall ice, and introduction to leading.
Special Notes: Two full days on the ice. May be taken more than once for credit.

AWS 207 Rock Climbing II 1.0 CR
Prerequisite: AWS 105, AWS 107, or equivalent.
Gives beginning climbers skills to rock climb on their own. Covers basics review, anchors, protection placement, more advanced rock climbing techniques and introduction to leading.
Special Notes: May be taken more than once for credit.

AWS 215 Expedition Mountaineering 1.0-3.0 CR
Prerequisite: AWS 205 or equivalent. Students should be in good physical condition, able to carry heavy pack and relay supplies at altitudes of over 16,000 feet.
Fees.
Field course held on major Alaskan mountain. Emphasizes route finding, decision making, group dynamics, judgment, high altitude climbing, and advanced techniques to teach safe and successful expedition mountaineering.
Special Notes: May be taken more than once for credit.

AWS 252 Advanced Sailing and Seamanship 1.0 CR
Prerequisite: AWS 152.
Designed for sailors with working knowledge of fundamentals of sail theory and boat handling. Focus will be on advanced sail trim, with emphasis on use of both spinnakers and flashers. Basic introduction to racing, rules, course tactics and special sail handling techniques. Attention to advanced docking and anchoring techniques, and special aspects of coastal navigation. Includes a multi-day cruise on Resurrection Bay.
Special Notes: Special fees vary depending on equipment provided, transportation arrangements, field contact hours and individual campus variables.

AWS 278 Alaska Native Survival Techniques 3.0 CR
Northern survival from a traditional Native perspective. Covers overview of Native cultures, and hands-on practice of emergency shelter construction techniques, clothing and equipment, travel, and subsistence. Includes comparison and contrast of western survival and Native techniques.

AWS 295A Wilderness Leadership Practicum 3.0 CR
Prerequisite: Technical skills in appropriate field and first aid training.
Fees.
Teaches experienced backpackers, mountaineers, paddlers, or skiers skills of wilderness leadership. Students, as interns, work in leadership roles with AWS classes or other appropriate groups. Emphasis on safety, judgment, decision making, personal dynamics, and group responsibility. Designed for teachers, outdoor leaders, or those interested in guiding.
Special Notes: May be taken more than once for credit.

BA : BUSINESS ADMINISTRATION

Offered through the School of Business, Business Education Building (BEB), Room 309, 786-4100

Each student taking any School of Business course will be charged a single lab fee of $20 for the semester. (Does not apply to Eagle River, Ft. Richardson, Elmendorf, or extended site offerings.)

BA 101 Introduction to Management 3.0 CR
Entry level survey of development of management theory. Techniques associated with core managerial functions such as planning, organizing, actuating, and controlling. Selected management concepts and models viewed within organizational settings.

BA 104 Real Estate Principles and Practice 3.0 CR
Fundamental course in real estate. Includes property rights, ownership, financing, brokerage, planning, investing, and home buying and selling.
Offered at Kenai Peninsula College only.

BA 105 Principles of Banking 3.0 CR
Designed for new personnel at any level. Foundation for most subsequent American institute of banking courses. Provides updated, broad perspective of banking industry and bank functions. Includes check processing, teller functions, deposits, trust services, bank bookkeeping, bank loans, and investments. Discussion of bank's role in community.

BA 110 Development of Local Tourism 2.0 CR
Grading Policy: Pass/No Pass.
This is the Alaska that visitors come to see; the land, water, animals and people of the Mat-Su area. Provides information about the Alaska visitor and the visitor industry. Local history, geography and tourist events will be included. A number of subjects will be covered starting with the state as a whole and quickly focusing on local visitor attractions and ideas for you to try. Presentations will be made on several subjects, each by an expert on the area under study.
Offered at Matanuska-Susitna College only.

BA 112 Tourism Principles and Practices 3.0 CR
Survey of tourism fundamentals; why tourists travel, components of tourism, economic and social impacts of tourism, destination development, and travel market research.

BA 115 Hotel/Motel Management 3.0 CR
Survey of hotel/motel management fundamentals: chain operations, franchises, and mom-n-pop enterprises. Emphasizes space allocation; guest room, dining, recreation, and entertainment facilities; housekeeping; marketing and public relations.

BA 116 Travel Agency Planning and Sales 3.0 CR
Designed for beginning travel agents. Sale of airline tickets, design and tabulation of route costs, time changes, group and individual rates. Includes transfers, schedule outlines, use of airline rate and time schedules, reservations, interviewing, and sales techniques.

BA 131 Personal Finance 3.0 CR
Introduction to consumer financial issues. Surveys variety of topics, including personal income, home mortgages, credit laws, income tax, budgeting, insurance, estate planning, investments in stocks, bonds, insurance, and mutual funds, transportation, leisure and recreation costs, consumer fraud and laws protecting consumer.

BA 132 Successful Money Management 1.0 CR
Grading Policy: Pass/No Pass.
How money is used in a family. Types of savings and investment vehicles available. Methods of investing, investing in growth, income and tax reduction. Management of financial risk. Preservation of capital and transfer of estate with minimal estate tax.
Offered at Matanuska-Susitna College only.

BA 150 Women in Business and Management 3.0 CR
Prerequisite: Some business or office experience, or faculty permission.
Covers strategies of business women who want to gain upward mobility in organizations. Includes understanding organizational structure, opportunities in business organizations and how to prepare for them, office politics and communications, personal awareness, managerial skills, and introduction to personal finance.

BA 151 Introduction to Business 3.0 CR
For students with relatively little business management experience. Understanding profit in business, issues of social responsibility and forms of business ownership. Roles of management in specialized fields of human resources, finance, production and marketing. Students explore opportunities and requirements in several business positions as well as assess personal interests and capabilities.

BA 155 Personal Investments 3.0 CR
An in-depth course on investment of personal income with emphasis on investments, including stocks, bonds, mutual funds, banking, annuities, insurance, real estate, estate planning, and taxes.

BA 166 Small Business Management 3.0 CR
Business planning as key to successful small business management. Examines practical aspects of management for starting/operating small businesses. Assists students in understanding personal finance, business regulations, marketing, production, and business finance.

BA 204 Introduction to Money and Banking 3.0 CR
Presents basic economic principles most closely related to money, banking, and other topics of interest to bank management. Stresses practical application of theories to individual banks. Covers commercial banking systems, cash assets and liquidity management, bank investments, federal reserve system and Treasury Department operations, and the international monetary system.
Special Notes: Designed for persons with entry level to five years experience.

BA 206 Analyzing Financial Statements 3.0 CR
Designed for lending personnel or management trainees with basic accounting knowledge. Tools and techniques necessary for evaluating financial condition and operating performance of modern business enterprises. Covers financial statement analysis, accounting and business funds flow. Also includes short-term liquidity and solvency, long-term financial strength, and asset utilization.

BA 209 Consumer Lending 3.0 CR
Prerequisite: BA 105, banking experience, or faculty permission.
Overview of consumer credit operations, and role of consumer credit in banking. Covers credit evaluation principles and opened credit, marketing bank services and collection policies and procedures.

BA 210 Law and Banking Principles 3.0 CR
Overview of general principles of law and legal issues related to banking, with special emphasis on the Uniform Commercial Code. Designed for entry- and officer-level banking personnel who need an overview of the laws, regulations, and legal processes directly related to banking.
Special Notes: Not applicable to UAA certificates or degrees.

BA 211 Law and Banking Applications 3 CR
Prerequisite: BA 210
Covers laws pertaining to secured transactions, letters of credit, and the bank collection process. Designed for entry- and officer-level banking professionals.
Special Notes: Not applicable to UAA certificates or degrees.

BA 223 Real Estate Law 3.0 CR
Practical course to assist students in surveying various kinds of deeds and conveyances, mortgages, liens, rentals, appraisals, and other real estate transactions involving law.

BA 231 Fundamentals of Supervision 3.0 CR
For students with or without supervisory experience. Introduction to effective supervisor's role. Emphasizes development of insights and skills necessary to get things done through others by planning, organizing, motivating, and controlling. Practical experience in decision making approach to condemnatory situations facing supervisors.

BA 232 Fundamentals of Organizational Management 3.0 CR
Prerequisite: BA 231 or faculty permission.
Leadership styles of managers and skills necessary to effectively lead in organizations. Explores literature in motivation and leadership for practical implications. Students analyze organizational case studies.

BA 233 Fundamentals of Financial Management 3.0 CR
Prerequisite: Either ACCT 101 or ACCT 201, and MATH 105.
Helps students to develop decision making viewpoints of managers. Includes financial statement analysis, cash flow planning, capital asset expenditures planning, and methods of short-term and long-term financing.

BA 241 Business Law I 3.0 CR
Cross-Listed: JUST 241.
Introduces legal aspects of business activities. Emphasizes basic principles, institutions, and administration of law in contracts, employment, torts, property, agency, real estate, and insurance.

BA 242 Business Law II 3.0 CR
Cross-Listed: JUST 242.
Prerequisite: BA/JUST 241.
Emphasizes basic principles, institutions, and administration of law in suretyships, partnerships, corporations, trusts, bankruptcy, negotiable instruments and sale of goods.

BA 256 Financial Planning and Control 3.0 CR
Prerequisite: BA 151 or 166.
The overall plan stated in terms of costs and revenue. Foundations for effective budgeting, management tool prerequisites, goals, objectives, programming, structure, of budgeting systems, processes and budget cycle formulation, development, preparation, review, approval, implementation, and control.
Offered at Kenai Peninsula College only.

BA 260 Marketing Practices 3.0 CR
Prerequisite: BA 151 or faculty permission.
Designed to give students a real-world view of basic marketing principles and practices. Emphasizes planning strategy and application of marketing concepts. Examines nature of marketing and its environment, selecting target markets, and developing a market mix: product, price, promotion, and distribution.

BA 261 Advertising and Sales Promotion 3.0 CR
Prerequisite: BA 260 or faculty permission.
Introduction to advertising and sales promotion. Integrates theory and practice. Examines advertising role in today's complex society. Covers creation of advertising message, dynamics of media, and coordination of advertising and sales promotion with other marketing elements.

BA 262 Public Relations 3.0 CR
Prerequisite: BA 260 or faculty permission.
Introduction to role of public relations in today's society. Familiarizes students with strategies and tactics of public relations practice. Examines specialized areas such as communication and marketing concepts, planning, and use of public relations by corporations, governments, and nonprofit agencies.

BA 263 Practices in Consumer Behavior 3.0 CR
Prerequisite: BA 260 or faculty permission.
Provides students with usable understanding of consumer behavior; based on the belief that knowledge of factors influencing consumer behavior can be used to develop sound marketing strategy. Explores motivation, personality, lifestyle, decision making, and the impact of cross-cultural variations on consumer buying behavior.

BA 264 Personal Selling 3.0 CR
Designed for people with or without sales experience. Explores skills all individuals use to sell themselves, products, services, and ideas. Includes selling process, buyer behavior, communication, and selling as part of marketing mix.

BA 273 Introduction to Statistics for Business and Economics 3.0 CR
Prerequisite: CIOS 110 and MATH 107 or 270.
Introduction to statistics and probability with emphasis on the analysis of business and economic data. Includes descriptive statistics for univariate and bivariate data; elementary probability and sampling distributions; and estimation of means, proportions, and simple regression coefficients. Students will be introduced to one or more computer packages for statistical data analysis.
Special Notes: A student may apply no more than 3 credits from AS 252 or BA 273 toward graduation requirements for a baccalaureate degree.

BA 285 Supervision/Management by Objectives 3.0 CR
Covers small group leadership and management so the student can function effectively as a foreman, fire crew boss, or unit supervisor. Emphasizes goal accomplishment, including identification of goals, planning and evaluation.
Offered at AVTEC only as part of the Forestry Degree.

BA 295 Internship in Business Administration 3.0 CR
Prerequisite: Department permission required. ENGL 111, SPCH 111, MATH 105 or 107 recommended.
Grading Policy: Pass/No Pass.
Placement of students in generalized and specialized work environment where the integration of classroom theory with practical and related experience takes place for specific periods of time. Direct supervision by the employer, faculty and cooperative education department is provided during the student's work period.
Special Notes: Course may be taken only once for credit.

BA 300 Organizational Theory and Behavior 3.0 CR
Prerequisite: School of Business majors must be admitted to upper-division standing.
Literature of organizational theory; emphasis on the theoretical concepts, organizational design, dynamics of formal and informal groups, communication in leadership, organizational development, organizational effectiveness, and social science research techniques.

BA 306 Real Estate Fundamentals (Principles) 3.0 CR
Prerequisite: Admission to upper-division standing, or faculty permission.
Principles of real estate, urban land economics, and governmental aspects of real property ownership and control. Survey course of all elements of real estate ownership.

BA 310 Consumer Behavior 3.0 CR
Prerequisite: BA 343 and School of Business majors must be admitted to upper-division standing.
Consumer-firm relationship analyzed through the application of concepts drawn from contemporary behavioral science to concrete business cases and practices. Relevant concepts from fields of cultural anthropology, sociology, and psychology applied to problems encountered in marketing to various consumer groups.

BA 323 Real Estate Appraising 3.0 CR
Prerequisite: BA 306 and School of Business majors must be admitted to upper-division standing.
Designed to train students in the techniques and art of real estate appraising. Studies of valuation procedures via the cost, market, and income approach to real estate value.
Special Notes: Equivalent to Society of Real Estate Appraisers 101 course.

BA 325 Corporate Finance 3.0 CR
Prerequisite: ACCT 201, 202, ECON 201, 202, BA 273 and School of Business majors must be admitted to upper-division standing.
Covers different concepts and techniques of financial analysis and planning, time value of money, stocks and bonds valuation, risk and return, capital budgeting, leverage and capital structure, dividend policy, working capital management, different methods of financing including stocks, debt, convertibles, leasing, mergers and acquisitions. Students will be able to evaluate the performance of companies and understand the underlying factors that determine takeover activities, investment and financing decisions.

BA 326 Real Estate Appraisal Case Studies 3.0 CR
Prerequisite: BA 323 and School of Business majors must be admitted to upper-division standing.
Review of basic residential appraisal techniques. Introduction to sophisticated application techniques. Focus on preparation of residential appraisal report. Examination of appraisal process. Technical skills developed through case studies, lectures, and class participation.

BA 327 Product Promotion Strategies 3.0 CR
Prerequisite: BA 343 recommended and School of Business majors must be admitted to upper-division standing.
Analysis of alternative persuasive communication strategies designed to promote consumer and/or industrial products or ideas. Includes determination of communication objectives, selection of media, brand positioning, media buying, campaign implementation, and measurement of promotion effectiveness.

BA 335 Management Principles and Practices 3.0 CR
Prerequisite: School of Business majors must be admitted to upper-division standing. Faculty permission for non-business majors.

Examination of both the theory and techniques of managerial process, with emphasis on the core functions of planning, organizing, and controlling. Contributions of major school covered; behavioral, classical and management science. Selected management concepts and models studied within system constructs.

BA 343 Principles of Marketing 3.0 CR
Prerequisite: ACCT 201, 202, ECON 201, 202 and School of Business majors must be admitted to upper-division standing.

Role of marketing in society and economy. The business firm as a marketing system, and management of the firm's marketing effort.

BA 361 Human Resource Management 3.0 CR
Prerequisite: BA 335 and School of Business majors must be admitted to upper-division standing.

Human resource practice in industry and the analysis of human resource structures, problems and trends. Includes recruiting, selecting, performance appraisal, training, compensation, labor and civil rights laws, interviewing, and testing.

BA 375 Statistics for Business and Economics 3.0 CR
Prerequisite: MATH 272, BA 273 and School of Business majors must be admitted to upper-division standing.

Intermediate statistics and probability with emphasis on the analysis of business and economic data. Includes multivariate probability models; classical inferences for means, standard deviations, and proportions in one and two populations; analysis of variance; contingency tables; multiple regression, and nonparametric statistics. Statistical computer packages are used extensively.

BA 377 Operations Management 3.0 CR
Prerequisite: BA 273, MATH 272 and School of Business majors must be admitted to upper-division standing.

Management of the operations/production system with emphasis on quantitative analysis. Characteristics of systems, types of production systems, forecasting, planning and scheduling work, facility design and location, and selected topics in operations research will be covered. The student is expected to spend two hours each week utilizing the School of Business computer laboratory.

BA 380 Managerial Presentations 3.0 CR
Prerequisite: School of Business majors must be admitted to upper-division standing.

Teaches how to compose business presentations for large and small groups. Students devise aids such as video tapes, computer software, overhead transparencies, and slides. Also learn how to present themselves in social-business situations and how to dress for success. Negotiating in a multi-culturally diverse environment is also covered.

BA 410 Real Estate Investment Analysis 3.0 CR
Prerequisite: BA 306 and School of Business majors must be admitted to upper-division standing.

An advanced treatment of real estate investment and feasibility analysis. Investment risks and an understanding of cash flow, tax sheltered income, and proceeds of sales are stressed. An analysis of the risks and rewards of alternative real estate investment opportunities, including vacant land, residential properties, offices and industrial buildings is covered. Alternative forms of investment, including direct ownership, group ownership, real estate corporations, and real estate investment trusts are analyzed.

BA 425 Advanced Corporate Financial Problems 3.0 CR
Prerequisite: BA 325, CIOS 110 and School of Business majors must be admitted to upper-division standing.

An in-depth consideration of corporate financial topics and problems that are covered in BA 325. Many cases related to the topics under consideration are assigned and discussed in class. The student is expected to spend two hours each week utilizing the School of Business computer laboratory.

BA 426 Financial Institutions 3.0 CR
Prerequisite: BA 325, CIOS 110 and School of Business majors must be admitted to upper-division standing.

A comprehensive study of the functions, structures, delivery systems, efficiencies, problems and performance of financial institutions including banks, saving and loans associations, credit unions, investment companies, pension funds, endowment funds and trusts.

BA 427 International Finance 3.0 CR
Prerequisite: BA 325, CIOS 110 and School of Business majors must be admitted to upper-division standing.

A study of foreign exchange determination and forecasting, risk exposures, and hedging and speculation techniques, international financing through Euro-equity and Eurobond markets, international investment and portfolio diversification, international cash management and capital budgeting, international banking, international debt problems and international taxes.

BA 441 Retailing Management 3.0 CR
Prerequisite: BA 343 and School of Business majors must be admitted to upper-division standing.

Factors governing successful store operation, including location, stock arrangement, buying and selling, advertising and display, merchandising, planning and control, fashion merchandising, personnel management, customer relations, recent trends, store problems and policies.

BA 445 Marketing Research 3.0 CR
Prerequisite: BA 273, 343 and School of Business majors must be admitted to upper-division standing.

Influence of marketing research on the decision making process; effect on the executive who must use it; uses and misuses. Emphasis on the cost versus the value of information for decision making. Problem for formulation, exploratory research, research design, basic observations and sampling requirements, data analysis, interpretation, and reporting. Research projects conducted on actual marketing problems.

BA 447 International Marketing 3.0 CR
Prerequisite: BA 343 and School of Business majors must be admitted to upper-division standing.

Emphasizes the planning, organizing, coordinating and controlling functions of international marketing management. Includes analysis of consumers and target markets, marketing research and promotion decisions applied to international markets.

BA 448 Real Estate Marketing and Property Management 3.0 CR
Prerequisite: BA 306 and School of Business majors must be admitted to upper-division standing.

Covers all aspects of real estate marketing and management, including the leasing and sales of all forms of real property space, such as apartments, shopping centers, office buildings, single family homes and special purpose properties. The management of brokerage and property management companies are covered in detail.

BA 450 Investment Management 3.0 CR
Prerequisite: BA 325, CIOS 110 and School of Business majors must be admitted to upper-division standing.

A study of the various institutional aspects of security investments. Securities including common stocks, preferred stocks, bonds, convertibles, swaps, mutual funds, closed-end funds, municipals, options, and futures are covered. Models based on fundamental and technical approaches of valuation and performance evaluation are discussed and used in application.

BA 460 Marketing Management 3.0 CR
Prerequisite: BA 343 and School of Business majors must be admitted to upper-division standing.

Analysis of product, price, promotion and distribution decisions from a strategic marketing planning perspective. Emphasizes marketing decision models applied to profit and nonprofit organizations.

BA 461 Negotiations and Conflict Management 3.0 CR
Prerequisite: School of Business majors must be admitted to upper-division standing.

Study of negotiation, power, and conflict management from analytical viewpoints. Topics include the application of negotiation and conflict management processes and methodology associated with international negotiations, human resource structures, and corporate merger. Computer exercises and role playing are included.

BA 462 Strategic Management 3.0 CR
Prerequisite: BA 273, 300, 325, 343, 377 and School of Business majors must be admitted to upper-division standing.

Management of the total organization in a turbulent environment, integration of functional viewpoints, strategy formulation and implementation. Emphasis on both theory and case analysis.

BA 464 Advanced Human Resource Management 3.0 CR
Prerequisite: BA 361 and School of Business majors must be admitted to upper-division standing.

Covers the management of relations between the organization and its personnel; building and maintaining a productive work force, and providing job satisfaction. Includes: compensation management, selection and placement, training, and performance appraisal.

BA 469 Employment Law and Individual Rights 3.0 CR
Prerequisite: School of Business majors must be admitted to upper-division standing.

Stresses the institutional framework in which fair employment, collective bargaining and employment-at-will are cast. Deals with major trends in the law governing employment, the reasons for these trends, and their consequences on the overall functioning of human resource structures.

BA 481 Applications in Management 3.0 CR
Prerequisite: BA 300 and School of Business majors must be admitted to upper-division standing.

An in-depth, hands-on examination of management topics and issues introduced

in BA 300. Students are encouraged to develop their own management skills through case analysis role playing, in-class exercises, and projects that require interaction with practicing managers.

BA 488 The Environment of Business 3.0 CR
Prerequisite: BA 335 and School of Business majors must be admitted to upper-division standing.
Examination of the legal, political, social and cultural environments in which business operates; approaches to identifying and resolving ethical and other value-related dilemmas in management.

BA 489 Entrepreneurship and New Business Planning 3.0 CR
Prerequisite: BA 462 and School of Business majors must be admitted to upper-division standing.
Conceptualizing and planning the new business; entrepreneurship and innovation in both new and established organizations. Stages in business growth and their implications for management. Each student is required to develop a detailed plan for a new business.

BA 490 International Comparative Management 3.0 CR
Prerequisite: BA 335 and School of Business majors must be admitted to upper-division standing.
Emphasizes differences and similarities between business management concepts and practices across cultures and geographic boundaries. The perspective of a global economy is adopted.

BA 491 Selected Topics in Business 1.0-3.0 CR
Prerequisite: School of Business majors must be admitted to upper-division standing.
Selected topics in business offered periodically at the discretion of faculty.
Special Notes: See schedule for specific title offerings.

BA 495 Business Administration Internship 3.0 CR
Prerequisite: Permission of the Dept. chair, School of Business majors must be admitted to upper-division standing.
Grading Policy: Pass/No Pass.
Integrates classroom study with paid, planned and supervised work experience in the public and private sectors. Students acquire essential practical skills by being exposed to occupational work environment beyond the boundaries of the campus, enhancing their self-confidence and career direction.
Special Notes: Course may be taken only once for credit.

BA 601 Business Statistics and Data Analysis 2.0 CR
Prerequisite: Graduate standing.
Data identification, collection, and analysis and presentation of results. Basic statistical tools and models for problem analysis and decision making are presented in the context of the manager's role in the organization. Emphasis is on the appropriate selection, use and interpretation of statistical models.

BA 603 Fundamentals of Finance 3.0 CR
Prerequisite: ACCT 601 and graduate standing or faculty permission.
Introduces basic concepts and techniques of business finance. Fundamentals of financial analysis and planning, time value of money, risk and return, working capital management, capital budgeting, cost of capital, mergers and acquisitions.

BA 604 Marketing Management 3.0 CR
Prerequisite: Graduate standing.
Role of marketing in the society and economy. The business firm as a marketing system, management of the firm's marketing effort.

BA 606 Fundamentals of Production/ Operations Management 2.0 CR
Prerequisite: BA 601 and graduate standing.
Decision making process as it relates to operations management. Understanding assumptions and appropriate application of quantitative models; problem formulation and solution, interpretation of results, and application of appropriate personal computer software.

BA 611 Research Methods and Statistical Analysis 3.0 CR
Prerequisite: BA 601 or equivalent and graduate standing.
An intermediate course in statistics concentrating on linear statistical models. Regression analysis of variance, and certain nonparametric procedures such as goodness-of-fit test and distribution-free alternatives to analysis of variance are included. Applications to management problems are illustrated. It is expected the student has an understanding of elementary probability, statistics, matrix arithmetic, and computer systems.

BA 612 Management Science 3.0 CR
Prerequisite: BA 601, BA 606, CIOS 605, or equivalent and graduate standing.
Survey course of a variety of management science (or operations research) tools with emphasis on the model building process and applications of mathematical models to managerial decision making situations. A considerable portion is devoted to mathematical programming including, in particular, linear programming. Other topics are network models for project scheduling, decision models, and inventory control models. It is expected that the student entering this course has an understanding of elementary probability, statistics, calculus, matrix arithmetic, and computer systems.

BA 616 Employment Law, Labor Law, and Arbitration 3.0 CR
Prerequisite: Graduate standing.
Integration of historical, political, social, economic, and legal trends underlying substantive employment law covering human resource structures in the private and public sectors. Non-union, occupational groups in education, hospitals, government and private industry will be considered. The course includes role playing.

BA 617 Technical Policy and Strategy 3.0 CR
Cross-Listed: ESM 617.
Prerequisite: 9 credits in management and fiscal areas of ESM program, or 9 credits beyond foundation courses in MBA program, or faculty permission.
Fees.
Issues and case studies of policy development, strategy, planning and management of technology in the overall corporate environment.
Special Note: Additional material fee.

BA 619 Computer Simulation of Systems 3.0 CR
Cross-Listed: ESM 619.
Prerequisite: BA 602 or ESM 620 or faculty permission.
Fees.
Intensive study of simulation concepts and methods, introduction to major simulation languages. Survey of simulation applications in various disciplines.
Special Note: Additional material fee.

BA 623 Total Quality Management 3.0 CR
Cross-Listed: ESM 623.
Prerequisite: BA 601 or ESM 620 (or equivalent) and BA 632 or ESM 601, or faculty permission.
Fee.
Brief history of the origins of modern quality management; review of basic tools for continuous quality improvement involving everyone in the organization. The organizational climate for continuous improvement. Survey of statistical tools for continuous quality improvement.
Special Note: Additional material fee.

BA 631 Business Environment Analysis 3.0 CR
Prerequisite: Completion of MBA foundation course requirements, graduate standing, or faculty permission.
Introduction to the methodology of business environment scanning, analysis, and forecasting; survey of the current business environment. Impacts of globalization of competition and financial markets, technological change, changing political systems, regulation, demographics, social change, and other change factors on business. Examination of social responsibility, ethics, environmental protection and other accountability issues.

BA 632 Organizational Behavior and Human Resource Management 3.0 CR
Prerequisite: Graduate standing.
A detailed interdisciplinary study of those organizational behavior and human resource structures which contribute centrally to the firm's success. Current and future developments regarding key concepts such as motivation, leadership, power and authority, corporate dynamics and culture, selection and placement, performance appraisal, compensation and human development will be examined.

BA 633 Problem Formulation and Decision Analysis 3.0 CR
Prerequisite: ECON 602, CIOS 605, BA 601, BA 606 or equivalent and graduate standing.
Identification and categorization of business problems with alternative approaches to modeling and analysis. Presentation of results to enhance the probability of managerial acceptance and implementation of potential solutions. Focus on formal quantitative modeling with strong recognition of the behavioral and political contexts of decision making in complex organizations.

BA 634 Creating the Successful Organization 3.0 CR
Prerequisite: BA 632 and graduate standing.
Exploration of the factors, conditions, and practices that lead to the creation and maintenance of organizational success. Alternative definitions of "success" and the view of various "stakeholders" will be evaluated. The role of organizational style, leadership, and structure in success. Cultural determinants of success. Examination of the Japanese approach to management. Adaptivity, entrepreneurship, and innovations as success factors. Case studies of successful organizations.

BA 635 Current Marketing Issues Seminar 3.0 CR
Prerequisite: BA 604 or equivalent and graduate standing.
An analysis of the managerial relevance of current issues in marketing as found in the professional and/or popular marketing literature. A historical perspective will be provided through classic readings from the literature. Students will be expected to read, analyze, and discuss assigned readings in a seminar atmosphere with a view

toward understanding the rationale of applied marketing management practices in such areas as theory, marketing mix, and ethics. The relation and role of marketing relative to other functional areas of the firm will be explored.

BA 636 Financial Decision Making 3.0 CR
Prerequisite: BA 601, BA 603 and graduate standing.
Advanced financial analysis with focus on making effective financial decisions. Analysis of business finance cases.

BA 641 Product Promotion Strategies 3.0 CR
Prerequisite: BA 604.
Analysis of alternative persuasive communication strategies designed to promote consumer and/or industrial oriented products or services. Topics include determination of communication objectives, selection of media, brand positioning, media buying, campaign implementation, and measurement of promotion effectiveness. Attention is given to the promotion of small businesses, international promotion, and industrial marketing.

BA 642 Entrepreneurship and Small Business Administration 3.0 CR
Prerequisite: BA 631, BA 632, BA 635, and BA 636.
Nature and significance of entrepreneurship. Characteristics and role of small business. Development of a business idea into an operating enterprise; small business planning and management; transition to professional management.

BA 643 International Marketing 3.0 CR
Prerequisite: BA 604.
Analysis of the marketing mix and marketing environment variables in international settings. Role and importance of product adaptation vs. standardization, of cultures and their impact on the 4P's.

BA 645 Topics in Organizational Behavior 3.0 CR
Prerequisite: BA 632.
A detailed examination of (a) current topic(s) in the organizational behavior area. Topic will be determined by contemporary trends in the business environment and/or student request, and will change from year to year.

BA 647 Negotiation and Dispute Settlement 3.0 CR
Prerequisite: Graduate standing.
Analysis and comparison of negotiation and dispute settlement structures utilized between workers and managers as well as between sellers and buyers. Current and future developments in international negotiations, acquisition and merger, collective bargaining and alternative dispute settlement will be discussed. The course includes computer exercises and role playing.

BA 652 International Comparison of Business Practices 3.0 CR
Prerequisite: Graduate standing or faculty permission.
A comparative study of the business philosophy, organization, management style, and business-society interaction in the major industrial nations. Specific study of the business systems of several of the following nations: Canada, France, Great Britain, Japan, People's Republic of China, Russia, and Germany.

BA 653 International Finance 3.0 CR
Prerequisite: BA 601 and BA 603.
A study of the international dimensions of international financial management, and the international financial markets. It covers topics such as Eurocurrency and foreign exchange markets, exchange risk, international capital budgeting, multicurrency financing decisions and sources of finance, international capital and money markets, and innovative financing techniques.

BA 655 Strategic Management Seminar 3.0 CR
Prerequisite: BA 631, BA 632, BA 635, BA 636 and graduate standing or faculty permission.
Analysis of the strategic environment; formulation and implementation of strategy. Role of top management and other stakeholders in setting the organization's fundamental direction. Structure and control system design for strategic support.

BA 656 Management Project 3.0 CR
Prerequisite: Completion of MBA core courses or faculty permission.
Management research project, designed to integrate policy concepts, research methods, and practical problem solving techniques.

BA 681 Portfolio and Security Analysis 3.0 CR
Prerequisite: BA 601, BA 603, CIOS 605 and graduate standing or faculty permission.
Advanced models for investment management are developed and their applications to decision making are discussed. Emphasis is on investment decision making and portfolio analysis. Quantitative financial analyses of the institute of chartered financial analysts are also discussed.

BIOL : BIOLOGICAL SCIENCES

Offered through the College of Arts and Sciences, Engineering Building (ENGR), Room 315, 786-4770

BIOL 074 Field Natural History 1.0-3.0 CR
Fees.
Grading Policy: Pass/No Pass.
A short course on field natural history. Covers major plant and animal species of area. Experience gained in location and identification. May include extensive hiking and camping.
Special Notes: Field trips in any weather; walking through rough terrain is routine. May have overnight field trips. May be repeated for credit with a change of subtitle. Check schedules for specific offerings.

BIOL 075 Local Flora 1.0 CR
Grading Policy: Pass/No Pass.
Study of wild flowers and plants in the surrounding locale with emphasis on use and identification.
Special Notes: May include preparation of pressed plant specimens and field trips.

BIOL 100 Human Biology 3.0 CR
Survey of biological principles as applied to human anatomy, physiology, and genetics.
Special Notes: Primarily for non-science majors. Not accepted for GER or biology major baccalaureate credit.

BIOL 102 Introductory Biology 3.0 CR
One semester freshman level course for students with little or no biology background. Includes basic organization of cells, organs, organisms, populations, evolution and functional relationships relevant to modern living.
Special Notes: Primarily for non-science majors. Satisfies UAA general education and CAS natural science degree requirements.

BIOL 103 Introductory Biology Laboratory 1.0 CR
Prerequisite: BIOL 102 or concurrent enrollment required.
Fees.
Laboratory part of BIOL 102. Exercises are designed to illustrate principles and concepts developed in BIOL 102.
Special Notes: Primarily for non-science majors. Satisfies UAA general education and CAS natural science degree requirements.

BIOL 104 Natural History of Alaska 3.0 CR
Cross-Listed: GEOL 104.
Surveys important biological, physical and geological features of Alaska, and their development over time. Includes study of major landforms, ecosystems, wildlife and people. Local area will be emphasized.
Special Notes: Acceptable as elective credit only.

BIOL 105 Fundamentals of Biology I 4.0 CR
Prerequisite: High school biology or faculty permission.
Fees.
An introduction to the basic principles of biology as science; simple biological chemistry; cell biology; energy transformation; cellular reproduction; and genetics.
Special Notes: One 3-hour lab per week. BIOL 105, 106 are core courses in biology and are prerequisites to further courses in the biological sciences. Required for BIOL 106.

BIOL 106 Fundamentals of Biology II 4.0 CR
Prerequisite: BIOL 105 or faculty permission.
Fees.
A continuation of an introduction to the basic principles of biology for the science major. Anatomy, physiology, and behavior of plants and lower kingdoms. Overview of ecology.
Special Notes: One 3-hour lab per week. BIOL 105 and 106 are core courses in biology and are prerequisites to further courses in the biological sciences. BIOL 105 and 106 are required for BIOL 219.

BIOL 111 Human Anatomy and Physiology I 4.0 CR
Fees.
An introduction to human structure and function. The integumentary, skeletal, muscular, nervous and endocrine systems are considered.
Special Notes: Accepted for biology major credit only by petition. Satisfies UAA general education and CAS natural science degree requirements for specified baccalaureate degree programs. One 3-hour lab per week.

BIOL 112 Human Anatomy and Physiology II 4.0 CR
Prerequisite: BIOL 111 or faculty permission.
Fees.
A continuation of BIOL 111. The circulatory, respiratory, digestive, excretory, reproductive and immune systems are considered.
Special Notes: Accepted for biology major credit only by petition. Satisfies UAA general education and CAS natural science degree requirements for specified baccalaureate programs. One 3-hour lab per week.

BIOL 113 Lectures in Human Anatomy and Physiology I 3.0 CR

An introduction to human structure and function. The integumentary, skeletal, muscular, nervous, and endocrine systems are considered.
Special Notes: Accepted for biology majors only by petition. BIOL 113 is the lecture part of BIOL 111 only. It does not have a lab session and does not satisfy the course requirements for nursing science majors. Satisfies UAA general education and CAS natural science degree requirements for specified baccalaureate degree programs.

BIOL 114 Lectures in Human Anatomy and Physiology II 3.0 CR

Prerequisite: One of: BIOL 111 or 113.
A continuation of BIOL 113. The circulatory, respiratory, digestive, excretory, reproductive, and immune systems are considered.
Special Notes: Accepted for biology majors only by petition. BIOL 114 is the lecture part of BIOL 112 only. It does not have a lab session and does not satisfy the course requirements for nursing science majors. Satisfies UAA general education and CAS natural science degree requirements for specified baccalaureate degree programs.

BIOL 124 Biota of Alaska: Selected Topics 1.0-4.0 CR

Fees.
Explores special features of birds, mammals, insects or plants. Can include life history, habitat, ecology, and behavior.
Special Notes: Community service course.

BIOL 126 Birds in Field and Laboratory 2.0 CR

Field trips, study projects, lectures and laboratories form a beginning course in bird study. General biology, ecology and behavior of birds. Emphasis on characteristics, observation, and recording information about birds in Alaska and other areas.
Special Notes: Community service course.

BIOL 139 Introduction to Forestry 3.0 CR

Survey course emphasizing basic concepts of forest management, utilization and conservation. Includes identity, characteristics and values of forest lands and forests. Covers cultural, ecological and technical conditions which influence use and management.
Special Notes: Community service course.

BIOL 150 Introduction to Marine Biology 4.0 CR

Fees.
An elementary course in marine natural history with emphasis on intertidal invertebrates and algae. Other topics will include seabirds, marine mammals, fish, bottom organisms, and plankton.
Special Notes: Community service course.

BIOL 201 Field Id of Alaskan Flora 3.0 CR

Field plant biology outlining the methods of identification based on leaf shape, fruit and flower form, bark and habitat. Covers all species that can be identified in the field including the lichens, mosses and liverworts, soft water algae and fleshy fungi.
Special Notes: Does not satisfy BA degree requirements.
Offered at Kenai Peninsula College only.

BIOL 219 Fundamentals of Biology III 4.0 CR

Prerequisite: BIOL 105, 106, and CHEM 105; or faculty permission.
Fees.
A continuation of an introduction to the principles of biology for science majors. Emphasis on the morphology, systematics, and physiology of animals. Overview of evolution.
Special Notes: Core course for biology majors. One 3-hour lab per week.
Offered fall and spring semesters.

BIOL 223 Introduction to Fishes 4.0 CR

Prerequisite: Basic biology or faculty permission.
Introduces anatomical physiology, classification and biology of fishes. Emphasizes the fishes of Alaska.
Offered at Kodiak College only.

BIOL 240 Introductory Microbiology for Health Sciences 4.0 CR

Prerequisite: Concurrent enrollment in BIOL 112, or 8 hours in biology or chemistry, or faculty permission.
Fees.
General introductory microbiology and virology with emphasis on those areas relating to health sciences, including host parasite interactions, host defense mechanisms, and epidemiology.
Special Notes: Recommended for associate and baccalaureate health science programs. Laboratory exercises generally require students to return to the lab to record experimental results after 24 hours, throughout the semester. Accepted for biology major credit only by petition.
Offered fall and spring semesters; summers as warranted by demand.

BIOL 241 Lectures in Introductory Microbiology for Health Sciences 3.0 CR

Prerequisite: Concurrent enrollment in BIOL 112, or 8 hours in biology or chemistry, or faculty permission.
Lectures in general introductory microbiology and virology with emphasis on those areas relating to health sciences, including host parasite interactions, host defense mechanisms, and epidemiology.
Special Notes: BIOL 241 is the lecture part of BIOL 240 only; it does not have a lab session. Recommended for students who have previously received credit for a microbiology course and who need to update their understanding of health science-related microbiology. Not open to students who have completed BIOL 240 or BIOL 340 during the previous five years.
Offered fall and spring semester; summer as warranted by demand.

BIOL 252 Principles of Genetics 4.0 CR

Prerequisite: BIOL 105, 106 and 219; CHEM 105; and MATH 107.
Fees.
Principles of inheritance in prokaryotes and eukaryotes and physicochemical properties of genetic systems.
Special Notes: Core course for biology majors. One 3-hour lab per week.
Offered spring semesters.

BIOL 292 Plant Lore of Kachemak Bay 1.0 CR

Grading Policy: Pass/No Pass.
Fees.
Identification of plants in biotic systems ranging from spruce/hardwood forests and marine bogs. Emphasis on traditional medicinal plants of Native and non-Native cultures.
Offered at Kenai Peninsula College only.

BIOL 308 Principles of Evolution 3.0 CR

Prerequisite: BIOL 105, 106, 219, 252, 371 or faculty permission.
An introduction to the mechanisms of, and evidence for, the evolution of living systems. The coding and transmission of genetic information in populations, populations variability, change and stabilization.
Special Notes: Core course for biology majors.
Offered spring semesters.

BIOL 309 Biogeography 3.0 CR

Prerequisite: BIOL 105, 106, 308 or faculty permission.
Ecological basis and historical patterns of the distribution of plants and animals on a worldwide basis. Current theories regarding the origin of these distributions are examined.
Offered as warranted by demand.

BIOL 310 Animal Physiology 4.0 CR

Prerequisite: BIOL 105, 106; CHEM 105, 106; or faculty permission.
Regulation of physiological processes in metazoans.
Special Notes: Satisfies physiology core course for biology majors.
Offered alternate spring semesters.

BIOL 316 Plant Physiology 4.0 CR

Prerequisite: BIOL 105, 106, 219; and CHEM 105; or graduate standing or faculty permission.
Fees.
Physiology of vascular plants, including growth, development, water relations, photosynthesis, transport, and metabolism.
Special Notes: Satisfies physiology core course for biology majors.
Offered alternate spring semesters.

BIOL 327 Parasitology 4.0 CR

Prerequisite: BIOL 105, 106, and 219; or faculty permission.
Fees.
The life history and ecology of parasites of medical significance and economic importance, including diagnosis and control. Emphasis on North American parasites.
Offered as warranted by demand.

BIOL 331 Systematic Botany 4.0 CR

Prerequisite: BIOL 105, 106, and 219; or faculty permission.
Fees.
Identification and classification of vascular plants with an emphasis on circumpolar flora; discussion of taxonomic principles and both classical and experimental methods of taxonomic research.
Special Notes: Saturday field trips. Each student shall prepare a plant collection.
Offered as warranted by demand.

BIOL 333 Biology of Non-Vascular Plants 4.0 CR

Prerequisite: BIOL 105, 106, and 219; or faculty permission.
Fees.
Comparative study of structure, development, phylogenetic trends, and life histories of the major groups of algae, fungi and bryophytes.
Offered as warranted by demand.

BIOL 334 Biology of Vascular Plants 4.0 CR
Prerequisite: All of: BIOL 105, 106, and 219.
Fees.
Comparative study of morphology, developmental anatomy, phylogenetic trends, and life histories of the major groups of vascular plants.
Offered as warranted by demand.

BIOL 335 Bryophytes and Lichens 4.0 CR
Prerequisite: BIOL 106.
Fees.
Biology of bryophytes and lichens with an emphasis on their identification, structure, systematics, adaptation, distribution, ecology, and evolution.
Offered as warranted by demand.

BIOL 340 General Microbiology 5.0 CR
Prerequisite: BIOL 105, 106, and 8 additional biology credits.
Fees.
Biology of prokaryotic and eukaryotic microorganisms and viruses, their relationships to other organisms and to the ecosystem.
Special Notes: Two 3-hour lab per week. Core course for BS biology majors.
Offered spring semesters.

BIOL 352 Human Genetics 3.0 CR
Prerequisite: BIOL 252.
An introduction to human genetics with emphasis on medical and social aspects. Included will be the genetics of normal human traits, biochemical and cytogenetic diagnosis of hereditary diseases, and genetic screening and counseling.
Offered as warranted by demand.

BIOL 361 Cell Biology 3.0 CR
Prerequisite: BIOL 252; or faculty permission.
Detailed structure, including ultrastructure, and function of the cell. Isolation, composition, and biochemical properties of cell organelles.
Special Notes: Satisfies physiology core course requirement for biology majors.
Offered fall semesters.

BIOL 362 Cell Biology Laboratory 3.0 CR
Prerequisite: BIOL 361; or faculty permission.
Fees.
A laboratory course designed to give experience in cell and tissue culture, analysis of subcellular components and techniques involving nucleic acids and proteins.
Offered spring semesters.

BIOL 371 Principles of Ecology 4.0 CR
Prerequisite: Both of: BIOL 219, CHEM 105 and one of: AS 252 or 307.
Fees.
Analyses of energy and material balance. Adaptations to extreme environments. Population attributes, dynamics and interactions. Factors controlling community composition and change. Ecosystem function including elemental cycling.
Special Notes: One 3-hour lab per week. Core course for biology majors.

BIOL 373 Environmental Biology 3.0 CR
Prerequisite: Both: BIOL 371 and CHEM 105.
Advanced environmental biology dealing with human population growth and the impact on environmental degradation and resource depletion.

BIOL 375 Terrestrial Ecosystems 3.0 CR
Prerequisite: BIOL 371.
Ecosystem structure will be analyzed, including vegetation physiognomy attributes, species diversity and trophic structure. Ecosystem distribution will be studied in relation to climate and edaphic factors. Processes such as stand photosynthesis, soil organic matter decomposition, and soil nutrient uptake will be related to abiotic variables.

BIOL 378 Marine Biology 3.0 CR
Prerequisite: BIOL 371.
The marine environment; biology and distribution of marine plants and animals; fisheries, aquaculture and pollution.
Offered as warranted by demand.

BIOL 390 Intermediate Selected Topics in Biology 1.0-4.0 CR
Prerequisite: 12 credits in biology; faculty permission required.
Detailed coverage of a selected topic in biology.
Special Notes: See schedules for specific titles to be offered.

BIOL 403 Microtechnique 4.0 CR
Prerequisite: BIOL 105 and 106, and 8 additional credits in biology; and faculty permission.
Fees.
Demonstration and use of tissue techniques including procurement, preservation embedding, sectioning, staining, microscopy, photography, and illustration.
Offered as warranted by demand.

BIOL 412 Endocrinology 3.0 CR
Prerequisite: BIOL 219 and CHEM 322.
A detailed and comprehensive study of endocrine glands and hormones. Special emphasis on chemical and physiological principles of hormonal integration, mechanisms of action, and homeostatic functions of hormones in mammals.

BIOL 423 Ichthyology 4.0 CR
Prerequisite: BIOL 219 or faculty permission.
Fees.
Major groups of fishes, emphasizing the fishes of northwestern North America. Classification, structure, evolution, general biology, and importance to humans of the major groups.
Offered as warranted by demand.

BIOL 427 Invertebrate Zoology 4.0 CR
Prerequisite: BIOL 105, 106, and 219; or faculty permission.
Fees.
Functional anatomy and evolutionary adaptations of invertebrate animals.
Special Notes: Includes field trips.
Offered alternate fall semesters.

BIOL 439 Plant Ecology Field Course 3.0 CR
Prerequisite: Both of: BIOL 219 and CHEM 105 and one of: AS 252 or 307.
Fees.
The interactions between plants and their environment. Theory and methodology for studying the responses of plants to various environmental conditions.
Normally offered summer semesters.

BIOL 461 Molecular Biology 3.0 CR
Prerequisite: BIOL 361; or faculty permission.
A study of molecular biology, with emphasis on molecular genetics and the molecular biology of eukaryotic cells and cancer cells, including current developments in the field.
Special Notes: Stacked with BIOL 661.
Offered as warranted by demand.

BIOL 462 Virology 3.0 CR
Prerequisite: BIOL 340; or faculty permission.
A lecture course covering: structure of viruses; selected bacterial, plant and animal viruses, including the major pathogens of man; viral gene expression; viral oncogenes; viral vaccines; origin of viruses.
Offered as warranted by demand.

BIOL 471 Immunochemistry 4.0 CR
Cross-Listed: CHEM 471.
Prerequisite: BIOL 105, 106 and CHEM 321; or faculty permission.
Fees.
A study of the immune response including the biochemistry of antibodies, cellular and molecular events triggered by antigenic stimulation, regulation immunopathology, transplantation, cancer and immunochemical techniques.
Offered as warranted by demand.

BIOL 475 Arctic Tundra Ecosystems 3.0 CR
Prerequisite: BIOL 371.
In-depth consideration of the arctic landscape, its biota, and adaptations to environmental conditions. Understanding of ecological principles required. Examines the unique aspects of arctic ecology and the relationship of arctic ecosystems to global environmental issues and to the biosphere.
Special Notes: Stacked with BIOL 675.

BIOL 476 Boreal Ecosystems 3.0 CR
Prerequisite: BIOL 371.
A comprehensive analysis of boreal ecosystems with emphasis on system functions and dynamics. Comparisons with other terrestrial systems will be made and unique boreal characteristics will be emphasized.
Special Notes: Stacked with BIOL 676.

BIOL 485 Selected Topics in Biology 1.0-4.0 CR
Prerequisite: 16 credits in biology.
Fees.
Detailed coverage of a selected topic in biology.
Special Notes: See schedules for specific titles to be offered.

BIOL 487 Comparative Anatomy of Vertebrates 4.0 CR
Prerequisite: BIOL 219; or faculty permission.
Fees.
Functional anatomy, ecology, and evolution of chordates.
Offered alternate fall semesters.

BIOL 488 Developmental Biology 4.0 CR
Prerequisite: BIOL 105, 106, 252, 361; or faculty permission.
A study of the molecular and cellular principles which underlie the development of tissues and organ systems in animals, including classical embryology.
Offered as warranted by demand.

BIOL 492 Undergraduate Seminar 1.0 CR
Prerequisite: Upper class standing.
Grading Policy: Pass/No Pass.
Fees.
Topical subjects in biology presented by faculty and undergraduate students.
Special Notes: Core course for major degree credit in biology. Attendance required. Stacked with BIOL 692.

BIOL 495 Instructional Practicum: Laboratory 1.0 CR
Prerequisite: 20 credits in biology.
Supervised practical experience in one 3-hour biology laboratory section. Planning, presentation of material, achievement testing, and correlation with lecture under the direct supervision of Department faculty.
Special Notes: May be repeated once for credit.

BIOL 498 Individual Research 1.0-6.0 CR
Prerequisite: Faculty permission.
Fees.
Lab and field investigations on specific subjects in biology. Topic for study to be approved and directed by a faculty member in biological sciences.
Special Notes: May be repeated for a maximum of 6 credits.

BIOL 602 Systematic Biology 2.0 CR
Prerequisite: BIOL 308 and 8 credits upper-division organismal biology credits; or graduate standing; or faculty permission.
Classification, systematics, and taxonomy of organisms.
Offered as warranted by demand.

BIOL 610B Microscopic Anatomy 3.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Lectures and laboratories in microscopic anatomy are designed to provide the principles and concepts of histology, to define the morphological characteristics of the cells, tissues and organs of the human body and to relate this information to functional processes studied in concurrent and subsequent courses.

BIOL 611B Gross Anatomy I and Embryology 5.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Provides a broad understanding of structural organization of human body at the macroscopic level of the human organism. Integrates embryological development with study of the cadaver and examination of the normal living body. Concentrates on exploration of body cavities and viscera they contain. Embryology and general anatomical concepts are presented in lecture format and in anatomy exercises, which students prepare and work through.

BIOL 612B Mechanisms in Cell Physiology 4.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Fundamental cellular events underlying the following topics: physiology of the cell membrane including ionic and electrical potential gradients, active transport, excitability and action potentials; biophysics of sensory receptors; neuromuscular transmission; muscle energetics and contractility; spinal reflexes and central synaptic transmission; autonomic nervous system; energy metabolism and temperature regulation; epithelial transport; gastrointestinal motility and secretions.

BIOL 614B Biochemistry I 3.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
The first part of a coordinated course covering classical molecular and cellular biochemistry, cellular physiology and molecular genetics. Metabolic interrelationships as they occur in the individual will be stressed and related to disturbances in disease states.

BIOL 620B Cell and Tissue Responses to Injury 3.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Patterns of cell and tissue responses to injury. Mechanisms of cell injury, the inflammatory process, immunology, immunopathology, thrombosis, normal and abnormal growth, neoplasia, clinico-pathological correlation.

BIOL 621B Natural History of Infectious Diseases and Chemotherapy I 5.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Pathogenesis and immunity of infectious diseases, natural barriers, microbiology, epidemiology, clinical manifestations and control of representative bacterial, fungal, parasitic and viral infectious diseases. Chemotherapeutics and principles of chemotherapy. Sterilization, principles of asepsis, nosocomical and introgenic infections and their presentation.

BIOL 623B Introduction to Immunology 2.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Basic concepts such as antigens; antibodies; complement; B- and T-lymphocyte function, including interactions with each other and with accessory cells; immunological tolerance; major histocompatibility complex, and role of these basic concepts in immunopathology (immunodeficiencies; hypersensitivities; autoimmunity; blood transfusion and transplantation).

BIOL 624B Biochemistry II 2.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Continuation of BIOL 614B.

BIOL 627 Advanced Invertebrate Zoology I 4.0 CR
Prerequisite: BIOL 427; or faculty permission.
Fees.
Functional morphology, evolutionary adaptations and phylogeny of the invertebrates with emphasis on skeletal systems, locomotion, nervous systems, and reproduction.
Offered as warranted by demand.

BIOL 628 Advanced Invertebrate Zoology II 4.0 CR
Prerequisite: BIOL 627; or faculty permission.
Fees.
Functional morphology, evolutionary adaptations and phylogeny of the invertebrates with an emphasis on skeletal systems, locomotion, nervous systems, and reproduction.
Offered as warranted by demand.

BIOL 631B Gross Anatomy II (Head, Neck Ear, Nose and Throat) 4.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Gross anatomy (including skull, larynx and pharynx). Audition and balance, physiology and clinical evaluation. Maxillo-facial disorders, diseases of nasal passages, naso- and oropharynx, accessory sinuses, physical examination.

BIOL 632B Nervous System 5.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Integrated approach to the normal structure and function of the nervous system, including the eye. Neuropathological examples are presented as well as clinical manifestations of neurological disease.

BIOL 634B Natural History of Infectious Diseases and Chemotherapy II 2.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Continuation of BIOL 621B.

BIOL 661 Advanced Molecular Biology 3.0 CR
Prerequisite: Graduate standing; or faculty permission.
A study of molecular biology, with emphasis on molecular genetics and the molecular biology of eukaryotic cells and cancer cells, including current developments in the field.
Special Notes: Stacked with BIOL 461. Lectures concurrent with BIOL 461. In addition to meeting all requirements for BIOL 461, graduate students will be required to research the literature on a current topic in molecular biology, to submit an extensive paper summarizing their findings including designs for future experiments on the subject, and to give a seminar on the same topic. Not available for credit to students who have completed BIOL 461.
Offered as warranted by demand.

BIOL 663 Molecular Biology of Cancer 3.0 CR
Prerequisite: BIOL 361 or 461; graduate standing; or faculty permission.
A study of the molecular biology of cancer, with emphasis on the mechanisms by which a normal cell becomes a malignant cell, including the role of both chemicals and viruses in carcinogenesis. The orientation of the course will be toward a study of current literature, by means of research, term papers, discussions, and seminars.
Offered as warranted by demand.

BIOL 672 Vegetation Analysis 4.0 CR
Prerequisite: Graduate standing or faculty permission.
Fees.
Covers methods of measuring, describing and classifying vegetation. Includes: 1) plot and plotless sampling methods, 2) releve, 3) community and ecosystem classification, 4) ordination and statistical analysis, 5) vegetation mapping, 6) vegetation structure, vegetation as habitat for animals, 7) cover/dominance, 8) species diversity, and 9) aerial photography and remote sensing as applied to landscape classification.

BIOL 675 Advanced Arctic Tundra Ecosystems 3.0 CR
Prerequisite: BIOL 371 and graduate standing.
In-depth consideration of the arctic landscape, its biota, and adaptations to

environmental conditions. Advanced understanding of ecological principles required. Examines the unique aspects of arctic ecology and the relationship of arctic ecosystems to global environmental issues and to the biosphere.
Special Notes: Stacked with BIOL 475.

BIOL 676 Advanced Boreal Ecosystems 3.0 CR
Prerequisite: BIOL 371 and graduate standing.
A comprehensive analysis of boreal ecosystems with emphasis on system functions and dynamics. Comparisons with other terrestrial systems will be made and unique boreal characteristics will be emphasized.
Special Notes: Stacked with BIOL 476.

BIOL 679 Physiological Plant Ecology 4.0 CR
Prerequisite: Graduate standing or special faculty permission.
Fees.
Analyzes interactions between the plant and its environment. Deals with acquisition of resources, both energy and matter. Radiation interception and energy dissipation will be analyzed using energy balance equations. The nature of low and high temperature stress and adaptations to deal with these will be described.

BIOL 685 Advanced Topics in Biology 1.0-5.0 CR
Prerequisite: Graduate standing.
Intensive studies on narrowly defined topics in biological sciences. Emphasis on content as well as on instructional techniques.
Special Notes: See schedules for specific titles being offered.
Offered as warranted by demand.

BIOL 692 Graduate Seminar 1.0 CR
Prerequisite: Graduate standing.
Grading Policy: Pass/No Pass.
Fees.
Topical subjects in biology presented by faculty and graduate students.
Special Notes: Two credits are required for biology master's program. Attendance required. Stacked with BIOL 492.

BIOL 698 Directed Research 1.0-6.0 CR
Prerequisite: Faculty permission.
Fees.
Research on a specific subject in biology. Topic for study to be approved and directed by a faculty member in biological sciences.
Special Notes: May be repeated for a maximum of 6 credits.

BIOL 699 Thesis Research 1.0-6.0 CR
Prerequisite: Permission of graduate advisor.
Planning, preparation and completion of a thesis in the biological sciences.
Special Notes: May be repeated for a maximum of 12 credits.

CE: CIVIL ENGINEERING

Offered through the School of Engineering, Engineering Building (ENGR), Room 201, 786-1900

CE 112 Elementary Surveying for Civil Engineers 3.0 CR
Prerequisite: Concurrent enrollment in ES 111 required.
Fees.
Basic plane surveying, taping, use of level, theodolite, and electronic distance measuring instruments, stadia, traverse, public land systems, and circular curves.
Offered spring semesters.

CE 334 Properties of Materials 2.0 CR
Prerequisite: ES 331.
Fees.
Introduction to structures and properties of engineering materials. Standard properties of common engineering materials: steel, aluminum, concrete and wood will be tested. Reviews theoretical bases and experimental mechanics of buckling of columns, bending of beams and tension-compression tests. Covers strain gages and photoelasticity theories also.
Offered fall semesters.

CE 344 Water Resources Engineering 3.0 CR
Prerequisite: ES 341.
Fundamentals of engineering hydrology and hydraulic engineering, precipitation, runoff, statistical methods, flood control, open channels, and groundwater.
Offered spring semesters.

CE 402 Transportation Engineering 3.0 CR
Fees.
Administration, economics, location, construction and maintenance of highways, railways, airports, and other transportation facilities.
Offered spring semesters.

CE 404 Highway Engineering 4.0 CR
Prerequisite: CE 112, CE 435 and ES 341.
The design, construction, operation, and maintenance of facilities for transporting people and goods by highway and the economic, social, and environmental consequences.

CE 415 Advanced Surveying 3.0 CR
Prerequisite: CE 112.
Fees.
Azimuth by astronomic methods, route surveying, including horizontal and vertical curves, cross-sectioning, earthwork, reduction of electronic distance measurement. Alaska State Plane Coordinate System.

CE 422 Foundation Engineering 3.0 CR
Prerequisite: CE 435.
Principal of foundation action, spread footings, mats, pile foundations, retaining walls and bulkheads, bridge piers, cofferdams and abutments.
Offered spring semesters.

CE 431 Structural Analysis 4.0 CR
Prerequisite: ES 331.
Fees.
Review of statically determinate beams and trusses. Discusses shearing, bending moment and influence line diagrams for statically determinate and indeterminate structures. Includes deflections, elastic lines, and an introduction to matrix and computer analyses.
Offered spring semesters.

CE 432 Steel Design 3.0 CR
Prerequisite: CE 334 and CE 431.
Advantages, structure, and mechanical properties of steel. Procedures and standard requirements for design of steel tension members and of beams and columns under axial, and eccentrical load will be discussed. The course will also review connections design.
Offered fall semesters.

CE 433 Concrete Design 3.0 CR
Prerequisite: CE 334 and CE 431.
Advantages, structure, and mechanical properties of concrete and reinforced concrete. Standard procedures and design for flexure, shear, diagonal tension, torsion and combined compression and bending will be discussed.
Offered spring semesters.

CE 434 Timber Design 3.0 CR
Prerequisite: CE 431 or faculty permission.
Essentials of structural design in timber. Design of basic components of solid and laminated timber, connections, arches, pole framing, diaphragms, stressed-skin construction and timber shells.

CE 435 Soil Mechanics 3.0 CR
Prerequisite: ES 331 and CE 334.
Fees.
Soil formation, identification and classification; physical and mechanical properties of soil, seepage, drainage and frost action; subsurface investigation; bearing capacity of soils, lateral earth pressures and stability of slopes.
Offered fall semesters.

CE 438 Design of Engineering Systems 3.0 CR
Prerequisite: Senior standing in an engineering program.
Fees.
Introduction to system design methods for large-scale engineering systems; linear graph project modeling and design drawings of civil engineering projects.
Offered spring semesters.

CE 441 Sanitary Engineering 3.0 CR
Prerequisite: ES 341 or faculty permission.
Fees.
Introduction to fundamentals of environmental engineering including theory and application of water and wastewater engineering and water supply. Wastewater characteristics, collection, treatment, and disposal. Introductory information on solid waste management and air pollution control.
Offered fall semesters.

CE 470 Civil Engineering Internship 1.0 CR
Prerequisite: Senior standing or permission of Dept. coordinator.
Designed to give students the opportunity to investigate the practical workings of engineering organizations. Assignments individually arranged with cooperating organizations and agencies.
Offered spring semesters of alternate years.

CE 603 Arctic Engineering 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Fees.
Application of engineering fundamentals to problems of advancing civilization in polar regions. Logistics, foundations on frozen ground and ice, thermal aspects of

structures, materials, transport, and communications, heating and ventilating.
Offered fall and spring semesters.

CE 617 Control Surveys 3.0 CR
Prerequisite: CE 415 or other surveying experience acceptable to faculty.
Geodetic surveying where the shape of the earth must be considered. Both horizontal and vertical control will be studied. Heavy emphasis on Alaska State Plane Coordinate System. Adjustments of level nets, traverses, triangulation, and trilateration.
Offered spring semesters of alternate years.

CE 620 Civil Engineering Construction 3.0 CR
Prerequisite: ESM 450 or equivalent.
Construction equipment and methods, construction management and accounting, construction estimates and costs.

CE 631 Structural Finite Elements 3.0 CR
Prerequisite: ES 301 and CE 431.
Fees.
Introduction to finite element and computer methods in structural analysis. Matrix algebra, the slope-deflection and the direct stiffness methods will be reviewed. Topics include: finite elements and corresponding matrix equations for a truss, for a beam and for frame structures, organization of typical computer programs, two-dimensional stress-strain problems, eigenvalue problems, and practical applications of engineering software.

CE 632 Advanced Structural Design 3.0 CR
Prerequisite: CE 431.
Design of complex structures and frames. Live, dead, and earthquake loadings. Structural joints, columns, connectors, ties, and struts. Application of modern materials and techniques to design.

CE 649 Urban Transportation Planning 3.0 CR
Prerequisite: Graduate standing in engineering or planning or faculty permission.
The urban transportation planning process with emphasis on travel demand forecasting procedures using a multimodal approach.

CE 662 Surface Water Dynamics 3.0 CR
Prerequisite: ES 341.
Principles of open channel flow, ice covered flow, unsteady flow, and stream flow as a sediment and pollution transport agent.

CE 663 Ground Water Dynamics 3.0 CR
Prerequisite: ES 341.
Fundamentals of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.

CE 676 Coastal Engineering 3.0 CR
Prerequisite: Bachelor's degree in Civil Engineering or faculty permission.
Review of deep and shallow water waves, littoral drift, coastal structures, pollution problems, and harbor seiches.

CE 681 Frozen Ground Engineering 3.0 CR
Prerequisite: Training or experience in soil mechanics.
Nature of frozen ground, thermal properties of frozen soil classification, physical and mechanical properties of frozen soils, subsurface investigation of frozen ground, thaw settlement and thaw consolidation, slope stability, and principles of foundation design in frozen ground.

CE 682 Ice Engineering 3.0 CR
Prerequisite: ES 331 and MATH 202.
Factors governing designs which must contend with the presence of ice and snow are discussed. Topics include ice growth, ice and snow structure, mechanical properties and their dependence on temperature and structure, creep and fracture, mechanics of ice sheets, forces on structures, and experimental methods.

CE 683 Arctic Hydrology and Hydraulic Engineering 3.0 CR
Prerequisite: CE 344 or equivalent.
Fees.
Aspects of hydrology and hydraulics unique to engineering problems of the north. Emphasis on Alaskan conditions, information from Canada and other circumpolar countries included.

CE 684 Arctic Utility Distribution 3.0 CR
Prerequisite: ES 341 or faculty permission.
Practices and considerations of utility distribution in arctic regions. Emphasis on proper design to include freeze protection, materials, energy conservation and system selection.

CE 685 Slope Stability 3.0 CR
Introduction to stability of slopes in soils and rocks; physical and mechanical properties of soils and rocks related to slope stability; residual stresses in rock masses; failures in overburden and rock masses; methods of slope stability analysis; role of slope stability in economic, design and operation of engineering projects.
Offered spring semesters of alternate years.

CE 698 Individual Research 1.0-6.0 CR
Prerequisite: Faculty permission.
A course to be designed between the student and faculty member to allow students the chance to pursue special advanced interests in engineering at the M.S. level.

CE 699 Thesis 1.0-6.0 CR
Prerequisite: Graduate committee permission.
Individual study of an advanced engineering problem resulting in a thesis. The student must have been admitted to candidacy for the Master of Science in Civil Engineering. The student must take an oral examination defending the thesis.

CED: COMMUNITY EDUCATION

Offered through Kenai Peninsula College, Ginger Steffy, Director, 34820 College Dr., Soldotna, 99669, 262-5801

CED 105 Adventures in Attitude 1.0 CR
Grading Policy: Pass/No Pass.
Fees.
Emphasizes interpersonal communication, positive attitudes, management of emotions, human relations, mental steps to motivation and integration of goals with self-management.

CED 106 Beginning Genealogy 3.0 CR
Teaches how to do genealogical research effectively and intelligently by using family, vital, census, court, and military records. Covers immigration and the naturalization process, importance of oral history and techniques of interviewing; how computers fit in the field; and types of libraries and special collections available.
Special Notes: Most of the course work will be done on the individual student's family.

CED 110 Employment Development Planning 1.0 CR
Grading Policy: Pass/No Pass
Designed to encourage and prepare single parents/displaced homemakers to pursue an education and/or employment by establishing goals and utilizing available resources. Includes communication skills, resume writing, interviewing techniques, self-image and problem solving techniques. Emphasis in goal setting and career planning.

CED 112 Interview Training 1.0 CR
Prerequisite: A completed job resume.
Grading Policy: Pass/No Pass.
Experiential application of successful job interview techniques and general communication skills. Video taped simulated practice interviews are used in class for feedback and suggestions.

CED 117 Assertion Training 1.0 CR
Grading Policy: Pass/No Pass.
Instruction in the basics of interpersonal communication and responsible assertion as tools for avoiding and/or solving interpersonal conflicts; practice of procedures by role plays in class and by assigned performance tasks outside of class, both of which are based on their identified assertiveness-improvement needs.

CED 118 Women and Career Planning 1.0 CR
Grading Policy: Pass/No pass.
Designed to encourage and prepare single parents/displaced homemakers to pursue an education and or employment by establishing goals and utilizing available resources. Topics include self-image, attitudes, resource management, time and money, decision-making, job and family, and problem solving.

CED 119 Crisis Intervention Training 4.0 CR
Grading Policy: Pass/No Pass.
Fees.
Prepares students for volunteer work in a shelter for battered women and their children. Includes 37 hours of lecture, with an 8 hour update at the end of 3 months, 30 hours of active participation in the shelter (as a Crisis Line/Shelter Volunteer), CPR and First Aid Certification, and attendance at a minimum of 2 volunteer meetings. Several guest speakers from the community and WRCC will be presenting topics on a wide variety of issues.

CED 120 Women and Weight 2.0 CR
Examines eating disorders as related to the feminine gender role. Review of anorexia, bulimia and bingeing. Emphasis on understanding the etiology of foodacholic patterns. Need-fulfillment explored through methods other than eating. Methods of instruction will include large and small group discussion, lecture, contract development, Gestalt and transactional analysis exercises and guest lecturers.

CED 121 Diets for Life 2.0 CR
Addresses special diets for diabetics, those at risk from heart disease, and those who wish to control their weight. Presentation of theory and medical explanation for types of diets and hands-on experiences in planning appropriate diets.

CED 130 Crisis Intervention 2.0 CR
Grading Policy: Pass/No Pass.
Fees.
General study of crisis intervention techniques with specific focus on domestic violence. Designed to help students understand and apply effective skills when dealing with victims in crisis.

CED 130L Crisis Intervention Lab Work 1.0 CR
Prerequisite: CED 130.
Grading Policy: Pass/No Pass.
Fees.
30 hours providing active crisis intervention in the community as a Crisis Advocate or Safe Home provided in Seward Life Action Council's Domestic Violence and Sexual Assault Program.

CED 139 IBM PC/XT Computer Repair Seminar 1.0 CR
Grading Policy: Pass/No Pass.
Directed toward computer users operating microcomputers in the IBM PC/XT/AT family and other close compatible machines. No familiarity with electronics is assumed, but participants are expected to be familiar with routine operations with PC-DOS/MS DOS. Provides an introduction to the system hardware and its relationship to the operating system. Hardware troubleshooting techniques are introduced, and some typical hardware expansion problems are addressed.

CED 140 Calculator Workshop 1.0 CR
Grading Policy: Pass/No Pass.
Familiarize students with the operation of a graphics calculator. Specific uses of the calculator appropriate to arithmetic, algebra, trigonometry, and calculus will be presented.

CED 142 Megaskills 1.0 CR
Grading Policy: Pass/No Pass.
Fees.
Introduces the concepts, content, and materials of the Megaskills program. All participants who complete the training workshop will have learned and demonstrated strategies and skills to conduct Megaskills workshops in their communities.

CED 210 Crime Scene Investigation 2.0 CR
Covers the fundamentals of investigation. Includes crime scene search and recording, collection and presentation of physical evidence, scientific aids, modus operandi, sources of information, interview and interrogations, follow-up and case preparation.

CED 231 Grant Proposal Writing 1.0 CR
Grading Policy: Pass/No Pass.
Fees.
Presents an overview of funding sources and references, and provides an in-depth description of the components of a grant proposal.

CED 240 Skills for Adolescence 1.0 CR
Prerequisite: Must be a classroom teacher.
Grading Policy: Pass/No Pass.
Certifies 6th-8th grade teachers to use "Skills for Adolescence" — a comprehensive research-based program that helps students develop[self-discipline, responsibility, good judgment, and cooperation.

CED 241 Classroom Volunteer Training 1.0 CR
Grading Policy: Pass/No Pass.
Fees.
Explores current "best practices" at an introductory level to equip volunteers to more effectively assist classroom teachers. Provides opportunities for directed observation as well as information on strategies and activities for increasing academic learning.

CED 242 Introduction to Coaching Socratic Seminars 2.0-3.0 CR
Grading Policy: Pass/No Pass.
Teaches fundamental concepts and techniques required to coach reading materials in preparation for Socratic seminars.

CED 244 Content Connections 1.0 CR
Prerequisite: Must be a teacher, teacher aide, or substitute teacher.
Grading Policy: Pass/No Pass.
Fees.
Engages participants in researching, reviewing, and creating interdisciplinary units for use in the classroom.

CED 246 Family Math for Educators and Parents 1.0 CR
Grading Policy: Pass/No Pass.
Introduces parents to what researchers know about the impact of parental and family involvement on student achievement, what research says about mathematics instruction in and out of school, what research says regarding mathematics instruction for girls and minorities. Participants will learn practical methods for improving student thinking about mathematics in the classroom, gain information and methods for promoting mathematical thinking in the entire school, at home, and in the after school family math program. Participants will prepare materials for and plan actual family math sessions for their school.

CED 248 Effective Use of DMC in K-12 1.0 CR
Prerequisite: Must be teacher, administrator, student teacher, aide, tutor, nurse or other instructional support personnel.
Grading Policy: Pass/No Pass.
Students will receive instruction in the appropriate use of district media center materials for all content areas (language arts, science, mathematics, trades and industry, health and home economics). Students will locate materials that support the curriculum of the KPBSD. They will preview, demonstrate, and exchange information on media.

CHEM: CHEMISTRY

Offered through the College of Arts and Sciences, Engineering Building (ENGR), Room 333/335, 786-1238

CHEM 055 Contemporary Chemistry 4.0 CR
Prerequisite: MATH 055 or equivalent.
Fees.
Introductory course for students with little or no chemistry background. Covers units of measurement, matter, atoms, periodic table, nomenclature, equations, oxidation-reduction, solutions, calculations, and problem solving.

CHEM 103 Introduction to General and Organic Chemistry 4.0 CR
Prerequisite: Grades of C or higher in MATH 055 or MATH 060; and high school chemistry or CHEM 055.
Fees.
Covers units of measurement, periodic table, chemical equations, atomic and molecular structure, chemical bonding, radioactivity, oxidation-reduction reactions, solutions, acids, bases, and buffers. Introduction to organic chemistry including units covering alkanes, alkenes, alkynes, aromatic compounds, alcohols, phenols, ethers, and halides.

CHEM 104 Introduction to Organic Chemistry and Biochemistry 4.0 CR
Prerequisite: CHEM 103.
Fees.
Includes a survey of organic chemistry and biochemistry. Subjects covered include aldehydes, ketones, carboxylic acids, esters, amines, amides, carbohydrates, lipids, proteins, enzymes, bioenergetics, catabolic pathways, biosynthetic pathways, nucleic acids, protein synthesis, and selected topics in physiology.

CHEM 105 General Chemistry I 4.0 CR
Prerequisite: Grades of C or higher in high school chemistry or CHEM 055, and MATH 105.
Fees.
An introduction to inorganic chemistry for science majors which includes atomic and molecular structure, chemical equations and calculations, states of matter, solutions, acids and bases, kinetics, oxidation-reduction reactions, and thermodynamics. Prior knowledge of nomenclature and basic calculations (metric and SI system, mole) will be assumed.

CHEM 106 General Chemistry II 4.0 CR
Prerequisite: Grades of C or higher in CHEM 105; and MATH 106 or MATH 107.
Fees.
The second semester in the general chemistry sequence for science majors. Topics discussed include solution equilibrium, electrochemistry, thermodynamics of equilibrium systems, coordination chemistry, radiation chemistry, organic nomenclature, structures, and simple reactions.

CHEM 212 Quantitative Analysis 5.0 CR
Prerequisite: Grade of C or higher in CHEM 106.
Fees.
General principles of chemical analysis, including introduction to volumetric, gravimetric, and instrumental methods, theory, problems, and laboratory.

CHEM 311 Physical Chemistry: A Biological Orientation 3.0 CR
Prerequisite: Grades of C or higher in CHEM 212 and MATH 200.
Designed to introduce the principles of physical chemistry to students primarily interested in the biochemical and biological aspects of chemistry. Topics of physical chemistry are presented from the viewpoint of their application to biochemical problems. Included are discussions of thermodynamics and biochemical energetics, properties of solutions and electrolytes, electrochemical applications to biological oxidation-reduction reactions, chemical and enzyme kinetics.

CHEM 321 Organic Chemistry I 4.0 CR
Prerequisite: Grade of C or higher in CHEM 106.
Fees.
A theoretical and laboratory course designed to study the important classes of carbon compounds including alkanes, alkenes, alkyl halides and their cyclic

derivatives. Included will be a study of reactions, reaction mechanisms, and stereochemistry of these compounds.

CHEM 322 Organic Chemistry II 4.0 CR
Prerequisite: Grades of C or higher in CHEM 321.
Fees.
A continuation of CHEM 321 including the study of spectroscopic means of structure determination, conjugated compounds, aromatic compounds, and carbonyl compounds. Various classes of reactions of these compounds will be studied also. Included in this study will be such topics as electrophilic aromatic substitution, addition, and condensation reactions of carbonyl compounds. Synthetic methods and reaction mechanisms will be emphasized throughout the course.

CHEM 331 Physical Chemistry I 3.0 CR
Prerequisite: Grades of C or higher in CHEM 106, MATH 302, and PHYS 212. Fees.
A quantitative study of the kinetic theory of gases and principles of chemical thermodynamics with applications to solutions, phase and chemical equilibria, electrochemistry, and chemical kinetics. Introduction to quantum mechanics and spectroscopy.

CHEM 332 Physical Chemistry II 5.0 CR
Prerequisite: Grade of C or higher in CHEM 331.
Fees.
Continuation of quantum mechanics with selected applications to atomic and molecular structure and spectroscopy. Selected topics in physical chemistry.

CHEM 421 Advanced Organic Chemistry 3.0 CR
Prerequisite: Grade of C or higher in CHEM 322.
Theoretical interpretation of the physical and chemical properties of organic molecules; molecular orbital theory; spectroscopy of organic molecules; photochemical processes.
Offered as warranted by demand.

CHEM 431 Advanced Physical Chemistry 3.0 CR
Prerequisite: Grades of C or higher in MATH 302, CHEM 332, and PHYS 212.
A selection of topics including phase transitions, perturbation theory, group theory and molecular spectroscopy, molecular reaction dynamics, and electric and magnetic properties of molecules.

CHEM 434 Instrumental Methods 4.0 CR
Prerequisite: Grade of C or higher in CHEM 212.
Fees.
Techniques in operating new and specialized instruments for qualitative and quantitative analysis and analytical methods of an advanced nature. For students in chemistry and allied fields.
Special Notes: Stacked with CHEM 634.

CHEM 441 Principles of Biochemistry I 3.0 CR
Prerequisite: Grade of C or higher in CHEM 322.
A study of the structure and function of proteins, carbohydrates, fats, vitamins, coenzymes, and nucleic acids and the degradative and biosynthetic pathways involving these biomolecules.

CHEM 442 Principles of Biochemistry II 3.0 CR
Prerequisite: Grade of C or higher in CHEM 441.
Topics will include a discussion of biomolecules with respect to their structure and function, metabolism, and molecular physiology.

CHEM 443 Biochemistry Laboratory 2.0 CR
Prerequisite: Grade of C or higher in CHEM 441, Corequisite CHEM 442.
Fees.
Laboratory course designed to provide instruction in modern biochemical laboratory techniques.

CHEM 450 Environmental Chemistry 3.0 CR
Prerequisite: Junior or senior standing in biology, chemistry, or engineering.
The origin and evolution of the environment, energy, mineral resources, solid wastes, recycling, and the effects of foreign substances on living systems. Air and water pollution. Quantitative chemical principles will be applied. The interrelationships among these problems will be demonstrated.
Special Notes: This course is an introduction to environmental chemistry for all science majors.

CHEM 452 Inorganic Chemistry I 3.0 CR
Prerequisite: Grades of C or higher in CHEM 321, CHEM 331.
A study of structures and bondings in inorganic compounds with emphasis on the chemistry of the main group elements.

CHEM 453 Inorganic Chemistry II 5.0 CR
Prerequisite: Grade of C or higher in CHEM 452.
Fees.
A continuation of CHEM 452. A study of structures, bondings, and reaction mechanisms of d- and f-block elements.

CHEM 471 Immunochemistry 4.0 CR
Cross-Listed: BIOL 471.
Prerequisite: BIOL 105, 106, and CHEM 321; or Dept. permission.
A study of the immune response including the biochemistry of antibodies, cellular and molecular events triggered by antigenic stimulation, regulation, immunopathology, transplantation, cancer and immunochemical techniques.
Offered as warranted by demand.

CHEM 490 Instructional Practicum: Laboratory 1.0 CR
Prerequisite: Department permission.
Supervised practical experience in one chemistry laboratory section. Planning, presentation of material, achievement testing, and correlation with lecture shall be under the direct supervision of Dept. faculty.
Special Notes: Required of graduate students and open to others with faculty permission only. May be repeated once for credit.

CHEM 492 Undergraduate Seminar 1.0 CR
Prerequisite: Admission to the chemistry degree program and faculty permission.
Topical subjects in chemistry and biochemistry presented by undergraduate students.
Special Notes: Stacked with CHEM 692.

CHEM 498 Individual Research 3.0 CR
Prerequisite: Dept. permission.
Fees.
Research projects to be arranged with individual faculty members who will direct the study of research.

CHEM 634 Advanced Instrumental Methods 4.0 CR
Prerequisite: CHEM 212.
Fees.
Lectures concurrent with CHEM 434. In addition to meeting all requirements for CHEM 434, graduate students will be required to develop an instrumental method, to submit a research paper summarizing their findings, including designs for future experiments on the subject and to give a seminar on the topic.
Special Notes: Stacked with CHEM 434. Not available for credit to students who have completed CHEM 434.

CHEM 642 Enzyme Structure and Mechanism 2.0 CR
Prerequisite: CHEM 442 or Dept. permission.
An advanced topic course in biochemistry; multisubstrate reaction kinetics. King-Altman analysis and product inhibition patterns will be applied to the relationships of protein structure and catalytic mechanism.

CHEM 643 Structure and Function of Biological Membranes 2.0 CR
Prerequisite: CHEM 442 or Dept. permission.
An advanced topics course in biochemistry; structural characterization of cellular membranes and the role in transport, bioenergenics, photosynthesis and modulation of enzyme activity.

CHEM 650 Toxic Metal and Organic Chemicals in the Environment 2.0 CR
Prerequisite: CHEM 434 or CHEM 450.
An advanced topics course in environmental chemistry; distribution, environmental effects and current analytical techniques associated with trace metals and organics from natural and anthropogenic sources. Role in both acute and long-term toxic effects will be considered.

CHEM 685 Advanced Topics in Chemistry 1.0 CR
Prerequisite: Graduate status or Dept. permission.
Intensive studies on narrowly defined topics in chemistry. Emphasis on content as well as on instructional techniques.

CHEM 692 Graduate Seminar 1.0 CR
Prerequisite: Graduate status and Department permission; Corequisite: CHEM 698.
Topical subjects in chemistry and biochemistry presented by graduate students.
Special Notes: Stacked with CHEM 492.

CHEM 698 Individual Research 3.0 CR
Prerequisite: Graduate status or Department permission.
Fees.
Graduate student research projects to be arranged with individual faculty members who will direct the study of research.

CHEM 699 Thesis 1.0-6.0 CR
Prerequisite: Permission of Department graduate advisor.
Planning, preparation and completion of a thesis in chemistry.

CIOS: COMPUTER INFORMATION AND OFFICE SYSTEMS

Offered through the School of Business, Business Education Building (BEB), Room 309, 786-4100

Each student taking any School of Business course will be charged a single lab fee of $20 for the semester. (Does not apply to Eagle River, Ft. Richardson, Elmendorf or extended site offerings.)

CIOS 082 Clerical Accounting 3.0 CR
Includes elements of accounting, accounting equation, and analysis of all business transactions.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 100 Keyboarding I 3.0 CR
Basic keyboarding skills emphasizing correct techniques and development of speed and accuracy. Introduces centering, typing personal and business letters, envelopes, tables and manuscripts. Requires no previous typing training.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 100A Keyboarding I: A 1.0 CR
Introductory keyboarding covering techniques and mechanics of learning to type by touch.
Special Notes: Open-entry, individualized course. CIOS 100A, 100B, and 100C are equivalent to CIOS 100.

CIOS 100B Keyboarding I: B 1.0 CR
Prerequisite: CIOS 100A.
Emphasizes development of speed and accuracy and introduces centering and typing of letters and envelopes.
Special Notes: Open-entry, individualized course. CIOS 100A, 100B, and 100C are equivalent to CIOS 100.

CIOS 100C Keyboarding I: C 1.0 CR
Prerequisite: CIOS 100B.
Emphasizes development of speed and accuracy and introduces typing of tables and reports.
Special Notes: Open-entry, individualized course. CIOS 100A, 100B, and 100C are equivalent to CIOS 100.

CIOS 102 Keyboarding Skill Building 1.0 CR
Prerequisite: CIOS 100 or keyboarding skill of at least 30 WPM .
Grading Policy: Pass/No Pass.
Drills to improve speed/accuracy on straight copy typing.
Special Notes: Open-entry, individualized course. May be repeated for a maximum of 3 credits with only 1 credit in each semester.

CIOS 105 Introduction to PC Computers and Applications 3.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM .
A non-technical computer literacy course. Overview of computers and current popular software packages for small business and personal use. Six to twelve hours of introduction to each of several applications including word processing, electronic spreadsheets, database and graphics software.

CIOS 105A Introduction to PC Computers 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM recommended.
Introduction to using PC software. Includes word processing, database management, electronic spreadsheets, and graphics.

CIOS 105B Introduction to PC Applications 2.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM recommended.
Overview of popular software packages for small business and personal use. Six to twelve hours of introduction to each of several applications including word processing, electronic spreadsheets, database and graphics software.

CIOS 106 Computer Literacy 2.0 CR
Prerequisite: Concurrent enrollment in CIOS 106W required. Keyboarding skills of 30 recommended.
Presents computer hardware and software concepts from user perspectives.
Special Notes: Lectures presented by telecourse.

CIOS 106W Computer Literacy Workshop 1.0 CR
Prerequisite: Concurrent enrollment in CIOS 106 required. Keyboarding skill of at least 30 WPM recommended.
An introduction to using microcomputers with word processing, electronic spreadsheets, and database software.

CIOS 107 Macintosh Computer and Applications 3.0 CR
Prerequisite: CIOS 100; keyboarding skill of at least 30 WPM .
Introduction to Macintosh computer hardware and software, including word processing, spreadsheets, data management, communications, and graphics.

CIOS 107A Introduction to Macintosh Computers 1.0 CR
Prerequisite: Keyboarding skills of at least 30 WPM recommended.
Introduction to using Macintosh software. Includes word processing, database management, electronic spreadsheets, and graphics.

CIOS 107B Introduction to Macintosh Applications 2.0 CR
Prerequisite: Keyboarding skills of at least 30 WPM recommended.
A hands-on course designed for home and business use. Topics include desktop/file management, word processing, spreadsheets, databases, and graphics.

CIOS 110 Computer Concepts in Business 3.0 CR
Prerequisite: MATH 105 and keyboarding skill of at least 30 WPM recommended.
Introduction to computer concepts from a user's perspective. Covers hardware, software, the information processing cycle, programming, and microcomputer software packages. Emphasis on solving business problems using spreadsheet applications.

CIOS 111A Introduction to Lotus in DOS 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM recommended.
Introduction to design and use of electronic spreadsheets. Covers the basic Lotus 1-2-3 commands and functions needed to create, manipulate, and print spreadsheets.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 111B Introduction to Excel on Mac 1.0 CR
Design and use of electronic spreadsheets. Covers basic commands and functions needed to create, manipulate, and print spreadsheets.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 111C Introduction to Lotus in Windows 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM recommended.
Introduction to design and use of electronic spreadsheets in a Windows environment. Covers the basic Lotus 1-2-3 for Windows commands and functions needed to create, manipulate, and print spreadsheets.

CIOS 111D Introduction to Excel in Windows 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM recommended.
Introduction to design and use of electronic spreadsheets in a Windows environment. Covers the basic Excel for Windows commands and functions needed to create, manipulate, and print spreadsheets.

CIOS 112A Introduction to dBASE III+ 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM recommended.
Includes designing and creating a database, updating, sorting and indexing, printing user-defined reports, and creating mailing labels.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 112B Introduction to dBASE IV 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM .
Includes designing and creating a database, updating, sorting and indexing, printing user-defined reports, and creating mailing labels.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 112C Introduction to Filemaker on Mac 1.0 CR
Prerequisite: CIOS 107A.
Designed to teach use of the application through a series of structured activities demonstrating the "power" of the application resulting in the creation of a substantial file useful to the participant.

CIOS 112D Introduction to Hypercard on Mac 1.0 CR
Prerequisite: CIOS 107A.
Introduction to Hypercard concepts. Students will create stacks and use and customize existing stacks using hypercards. Students will also create individualized slide shows.

CIOS 112E Introduction to Q & A 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM .
Q & A is an easy to use data filing program that combines word processing, report generation, and artificial intelligence in a tightly integrated package. The first microcomputer application to use artificial intelligence, Q & A is suitable for a wide range of business and personal applications.

CIOS 113A Introduction to MS-DOS 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM recommended.
Overview of common MS-DOS commands. Creating directories and managing hard-disks are stressed. Standard resident and nonresident commands are introduced.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 113B Introduction to Windows 1.0 CR
Introduction to the Windows environment. Includes file and disk management, the control panel, print manager, Windows setup and maintenance.

CIOS 113C Introduction to Mac Operating System 1.0 CR
Prerequisite: CIOS 107A and keyboarding skill of at least 30 WPM .
Designed for Macintosh owners and intensive Macintosh users. Focuses on system maintenance and operation with an emphasis on troubleshooting. Includes viruses, bombs, customizing the system, hard disk management, and system connectivity.

CIOS 114A Introduction to Harvard Graphics 1.0 CR
Use of Harvard Graphics to create text, pie, bar, line, and area charts. Includes basic concepts of graphic design, types of data, and manipulation and transformation of graph elements. Students will have assigned and individual projects.

CIOS 114B Introduction to Persuasion 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM .
Instruction and practice in Aldus Persuasion and the applications in making a presentation.

CIOS 115A Introduction to WordStar in DOS 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM and basic English skills.
Instruction and practice in use of IBM personal computer and WordStar software for standard word processing operations.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 115B Introduction to DisplayWrite in DOS 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM and basic English skills.
Instruction and practice in use of IBM personal computer and DisplayWrite software for standard word processing operations.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 115C Introduction to PFS: Write in DOS 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM and basic English skills.
Instruction and practice in use of IBM personal computer and PFS: Write software for standard word processing operations.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 115D Introduction to WordPerfect In DOS 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM and basic English skills.
Instruction and practice in use of IBM personal computer and WordPerfect software for standard word processing operations.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 115E Introduction to Microsoft Word in DOS 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM and basic English skills.
Instruction and practice in use of IBM personal computer and Microsoft Word software for standard word processing operations.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 115F Introduction to Microsoft Word on Mac 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM and basic English skills.
Instruction and practice in use of Macintosh personal computer and Microsoft Word software for standard word processing operations.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 115G Introduction to Microsoft Word in Windows 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM and basic English skills.
Explores some of the characteristics of a Window-based application covering basic Windows operations focusing on Microsoft Word for Windows.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 115H Introduction to WordPerfect in Windows 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM and basic English skills.
Instruction and practice in use of IBM personal computer and WordPerfect for Windows software for standard word processing operations.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 115J Introduction to WordPerfect on Mac 1.0 CR
Prerequisite: Keyboarding skill of at least 30 WPM and basic English skills.
Introduces WordPerfect software on the Macintosh. Explores word processing features needed to retrieve, revise, format, and print documents.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 116A Introduction to Desktop Publishing on Mac 1.0 CR
Prerequisite: CIOS 107A.
Introduction to using a desktop publishing package. Students will produce publications by placing text and graphics created with other applications. Design elements will also be discussed.
Special Notes: A student may not apply elective credit toward a certificate or degree from both CIOS 116A and CIOS 338.

CIOS 116B Introduction to Desktop Publishing on IBM 1.0 CR
Prerequisite: CIOS 100.
Introduction to using a desktop publishing package on the IBM. Students will produce publications placing text and graphics created with other applications. Design elements will also be discussed.

CIOS 117A Electronic Research Methods 1.0 CR
Prerequisite: Familiarity with Macintosh or other computer system.
Electronic research will be discussed as a form of information retrieval. Presentations about electronic retrieval methods will be followed by hands-on, practical searching for student-selected project information. Modem-equipped computers will be demonstrated.

CIOS 160 Business English 3.0 CR
Develops skills in English fundamentals with emphasis on language usage. Intensive study of grammar, punctuation, capitalization, spelling, word usage, and sentence structure.

CIOS 161 Business Math 3.0 CR
Prerequisite: Qualifying exam and faculty signature for open-entry class only.
Business math fundamentals and concepts to aid in business classes, jobs, and personal lives. Business math applications in banking, marketing, accounting, and finance. Instruction in solving problems with calculating machines.
Special Notes: Students supply own calculators or use school equipment. May be offered as either classroom or open-entry, individualized course.

CIOS 162 Payroll Procedures 1.0 CR
Realistic activities introduce the student to preparation of payroll records and tax returns. Up-to-date payroll information and tax forms are used for practice.
Special Notes: Each student is expected to complete a minimum of 30 hours in the lab.

CIOS 165 Office Procedures 3.0 CR
Prerequisite: CIOS 100.
Duties and responsibilities of general office employees. Includes filing, effective mail processing, telephone communication, meeting the public, office supplies, banking, employment procedures, and grooming.

CIOS 166 Filing 1.0 CR
Study of filing procedures and basic records management principles. Practice in alphabetic filing rules and introduction to subject, numeric, and geographic filing systems.
Special Notes: Open-entry, individualized course.

CIOS 167 Proofreading 1.0 CR
Prerequisite: CIOS 100 and CIOS 160.
Instruction and practice in proofreading skills. Includes basic techniques of proofreading; review of grammar, punctuation, and spelling; and proofreading for content and usage.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 168 Shorthand 3.0 CR
Theory, reading and writing practice for rapid writing of office dictation or abbreviated notetaking.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 169 Shorthand Skill Building 1.0 CR
Prerequisite: CIOS 100 and CIOS 168.
Grading Policy: Pass/No Pass.
Improves skills in taking and transcribing shorthand. Materials individualized to skill level of students.
Special Notes: May be repeated for a maximum of 3 credits with only 1 credit per semester. Open-entry, individualized course.

CIOS 170 Calculators 1.0 CR
Basic operation of electronic calculators with application in solving business problems.
Special Notes: Open-entry, individualized course.

CIOS 185 Introduction to Programming Business Applications 3.0 CR
Prerequisite: CIOS 110.
Introduction to business data processing and programming concepts and techniques required to produce business reports, process files with control break

logic, program/code table handling and table look-up routines, and modularized large programs. Emphasis on structured program design, program testing and certification, and documentation for production.
Special Notes: Currently uses Pascal as programming language.

CIOS 192 Seminars in Office Management and Technology 1.0 CR

Grading Policy: Pass/No Pass.
Specialized topics in office management and technology. Seminars include Business English Review, Letter Writing, Personal Communications in the Office, Job Search Techniques, Better Office Skills and Services, Time Management/Work Organization, Editing/Proofreading/Spelling, Managing Stress and Conflict, Professional Development and Career Advancement, Effective Listening and Memory Development, and Personal Finance.
Special Notes: May be repeated for a maximum of 7 credits with a change of subtitle. Check schedules for specific offerings.

CIOS 201 Programming Business Applications with COBOL 5.0 CR

Prerequisite: CIOS 185.
Training and practice in writing programs for business applications in COBOL. Emphasis on structured program design, program testing and certification, and documentation for production.
Special Notes: Class requires 8-hour midterm and 8-hour final scheduled by department on weekends. Specific dates announced in class.

CIOS 202 Programming Business Applications with FORTRAN 3.0 CR

Prerequisite: MATH 107 or MATH 270; CIOS 185 recommended.
Writing programs in FORTRAN. Emphasis on multidimensional arrays/tables, modularizing programs using subroutines, and updating files. Also covers top-down design and structured methodology.

CIOS 211A Advanced Lotus in DOS 1.0 CR

Prerequisite: CIOS 111A.
Concepts and techniques for construction of electronic spreadsheets and spreadsheet templates for business use. Application of Lotus 1-2-3 database commands, advanced use of functions and file commands, and an introduction to keystroke macros.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 211B Advanced Excel on Mac 1.0 CR

Prerequisite: CIOS 111B.
Includes software applications in advanced areas covering the concepts and techniques for construction of electronic spreadsheets and spreadsheet templates.

CIOS 212A Advanced dBASE III+ in DOS 1.0 CR

Prerequisite: CIOS 112A.
Students develop projects using dBASE III+.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 212B Advanced dBASE IV in DOS 1.0 CR

Prerequisite: CIOS 112B.
Students will develop projects using dBASE IV.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 213A Advanced MS-DOS 1.0 CR

Prerequisite: CIOS 113A.
Additional fundamentals of the operating system and the interaction of hardware and software of an IBM or IBM compatible personal computer (PC). Advanced MS-DOS topics are taught in order to give the students a base of knowledge to work from to completely utilize the PC environment. Technically oriented course.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 214A Advanced Harvard Graphics 1.0 CR

Prerequisite: CIOS 114A.
Use of graphics to import data from spreadsheets and export to a word processing or desktop publishing program. Includes 3-D graphics, freeform graphics, specialized graphic programs, and use of clip art symbols. Students will develop individual projects.

CIOS 215A Advanced WordStar in DOS 1.0 CR

Prerequisite: CIOS 115A.
Continuation of CIOS 115A. Includes software applications in advanced areas such as repetitive letters, tables, reports, footnotes, and merging. Requires ability to solve problems, interpret work orders, and type from rough draft copy.

CIOS 215B Advanced DisplayWrite in DOS 1.0 CR

Prerequisite: CIOS 115B.
Continuation of CIOS 115B. Includes software applications in advanced areas such as repetitive letters, tables, reports, footnotes, and merging. Requires ability to solve problems, interpret work orders, and type from rough draft copy.

CIOS 215D Advanced WordPerfect in DOS 1.0 CR

Prerequisite: CIOS 115D.
Continuation of CIOS 115D. Includes software applications in advanced areas such as repetitive letters, tables, reports, footnotes, and merging. Requires ability to solve problems, interpret work orders, and type from rough draft copy.

CIOS 215E Advanced Microsoft Word in DOS 1.0 CR

Prerequisite: CIOS 115E.
Continuation of CIOS 115E. Includes software applications in advanced areas such as repetitive letters, tables, reports, footnotes, and merging. Requires ability to solve problems, interpret work orders, and type from rough draft copy.

CIOS 215F Advanced Microsoft Word on Mac 1.0 CR

Prerequisite: CIOS 115F.
Continuation of CIOS 115F. Includes software applications in advanced areas such as repetitive letters, tables, reports, footnotes, and merging. Requires ability to solve problems, interpret work orders, and type from rough draft copy.

CIOS 215J Advanced WordPerfect on Mac 1.0 CR

Prerequisite: CIOS 115J.
Continuation of CIOS 115J. Includes software applications in advanced areas such as repetitive letters, tables, reports, footnotes, and merging. Requires ability to solve problems, interpret work orders, and type from rough draft copy.

CIOS 216A Advanced Desktop Publishing on Mac 1.0 CR

Prerequisite: CIOS 116A.
Continuation of desktop publishing fundamentals, features, and operations on the Macintosh computer system. All aspects of the publishing field are touched upon. Students will generate various graphics, charts and documents incorporating advanced drawing and graphing programs.
Special Notes: A student may not apply elective credit toward a certificate or degree from both CIOS 216A and CIOS 338.

CIOS 216B Advanced Desktop Publishing on IBM 1.0 CR

Prerequisite: CIOS 116B.
Continuation of desktop publishing fundamentals, features, and operations on a personal computer. All aspects of the publishing field are touched upon. Students will generate various graphics, charts and documents incorporating advanced drawing and graphing programs.

CIOS 221A Advanced Lotus Macros in DOS 1.0 CR

Prerequisite: CIOS 211A.
Design and use of macros in Lotus 1-2-3 spreadsheets. Covers keystroke macros and advanced macro command programming.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 223A Advanced MS-DOS Topics 1.0 CR

Prerequisite: CIOS 213A.
A continuation to the Microsoft disk operating system (MS-DOS). Includes advanced techniques of the operating system and the interaction of hardware and software on an IBM or compatible personal computer.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 225D Advanced WordPerfect Topics in DOS 1.0 CR

Prerequisite: CIOS 215D.
Continuation of CIOS 215D. Includes skills to produce documents using graphics and desktop publishing features; create reports and term papers using endnotes, footnotes, references, indexing, outlining features and customize certain features in WordPerfect.

CIOS 231 Programming Advanced Business Applications with COBOL 5.0 CR

Prerequisite: ACCT 201 and CIOS 201.
Writing advanced programs for business applications using COBOL. Includes updating sequential files, indexed files, and a database. Emphasis on structured program design, program testing and certification, and documentation for production.
Special Notes: Class requires 10-hour midterm and 10-hour final scheduled by department on weekends. Specific dates announced in class.

CIOS 247 Programming Advanced Business Applications with Pascal 5.0 CR

Prerequisite: CIOS 185.
Training and practice in writing advanced applications using Pascal.

CIOS 250A Machine Transcription A 1.0 CR

Prerequisite: CIOS 100 or keyboarding skill of at least 30 WPM ; and CIOS 160 or ENGL 111 or pass CIOS written exam; and 1 credit of any CIOS 115 course.
Introduces machine transcription for students with no previous experience. Includes review of English grammar and punctuation.
Special Notes: Open-entry, individualized course.

CIOS 250B Machine Transcription B 1.0 CR
Prerequisite: CIOS 250A or demonstrated transcript ability.
Emphasizes mailable copies, review of language skills and vocabulary.
Special Notes: Open-entry, individualized course.

CIOS 251 Medical Transcription 3.0 CR
Prerequisite: CIOS 260 or keyboarding skill of at least 40 WPM .
Emphasizes accuracy and speed in transcribing medical dictation. Develops ability to produce accurate medical data through a broad knowledge of medical terms, drugs, and instruments, as well as acceptable initials and abbreviations for medical terminology. Also develops familiarity with various types of medical reports and records.

CIOS 252 Legal Transcription 1.0-3.0 CR
Prerequisite: CIOS 260 or keyboarding skill of at least 40 WPM .
Machine transcription of client and court documents prepared in the law office.

CIOS 260 Keyboarding II 3.0 CR
Prerequisite: CIOS 100 (or CIOS 100A, 100B, and 100C) or keyboarding skill of at least 30 WPM and 1 credit of any CIOS 115 course.
Applies keyboarding skills to special letters, tabulations, manuscripts, business forms, and other office problems. Develops speed and accuracy.
Special Notes: May be offered as either classroom or open-entry, individualized course.

CIOS 261 Keyboarding III 3.0 CR
Prerequisite: CIOS 260, 1 credit of any CIOS 115 course, and keyboarding skill of 45 WPM.
Emphasizes problem solving approach to produce high-quality office documents. Word processing program is used to create business letters, legal documents, forms, statistical tabulating, and financial reports. Includes speed and accuracy skill building.
Special Notes: Open-entry, individualized course. Word processing software is selected by department.

CIOS 262 Written Business Communications 3.0 CR
Prerequisite: CIOS 160.
Applies techniques of written communications to situations that require problem solving and an understanding of human relations. Students compose and evaluate various kinds of communications that commonly pass between business associates, customers, and dealers. Includes interoffice memos, letters, and reports.

CIOS 263 Professional Secretarial Procedures 3.0 CR
Prerequisite: CIOS 165; CIOS 160 recommended.
Capstone course for secretarial training, emphasizing the office professional's responsibilities in office communications, technology, records management, meetings, supervision, executive travel, reprographics, and employment/advancement procedures.

CIOS 264 Interpersonal Skills in Organizations 3.0 CR
Prerequisite: CIOS 165 and/or office experience with faculty permission.
Examination of theories and principles of human behavior that deal with the work place. Emphasizes leadership theory, problems in communication, motivation, and interpersonal skills which enhance the ability to function successfully with others in an organization.

CIOS 268 Intensive CPS Review 1.0 CR
Prerequisite: Work experience or previous coursework in these areas recommended.
Grading Policy: Pass/No Pass.
Intensive review for those interested in preparing for academic areas covered in the Certified Professional Secretary examination (CPS). Selected titles include Behavioral Science in Business; Business Law; Economics and Management; Accounting; Office Administration and Communication; and Office Technology.
Special Notes: Check schedules for specific titles being offered.

CIOS 272 Law Office Procedures: Litigation Documents 3.0 CR
Prerequisite: CIOS 260 or keyboarding skill of at least 45 WPM; CIOS 160 recommended.
Principles of law office procedures in preparation of legal documents used in civil litigation from prefiling stage of lawsuits through pretrial procedures, trial, post-judgment enforcement, and appeal. Some attention given to distinctions in preparation of documents for criminal and federal litigation and to jurisdiction of various courts. Emphasizes stylization of legal papers, purpose, applicable civil rules, and legal vocabulary.

CIOS 273 Law Office Procedures: Client Documents 3.0 CR
Prerequisite: CIOS 260 or keyboarding skill of at least 45 WPM; CIOS 160 recommended.
Principles of law office organization and management and survey of Alaska procedures in real estate, corporate, family, probate, and bankruptcy law. Preparation of legal documents used in each area, emphasizing stylization, purpose, statutory requirements, and legal vocabulary.

CIOS 274 Alaska Rules of Civil Procedures 3.0 CR
Prerequisite: CIOS 272 or knowledge of legal documents.
Study of Alaska rules of civil procedures in civil litigation. Also covers appellate procedures and examines differences in federal civil rules.

CIOS 276 Records Management 3.0 CR
Presents principles used in management of information and records. Covers controls related to creation, use, maintenance, protection, retrieval, and disposition of records. Includes application of microforms and forms control.

CIOS 290 CIOS Seminar/Project 1.0-6.0 CR
Prerequisite: Department permission required.
In a simulated professional environment, students complete a CIOS project, prepare a project report, and make an oral presentation. Project may include learning a new software product as well as using the product to solve problems.
Special Notes: May be taken more than once for credit. Check schedule for specific titles being offered.

CIOS 295A Computer Operations Internship 1.0-6.0 CR
Prerequisite: Department permission required.
Computer operations work experience in an approved position.
Special Notes: Requires 45 hours of work experience for each credit. May be taken more than once for credit. Maximum of 5 internship credits may be used to meet degree requirements.

CIOS 295B Computer Programming Internship 1.0-6.0 CR
Prerequisite: Department permission required.
Computer programming work experience in an approved position.
Special Notes: Requires 45 hours of work experience for each credit. May be taken more than once for credit. Maximum of 5 internship credits may be used to meet degree requirements.

CIOS 295C Office Systems Internship 1.0-6.0 CR
Prerequisite: 12 credit hours in CIOS and department permission required.
Places students in business offices related to their educational programs and occupational objectives. Includes seminar with faculty coordinator.
Special Notes: Requires 45 hours of work experience for each credit. May be taken more than once for credit. Maximum of 3 internship credits may be used to meet degree requirements.

CIOS 310 Analysis and Design of Business Systems 3.0 CR
Prerequisite: Admission to upper-division standing, or faculty permission required.
Concepts and techniques for designing computer-based business systems. Includes feasibility study, system design, system development, implementation, performance evaluation and review.

CIOS 312 Database Management Systems for End Users 3.0 CR
Prerequisite: Admission to upper-division standing, or faculty permission required.
Designed to examine the physical and logical design concepts and techniques associated with modern database systems. Includes basic database concepts, methods of file organization, common data structures, the relational and CODASYL database models, introduction to database design, relational query languages, and applications development.

CIOS 315 Advanced Topics in Microcomputer Applications for Business 3.0 CR
Prerequisite: Admission to upper-division standing.
Designed to provide the student with exposure to advanced application software topics as they relate to business problems. The specific mix of software products and topics may vary from semester to semester, but involve the use of database, spreadsheet, statistical, and graphics applications in the fields of accounting, finance, operations, marketing and management. Each student will be expected to independently present an applications software project designed and developed during the semester.

CIOS 330 Database Management Systems 3.0 CR
Prerequisite: Admission to upper-division standing.
Covers principles of database management systems including concepts and design, methods of file organization, data structures, query languages and micro to mainframe database environments. Students will be expected to design and implement a database project during the semester.

CIOS 338 Desktop Publishing and Design 3.0 CR
Prerequisite: CIOS 107A.
The use of desktop publishing software to design, lay out, edit and refine high-quality printed communications in an office setting. Students produce flyers, brochures, newsletters, and other publications with the quality of printed typesetting and design.
Special Notes: A student may not apply elective credit toward a certificate or degree from both CIOS 216A and CIOS 338.

CIOS 340 Interactive and Database Programming for Business Applications 3.0 CR
Prerequisite: CIOS 221 and admission to upper-division standing.
Students will write advanced business application programs using COBOL to interface with screen design and DBMS software for interactive processing. Emphasis on structured program design, program testing and certification, and documentation for production.

CIOS 350 Developing Application Software in an IBM Environment 3.0 CR
Prerequisite: Admission to upper-division standing.
Training and practice in developing application software on IBM mainframe computers. Emphasis on IBM operating systems, job control language, and software development tools. Also includes an overview of end-user products and development tools.

CIOS 360 4th GL Programming for Business Applications 3.0 CR
Prerequisite: Admission to upper-division standing.
The student will learn to develop applications using current systems development methodologies and fourth generation languages (4GL). Students will design, code and test 4GL programs. The role of 4GL tools in the prototyping methodology will be introduced.

CIOS 361 C Language for Business Programming 3.0 CR
Prerequisite: CIOS 185 and admission to upper-division standing.
Business programming in the C language for those familiar with Pascal.

CIOS 362 RPG Programming for Business Applications 3.0 CR
Prerequisite: CIOS 185 and admission to upper-division standing.
Emphasis is on business problem solving with a computer. The student will learn RPG syntax and solve problems through analysis, program design, development, testing and documentation. Control of the hardware environment in which RPG is run will be explored.

CIOS 376 Management Information Systems 3.0 CR
Prerequisite: Admission to upper-division standing.
Theory, analysis, and design of information systems (IS) for management planning and control. Includes business information systems, and how IS supports decision-making, issues in managing the acquisition, development and use of computer systems, the technology of IS, database management, and the system development process.

CIOS 390 CIOS Software Development Project 1.0-6.0 CR
Prerequisite: Department permission required.
Given design specifications in a simulated professional environment, students complete an MIS software development project. Emphasis is on software development and implementation using either a traditional programming language to develop a program, or installing and customizing a purchased software package.
Special Notes: May be taken more than once for credit. Maximum of 9 elective credits may be used for the BBA MIS degree. Check schedule for specific titles being offered.

CIOS 395 Programmer/Analyst Internship 1.0-6.0 CR
Prerequisite: Department permission required.
Programmer/analyst work experience in an approved position.
Special Notes: Requires 45 hours of work experience for each credit. May be taken more than once for credit. Maximum of 6 internship credits may be used to meet degree requirements.

CIOS 410 Project Management 3.0 CR
Prerequisite: Admission to upper-division standing.
Covers building the project plan, determining work flow and project duration, risk analysis and contingency plans, scheduling activities and resources, controlling work in progress, reporting to the user and upper management, and automated project management systems.

CIOS 420 Consulting and Training End Users 3.0 CR
Prerequisite: Admission to upper-division standing.
Covers computer training needs assessment, the design, development, delivery and evaluation of computer training, and controlling a project with project management.

CIOS 430 Decision Support and Expert Systems 3.0 CR
Prerequisite: Admission to upper-division standing.
Introduces the concepts and theory of decision support, group and executive support systems, and the associated field of expert systems. The student will be exposed to a selected set of methodologies and software support systems used in DSS/ESS/ES settings.

CIOS 450 Managing Data Communications and Computer Networks 3.0 CR
Prerequisite: Admission to upper-division standing.
Gives students a basis for understanding the rapidly changing environment of data communication including local and area networks. Focuses on the control and management of data in a distributed environment, the technology issues associated with data communications, and current trends in the industry.

CIOS 490 MIS Seminar/Project 1.0-6.0 CR
Prerequisite: Admission to upper-division standing. In a simulated professional environment students complete an MIS project, prepare a project report, and make an oral presentation.
Special Notes: May be taken more than once for a maximum of 6 elective credits.

CIOS 495 Systems Analyst/User-Support Internship 1.0-6.0 CR
Prerequisite: Department permission required.
Systems analyst or user-support work experience in an approved position.
Special Notes: Requires 45 hours of work experience for each credit. May be taken more than once for credit. Maximum of 6 internship credits may be used to meet degree requirements.

CIOS 605 Information Systems for Managers 2.0 CR
Prerequisite: Graduate standing.
Provides the knowledge and skills concerning information systems in a business setting to enable effective use of information technology (IT) in organizations. Topics include major industry trends, how information systems (IS) are developed and managed, system components, and the role of information systems (IS) in organizations.

CIOS 614 Systems Theory and Analysis 3.0 CR
Prerequisite: Graduate standing.
Theory and design of complex interactive systems, system philosophy, components of general systems theory, system design, principles, and methods. Survey of application of systems concept to business and economics.

CIOS 621 Seminar in Management Information Systems 3.0 CR
Prerequisite: Graduate standing and CIOS 605 or equivalent.
Selected advanced topics in management information with emphasis on the role of manager, the role of information in the decision making process, establishing a uniform data base, design of information systems, global IS, and telecommunications and networking issues.

COUN: COUNSELING

Offered through the Advising and Counseling Center, Business Education Building (BEB), Room 115, 786-4500

COUN 101 Introduction to Career Exploration 1.0 CR
Grading Policy: Pass/No Pass.
Fees.
An introduction to career exploration. Includes exploring self-concept, values, interests, skills, aptitudes, work orientation, occupational information and decision making.

COUN 107 Managing Stress 1.0 CR
Examines general causes of stress and effective methods to eliminate or manage stress in your own life.

COUN 108 Improving Communication in Relationships 3.0 CR
Increases awareness of how individuals communicate and relate to other significant people in their lives. Teaches specific skills in styles and patterns of communication. How to effectively resolve issues and conflicts in relationships.

COUN 208 Career Planning and Changing 3.0 CR
Presents an innovative approach to career/life planning and job hunting. Emphasizes self-awareness and an ongoing process to define who you are and what you want from life. Includes skills identification, prioritizing, information gathering, resume writing, interviewing, salary negotiations and techniques to control the job hunt.

COUN 209 Information Interviewing for the Job Hunt 1.0-3.0 CR
Prerequisite: COUN 208 or faculty permission.
Individualized interviewing for information/creating your own job as taught in COUN 208. Includes identifying sources of information, identifying and approaching persons with the power to hire, utilizing your contacts, and developing and presenting job proposals. Students research organizations/fields of their choice and apply these principles.

CS: COMPUTER SCIENCE

Offered through the College of Arts and Sciences, CAS Building, Room 154, 786-1742/4824

Each student taking any Computer Science course will be charged a single lab fee of $20 for the semester. (Does not apply to Eagle River, Ft. Richardson, Elmendorf, or extended site offerings.)

CS 100 Introduction to Computers 3.0 CR

An introductory course in computers and computing intended for non-computer science majors and minors. Includes an introduction to programming languages such as BASIC or LOGO. Emphasis is on vocabulary and concept development needed to be an effective computer user.
Special Notes: Not to be taken for credit by Computer Science majors or minors.

CS 101 Introduction to Data Processing 3.0 CR

Prerequisite: Two years of high school algebra or equivalent.
A broad survey of computer science intended for students who are pursuing majors or minors in computer science or related fields such as engineering. While the fundamentals of computer problem solving and programming in a higher-level programming language such as BASIC or Pascal are discussed and applied, the emphasis is on concepts and vocabulary associated with computers and their general use in business data processing.

CS 105 FORTRAN Programming 3.0 CR

Prerequisite: MATH 107 or MATH 270 or faculty permission.
Training and practice in writing programs in the FORTRAN language. Emphasis on problem solving with a computer: analysis, flowcharting, testing/debugging, and documentation.

CS 106 BASIC Programming 3.0 CR

Prerequisite: Two years of high school algebra or equivalent with a grade of C or better.
Practice and use of the algorithmic approach to logical reasoning using graphic display of algorithms in flowchart form and coding instructions in the BASIC language.

CS 107 Pascal Programming 3.0 CR

Prerequisite: MATH 107 or MATH 270 or faculty permission.
Training and practice in writing programs in the Pascal language. Emphasis on problem solving with a computer: analysis, flowcharting, testing/debugging, and documentation.
Special Notes: A student may apply no more than 3 credits from CS 107 and CS 201 toward graduation requirements for a baccalaureate degree.

CS 108 Introduction to COBOL 3.0 CR

Training and practice in writing programs in the COBOL language. Emphasis on problem solving with a computer: analysis, testing/debugging, and documentation.
Special Notes: Not to be taken for credit by Computer Science majors or minors in the Information Systems Option.

CS 109 Selected Computer Languages 3.0 CR

Prerequisite: Two years of high school algebra or faculty permission.
Problem analysis and solution using a selected programming language (FORTH, MODULA-2, ADA, etc.).
Special Notes: Course may be repeated for different languages, with faculty permission.

CS 201 Programming Concepts I 3.0 CR

Prerequisite: CS 105 or 106 or 109.
An introduction to programming techniques and problem solving. Emphasis will be on the fundamentals of structured programming, testing, implementation and documentation of scientific applications using Pascal.

CS 202 Programming Concepts II 3.0 CR

Prerequisite: CS 201 (or CS 107 with faculty permission).
An introduction to data structures and algorithm development using Pascal.

CS 207 C Programming 3.0 CR

Prerequisite: CS 107, CS 201, or CS 105 or faculty permission.
Training and practice in writing programs in the C programming language.

CS 210 Software and Hardware Concepts 3.0 CR

Prerequisite: CS 101 and one programming language course.
Basic concepts of computer systems and computer architecture. Includes discussion of memory, I/O units, CPU, machine assembler languages, and components and structure of operating systems.

CS 215 COBOL Program Development I 3.0 CR

Prerequisite: CS 101 and CS 105, CS 106, CS 107 or CS 109. Prior completion or concurrent enrollment in ACCT 201.
An introduction to business applications programming and problem solving. Emphasis will be on the fundamentals of structured program design, development, testing, implementation, and documentation of common business oriented applications using COBOL.

CS 216 COBOL Program Development II 3.0 CR

Prerequisite: CS 215. Prior completion or concurrent enrollment in ACCT 202.
A continuation of CS 215. Emphasis will be on structured methodology of program design, development, testing, implementation, and documentation of common business oriented applications using COBOL.

CS 300 Assembler Language Programming 3.0 CR

Prerequisite: CS 210.
Review of basic computer organization. An extensive treatment of a specific assembler language.

CS 310 Numerical Methods 3.0 CR

Prerequisite: CS 105, MATH 302, MATH 314.
Introduction to the theory and practice of computation with special emphasis on methods useful with digital computers. Topics include matrix calculations and the solution of systems of linear equations, the solution of nonlinear equations, interpolation and approximation, numerical differentiation and integration, and solution of differential equations.

CS 315 Systems Analysis Methods 3.0 CR

Prerequisite: CS 215 and ACCT 202.
Overview of the system development life cycle. Emphasis on current system documentation through the use of both classical and structured tools/techniques for describing process flow, data flows, data structures, file designs, input and output designs, and program specifications. Discussion of the information gathering and reporting activities and of the transition from analysis to design of standard business application programs.

CS 316 Structured Systems Analysis and Design 3.0 CR

Prerequisite: CS 315.
Advanced study of structured systems development. Emphasis on strategies and techniques of structured analysis and structured design for producing logical methodologies for dealing with complexity in the development of information systems.

CS 320 Introduction to Operating Systems 3.0 CR

Prerequisite: CS 300 and MATH 306 recommended.
The use and implementation of assemblers, macro assemblers, linkers, loaders, and other systems programs. Exercises in designing and writing various systems programs. An introduction to process, memory, device, and file management in batch, multiprocessing, and timeshared operating systems.

CS 330 Data Structures and Algorithms 3.0 CR

Prerequisite: CS 202 and CS 210.
Data structures and algorithms for their manipulation. Arrays, tables, stacks, queues, trees, linked lists, sorting, searching, and hashing.

CS 331 Programming Language Structures 3.0 CR

Prerequisite: CS 202, CS 330 recommended.
Study of the syntax and semantics of widely differing programming languages. Syntax specification, block structure, binding, data structures, operators and control structures. Comparison of several languages such as ALGOL, FORTRAN, LISP, SNOBOL, and Pascal. Programming assignments in each language.

CS 340 Topics in Computer Science for Teachers 3.0 CR

A consideration of topics in computer science useful in curriculum enrichment in elementary and secondary education.
Special Notes: May be repeated as topics vary. Does not count toward a computer science major.

CS 360 Database Program Development 3.0 CR

Prerequisite: CS 202 or CS 216.
Introduction to application program development in a database environment with an emphasis on loading, modifying, and querying the database using a host language. Discussion and application of data structures, index and direct file organizations, models of data including hierarchical, network and relational. Discussion of storage devices, data administration, data analysis, design, and implementation.

CS 381 Optimization Techniques 3.0 CR

Prerequisite: MATH 306, MATH 314, and AS 307.
Nature of computer based optimization methods. General and special purpose methods of optimization, such as classical optimization, linear programming, separable programming, integer programming, goal programming, quadratic programming, chance-constrained programming, transportation, and assignment problems. Emphasis on problem recognition, formulation, solution, and interpretation using computer software packages.

CS 385 Computer Graphics 3.0 CR

Prerequisite: CS 202 and CS 210.
Study of the devices and techniques for the use of computers in generating graphical displays. Includes display devices, display processing, transformation systems, interactive graphics, three-dimensional graphics, graphics system design and configuration, low and high level graphics languages, and applications.

CS 401 Software Engineering 3.0 CR
Prerequisite: CS 107 or CS 201 and junior standing.
Software design as an engineering discipline. Project planning, proposal writing, and management. Program design, verification, and documentation. Additional topics from security, legal aspects of software, and validation.

CS 402 Software Engineering Economics 3.0 CR
Prerequisite: CS 401 or senior standing.
An examination of the primary factors that influence software cost and alternative methods of software development cost estimation useful in evaluating alternatives using various economic criteria.

CS 405 Artificial Intelligence 3.0 CR
Prerequisite: MATH 306, CS 330 and CS 331.
An introduction to the basic concepts of artificial intelligence. Includes expert systems, natural language processing, machine learning and survey of AI programming languages with emphasis on LISP and PROLOG.

CS 406 Topics in Computer Science 3.0 CR
Prerequisite: Faculty permission.
Advanced topics in computer science not available in other CS course offerings.
Special Notes: Course may be repeated with change of subtitle.

CS 410 Decision Support Systems 3.0 CR
Prerequisite: CS 101, BA 377, and faculty permission.
An analysis of the highest level of information support systems which serve the manager user. Decision support systems (DSS) provide quantitative-based information derived from one or more databases within and/or external to an organization and used to aid managers in the decision making process. The primary course objective is to examine the theoretical foundations of decision support systems and to examine the key issues related to success in the development and operation of DSS in organizations.

CS 411 Design and Analysis of Algorithms 3.0 CR
Prerequisite: MATH 306 and CS 330.
Introduction to analysis and complexity of algorithms. Searching/sorting algorithms, polynomial matrix algorithms, graph theoretic algorithms. Introduction to complexity theory.

CS 413 EDP Audit and Controls 3.0 CR
Prerequisite: CS 315.
Introduction to the fundamentals of EDP auditing. Primary objectives are to emphasize the importance of EDP controls and to gain an appreciation of and motivation for proper data processing practices and management. Topics include: flowcharting, internal control, transaction cycles, computer hardware and software, computer crime, basic auditing concepts, and systems studies.

CS 414 Information Systems Planning and Management 3.0 CR
Prerequisite: CS 316.
Introduction to the financial, technical, and strategic information systems planning processes. Emphasis on information systems and their relationships within the organization, on the means of systems selection including staffing and financing, and on the overall management requirements needed to plan, organize and control user services.

CS 425 Internship in Computing 3.0 CR
Prerequisite: Junior standing with minimum of 15 credits in CS courses and faculty permission.
Professional work experience in appropriate areas of computing.

CS 430 Computer Modeling and Simulation Techniques 3.0 CR
Prerequisite: AS 307 and CS 202.
Applications and rationale. Design and analysis of discrete simulation models. Generation of random sequences and stochastic variates.

CS 442 Communications and Networks 3.0 CR
Prerequisite: CS 210, and MATH 231 or MATH 306.
Introduction to data transmission, information theory, and computer networks. Topics include: characteristics of transmission media, multiplexing, error detection and correction, data security, communication protocols, packet switching, analysis of various network architectures; and review of selected commercial network environments.

CS 448 System Architecture 3.0 CR
Prerequisite: CS 320.
Hardware and operating systems and their interaction, I/O, interrupts, memory management, concurrent processing, deadlock, modularity, system balancing, scheduling, protection, and introduction to communications and networks.

CS 450 Automata, Languages and Computability 3.0 CR
Prerequisite: CS 330.
Study of the theory of computing. Topics include: context-free grammars and parsing; finite automata and regular languages; pushdown automata and context-free grammars, deterministic and nondeterministic Turing machines; decidability and computability; complexity classes and complete problems.

CS 470 Applied Software Development Project 3.0 CR
Prerequisite: Senior standing and faculty permission.
Application of computer programming and system development concepts, principles, and practices to a comprehensive system development project. The student is required to analyze, design, and document a realistic system of moderate complexity under the supervision of his/her committee chairman. Independent study with grade determined by project which the student presents (and defends) to his/her committee.

DA: DENTAL ASSISTING

Offered through the College of Career and Vocational Education, Allied Health Sciences Building (AHS), Room 124, 786-1353/1701

DA 110 Dental Radiography 4.0 CR
Prerequisite: Corequisite: DA 123 for Dental Assisting, DH 114 for Dental Hygiene or familiarity with dental terminology.
Cross-Listed: DH 110.
Fees.
Radiation physics and biology with emphasis on radiation health, safety, protection, radiation production, x-ray machines, components and functions, and image receptors. Includes study of essential radiographic techniques, film processing techniques, and identification of radiographic anatomy. One 2 hour lab per week.

DA 121 Chairside Procedures I 6.0 CR
Prerequisite: Corequisite DA 123.
Fees.
Beginning skills necessary to function as a chairside dental assistant in a general dentistry practice. Emphasis on developing clinical skills in four-handed dentistry techniques.

DA 122 Chairside Procedures II 8.0 CR
Prerequisite: DA 121, DA 123, DS 110 and Corequisite DA 125.
Fees.
Emphasizes advanced dental assisting skills necessary in general dentistry. Panoramic procedures, exposing radiographs on patients, taking impressions for study models, matrix assembly, rubber dam application, assisting with the administration of local anesthesia, temporary crown construction, and oral health and nutrition. Briefly introduces the specialties in dentistry.

DA 123 Biomedical Sciences for Dental Assistants 4.0 CR
Prerequisite: Corequisite: DA 121.
Fees.
Microbiology as it applies to prevention of disease transmission; dental terminology as it relates to anatomy; anatomy and physiology of the head and neck; and the body systems as they relate to dentistry.

DA 124 Dental Materials and Application I 2.0 CR
Fees.
Physical and chemical properties of restorative dental materials. Prepares student for laboratory application of those materials.

DA 125 Dental Materials and Application II 2.0 CR
Prerequisite: DA 124.
Fees.
Properties and manipulation of gypsum material, impression materials and custom trays. Covers basic crown and bridge procedures.

DA 126 Dental Sciences for Dental Assistants 1.0 CR
Prerequisite: DA 123.
Fees.
Introduces oral embryology and histology, oral pathology, and pharmacology as they relate to dental assisting procedures.

DA 127 Dental Practice Management and Professionalism 3.0 CR
Prerequisite: DA 123.
Fees.
Introduces the responsibilities of the dental assistant or dental practice management assistant and professionalism and related topics.

DA 128 Dental Communication Skills 2.0 CR
Fees.
Introduces patient management, special needs patients, oral and written communication and applied psychology in the dental office setting.

DA 195A Dental Assisting Practicum I 1.0 CR
Prerequisite: Corequisites DA 121, DA 123, DA 124.
Grading Policy: Pass/No Pass.
Fees.
Orientation and practice in dental assisting techniques under supervision in local

dental offices and clinics. Emphasizes further development of chairside assisting skills.
Special Notes: Student will spend 80-85 hours in 10 weeks with 6 hours of contact with the instructor. Must be current with all immunizations, including hepatitis B vaccine series.

DA 195B Dental Assisting Practicum II 3.0 CR
Prerequisite: DA 195A and Corequisites DA 122, DA 125, DA 126 and DA 128.
Grading Policy: Pass/No Pass.
Fees.
Clinical cooperative work experience for dental assisting students who have completed all program requirements in previous fall and spring semesters. Students placed in general and specialized dental office for work experience as a dental assistant. Direct supervision is provided by the participating dentists, work experience coordinator and program faculty. Seminars are held to discuss student progress. Student/faculty contact is 20 hours with 240 hours work experience.

DH: DENTAL HYGIENE

Offered through the College of Career and Vocational Education, Allied Health Sciences Building (AHS), Room 124, 786-1701/1353

DH 110 Dental Radiography 4.0 CR
Prerequisite: Corequisite: DH 114 for Dental Hygiene, DA 123 for Dental Assisting or familiarity with dental terminology.
Cross-Listed: DA 110.
Fees.
Radiation physics and biology with emphasis on radiation health, safety, protection, radiation production, x-ray machines, components and functions, and image receptors. Includes study of essential radiographic techniques, film processing techniques, and identification of radiographic anatomy. One 2 hour lab per week.

DH 111 Periodontics I 2.0 CR
Prerequisite: Department permission required.
Fees.
Introduction to embryology and histology of the periodontal tissues. Includes discussion on dental accretions and cariology.

DH 112 Techniques I for Dental Hygienists 7.0 CR
Prerequisite: Current BCLS certification; formal acceptance into the Dental Hygiene Program; and corequisites DH 111, DH 113, DH 114.
Fees.
A pre-clinical course introducing basic dental hygiene procedures to include data gathering, patient education and basic instrumentation. Emphasis is placed on skill development in basic instrumentation and infection control.

DH 113 Issues for Dental Hygiene 1.0 CR
Prerequisite: Corequisite DH 112.
Fees.
Introduces ethical and legal concerns of the dental hygiene profession. Patient management and teamwork are discussed.

DH 114 Anatomy of the Orofacial Structures 2.0 CR
Prerequisite: Department permission required.
Fees.
Provides students with knowledge to perform technical skills within the oral cavity. In particular, those relating to dental screening and record taking.

DH 121 Periodontics II 2.0 CR
Prerequisite: DH 111 or Department permission required.
Fees.
Introduction to periodontal disease. Emphasis placed on recognition of periodontal disease and treatment planning.

DH 122 Techniques II for Dental Hygienists 4.0 CR
Prerequisite: Current BCLS certification; formal acceptance into the Dental Hygiene Program; and concurrent enrollment in DH 192 and DH 195.
Fees.
Introduces adjunctive techniques used in dental hygiene treatment. Basic manipulation of dental materials. Emphasis is placed on care of materials and restorations that are encountered intraorally during dental hygiene treatment. Radiology lab provides opportunity to develop competence in exposing radiographs on patients under direct faculty supervision.

DH 165 Pharmacology for Dental Hygienists 2.0 CR
Prerequisite: Department permission required.
Fees.
General concepts of pharmacology, nature of drug reactions, individual response to drugs, principles of neuropharmacology, toxicology, anti-infective therapy, effect of drugs on cardiovascular, endocrine and other body systems. Emphasis is placed on drugs used in dentistry.

DH 192 Clinical Seminar I 1.0 CR
Prerequisite: Concurrent enrollment DH 195 and DH 122.
Fees.
Discussion and evaluation of clinical experiences encountered in DH 195. Emphasis is placed on review of treatment plans and case presentation.

DH 195 Clinical Practicum I for Dental Hygienists 4.0 CR
Prerequisite: DH 111, DH 112, DA/DH 110; formal acceptance into the dental hygiene program; current BCLS certification; corequisites DH 165 and DH 121; concurrent enrollment DH 192 and DH 122.
Grading Policy: Pass/No Pass.
Fees.
Provides opportunity for student to achieve clinical skill competency with individuals presenting themselves as periodontally healthy or with signs of gingivitis. Teacher/student contact hours equal 12 per week.

DH 211 Current Periodontal Therapies 2.0 CR
Prerequisite: DH 111 and DH 121.
Fees.
Develops familiarity with current nonsurgical and surgical techniques in the treatment of periodontal disease. Nutrition and immunology as it relates to periodontal diseases are discussed. Case presentations made by students.

DH 212 Techniques III for Dental Hygienists 3.0 CR
Prerequisite: DH 211 and concurrent enrollment in DH 212 and DH 295A.
Fees.
Advanced dental hygiene instrumentation and intraoral techniques. Provides for discussion of patients with special needs.

DH 214 Pathology of Oral Tissues 2.0 CR
Prerequisite: Completion of first year dental hygiene courses.
Fees.
Includes the signs, symptoms, contagion recognition of selected diseases of the oral cavity and systemic diseases that manifest themselves in the oral cavity.

DH 224 Principles of Dental Health 3.0 CR
Prerequisite: Completion of first year dental hygiene courses.
Fees.
Provides a broad understanding of community dental health and dental epidemiology. Students develop and implement a basic community dental health project.

DH 270 Local Anesthesia for Dental Hygienists 2.0 CR
Prerequisite: Second semester dental hygiene student or Alaska licensure in dental hygiene, and current CPR certification.
Fees.
15-hour lecture, 30-hour lab course for licensed dental hygienists and second year dental hygiene students. Teaches techniques of regional anesthesia in dentistry, pharmacology of local anesthetic drugs, armamentarium, anatomical and physiological considerations, and potential complications.
Special Notes: Required for second year, first semester dental hygiene students and Alaska licensed dental hygienists. Contact Dental Programs.
Offered fall and summer semesters as warranted by community interest.

DH 292A Clinical Seminar II 1.0 CR
Prerequisite: Concurrent enrollment in DH 295A and DH 212.
Fees.
Discussion and evaluation of clinical experiences encountered in DH 295A. Emphasis is placed on review of treatment plans and case presentations of patients exhibiting early periodontal disease.

DH 292B Clinical Seminar III 1.0 CR
Prerequisite: Concurrent enrollment in DH 295B.
Fees.
Discussion and evaluation of clinical experiences encountered in DH 295B. Emphasis is placed on review of treatment plans and case presentations of patients exhibiting moderate to advanced periodontal disease.

DH 295A Clinical Practicum II for Dental Hygienists 5.0 CR
Prerequisite: DH 195; corequisites DH 270, DH 211, DH 214; concurrent enrollment DH 292A and DH 212; current BCLS certification; formal acceptance into Dental Hygiene Program.
Grading Policy: Pass/No Pass.
Fees.
Provides opportunity for students to achieve clinical skill competency with individuals presenting themselves with mild to moderate periodontal disease.

DH 295B **Clinical Practicum III for Dental Hygienists** **6.0 CR**
Prerequisite: DH 295A; concurrent enrollment DH 292B; current BCLS certification; formal acceptance into the Dental Hygiene Program.
Fees.
Grading Policy: Pass/No Pass.
Provides opportunity for student to achieve clinical skill competency with individuals presenting themselves with moderate to advanced periodontal disease.

DH 320 **Dental Health Services** **2.0 CR**
Prerequisite: DH 220.
Fees.
Surveys the various alternative dental hygiene practice settings available to clinicians. Generally overviews the role the dental hygienist has in providing dental hygiene services within various health care systems.

DH 395 **Clinical Practicum IV for Dental Hygienists** **1.0-3.0 CR**
Prerequisite: Graduated from an ADA accredited dental hygiene program, or graduated from an ADA accredited dental hygiene program and licensed as a dental hygienist. Current CPR certification.
Fees.
Students integrate and apply dental hygiene techniques through direct patient care. Synthesis of knowledge and skill competencies essential to dental hygiene practice are stressed. Emphasis is placed on comprehensive dental hygiene treatment.
May be repeated for credit. No more than three credits will be applied to a degree program

DH 420 **Community Dental Health** **3.0 CR**
Prerequisite: HS 379 and HS 380.
In various dental hygiene practice settings, the student participates in community health care planning and becomes acquainted with patterns for delivery of comprehensive health care services and the role of dental team members. Students spend one hour per week in lecture and six hours per week participating in the initiation, presentation and evaluation of a research project. Field assignments will be arranged on a contractual basis to meet the dental needs, goals and interests of the student. Regularly scheduled meetings shall be held with the faculty to assess the progress of the project and evaluate the outcome.

DH 495 **Alternative Practicum for Dental Hygienists** **2.0 CR**
Prerequisite: Graduate of an accredited dental hygiene program; licensed in Alaska as a dental hygienist; DH 320; CPR certification; immunizations.
Students will provide dental hygiene services and dental health education in selected dental health care settings. Sites include but are not limited to rural communities, correctional institutions, hospitals, nursing homes and community dental clinics. Students will be required to adhere to state and agency regulations concerning clinical supervision. Due to the seasonal nature of work in rural areas, rural assignments generally will be offered during the spring semester.

DN: DIETETICS AND NUTRITION

Offered through the College of Career and Vocational Education, Lucy Cuddy Center (CUDY), Room 121, 786-1487

DN 115 **CNR-Normal Nutrition Counseling** **1.0 CR**
Grading Policy: Pass/No Pass.
This course, the first in a series of four, provides students with knowledge of basic applied nutrition and counseling techniques. Counseling opportunities are provided to allow students to practice skills learned in the classroom.
Special Notes: This is a one week course.

DN 116 **CNR-Therapeutic Nutrition Counseling** **1.0 CR**
Prerequisite: DN 115 or faculty permission.
Grading Policy: Pass/No Pass.
This course, the second in a series of four, provides students with basic therapeutic knowledge and nutrition counseling techniques. Counseling opportunities are provided to allow students to practice skills learned in the classroom.
Special Notes: This is a one week course.

DN 117 **CNR-Nutrition Education and Food Preservation** **1.0 CR**
Prerequisite: DN 115 or faculty permission.
Grading Policy: Pass/No Pass.
This class, the third in a series of four, provides students with knowledge of methods for planning and presenting group nutrition education talks, and food preservation methods.
Special Notes: This is a one week course.

DN 118 **CNR-Community Resources and Problem Solving** **1.0 CR**
Prerequisite: DN 115, DN 116, DN 117 or faculty permission.
Grading Policy: Pass/No Pass.
This course, the fourth in a series of four, provides students with knowledge of communities nutrition resources and methods for community nutrition problem solving.
Special Notes: This is a one week course.

DN 140 **Introduction to Nutrition** **2.0 CR**
Fees.
Fundamentals in science and practice of nutrition. Includes interrelationships of essential nutrients, requirements throughout life cycle, and recommendations for healthy diets. Particular application for nursing, dental, and dietetics students.

DN 145 **Child Nutrition** **2.0 CR**
Fees.
Introduction to the nutritional needs of infants, preschool, and school-age children and how these needs translate into healthy and appealing meals/snacks. Covers common childhood eating problems and child nutrition programs for reimbursable food costs.

DN 146 **Science of Weight Management** **1.0 CR**
Designed for understanding sound weight control techniques and ability to evaluate popular fad diets.

DN 150 **Introduction to Diet Therapy** **1.0 CR**
Prerequisite: DN 140 or concurrent enrollment or faculty permission.
Fees.
Emphasis on assessing nutritional needs, principles of diet modification for specific disease states, and review of nutrition information sources.

DN 195 **Nutritional Care Practicum** **1.0 CR**
Prerequisite: DN 203 or corequisite DN 140 and concurrent enrollment in DN 150.
Grading Policy: Pass/No Pass.
Field experience class of 45 hours with 6 hours instructor contact. Assignments parallel topics in DN 140 and 150.

DN 203 **Normal Nutrition** **3.0 CR**
Prerequisite: Corequisite: BIOL 111 or CHEM 104 or faculty permission.
Fees.
Study of nutrition in the life cycle including food sources and requirements of nutrients; physiological and metabolic aspects of nutrient function; food choices, selection and contemporary issues of concern to health professionals and consumers.

DN 245 **Nutrition for the Second Fifty Years** **3.0 CR**
Fees.
Focuses on the nutritional needs of the older person, based on physiological changes in aging, with nutritionally related diseases, procuring and preparing food, and assistive care. Designed for those preparing for careers in elderly care and for those interested in learning how to care for themselves in later years.

DNCE: DANCE

Offered through the College of Arts and Sciences, Arts Building (ARTS), Room 332, 786-1792

DNCE 061 **Elementary Ballet** **1.0 CR**
Fees.
Introduction to classical ballet techniques for the avocational student with little or no background in dance. Simple exercises and combinations introduce fundamental ballet positions, movements, and terminology. Correct alignment stressed in basic exercises and elementary locomotor combinations.
Special Notes: May be repeated three times for credit.

DNCE 071 **Elementary Modern** **1.0 CR**
Fees.
Introduction to elementary modern techniques for the avocational student with little or no background in modern dance. Simple exercises and combinations introduce fundamental modern dance positions, movements and terminology. Correct alignment stressed in basic exercises and elementary locomotor combinations.
Special Notes: May be repeated three times for credit.

DNCE 081 **Elementary Jazz** **1.0 CR**
Fees.
Introductory course in fundamentals of jazz dance for the avocational student with little or no dance background. Simple exercises and movement combinations introduce elementary fundamentals of jazz style and basic dance technique. Correct alignment is stressed throughout class.
Special Notes: May be repeated three times for credit.

DNCE 100 Introduction to Dance 1.0 CR
Fees.
Introduction to the art and discipline of dance movement. Classes are geared to the level of the participants. Enhanced physical agility and knowledge of basic dance vocabulary are goals. Three short sections offered in ballet, modern and jazz.

DNCE 101 Fundamentals of Ballet I 2.0 CR
Fees.
Beginning ballet technique introduced through barre and center floor work. Correct alignment and injury prevention stressed. Exploration of dance aesthetics and ballet philosophy as well as social and historical influences.
Special Notes: May be repeated three times for credit.

DNCE 102 Fundamentals of Ballet II 2.0 CR
Prerequisite: DNCE 101 or equivalent or faculty permission.
Fees.
Technical, verbal, and theoretical knowledge of ballet enhanced by acquisition of new skills for control and movement. Concepts of dance aesthetics and style plus interrelationships between music and dance. Emphasis on correct anatomical alignment and science of movement.
Special Notes: May be repeated three times for credit.

DNCE 121 Fundamentals of Modern Dance I 2.0 CR
Fees.
Beginning modern dance techniques. Correct alignment and injury prevention stressed. Introduces basic dance skills through warm-up exercises, locomotor movements and simple combinations. Exploration of dance aesthetics and modern dance philosophy, and historical and social influences.
Special Notes: May be repeated three times for credit.

DNCE 122 Fundamentals of Modern Dance II 2.0 CR
Prerequisite: DNCE 121 or equivalent or faculty permission.
Fees.
Modern dance techniques and vocabulary expanded by additional dance skills. Introduction of long warm-ups and movement combinations to increase body strength and flexibility. Exploration of modern dance philosophy and aesthetics. Qualities of dance movement and music/dance relationships. Emphasis on science of movement including proper anatomical alignment, injury prevention, and movement efficiency.
Special Notes: May be repeated three times for credit.

DNCE 124 Dance for Musical Theatre 2.0 CR
Cross-Listed: THR 124.
Fees.
Basic stage dance/performance techniques. Styles of dance from early 1900's to the present will be covered.
Special Notes: May be repeated three times for credit.

DNCE 131 Fundamentals of Jazz I 2.0 CR
Fees.
Basic jazz techniques including body isolations and syncopation. Correct alignment and injury prevention stressed. Warm-up exercises, locomotor movements and short combinations introduce skills necessary for jazz style. Exploration of dance aesthetics and jazz philosophy as well as social and historical influences.
Special Notes: May be repeated three times for credit.

DNCE 132 Fundamentals of Jazz II 2.0 CR
Prerequisite: DNCE 131 or equivalent or faculty permission.
Fees.
Enhances technical, verbal, and theoretical knowledge of jazz. Warm-up exercises to promote strength and flexibility. Locomotor movements and dance combinations to challenge existing jazz style with multi-rhythms and isolations. Concepts of dance aesthetics and jazz cultural style applied to interrelationships between music and dance. Historical and social influences in jazz. Emphasis on correct alignment and injury prevention.
Special Notes: May be repeated three times for credit.

DNCE 141 Beginning Folk Dance I 1.0 CR
Fees.
Learning and practicing basic dance steps at various tempos. Includes polka, two-step, schottische, and grapevine. Study of basic dance positions such as ballroom, varsouvienne, and shoulderhold line. Practice of entire simple folk dances.
Special Notes: May be repeated three times for credit.

DNCE 145 Fundamentals of African/Haitian Dance 2.0 CR
Fees.
Beginning course in African/Haitian dance technique. Fundamentals of West African and Haitian dance developed through warm-up exercises and movement combinations of actual ritual dances. History and ethnography of the dance stressed throughout class.
Special Notes: May be repeated three times for credit.

DNCE 151 Beginning Tap Dance I 1.0 CR
Fees.
Learning and practicing basic tap dance steps and combinations. Begins with warm-up exercises at barre and across floor. Covers basic steps such as shuffle, flap, ball-change, front and back flaps.
Special Notes: May be repeated three times for credit.

DNCE 152 Beginning Tap Dance II 1.0 CR
Prerequisite: DNCE 151.
Fees.
Increases the student skill level in basic tap dance technique and augments tap vocabulary acquired in DNCE 151. Basic steps will be developed into longer combinations and dance routines.

DNCE 155 Borealis Dancers 2.0 CR
Grading Policy: Pass/No Pass.
The basics of dance techniques as well as build physical stamina, agility, balance and poise. Learn to perform various dance routines including Russian Folk, Swedish Folk, German Inspired Character Dance, Charleston, Gold Miners Character Dance, and Can-Can.
Offered at Matanuska-Susitna College only.

DNCE 170 Dance Appreciation 3.0 CR
Fees.
Introduction and survey of dance as nonverbal communication throughout time and culture. Exploration of the historical, cultural, social, creative and aesthetic influences in the development of western concert dance and the current trends of dance in America.

DNCE 201 Intermediate Ballet I 2.0 CR
Prerequisite: DNCE 102 or equivalent or faculty permission.
Fees.
Elaboration of ballet techniques through barre and center practice with emphasis on body placement, flexibility, and strength. Correct alignment and injury prevention stressed. Serious ballet course requiring regular attendance.
Special Notes: May be repeated three times for credit.

DNCE 202 Intermediate Ballet II 2.0 CR
Prerequisite: DNCE 201 or equivalent or faculty permission.
Fees.
Concentration on specific techniques fundamental to expertise in classical ballet. Emphasis on development of balance and endurance, and on building a strong knowledge of steps in combinations. Performance style and correct alignment and injury prevention stressed. Serious ballet course requiring regular attendance.
Special Notes: May be repeated three times for credit.

DNCE 203 Advanced Ballet I 2.0 CR
Prerequisite: DNCE 202 or equivalent or faculty permission.
Fees.
Continuation of DNCE 202. More complex ballet steps and techniques. For students who have previously taken intermediate ballet or who have completed at least one year of recent ballet training under qualified teacher.
Special Notes: May be repeated three times for credit.

DNCE 204 Advanced Ballet II 2.0 CR
Prerequisite: DNCE 203 or faculty permission.
Fees.
Continuation of DNCE 203. More complex ballet steps and techniques. For students who have previously taken intermediate classical ballet or who have completed at least one year of recent ballet training under a qualified teacher.
Special Notes: May be repeated three times for credit.

DNCE 221 Intermediate Modern Dance I 2.0 CR
Prerequisite: Satisfactory completion of DNCE 121 and 122 or equivalent or faculty permission.
Fees.
Increases student skill level and movement vocabulary in Intermediate Modern I technique. Movement phrasing and dynamics emphasized with correct alignment and injury prevention enhanced.
Special Notes: May be repeated three times for credit.

DNCE 222 Intermediate Modern Dance II 2.0 CR
Prerequisite: DNCE 221 or faculty permission.
Fees.
Continuation of DNCE 221. Elaboration of Intermediate Modern I technique and theories with an emphasis on developing performance technique and improvisational skills. Correct alignment and injury prevention stressed throughout.
Special Notes: May be repeated three times for credit.

DNCE 231 Intermediate Jazz Dance I 2.0 CR
Prerequisite: DNCE 132 or equivalent or faculty permission.
Fees.
Increases student skill level and movement vocabulary in intermediate jazz dance technique. Jazz dance principles of poly-rhythms, syncopation and body isolations explored with emphasis on extended phrases and musicality. Correct alignment stressed throughout. Serious course requiring regular attendance.
Special Notes: May be repeated three times for credit.

DNCE 232 Intermediate Jazz Dance II 2.0 CR
Prerequisite: DNCE 231 or equivalent or faculty permission.
Fees.
Augmentation of skill level and movement vocabulary acquired in DNCE 231. Complex movement phrases with emphasis on musicality and performance style explored. Correct alignment and injury prevention stressed throughout.
Special Notes: May be repeated three times for credit.

DNCE 233 Advanced Jazz Dance I 2.0 CR
Prerequisite: DNCE 232 or faculty permission.
Fees.
Performance oriented jazz dance emphasizing continued technical development.
Special Notes: May be repeated three times for credit.

DNCE 251 Intermediate Tap Dance I 1.0 CR
Prerequisite: DNCE 152 or faculty permission.
Fees.
Introduces intermediate level tap dance technique and vocabulary. Develops more intricate rhythmic sequences and complete full-length dances.
Offered at Kenai Peninsula College only.

DNCE 252 Intermediate Tap Dance II 1.0 CR
Prerequisite: DNCE 251 or faculty permission.
Fees.
Increases skill level in intermediate tap dance techniques and vocabulary. Develops more intricate rhythmic sequences and complete full-length dances. Emphasizes performance and mastery of musical understanding.
Offered at Kenai Peninsula College only.

DNCE 260 Modern Technique, Composition and Repertory 1.0 CR
Prerequisite: Successful completion of two semesters training in ballet or jazz technique with two semesters in modern technique, or its equivalent, and faculty permission by audition required.
Fees.
An intensive three week course taught by a professional choreographer/performer. Class work includes modern dance technique, exploration of elements of composition, learning of performance skill, and repertory. First two weeks in class participation. Third week observation/discussion of the evolution of rehearsal into performance.
Special Notes: Class open by audition only.

DNCE 265 Dance Repertory and Performance 2.0 CR
Prerequisite: One to two semester previous work in either jazz, modern or ballet and by audition or faculty permission.
Fees.
Application of performing skills through repertory. Taught by various professionals and faculty focusing on learning and refining a short work of choreography in both the jazz and contemporary dance idiom. Culminates in a student performance with possibilities for other performances during semester.
Special Notes: Requires serious attendance and additional rehearsals as required. May be repeated three times for credit.

ECD: EARLY CHILDHOOD DEVELOPMENT

Offered through the School of Education, Classroom Building (K), Room 217, 786-1771

PREREQUISITE NOTICE:
Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.

EDC 101 Connections 1.0 CR
Grading Policy: Pass/No Pass.
Connections bridges the gap between theories of winning environments, positive discipline skills and the challenging child by examining theories and strategies for designing the ideal home center and successful intervention and management techniques, and by using community resources and referral procedures.

ECD 105 Introduction to the Field of Early Childhood 3.0 CR
Survey of historical, social, and philosophical foundations of the field. Discusses ethics, developmentally appropriate practices, survey of types of early childhood settings, and personal skills and professional competencies for the early childhood practitioner.

ECD 111 Safe Learning Environments 1.0 CR
Stresses importance of safe learning environments and competencies which enable students to provide such environments for young children. Emphasis on measures necessary to reduce and prevent accidents.

ECD 112 Healthy Learning Environments 1.0 CR
Prepares students to provide learning environments for young children which are free of factors contributing to or causing illness.

ECD 113 Learning Environments 1.0 CR
Emphasizes arrangement of environments conducive to learning and appropriate to developmental levels and learning styles of children. Includes selection of materials and equipment, room arrangements, and scheduling.

ECD 121 Physical Activities for Young Children 1.0 CR
Stresses essentials of planning centers which provide space, materials, equipment, and activities to promote physical development of children. Includes planning and scheduling activities, selecting equipment and materials.

ECD 122 Cognitive Activities for Young Children 1.0 CR
Activities and experiences which encourage questioning, probing, and problem-solving skills appropriate for different developmental levels and various learning styles of young children.

ECD 123 Communication 1.0 CR
Activities that help children acquire and use language to communicate their thoughts and feelings. Includes nonverbal communication and understanding others.

ECD 124 Creative Activities for Young Children 1.0 CR
Experiences, activities, and media that stimulate children to explore and express their creative abilities.

ECD 125 Safe and Healthy Learning Environments 1.0 CR
Stresses competencies which enable students to provide measures necessary to reduce and prevent accidents. Prepares students to provide learning environments which are free of factors contributing to or causing illness.
Offered at Kenai Peninsula College only.

ECD 126 Learning Environment/Physical Activities 1.0 CR
Emphasizes learning as appropriate to developmental levels and learning styles of children. Includes planning and scheduling activities, selecting equipment and materials to promote physical development of children.
Offered at Kenai Peninsula College only.

ECD 127 Social/Sense of Self Development 1.0 CR
Emphasizes providing physical/emotional security for children, helping each child to accept and take pride in his/herself, and to develop a sense of independence.
Offered at Kenai Peninsula College only.

ECD 131 Guidance and Discipline 1.0 CR
Information and activities used in providing environments where young children learn and practice appropriate behaviors individually and in groups. Includes influences on behavior promoting self-control, inappropriate practices, and parent involvement.

ECD 132 Social Development 1.0 CR
Emphasis on social development of young children by the encouragement of empathy and mutual respect among children and adults. Also discussed is the development of cooperation among children and between children and adults.

ECD 211 Development of a Sense of Self 1.0 CR
Presents information and activities to help young children know, accept, and take pride in themselves, and to develop independence. Includes fostering children's self-knowledge and sense of pride, experiences of success, acceptance by others, and realization of own effectiveness.

ECD 221 Families 1.0 CR
Emphasis on the importance of positive and productive relationships between families and child development programs. Also discussed is coordination of child-rearing efforts of both family and program.

ECD 222 Program Management 1.0 CR
Information and activities teaching students to use available resources to ensure effective operation of children's programs. Emphasis on competent organization, planning, and record-keeping.

ECD 223 Exploring and Developing Personal Capabilities in Teaching 1.0 CR
Stresses awareness of personal qualities, feelings, and values that affect teaching atmosphere, relationships with children, and individual teaching style.

ECD 224 Professionalism 1.0 CR
Promotes professional and personal growth among caregivers of young children. Topics include developing philosophical basis for caregiving, goal ethics, networking, and continuing self-actualization.

ECD 225 Professionalism and Program Management 1.0 CR
Emphasizes being a competent organizer, planner, record keeper, communicator, and a cooperative coworker. Stresses making decisions based on knowledge of early childhood theories and practices, promoting quality in child care services, and taking

advantage of opportunities to improve competence, both for personal and professional growth and for the benefit of children and families.
Offered at Kenai Peninsula College only.

ECD 226 Guidance/Discipline and Families 1.0 CR
Learning to maintain an open, friendly, and cooperative relationship with each child's family, encouraging their involvement in the program and supporting the child's relationship with his or her family. Stresses providing a supportive environment in which children can begin to learn and practice appropriate and acceptable behaviors as individuals and as a group.
Offered at Kenai Peninsula College only.

ECD 231 Screening 1.0 CR
Stresses activities to help teachers understand purposes of screening young children and use of screening procedures.

ECD 232 Assessment/Recording 1.0 CR
Stresses activities to help teachers understand assessment of young children, recording of assessment information, and staffing procedures.

ECD 233 Mainstreaming Preschool Children with Special Needs 1.0 CR
Stresses activities to help teachers understand concepts and purposes of mainstreaming special needs preschool children into regular classrooms. Emphasis on rights of special needs children to services and necessary procedures for providing those services under P.L. 94142.

ECD 235 Young and Special: Basic Development and Developmental Disabilities 3.0 CR
Telecourse introducing basic causes and signs of abnormal child development as contrasted with normal development. Emphasizes preschool years. Includes techniques and activities appropriate for children with disabilities.

ECD 289 CDA Assessment 1.0 CR
Stresses application and preparation procedures for final child development associate (CDA) credential assessment. Emphasizes steps taken to become CDA certified.

ECD 295A Practicum I 3.0 CR
Prerequisite: ECD 105, 223, 224, DN 145, PSY 245, either ECD 235 or ECD 231, 232, and 233. Ten credits of the following: ECD 111, 112, 113, 121, 122, 123, 124, 131, 132, 211, 221, 222.
Supervised field experience in an instructor-approved early childhood setting. Emphasis is on planning and conducting children's activities in various program areas and on assisting a lead teacher. Experience includes an initial assessment in all areas of professional competencies. An individual plan for the semester will be developed.
Special Notes: Faculty permission required. Must have faculty permission to take concurrently with ECD 295B.

ECD 295B Practicum II 3.0 CR
Prerequisite: ECD 295A.
Supervised experience in an instructor-approved early childhood setting. Emphasis is on an increasing level of responsibility for planning/supervising all program areas. Experience includes an initial assessment in all areas of professional competencies. An individual plan for the semester will be developed.
Special Notes: Faculty permission required. Must have faculty permission to take concurrently with ECD 295A .

ECON: ECONOMICS

Offered through the School of Public Affairs, Library Building (LIB), Second Floor, 786-1770

ECON 101 Introduction to Current Economic Problems (Topics Vary) 3.0 CR
A one semester course designed primarily for the student who plans no further work in economics. Utilizes a less rigorous approach than is customary in traditional economics courses and focuses on current economic problems.
Special Notes: Not recommended for persons who have taken ECON 201 and/or 202.

ECON 107 Contemporary Labor Issues 3.0 CR
Examines fundamental issues in today's labor market. For individuals involved in labor organizations and management, as well as those interested in understanding labor issues. Covers functions of labor market, as well as problems confronting labor and management.
Special Notes: Course will not substitute for ECON 421.

ECON 201 Principles of Macroeconomics 3.0 CR
Prerequisite: Knowledge of basic algebra recommended.
Introduction to economics; analysis and theory of national income; money and banking; public finance and taxation; and international trade. Primary concentration on the capitalist system and the U.S. economy.

ECON 202 Principles of Microeconomics 3.0 CR
Prerequisite: ECON 201.
Theory of prices and markets; industrial organization; public policy; income distribution; and contemporary problems of labor and business.

ECON 321 Intermediate Microeconomics 3.0 CR
Prerequisite: ECON 201, 202 and MATH 200 or 272.
Analysis of demand and supply under various market structures; theory of production and cost; factor pricing and theory of distribution; and survey of welfare economics.

ECON 324 Intermediate Macroeconomics 3.0 CR
Prerequisite: ECON 201, 202, and 350.
Concepts and measurement of national income; analysis of aggregate demand and supply and their relationship to prices, employment, and growth.

ECON 337 Economic Development 3.0 CR
Prerequisite: ECON 201 and 202.
Problems of economic development illustrated with case studies; theories of growth and development; and analysis of major policy issues. Emphasis is on third world countries.

ECON 350 Money and Banking 3.0 CR
Prerequisite: ECON 201 and 202.
Sources and uses of money and credit in modern society; regulation of money and credit and its impact on the U.S. economy.

ECON 351 Public Finance 3.0 CR
Prerequisite: ECON 201 and 202.
Government taxation, borrowing, and spending; economic effects of taxation, and influence of fiscal policy on economic activity.

ECON 359 Industrial Organization and Public Policy 3.0 CR
Prerequisite: ECON 201 and 202.
Analysis of different market structures and how these market structures impact resource allocation. Additional topics include social control of business through anti-trust and other government regulation; public policy issues in regulated industries, such as transportation, communications, electricity, and gas; and the economic and legal issues and problems arising from noncompetitive market conditions.

ECON 360 Modern Economic History 3.0 CR
Cross-Listed: HIST 360.
Prerequisite: HIST 102 and ECON 201 or faculty permission.
Surveys economic history of the modern era (1800 to present). Emphasis will be placed on Western Europe and the U.S. Additional coverage will be given to Japan, the Soviet Union and one Third World nation.

ECON 412 Econometrics 3.0 CR
Prerequisite: ECON 201, 202 and BA 273.
Fees.
Application of statistical methods in testing economic theories and estimating economic relationships. Emphasizes multiple regression analysis. The student is expected to spend two hours per week utilizing the computer lab.

ECON 415 Urban and Regional Economics 3.0 CR
Prerequisite: ECON 201 and 202.
Economic issues examined at subnational level, such as states, regions, and cities. Includes the location of economic activity in regions, relationship between regions, models of economic growth, the structure of regional economies, housing and land use issues, and urban and regional economic policy.

ECON 421 Labor Economics 3.0 CR
Prerequisite: ECON 201 and 202.
Labor market analysis; employment and unemployment, wage differences, structure and composition of the labor force; economic aspects of unionism; labor legislation; and social insurance.

ECON 423 Comparative Economic Systems 3.0 CR
Prerequisite: ECON 201 and 202.
Contrasts in structures, institutions, and dynamics of selected private enterprise, collectivist, and underdeveloped economies.

ECON 425 History of Economic Thought 3.0 CR
Prerequisite: ECON 201, 202 and 3 credits of upper-division courses in economics or other social sciences.
Economic thought from the physiocrats to the present; classical and neoclassical theory, exponents and critics; and contemporary development in economic theory.

ECON 429 Business Forecasting 3.0 CR
Prerequisite: ECON 201, ECON 202, CIOS 110 and BA 273..
Fees.
Methods of business forecasting; theories and analysis of fluctuations in economic activity. The student is expected to spend two hours per week utilizing the computer lab.

ECON 430 Mathematics for Economists 3.0 CR
Prerequisite: ECON 321, 324 and MATH 200 or 272.
Application of calculus, matrix algebra, and probability theory in various areas of economics, including demand theory, production theory, optimization, and input-output analysis.

ECON 435 Economics of Resources 3.0 CR
Prerequisite: ECON 201 and 202.
Economic analysis of resource use and development. Topics include economics of nonrenewable resources, forestry, and fisheries; environmental economics, and public resource management. Examples are presented of Alaska resource development and management experience.

ECON 454 Economics Internship 3.0 CR
Prerequisite: Junior standing as an economics major; ECON 321 and 324; and permission of faculty and dean.
Work experience in an approved position with supervision and training in various phases of applied economics or economic research.

ECON 463 International Economics 3.0 CR
Prerequisite: ECON 201 and 202.
Pure theory of international trade; comparative cost, terms of trade, and factor movements, international disequilibrium; balance of payments and its impact on national economy, capital movement, economic development through international trade.

ECON 488 Seminar in Economic Research 3.0 CR
Prerequisite: Faculty permission.
Methods of economic research, based on analysis of recent economic research projects. Faculty and other researchers discuss research methodologies, problems encountered in carrying out research projects, and results obtained from their research. A formal paper is required.

ECON 602 Introduction to Economics for Managers 3.0 CR
Prerequisite: Acceptance into the MBA program or faculty permission.
Introduction to the theory of prices and markets; national income analysis; and money and banking. Primary concentration on the fundamentals useful in the management of business.
Special Notes: Does not satisfy the minimum 30 credit hour requirement of any masters degree program at UAA. Students are expected to have a working knowledge of computer spreadsheet programs.

ECON 607 Public Finance and Taxation 3.0 CR
Prerequisite: Faculty permission.
Role of government expenditures in light of welfare economics, direction, and development of expenditures; types of taxes, their distributional and allocative effects; pricing policies in government enterprises; compensatory finance; and the public debt.

ECON 620 Managerial Economics 3.0 CR
Prerequisite: ECON 201, 202; BA 273; MATH 272.
Fees.
The application of economic theory to managerial decision making, including: theory of consumer behavior and market demand, theory of the firm and market supply, price and output decisions under alternative market structures, capital and labor markets, and government's roles in a market economy.

ECON 625 Economics and Public Policy 3.0 CR
Prerequisite: ECON 201 and 202.
An examination of economics in relation to public policy, both as a determinant of policy and a tool of administration.

ECON 626 Regional Economic Analysis 3.0 CR
Prerequisite: ECON 201 and 202.
Application of economic methods to city and regional economies. Includes forecasting economic and population growth; impact analysis; measuring regional economic activity; economic development planning; location models for private and public sector; housing market analysis.

ECON 628 Applied Economics 3.0 CR
Prerequisite: ECON 625.
Applied economic analysis. Includes adjusting for inflation; discounting; projecting market impacts; interpreting multiple regression results; non-market valuation; cost-benefit analysis; indirect economic impacts; presentation of economic results.

ECON 634 Petroleum Economics 3.0 CR
Prerequisite: ECON 435 or 625 or faculty permission.
Economics of petroleum exploration and extraction; review of public policies governing petroleum industry, import policies, tax concession, etc.

ECON 640 Economics of Transportation 3.0 CR
Prerequisite: Faculty permission.
Economic aspects of the transportation industry with special emphasis on problems of regulation and public policy.

ECON 650 Alaska Economic Issues 3.0 CR
Prerequisite: BA in Education or faculty permission.
Applies economic concepts and methodology to current issues related to Alaska's economic development. Includes the effects of changing oil revenues, passage of Alaska Native Claims Settlement Act, local hire legislation, changing state population, etc. Alaska business leaders representing relevant industries and institutions are utilized as speakers in order to involve participants in personal interaction with decision makers.

ECON 651 Selected Topics in Economics for Educators 1.0-3.0 CR
Prerequisite: Bachelor's degree in education or faculty permission.
Selected economics topics of special relevance to specific subjects in school curriculum, kindergarten through senior high school.

ECON 688 Seminar in Economic Research 3.0 CR
Prerequisite: Faculty permission.
Methods of economic research based on analysis of recent economic research projects. Faculty and other researchers discuss research methodologies, problems encountered in carrying out research projects, and results obtained from their research. A formal paper is required.

ED: EDUCATION

Offered through the School of Education, Classroom Building (K), Room 217, 786-1771

ED 120 Parenting: More than Discipline 3.0 CR
Cross-Listed: PSY 120.
Introduction to parenting and how it differs from discipline. Discusses three parenting styles. Emphasizes nurturing, communicating, setting limits, and making maturity demands.

ED 125 Kids are People Facilitator Training 2.0 CR
Hands-on experience in group dynamics. The practical logistics and politics of starting support groups will be studied and discussed, including: identification of "at risk youth"; necessity for confidentiality; child abuse laws and the reporting procedure for suspected child abuse; permission procedures and forms necessary to start a group; referral procedures when a child needs more intense therapy. Students will co-facilitate a 9-week group session.

ED 150 Apple for Teachers 1.0 CR
Grading Policy: Pass/No Pass.
Fees.
Introduction to using apple and apple-compatible computers for teachers and others wishing to use microcomputers with children. Includes operating instructions, care and use of diskettes, choosing and evaluating software, and incorporating the computer into classroom activities.

ED 180 Beginning Sign Language 1.0 CR
Introductory training in manual communication methods used in the United States. Students will learn how to carry on basic communication with deaf persons via manual mode. Credit will be awarded upon demonstration of mastery of the materials.

ED 181 Intermediate Sign Language 1.0 CR
Prerequisite: ED 180.
Continued instruction in manual communication methods. Students will become fluent in the most commonly used methods of communicating with deaf persons. Credit will be awarded only upon demonstration of successful mastery of the competencies required in the course.

ED 200 Tutoring Lab 1.0-3.0 CR
Prerequisite: Passing grade in ED 200A or concurrent enrollment.
The goal of this course is to successfully tutor students. Introduction to tutoring lab serves as the practical experience for ED 200A, ED 200B, and ED 200C.
Offered at Kenai Peninsula College only.

ED 200A Beginning Tutor Training Seminar 1.0 CR
Prerequisite: Faculty permission.
Students new to the tutor program develop skills for successfully helping students with their course work. Tutors learn and practice techniques for handling a variety of situations before tutoring begins. The framework for each semester tutor program is established during this course.
Offered at Kenai Peninsula College only.

ED 200B Advanced Tutor Training Seminar 1.0 CR
Prerequisite: Completion of ED 200A and 1 credit of ED 200 or the equivalent and faculty permission.
Advanced tutors will hone their skills through seminars, workshops and projects. Tutors may qualify for assisting their peers in academic courses, adult basic education, and English-As-A-Second-Language, or in public schools.
Offered at Kenai Peninsula College only.

ED 200C Master Tutor Training Seminar 1.0 CR
Prerequisite: Completion of ED 200A and ED 200B, plus 2 credits of ED 200 or the equivalent and faculty permission.
Master tutors will hone their skills through seminars, workshops, and projects. Tutors may qualify for assisting their peers in academic courses, adult basic education, and English-As-A-Second-Language or in the public schools.
Offered at Kenai Peninsula College only.

ED 210 American Schools 2.0 CR
Prerequisite: Concurrent enrollment in ED 211.
Examines the sociopolitical environment and various client groups served by the nation's school system, including a brief overview of the historical development of the nation's schools. Looks at the diverse characteristics of the emerging population of students who now constitute the nation's "student body," the working environment of a teacher, and the emerging definition of excellent teaching practices.

ED 211 Observation of Learning 1.0 CR
Prerequisite: Concurrent enrollment in ED 210.
Grading Policy: Pass/No Pass.
Teaches prospective educators, parents and other interested students how to observe a learning setting, including observer access and etiquette, and how to identify critical aspects of learner and teacher behavior.
Special Notes: Individualized, self-paced, open entry/exit course. All pre-education majors must pass this course in order to take other courses in education. Students attend an orientation session, then hours by appointment. May be repeated as many times as necessary to pass.

ED 212 Human Development and Learning 2.0 CR
Prerequisite: ED 211.
Overview of human development, pre-natal to aging, as this impacts learning. Theories of learning, and how learning is studied. Learning style and how it is identified. Characteristics of diversity in learners, as this evolves through development.

ED 216 Children's Literature 3.0 CR
Intended for teachers, parents, librarians, or anyone interested in reading many books for preschoolers through 6th grade. Much attention to selection and best use of children's literature.

ED 220 The 4Mat System I 1.0 CR
Grading Policy: Pass/No Pass.
Prerequisite: ED 220 or fundamental training seminar in the 4Mat System.
Introduces learning style theory, right/left information processing research, and the 4Mat System of instructional design.

ED 221 The 4Mat System II 1.0 CR
Grading Policy: Pass/No Pass.
Extends understanding of the 4Mat System and whole-brained teaching strategies and emphasizes methodology and practice in developing concept-based 4Mat units.

ED 282 SEE—Signed Exact English I 3.0 CR
(Sign language in presented English order.) Understanding and practicing fundamentals of the SEE system. Approximately 600 SEE signs will be taught plus verb tenses and approximately 65 affixes.

ED 283 SEE—Signed Exact English II 3.0 CR
Prerequisite: ED 282 or faculty permission.
(Sign language in presented English order.) Designed to increase signing vocabulary and fluency as well as fingerspelling skills to enable the student to use sign language conversationally and in beginning interpretative situations. The student will learn approximately 500 new signs.

ED 313 Designing Instruction 2.0 CR
Prerequisite: Corequisite: ED 212.
Overview of basic instructional strategies and possible models. Components of a "lesson" or pre-planned learning activity. How to design lessons which accommodate diverse learners in the same setting.

ED 314 Creating Effective Learning Environments 2.0 CR
Prerequisite: Corequisite: ED 212.
Survey of the types of possible learning environments. Teaches how to design a manageable learning environment to meet individual and multiple needs, given organizational, physical, political, social and individual learner constraints. Includes special emphasis on designing environments for diverse and exceptional learners.

ED 332 Diagnosis and Assessment of Learning 1.0 CR
Prerequisite: Corequisite: ED 313.
Overview of how to diagnose the learner's current functioning in relation to a learning objective; types of assessment; how to select and use appropriate models of assessment. Utilizing the results of assessment to improve instruction.
Special Notes: Education pre-majors sign up for ED 332 and two credits selected from either ED 333, 334, or 335.

ED 333 Diagnosis and Assessment of Early Childhood and Primary Learning 1.0 CR
Prerequisite: Corequisite: ED 332.
Specific application of diagnostic and assessment techniques to very young children, including children with diverse and special needs.

ED 334 Diagnosis and Assessment of Intermediate and Transescent Learning 1.0 CR
Prerequisite: Corequisite: ED 332.
Specific application of diagnostic and assessment techniques to intermediate and transescent children, including children with diverse and special needs.

ED 335 Diagnosis and Assessment of Adolescent Learning 1.0 CR
Prerequisite: Corequisite: ED 332.
Specific application of diagnostic and assessment techniques to older adolescent children, including children with diverse and special needs.

ED 336 Classroom Management 1.0 CR
Prerequisite: Both of: ED 313 and 314; and Corequisite: ED 332.
Theories and relationship of classroom management to instructional design and assessment methodology. Techniques for creating a positive preventative discipline environment. Special emphasis on classroom management strategies for diverse and special needs children.
Special Notes: Education pre-majors must sign up for ED 336 and two credits from either ED 337, 338 or 339.

ED 337 Classroom Management in Early Childhood and Primary Settings 1.0 CR
Prerequisite: Corequisite: ED 336.
Application of principles and strategies of classroom management to early childhood education and primary settings, with special emphasis on application for diverse and special needs children.

ED 338 Classroom Management in Intermediate and Transescent Settings 1.0 CR
Prerequisite: Corequisite: ED 336.
Application of principles and strategies of classroom management to intermediate and transescent settings, with special emphasis on application for diverse and special needs children.

ED 339 Classroom Management in Older Adolescent Settings 1.0 CR
Prerequisite: Corequisite: ED 336.
Application of principles and strategies of classroom management to older adolescent settings, with special emphasis on application for diverse and special needs children.

ED 351 Workshop on Alaska 1.0 CR
A workshop consisting of lectures and demonstrations by authorities in anthropology, biology, education, geography, mining geology, history, literature, art, wildlife, and various other teaching fields.

ED 400 Practicum in Secondary Education 4.0 CR
Prerequisite: Admission to secondary education program. Enrollment in teaching methods.
Practical field experience in secondary classrooms in local public schools. Individual schedules are arranged for the time in the classrooms. A weekly seminar on campus is required. To be taken concurrently with enrollment in the appropriate required teaching methods course. Students gain practical experience in implementing instructional strategies, classroom management, and school procedures.
Special Notes: May be repeated for credit.
Offered fall and spring semesters.

ED 401 Social Studies for Elementary Teachers 3.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto; all general education degree requirements and admission to School of Education.
Methodology and materials in the modern elementary social studies curriculum. Current trends in content and instructional techniques including unit planning and development, and inquiry techniques. Field experience in a classroom is required.
Offered fall and spring semesters.

ED 402 Secondary Methods: Science 4.0 CR
Prerequisite: Acceptance into secondary education methods sequence. Dept. permission. ED 400 or ED 687 must be taken concurrently and must be taken prior to ED 452S.

Instructional techniques and methods appropriate to teaching science on the secondary level, including classroom management, lesson planning, research, and relevant aspects of statistical evaluations.

ED 403 Secondary Methods: Social Studies 4.0 CR
Prerequisite: ED 313; ED 332; admission to secondary methods sequence. Dept. permission.

A course to assist future social studies/history teachers to determine key ideas and concepts and prepare lessons and a unit combining concepts and strategies. The student will evaluate effectiveness of the strategies and concepts in actual classroom settings.

ED 404 Teaching Science in Elementary Schools 3.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto; all general education requirements and admission to School of Education.
Fees.

A process oriented approach to teaching science. Modern concepts, methods and materials with emphasis on active involvement of the learner. Participation in science activities for all grade levels (K-6) required.
Offered fall and spring semesters.

ED 407 Teaching of Elementary Mathematics 3.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto; MATH 205, all general education requirements and admission to School of Education.

Math topics and their relationship to the methods used in teaching elementary children, includes: sets; patterning; place value; operations with whole numbers and errors with them; operations with fractions and errors with them; evaluation of books and materials; gaming; geometry; metric measurement; mapping; problem solving; computers; calculators; diagnostic and prescriptive testing; education theories; scope and sequence; and grouping and organization for math in the elementary classroom.
Offered fall and spring semesters.

ED 408 Elementary School Physical and Health Education 3.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto; all general education degree requirements and admission to School of Education.
Cross-Listed: PE 408.

Philosophy, source materials, group activities and program planning; participation required to gain skills and techniques of teaching health education and physical activities for elementary grade children.
Offered fall and spring semesters.

ED 410 Language and Cognition 4.0 CR
Prerequisite: ED 313; acceptance into the secondary education program.

Prepares future teachers to integrate listening, speaking, reading and writing into their content classrooms. Includes discussion of current learning theory which is based on two principles of language process: 1) they are the primary means of learning; and 2) they are the principal means of sharing acquired learning in every content area.

ED 411 Secondary Methods: Mathematics 4.0 CR
Prerequisite: Acceptance into secondary education program; Dept. permission.

Instructional techniques and materials appropriate to the teaching of mathematics on the secondary level, including classroom management, lesson planning, research and relevant aspects of statistical evaluation.
Special Notes: Concurrent enrollment in ED 400 is required. Must be taken before ED 452.

ED 413 Secondary Methods: English 4.0 CR
Prerequisite: Admission to teacher certification, ED 313 and ED 332. Concurrent enrollment in ED 400 required.
Cross-Listed: ENGL 413.

Approaches to teaching English in the secondary school, including goals for instruction, teaching techniques, and methods of evaluation. Students will be expected to participate in practical, hands-on learning activities to gain experience in planning instruction, using various instructional delivery methods, managing a classroom, and evaluating learning.

ED 418 Methods: Art in the Elementary School 3.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto, all general education degree requirements and admission to School of Education.
Cross-Listed: ART 418.
Fees.

Methods of teaching art principles, procedures and materials for the elementary school level. Explores a wide variety of art media basic to elementary art curricula. Students will be responsible for developing and evaluating curriculum activities.

ED 419 Exceptionalities: Culture and Learning 3.0 CR
Prerequisite: ED 212.

Examination of special education and multicultural considerations for undergraduate elementary and secondary education majors who are preparing to be teachers. Includes instructional strategies to enhance the general education program of the exceptional population including culturally and linguistically diverse students and those with handicapping conditions.
Offered fall and spring semesters.

ED 421 Development of Reading in Elementary School 6.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto; all general education degree requirements; 12 credits of methods courses and admission to School of Education.
Fees.

A comprehensive study of the reading process and the development of reading proficiency in the elementary school. Includes focus on the foundations of reading and the materials and methodologies used in elementary school programs. Field work required.
Offered fall and spring semesters.

ED 422 Teaching Language Arts and Literature 6.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto; all general education requirements and 12 credits of methods courses and admission to School of Education.
Fees.

A critical study of the theoretical and practical aspects of teaching, listening, speaking, and writing through children's literature. Emphasis is directed toward the integration of language instruction in the elementary school. Field work required.
Offered fall and spring semesters.

ED 423 Philosophical Foundations of Education 3.0 CR
Prerequisite: Both of: ED 210 and 211.

Philosophical assumptions underlying the American concept of schooling, including an overview of the historical antecedents of modern educational philosophy. How a philosophy guides choices about schooling. Development of a coherent personal educational philosophy.

ED 442 Curriculum and Instruction in Secondary Art 3.0 CR
Prerequisite: The 18 credit lower division Art core is required for Art majors and recommended for others. ED 332. Admission to School of Education.
Cross-Listed: ART 442.

Investigation, practice, and discussion of objectives, scope, sequence, evaluation and related readings dealing with teaching art at the secondary level.

ED 452E Student Teaching—Elementary 12.0 CR
Prerequisite: See requirements for admission to student teaching.
Grading Policy: Pass/No Pass.

Elementary student teaching consists of a 16 week semester of full days in the classroom of the elementary schools approved by the School of Education. Experiences include: observations; teaming with host teacher and/or other team members; planning and conducting individualized instruction; organizing plans for grouping to meet varying needs of children; daily critique of performance by host teacher; weekly supervision and post-conference with university supervisor; and weekly seminar meetings of all student teachers with university faculty members. The classroom experience in the elementary school is designed to progress through the full range of teaching and classroom management responsibilities of an elementary teacher in a typical school situation.
Offered fall and spring semesters.

ED 452P Student Teaching—Physical Education 12.0 CR
Prerequisite: See requirements for admission to student teaching.
Grading Policy: Pass/No Pass.

Supervised teaching of physical education in schools approved by the School of Education. Course requires teaching full days for the entire semester on the elementary and/or secondary level depending on certification sought. Weekly seminar meetings of all student teachers with university faculty members.
Offered fall and spring semesters.

ED 452S Student Teaching—Secondary 12.0 CR
Prerequisite: See requirements for admission to student teaching.
Grading Policy: Pass/No Pass.

Supervised teaching in secondary schools approved by the School of Education. The School of Education may limit registration, determine assignments, prescribe the number of teaching hours required, and cancel the registration of students doing unsatisfactory work.
Offered fall and spring semesters.

ED 460 Exceptional Learner 3.0 CR
Prerequisite: ED 212 or equivalent.

Introduction to the field of special education. Covers the nature and characteristics of various physical and mental exceptionalities included in the special education population.
Offered fall, spring and summer semesters.

ED 471 Elementary Music Methods 3.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto; all general education requirements and admission to School of Education.

Cross-Listed: MUS 471.
Principles, procedures, and materials for teaching music to children at the elementary level.
Offered fall and spring semesters.

ED 472 Secondary Music Methods 3.0 CR
Prerequisite: Admission to teacher certification, 100 semester credits, ED 332 and MUS 232 or faculty permission.
Cross-Listed: MUS 472.
Methods and problems of teaching music in junior and senior high schools with emphasis on the general music program.

ED 474 Special Children from Birth through Five 3.0 CR
Prerequisite: ED 460 or faculty permission.
Legislative, historical, and philosophical perspectives of early childhood special education on principles and procedures for developing infant learning and preschool programs for handicapped children will precede discussions of basic child development, characteristics of young handicapped children, and exemplary curricular models.
Special Notes: Students are expected to participate in experiences outside regular class periods (15 hours).

ED 476 Instructional Strategies in the Language Classroom 3.0 CR
Prerequisite: Basic fluency in a foreign language, actual or prospective teacher certification.
Cross-Listed: FL 476.
Instructional strategies of the language classroom which reflect the current emphasis on oral language acquisition and a multisensory approach to learning a second language. Students develop their own activities in the appropriate target language.

ED 478 Methods and Materials for Bilingual Education 3.0 CR
Overview for teachers of the current theories and methodologies for bilingual and multi-cultural education. Linguistic, social and cultural differences will be examined in relation to appropriate instructional strategies and materials for all learners. Field experience in a bilingual classroom is required.
Offered spring semesters.

ED 479 Assessment of Bilingual/ESL Education 3.0 CR
The theoretical and practical aspects of language assessment of limited English proficient students. The content will center around current linguistic theory and the theoretical basis for most commercially available instruments, the diversity in assessment approaches, reliability and validity of assessment instruments, and guidelines for choosing among assessment approaches. Within all of these topics the course also necessarily deals with language as an integral aspect of culture and education.
Offered spring semesters.

ED 480 Education of Culturally Different Youth 3.0 CR
Prerequisite: ED 313.
Interdisciplinary study of problems encountered by teachers in educating culturally different pupils. Considers the psychological and social factors inherent in the educational process. Specific attention given to curricular improvement and teaching strategies appropriate for culturally different students.
Offered fall semesters.

ED 481 The Mentally Retarded 3.0 CR
Prerequisite: ED 460.
Basic understanding of mental retardation. Discusses the role of education of handicapped persons, the importance of early intervention, and consideration of such issues as labeling and the treatment of culturally different students. Includes an overview of characteristics, definitions and prevalence of various handicaps as well as their social, psychological and medical correlations.
Offered as warranted by demand.

ED 482 Mainstreaming 3.0 CR
Prerequisite: ED 460 or concurrent enrollment required.
Mainstreaming identification, referral and staffing procedures. Regular and special educators learn to understand the handicapped student and specific techniques to meet their special education needs in mainstreamed settings.

ED 484 Language Development and Disorders 3.0 CR
Prerequisite: ED 460.
Language development and disorders as they impact mildly and moderately handicapped students. The course addresses academic and social/emotional difficulties encountered by students and includes etiology, assessment and educational interventions.

ED 485 Rural Special Education 3.0 CR
Prerequisite: ED 460 or concurrent enrollment required.
Concepts related to the delivery of educational services to students with handicaps who live in areas of low population and/or relative isolation. Focuses on the impact of the individual teacher and the development of appropriate assessment and intervention services by dealing with the following topics: effective resource development, bilingual/multicultural concerns, program and personnel adaptation. Rural Alaska needs are a major focus, although content is appropriate for less isolated settings in other geographic areas as well as for small private schools.

ED 486 Organization and Management: Special Education 4.0 CR
Competency based course that addresses special education curricular considerations for mildly handicapped students including the development of individualized education programs (IEP), writing behavioral objectives, task analysis, and making data based instructional decisions. Addresses various theoretical bases of individual and classroom management.

ED 487 Field Experience/Special Education 1.0-6.0 CR
Prerequisite: ED 460 or concurrent enrollment required.
Grading Policy: Pass/No Pass.
Field experience with exceptional people in a variety of facilities in the Anchorage area. Individual schedules are arranged for observation time in public schools and agencies working with exceptional individuals of various ages. Required seminars accompany on site time commitment from seven to twenty hours a week.
Special Notes: Appropriate for students who are undecided about special education as a vocational option, students who want to know more about special education options in the Anchorage area, as well as students majoring in special education.
Offered fall and spring semesters.

ED 601 Styles: Teaching and Learning 1.0 CR
Prerequisite: Graduate standing or faculty permission.
The four Jungian personality types related to teaching and learning. Presents basic aspects of the Jungian styles of personality and communication related to the perception, gathering, processing, and presentation of information. Participants will identify their own preferred styles, learn effective uses of their style, and learn to flex into the styles of others for more effective communication. Lesson design and teaching strategies for each of the four styles will be developed.

ED 602 Studies in Outdoor Education 1.0-3.0 CR
Prerequisite: Graduate standing in education.
Research of selected topics in elementary outdoor education. Participants will be involved in the development of instructional materials and resources based on outdoor learning experiences that are suited to their particular needs, interest and grade level.
Special Notes: May be repeated for credit. No more than 3 credits may apply to the degree program.

ED 603 Developing Reading in the Elementary School 3.0 CR
Prerequisite: ED 420.
Study of current developments in reading theory and instructional practices. Procedures for program analysis and implementation of change. Individual in-depth study of specific problems related to reading instruction.
Offered fall semesters.

ED 604 Diagnosis and Correction of Reading Deficiencies 3.0 CR
Prerequisite: ED 410 or ED 420 and experience in the teaching of reading.
Nature of the reading process; emphasis on psychology involved in discerning reading difficulties, testing programs to ascertain specific disabilities in readiness, vocabulary, word-attack skills, comprehension, speed, and accuracy; specific suggestions for their correction; and newer approaches to teaching reading.
Offered spring semesters.

ED 606 Reading Clinic 3.0 CR
Prerequisite: ED 604 or equivalent.
A practicum approach to learning the techniques for evaluation and therapy regarding multiple types of reading difficulties.

ED 607 Reading in the Content Areas 3.0 CR
Development of strategies to teach content area material to a wide range of learners. Emphasis will be on a minimal number of reading strategies that are useful in meeting the needs of students in different subject areas. Intended for subject area teachers as well as reading specialists responsible for school wide reading programs.

ED 609 Reading: Supervised Practicum 3.0 CR
Prerequisite: ED 410 or ED 420; and ED 606.
Supervised field experience with student and staff in public school. Graduate students will work with elementary and/or secondary faculty members to evaluate and implement reading programs.

ED 610 Language and Cognition 4.0 CR
Prerequisite: Acceptance into MAT program and faculty permission.
Prepares future secondary and middle school teachers to use language as a pedagogical tool. Emphasizes reading and writing as key ways of knowing in all content areas. Presents a review of the literature concerning research and theory on brain, mind, and language connections.

ED 611 Roles and Responsibilities of the Elementary Counselor 3.0 CR
Professional roles and program components of a comprehensive developmental counseling program at an elementary school. Knowledge and skill development to

implement the Alaska Counseling Program, which is based on national standards, will be the focus. Appropriate computer skills and technical awareness will be embedded in the course.

ED 612 Human Relations in Education 3.0 CR

Development of attitudes and behaviors which will help all those involved in education to deal directly with the affective domain of learning. Effective sending and receiving in communication will be studied as well as techniques for creating a positive communication atmosphere for the profession.
Offered fall and even summer semesters.

ED 615 Roles and Responsibilities of the Secondary Counselor 3.0 CR

Professional roles and program components of a comprehensive developmental counseling program at a secondary school. Knowledge and skill development to implement the Alaska Counseling Program, which is based on national standards, will be the focus. Appropriate computer skills and technical awareness will be embedded in the course.

ED 616 Counseling Theories 3.0 CR

Explores the theories and accompanying techniques that provide the foundation for the counseling process. Integration of theories and techniques to form one's own theoretical foundation will be stressed. Multicultural and ethical issues in counseling will also be emphasized.

ED 617 Partners across the Pacific: U.S.-Japan 3.0 CR

Prerequisite: Teacher certificate or graduate admission into the School of Education.
Curriculum enrichment and classroom strategies to improve instruction about the Asian Pacific Region. Focuses on the U.S.-Japan relationship and Alaska's link to the Pacific Rim.

ED 618 Issues in Children's Literature 3.0 CR

Develop awareness of current issues in children's literature in terms of topic, criticism, genre, authors and illustrations. Classroom applications include the development of a literature curriculum, and thus integration of literature, reading and writing.

ED 619 Advanced Problems in Literacy 3.0 CR

Develops familiarity with issues and questions regarding literacy instruction in public schools today. Students are expected to research, present, and develop a classroom project with a question of their choice.

ED 620 Integrating the Language Arts 3.0 CR

Prerequisite: Graduate standing.
Integration of the language processes: listening, speaking, reading, and writing; and the language content of literature and grammar into one unified curriculum, K-12. After establishing criteria for interdependency, students will review all language areas in order to assess their commonalities and individual variations. Using this assessment as a base, students will construct various models of language integration.

ED 621 Culture, Language and Literacy 3.0 CR

Prerequisite: Graduate standing in the School of Education or faculty permission.
Examination of the theoretical underpinnings of bilingual/cross-cultural and English-As-A-Second-Language (ESL) education as they apply to literacy issues. Special attention is given to research findings on first and second language acquisition and subsequent implications for the teaching of reading and writing.

ED 622 Philosophy of Education 3.0 CR

Prerequisite: Graduate standing in School of Education.
Basic philosophic concepts and their historical development; philosophy applied to education and related issues and problems; examination of contributions of outstanding educators.
Offered fall and odd summer semesters.

ED 623 Counseling Skills 3.0 CR

Prerequisite: ED 616 or concurrent enrollment for Counseling majors.
Fees.
Emphasizes acquisition and application of basic counseling skills. Students will have experience practicing the skills. There will be focus on giving and receiving feedback pertaining to skill development. Participation in audio or video taping will provide an opportunity to refine counseling skills and techniques. The stages of the counseling process in which the skills are utilized will be addressed.

ED 624 Group Counseling 3.0 CR

Prerequisite: ED 623 or concurrent enrollment or faculty permission.
The development of theoretical constructs and their application to complex group interactions; an awareness of self as change agent in the evolving unique society of the group.
Offered spring and odd summer semesters.

ED 625 Teachers and Computers: Selected Topics 1.0-3.0 CR

Computer applications and computer assisted instructional planning for teachers. Introduces special topics related to the use of computers in the classroom. Project required.
Special Notes: May be repeated for credit with a change of subtitle. No more than 3 credits may be applied to a degree program.

ED 626 Technology in Teaching and Learning 3.0 CR

Prerequisite: Graduate standing and completion of ED 150 or prior experience using a PC.
Fees.
The role of technology in restructuring learning environments. Explains how teaching and learning environments can be enhanced through different approaches to using technology. A broad range of technologies used in education will be explored, centering around microcomputers and optical hardware. Activities include hands-on experiences with applications software and hypermedia.

ED 627 Education Research 3.0 CR

Prerequisite: Graduate standing in School of Education.
Techniques of education research; selection of topics and problems; data gathering; interpretation and preparation of reports.

ED 628 Responsibility Models/Cooperative Discipline 3.0 CR

A comprehensive discipline approach incorporating preventive, corrective, and supportive dimensions of discipline. Models of discipline designed to develop self-responsibility and self-control will be explored including cooperative discipline. Classroom teachers will gain specific techniques to help teachers deal more effectively with discipline. An action plan will be emphasized.

ED 631 Advanced Educational Psychology 3.0 CR

Prerequisite: Graduate standing in School of Education.
Human emotional, mental, physical and social development. Emphasis on individual differences. Assumes one previous course in human development, educational psychology, and teaching experience.
Offered spring and summer semesters.

ED 632 Assessment and Career Information for Counselors 3.0 CR

Assessment tools appropriate to both general guidance and career guidance. This would encompass career, behavioral, aptitude, interest, social and emotional instruments and computer assessment and career programs used by counselors. The connection between overall assessment and effective career choices would be a key component.

ED 633 Abuse and Minors: Sources and Solutions 3.0 CR

Designed to prepare counselors/educators to manage abusive situations effectively. Encompasses substance abuse, child abuse, sexual abuse and suicide. Prevention, intervention and postvention strategies will be learned, so that educators can deal with before, during, and after components in the management of crisis issues.

ED 634 Counseling Practicum I 3.0 CR

Prerequisite: ED 623, ED 624 and faculty permission.
Grading Policy: Pass/No Pass.
The culminating activity of counselor preparation. The counselor candidate works in a school setting and experiences the real situation of a school counselor.
Special Notes: May be repeated for credit.
Offered fall and spring semesters.

ED 635 Restructuring Education: Crisis and Opportunity 3.0 CR

Prerequisite: Graduate standing.
Provides a systematic examination of the pedagogical, social and political issues surrounding the organization and operation of schooling in America. Presents a framework for the restructuring of schools which focuses on the implications of contemporary research on teaching and learning.

ED 636 Counseling Practicum II 3.0 CR

Prerequisite: ED 623, ED 624, ED 634, and faculty permission.
Grading Policy: Pass/No Pass.
The culminating activity of counselor education preparation. The counselor educator candidate works in a variety of therapeutic settings and experiences the real work situation of a counselor.
Special Notes: May be repeated for credit.
Offered fall and spring semesters.

ED 637 Public School Administration 3.0 CR

Prerequisite: ED 635 and graduate standing in School of Education.
Responsibility pertaining to the organization of a school and the direction of personnel. Functions of instructional leadership. Public school administration as a career. Problems incidental to public school administration in Alaska.
Offered spring and even summer semesters.

ED 638 Supervision for Improvement of Instruction 3.0 CR

Prerequisite: Graduate standing in education. Required for, but not limited to, administration majors.
Development, purpose, organization of supervisory programs; special attention to current in-service education programs.
Offered spring and even summer semesters.

ED 639 Public School Finance 3.0 CR
Prerequisite: Graduate standing in education.
Contemporary basis for raising and distributing federal, state and local education funds; problems of school financing in Alaska.
Offered spring and odd summer semesters.

ED 641 School Law 3.0 CR
Prerequisite: Graduate standing in education.
Rights and responsibilities of teachers and pupils; rulings of the attorney general; decisions of the courts; and regulations of the state board of education.
Offered fall and even summer semesters.

ED 643 Administrative Skills 1.0-6.0 CR
Fees.
Development of practice in administrative, interpersonal and communication skills essential to school administration.
Special Notes: Course content varies by semester. May be repeated for credit.
Offered fall and odd summer semesters.

ED 645 School Building and Planning 3.0 CR
School site visitation, discussions with planning personnel, and reading in the area of school architecture will be the course basis.

ED 646 School Business Management 3.0 CR
Operations of the school business manager will be the topic of research. Federal, state, and local regulations and policies will be studied.

ED 647 Developing School Leaders 3.0 CR
Prerequisite: Principal's certificate, faculty permission.
Grading Policy: Pass/No Pass.
Designed to assist school administrators develop skills needed to become a mentor to potential school leaders. Develops knowledge of theoretical framework and research identifying the phases of and skills associated with effective mentor/protege relationships. Emphasizes practice in, feedback on, and development of behaviors identified in successful mentoring in a school setting. Aspects of instructional leadership and applicable administrative skills will be addressed.
Special Notes: May be repeated for credit.

ED 651 Curriculum Theory and Development 3.0 CR
Curriculum theory as it applies to current developments in K-12 curriculum. Participants will be exposed to curricular, instructional and assessment issues which evolve from contemporary research.

ED 653 Advanced Instructional Strategies for Secondary Education 3.0 CR
Prerequisite: ED 402 or faculty permission.
A variety of inductive and deductive instructional strategies for secondary teachers with pertinent research on adolescent development and learning styles. Students will develop and model a variety of new strategies. Participants will experience supportive evaluation through peer coaching.

ED 654 Brain Theories: Development and Learning 3.0 CR
Prerequisite: ED 313 and graduate standing.
Examination of brain research and theories relevant to education. Focuses to bring educators up-to-date on brain research and to provide the background information necessary to evaluate educational theories developed from brain research. Curriculum models and classroom activities will be developed and evaluated.

ED 655 The Adult Learner 3.0 CR
Prerequisite: Graduate standing.
Examines major principles, problems and information about adults and adult learning. Includes psychological, physical, intellectual and other factors affecting adults and their abilities to learn; motivation, participation of adult learners; and traditional, non-traditional and self-directed learning.

ED 656 Middle School: Transescent Years 3.0 CR
Prerequisite: Completion of secondary methods course or elementary certification.
Theory and practice of middle school education; the transescent student, curriculum modification and classroom management through interdisciplinary teams. Characteristics of the transescent student's developmental needs are covered along with instructional resources, team planning, instructional strategies and classroom management.

ED 657 Adult Education Leadership 3.0 CR
Prerequisite: Graduate standing.
Explores concepts, theories and approaches concerning leadership, with particular emphasis on how they apply to adult and continuing education. Application of leadership ideas to improve decision making and problem solving skills, enhance effectiveness, strengthen programs and situations and predict outcomes. Examines personal leadership styles and philosophies of leadership and leadership development.

ED 658 Organization and Administration in Adult and Continuing Education 3.0 CR
Prerequisite: Graduate standing.
Examines organizational models utilized by the diverse range of institutions and agencies involved in adult and continuing education and extension programs. Includes diversity of programs, organizational structures, goals and programs. Examines finance and facilities, personnel, program and community relations, with major emphasis on "uncertainty processing."

ED 659 Personnel Management and Negotiations 3.0 CR
Prerequisite: Graduate standing.
Provides the student with a working knowledge of the information and processes needed to successfully manage a school district personnel system and an understanding of the legal requirements and procedures for contract negotiations. Through observation of school district personnel operations, the study of written materials, and classroom presentations, various methods and practices currently used to hire, manage, train, evaluate and terminate personnel will be studied. The overall focus of the course is how to manage the requirements of personnel and negotiate matters in such a way that the institutional purposes and positive goals of a school district can be achieved.

ED 660E Practicum: Principal (Elementary) 1.0-6.0 CR
Prerequisite: Approval of student's advisory committee.
Grading Policy: Pass/No Pass.
Fieldwork in an appropriate educational or agency setting. Assignment will be respective to the principalship.
Special Notes: May be repeated for credit.

ED 660S Practicum: Principal (Secondary) 1.0-6.0 CR
Prerequisite: Approval of student's advisory committee.
Grading Policy: Pass/No Pass.
Fieldwork in an appropriate educational or agency setting. Assignment will be respective to the principalship.
Special Notes: May be repeated for credit.

ED 661 Internship: Superintendent 1.0-6.0 CR
Prerequisite: Approval of student's advisory committee.
Grading Policy: Pass/No Pass.
Fieldwork in an appropriate educational or agency setting. Assignment will be respective to the superintendency.
Special Notes: May be repeated for a maximum of 9 degree credits.
Offered fall and spring semesters.

ED 661C Internship: Counseling 1.0-12.0 CR
Grading Policy: Pass/No Pass.
Post-master's or post-practica field work in a counseling setting. Provides an opportunity for working counselors or graduate counseling students that have completed a minimum of two successful practica to acquire the additional supervised hours that are required for national certification.

ED 662 Teaching in the Middle School 3.0 CR
Prerequisite: Type A Certificate (elementary or secondary); corequisite ED 656.
Curricular and instructional modifications to accommodate the middle school student's developmental needs. Emphasizes instructional team planning, core courses and interdisciplinary instruction. A variety of appropriate instructional and management strategies will be demonstrated: cooperative learning, inquiry, concept attainment, Taba and computer technology.

ED 663 Writing and Learning: Anchorage Writing Project Summer Institute 1.0-5.0 CR
An intensive course designed to introduce students to the writing process. Focus will be on teaching techniques, including student writing response groups, writing to assist learning, personal experience writing, cognitive organization, oral language, sentence combining, and grammar. Students will be required to participate in preliminary and post institute meetings.

ED 664 Writing and Learning: Anchorage Writing Project Advanced Institute 1.0-3.0 CR
Prerequisite: 3 credits of ED 663.
Advanced study of teaching techniques introduced in summer institute. Students will be requested to participate in preliminary and post institute meetings.

ED 665 History and Philosophy of Adult Education 3.0 CR
Prerequisite: Graduate standing.
Examines the history of adult education in Europe and the United Kingdom. Reviews selected programs in South America and the United States. Studies the historical context of the philosophies of adult education and compares and analyzes the relationships among these approaches.

ED 670 Current Topics in Education 1.0-3.0 CR
Prerequisite: Faculty permission.
Study of specific current issues, techniques and trends affecting educators.
Special Notes: May be repeated for credit with a change of subtitle. Restricted enrollment may apply; see advisor for applicability to degree program.

ED 672 Issues and Trends in Special Education 3.0 CR
Prerequisite: ED 687 or concurrent enrollment required.
A critical analysis of the current trends affecting special programming across the country and in the state and local community. Includes an in-depth review of the literature describing trends and participation by local individuals in issues pertinent to Alaska communities. Includes exposure to private and public agencies available to and for handicapped persons in Alaska.

ED 673 Counseling Exceptional Students 2.0 CR
Prerequisite: Graduate standing and faculty permission.
Theories and techniques for the professionals who work with exceptional students. Covers school, family, vocational and personal problems of exceptional students.

ED 674 Families of Exceptional Youth 3.0 CR
Prerequisite: Graduate standing and faculty permission.
Concepts, strategies and issues surrounding the parenting of exceptional children and youth. Professionals will be provided with an in-depth understanding of concepts and strategies required to devise comprehensive home/school programs that address family dynamics.

ED 675 Methods for Educating the Mentally Handicapped 3.0 CR
Prerequisite: ED 460.
Principles and methods of teaching mentally handicapped elementary and secondary students. Class participants will practice developing appropriate instructional programs for teaching mentally handicapped students communication skills, arithmetic skills, and social and vocational competencies. Various methods including unit instruction, clinical teaching, work/study programming, and programmed instruction will be explored for teaching the mentally handicapped student.
Offered as warranted by demand.

ED 676 Theories of Behavior Disorders 3.0 CR
Prerequisite: ED 460.
Theories, terminology, assessment, and intervention techniques applicable to teaching emotionally disturbed/behavior disordered children and youth in the least restrictive settings. Includes definition, causes and characteristics of emotional disturbance.

ED 677 Distance Learning and Adult Education 3.0 CR
Prerequisite: Graduate standing.
Development of effective instructional methods for reaching adult learners at a distance. Provides participation in the design of instruction and use of specific delivery systems and technologies. Emphasizes design and delivery of instruction in Alaska. Students analyze and critique various modes of distance education in Alaska.

ED 678 Curriculum and Program Planning in Adult Education 3.0 CR
Prerequisite: Graduate standing.
Identification and examination of fundamental principles and concepts of program planning and curriculum development as they apply to the field of adult education. Specifically reviews education and training programs and curricula designed for the adult learner and offers practical applications of the ideas.

ED 679 Methods and Materials in Adult Education 3.0 CR
Prerequisite: Graduate standing.
Exploration of methods and materials available for use in adult education, including the wide variety of methods and techniques in use today, and of both print and mediated materials. Develops skills in creating materials appropriate for adults in differing settings, and participating in delivery of instruction using various methods to create stimulating and effective learning environments.

ED 680 Theories of Mild Disabilities 3.0 CR
In-depth analysis, synthesis and evaluation of theories regarding mildly handicapped students who are identified as having learning disabilities, behavior disorders and mild mental retardation. Emphasizes definitional and causal issues, characteristics of students and how their development and learning is similar to and from normal persons.

ED 681 Issues in Early Childhood Special Education 3.0 CR
Prerequisite: ED 460 or faculty permission.
A critical study of theoretical and practical issues related to personal, curricular, cultural, political, coordination, and service delivery needs of young exceptional children and their families.
Special Notes: Students are expected to participate in experiences outside of the regular class period (15 hours).

ED 682 Assessment: Learning and Behavior 3.0 CR
Prerequisite: Graduate majors in special education, or faculty permission.
Fees.
Techniques and methods for assessing exceptional students. Focuses on the historical development, basic purposes and assumption of assessment; testing terminology and statistics; and the administration and interpretation of formal and informal assessment procedures.
Special Notes: Special education students are required to spend time outside of class testing children and youth.

ED 682Y Assessment: Early Childhood Special Education 4.0 CR
Prerequisite: ED 681 or faculty permission.
Grading Policy: Pass/No Pass.
Techniques and methods for assessing young children with special needs and their families. The focus is on historical development, basic purpose and assumption of assessment; testing terminology and statistics; and the administration and interpretation of formal and informal assessment procedures. Special education students are required to spend time outside of class testing children and their families.

ED 683E Strategies: Educationally Handicapped-Elementary 3.0 CR
Prerequisite: Corequisite: ED 680.
A competency based course in the development and implementation of instructional strategies appropriate for working with various types of learning disabilities. A theoretical basis for selecting and evaluating specific approaches to teaching the elementary student with learning disabilities will be presented.
Special Notes: Limited to special education majors only, or by special arrangement.

ED 683S Strategies: Educationally Handicapped-Secondary 3.0 CR
Prerequisite: ED 680.
Specific problems concerning adolescents with educational handicaps. Emphasizes preparation to recognize and cope with emotional characteristics; organize and manage individualized programs for secondary students (including mainstreaming); demonstrate instructional techniques, and be cognizant of vocational and career opportunities available. Extensive work outside class is required to practice educational strategies and demonstrate competence.
Special Notes: Limited to special education majors only, or by special arrangement.

ED 683Y Strategies: Early Childhood Special Education 4.0 CR
Prerequisite: ED 681.
Provides in-depth understanding of best practice strategies in the field of early intervention. Presents concepts and strategies necessary to prepare students for working with infants, toddlers, and preschoolers with disabilities and their families.
Special Notes: Assignments outside of class will be required to practice strategies and demonstrate competence.

ED 684 The Gifted Student 3.0 CR
Prerequisite: ED 460 or concurrent enrollment required.
Social, emotional, and education problems of gifted students. Focuses on divergent and convergent modes of thinking; understanding of cognitive abilities; and characteristics and methods of working with the gifted student.
Special Notes: Alternate year offering.

ED 685 Young Children with Complex Needs 3.0 CR
Prerequisite: ED 681 or faculty permission.
Professionals working with young children who experience severe medical/complex needs and their families will acquire basic knowledge and awareness of medical, educational, and health issues.

ED 686 Transition Services for Disabled Persons 3.0 CR
Prerequisite: Graduate standing.
In-depth examination of issues related to transition programming for disabled persons within educational, personal/social and community based settings. Content addresses transition planning processes, curricular implications, curriculum based vocational assessment and community based instruction.

ED 687 Advanced Practicum: Education 1.0-12.0 CR
Prerequisite: Graduate standing and faculty permission, or concurrent methods enrollment.
Grading Policy: Pass/No Pass.
Supervised field experience with students in educational facilities. Students will be assigned work with children in the area of specialization. Placement is arranged by the supervisor and the number of hours in assigned locations will vary according to the number of credits earned.
Special Notes: May be repeated for credit.
Offered fall, spring and summer semesters (depending upon the specific program.)

ED 688 Collaborative Consultation 3.0 CR
Prerequisite: Faculty permission.
Roles, skills, and competencies of the teacher consultant in the delivery of services to mildly and moderately handicapped students. Helps teacher consultants problem solve, and develop appropriate liaison activities within the educational setting.

ED 689 Special Populations of Gifted Students 3.0 CR
Prerequisite: ED 684.
Topics will build upon the fundamental concepts addressed in ED 684 (The Gifted Student) by focusing on the underserved gifted population including gifted minority students, females, handicapped, underachievers and those in rural communities. The highly gifted and those who possess unusual creativity and talents will also be discussed.

ED 690 Advanced Seminar: Special Education 3.0 CR
Prerequisite: Certification and/or master's in special education and faculty permission.
Current issues of concern to professionals in special education and related fields. Issues include ethics, philosophy, multidisciplinary emphasis, assessment and intervention approaches, and new directions in the field of special education.
Special Notes: Intended for the post special education certification/ master's student with field experience. The content of the course varies and may be repeated for credit.
Offered as warranted by demand.

ED 698 Individual Research 1.0-6.0 CR
Prerequisite: ED 627 or concurrent enrollment required; and faculty permission.
Grading Policy: Pass/No Pass.
As directed by graduate committee.

ED 699 Thesis 1.0-6.0 CR
Prerequisite: ED 627 or concurrent enrollment required; and faculty permission.
Grading Policy: Pass/No Pass.
As directed by graduate committee.

EDD: ENGINEERING DESIGN AND DRAFTING

Offered through Kenai Peninsula College, Ginger Steffy, Director, 34820 College Dr., Soldotna, 99669, 262-5801

EDD 288 Computer Aided Drafting 4.0 CR
Prerequisite: Completion of a high school or college drafting course.
Introduction to computer aided drafting, instruction, and hands-on application using auto cad menu driven systems for data manipulation. Drawing production and drawing plotting.

EMT: EMERGENCY MEDICAL TECHNOLOGY

Offered through the College of Career and Vocational Education, Gordon Hartlieb Building (GHB), Room 111, 786-1184

EMT 130 Emergency Medical Technician I 6.0 CR
Fees.
Provides the necessary training to become state or nationally registered as an EMT I, which is optional. Proficiency in victim assessment, recognition and treatment of medical emergencies and other basic life support procedures. Includes practicum experience in hospitals, emergency rooms, or other sites.
Special Notes: Students must have the strength to be able to move victims, sufficient vision to assess condition of victims, and dexterity to perform the skills application procedures.

EMT 230 Emergency Medical Technician II 3.0 CR
Prerequisite: Must meet all qualifications for EMT I and have 6 months experience. Must have approval of sponsor physician.
Fees.
Intermediate EMT course providing EMT I's with added skills of esophageal intubation, specialized tourniquets, and intravenous treatment.

EMT 231 Emergency Medical Technician III 3.0 CR
Prerequisite: Must meet all qualifications for EMT II. Must have approval of sponsor physician.
Fees.
Advanced EMT course providing EMT II's with added skills of applying electrodes and monitoring cardiac activity, defibrillating life-threatening arrhythmias, and using lidocaine, morphine, and epinephrine for anaphylaxis.

ENGL : ENGLISH

Offered through the College of Arts and Sciences, Classroom Building (K), Room 218 and 222B, 786-1731 or 786-1552

ENGL 063 Writing Fundamentals 1.0-3.0 CR
Prerequisite: Appropriate score on English Placement Test.
Grading Policy: Pass/No Pass.
Fees.
Specific practice to increase student's ability to use the writing system of the English language. Individualized instruction based on student's present skill level.
Special Notes: May be taken for up to six credits.

ENGL 067 Grammar Fundamentals 1.0-3.0 CR
Prerequisite: Appropriate score on English Placement Test.
Grading Policy: Pass/No Pass.
Fees.
Introduction to basic grammar and its use in developing writing skills. Covers simple parts of speech, basic sentence construction, and complex sentence development.
Special Notes: May be taken for up to six credits.

ENGL 078 Reading Fundamentals 1.0-3.0 CR
Prerequisite: Appropriate score on Reading Placement Test.
Grading Policy: Pass/No Pass.
Fees.
Basic reading course covering word-attack skills, vocabulary, and comprehension. Individualized instruction based on student's present skill level.
Special Notes: May be taken for up to six credits.

ENGL 080 Slingerland Language Arts I 3.0 CR
Prerequisite: Special screening or faculty permission.
For English-speaking students who have specific language processing problems. Intensive, guided practice in handwriting, spelling, and word-attack skills. Uses all learning channels (sight, hearing, and touch) and phonics-based approach.
Special Notes: May be taken for up to six credits. Course is designed for adults with learning disabilities. Special training system requires minimum 4 hours per week of intensive, guided practice for 3 hours credit.

ENGL 082 Slingerland Language Arts II 3.0 CR
Prerequisite: ENGL 080 or faculty permission.
For English-speaking students who have specific language processing problems. More guided practice in spelling and word-attack skills. Uses multi-sensory learning and a phonics-based approach. Increases student accuracy in writing basic English.
Special Notes: May be taken for up to six credits. Course is designed for adults with learning disabilities. Special training system requires minimum 4 hours per week of intensive, guided practice for 3 hours credit.

ENGL 084 Slingerland Grammar/Writing 3.0 CR
Prerequisite: Special screening or faculty permission.
For English-speaking students who have specific language processing problems. Basic instruction in parts of speech, parts and kinds of sentences, and writing single-paragraph compositions. Helps develop writing habits and accuracy necessary in other English courses.
Special Notes: May be taken for up to six credits. Course is designed for adults with learning disabilities. Special training system requires minimum 4 hours per week of intensive, guided practice for 3 hours credit.

ENGL 100A Campus Survival Skills 1.0 CR
Grading Policy: Pass/No Pass.
Practical ways of getting started in college. Includes understanding and dealing with the university system, introduction to campus resources, and topics of interest to the class.

ENGL 100B Classroom Success Skills 1.0 CR
Grading Policy: Pass/No Pass.
Introduction in basic study skills such as note taking, reading for information, and preparing for tests. Also covers coping with college stress and locating learning resources.

ENGL 101A Vocabulary Skill Building 1.0-3.0 CR
Fees.
Increases student's vocabulary through use of different approaches. Includes word recognition drills, practice exercises, and study of word roots, prefixes, and origins.
Special Notes: May be taken for up to six credits.

ENGL 101B Spelling Skill Building 1.0-3.0 CR
Fees.
For students needing intensive practice in this skill. Includes phonics, spelling rules, proofreading, practice drills, and use of dictionary.
Special Notes: May be taken for up to six credits.

ENGL 101C Grammar Skill Building 1.0-3.0 CR
Fees.
Instruction in correct grammatical usage. Includes word choice, parts of speech, agreement of sentence elements, and application in writing basic paragraphs.
Special Notes: May be taken for up to six credits.

ENGL 101D Sentence Skill Building 1.0-3.0 CR
Fees.
Instruction in writing effective sentences. Includes parallel structure, coordination, subordination, and precise word choice.
Special Notes: May be taken for up to six credits.

ENGL 101E **Refresher Writing Skills** **1.0-3.0 CR**
Fees.
Renews and expands basic writing skills for students interested in general self-improvement. Writing tasks assigned according to individual ability and interest.
Special Notes: May be taken for up to six credits.

ENGL 105 **Reading Strategies** **1.0-3.0 CR**
Prerequisite: Appropriate score on Reading Placement Test.
Fees.
Open-entry course covering comprehension, vocabulary, and textbook strategies. Encourages wide reading and development of skills necessary for success in freshman courses. Designed to fit with ENGL 106.
Special Notes: May be taken for up to six credits.

ENGL 106 **Basic Composition I** **3.0 CR**
Prerequisite: Appropriate score on English Placement Test.
Fees.
Instruction in skills necessary to produce clear written English. Emphasis on standard grammar, sentence structure, punctuation, and single-paragraph compositions. Introduction to use of writing resources.

ENGL 107 **How to Succeed in College** **3.0 CR**
Prerequisite: Appropriate score on Reading Placement Test.
Fees.
Intermediate course in study skills and study reading required for college work. Includes time management, memory, concentration, note taking, and vocabulary practice. Also covers improving thinking ability and overview of speed reading. Written projects focus on individual needs.

ENGL 108 **Basic Composition II** **3.0 CR**
Prerequisite: ENGL 106 or appropriate score on English Placement Test.
Fees.
Practice in using different forms of paragraph development for specific purposes. Combining paragraphs into short essays. Includes intensive practice in formal punctuation.

ENGL 109 **Practical Writing** **3.0 CR**
Prerequisite: ENGL 106 or appropriate score on English Placement Test.
Fees.
Alternative to ENGL 108. Instruction in skills necessary to meet day-to-day demands in composition. Emphasis on paragraph development in business letters and memos, short essays, essay exams, and short research papers. Includes intensive practice in formal punctuation.

ENGL 110 **Introduction to Speed Reading** **1.0 CR**
Prerequisite: Fluency in standard English and above-average reading skills.
Introduction to newest speed reading, comprehension, and vocabulary strategies. Application of techniques to study, leisure, and professional reading.

ENGL 111 **Methods of Written Communication** **3.0 CR**
Prerequisite: Appropriate score on English Placement Test, SAT Test of Standard Written English, or ACT English Usage Test.
Fees.
Instruction in composition of expository essays with emphasis on different techniques for organization and development. Documented paper required.
Special Notes: Applies toward written communication requirement.

ENGL 116 **Writing Life Stories** **3.0 CR**
Students will learn to write and record family history from a personal perspective, to preserve newspaper clippings and photos, and create a genealogical chart for their family.
Offered at Matanuska-Susitna College only.

ENGL 120 **Critical/Creative Thinking** **3.0 CR**
Prerequisite: Average reading skills recommended.
Introductory course emphasizing principles and techniques of thinking better. Focuses on critical and creative thinking and problem solving strategies.

ENGL 121 **Introduction to Literature** **3.0 CR**
Course for non-majors. Introduction to analysis and appreciation of fiction, drama, and poetry. Emphasis on reading and discussion.

ENGL 122 **Introduction to Shakespeare** **3.0 CR**
Representative selection of Shakespeare's plays, with reference to their historical backgrounds and theatrical environment of Elizabethan Age.

ENGL 133 **Women's Autobiography** **3.0 CR**
Uses autobiographies by 20th century American women to help students read nonfiction with skill and enjoyment, and to help them prepare their own autobiographies. Includes use of library and personal resources, and methods of organizing materials (from family documents to professional vitae). Choice of reading or writing emphasis.

ENGL 150 **Women Writers** **3.0 CR**
A survey of women authors, with examination of how they portray both women and men in their writings.

ENGL 175 **Vocabulary Development** **3.0 CR**
Prerequisite: Fluency in speaking and reading English.
Studies to increase awareness and control of words in English. Emphasis on vocabulary building through familiarity with Greek word roots.

ENGL 201 **Masterpieces of World Literature I** **3.0 CR**
Prerequisite: ENGL 111.
Introductory course for majors and non-majors. Emphasizes understanding literature, forming critical vocabulary, and developing literary judgment. Selected masterpieces from ancient times through the Renaissance.

ENGL 202 **Masterpieces of World Literature II** **3.0 CR**
Prerequisite: ENGL 111.
Introductory course for majors and non-majors. Emphasizes understanding literature, forming critical vocabulary, and developing literary judgment. Selected masterpieces from the Renaissance to the present.

ENGL 203 **Survey of British Literature I** **3.0 CR**
Prerequisite: ENGL 111.
Analysis and interpretation of selected English writings from the Anglo-Saxons to the Romantics.

ENGL 204 **Survey of British Literature II** **3.0 CR**
Prerequisite: ENGL 111.
Analysis and interpretation of selected English writings from the Romantics to the present.

ENGL 207 **American Prizewinners** **3.0 CR**
Interpretation and discussion of selections by American writers who have been honored nationally or internationally.

ENGL 208 **Accelerated Reading and Comprehension** **3.0 CR**
Prerequisite: ENGL 111 or equivalent or faculty permission.
Deals with advanced reading rate and comprehension based on a broad range of reading tasks. Develops the ability to read at accelerated rates using speed reading, comprehension, and vocabulary skills. Critical book reviews required.

ENGL 209 **Enriched Lifelong Reading** **3.0 CR**
Prerequisite: Average or better reading skills.
Helps people choose and enjoy leisure reading materials. Centers on different purposes of reading such as recreation, self-help, and learning new information. Includes books, magazines, and newspapers. Designed to widen and deepen personal, lifelong reading habits.

ENGL 210 **Academic Reading** **3.0 CR**
Prerequisite: ENGL 111.
Instruction in advanced reading and critical thinking strategies for academic texts, lab manuals, and journal articles. Use of library resources included.

ENGL 211 **Intermediate Exposition with Readings in Literature** **3.0 CR**
Prerequisite: ENGL 111.
Fees.
Instruction in writing based on close analysis of literature. Develops a broad range of expository writing skills. Research paper required.
Special Notes: Applies toward written communication requirement.

ENGL 212 **Technical Writing** **3.0 CR**
Prerequisite: ENGL 111 and experience in business, technical, or scientific field.
Fees.
Instruction in composition of technical correspondence, informal and formal reports. Develops a broad range of college and career writing skills. Investigative report required.
Special Notes: Applies toward written communication requirement.

ENGL 213 **Intermediate Exposition with Readings in Nonfiction** **3.0 CR**
Prerequisite: ENGL 111.
Fees.
Instruction in writing based on close analysis of nonfiction expository prose. Develops a broad range of college and career writing skills. Research paper required.
Special Notes: Applies toward written communication requirement.

ENGL 235 **The Iliad** **3.0 CR**
Reading and review course covering the 24 books of Homer's Iliad. Emphasis on key myths, mythological figures, and development of oral literature into written form.

ENGL 240 **Literature of the South** **3.0 CR**
Explores the essence and the diversity of the South, through literary works by authors including Faulkner, Welty, Wright, and Wolfe.

ENGL 259 Introduction to Creative Writing 1.0 CR
Fees.
Introduction to one type of creative writing conducted in short workshops.
Special Notes: Repeatable course.

ENGL 260A Introduction to Creative Writing 3.0 CR
Fees.
Introduction to two or more types of creative writing and close analysis of each student's work.
Special Notes: Repeatable course.

ENGL 260B Introduction to Creative Writing: Poetry 3.0 CR
Fees.
Introduction to various poetic writing techniques and close analysis of each student's work.
Special Notes: Repeatable course.

ENGL 260C Introduction to Creative Writing: Fiction 3.0 CR
Fees.
Introduction to various fictional writing techniques and close analysis of each student's work.
Special Notes: Repeatable course.

ENGL 260D Introduction to Creative Writing: Drama 3.0 CR
Fees.
Introduction to various dramatic writing techniques and close analysis of each student's work.
Special Notes: Repeatable course.

ENGL 260E Introduction to Creative Writing: Nonfiction 3.0 CR
Fees.
Introduction to various prose nonfiction writing techniques and close analysis of each student's work.
Special Notes: Repeatable course.

ENGL 260F Introduction to Creative Writing: Children's Stories 3.0 CR
Fees.
Introduction to various approaches to writing children's stories and close analysis of each student's work.
Special Notes: Repeatable course.

ENGL 261 Art/Literary Magazine Production 3.0 CR
Fees.
Students edit and prepare manuscripts for publication, layout magazine pages for the printer, and learn about other aspects of magazine production. Students solicit, evaluate and select material appropriate for a literary magazine: short stories, poetry, essays, artwork, etc. Also covers publicity, marketing and distribution of the finished publication.

ENGL 265 Literature of the North 3.0 CR
Regional approach to writers of Alaska, Canada, Scandinavia, and Soviet Union.

ENGL 275 Vocabulary Enrichment 3.0 CR
Prerequisite: Well developed speaking, reading, and study skills.
Studies to increase command of Latin-based English words. Emphasizes awareness of shades of meaning and rapid acquisition of new words. Individual projects encouraged.

ENGL 300 Tutoring Skills for English Majors 3.0 CR
Prerequisite: Declared English major or English education major. One of: ENGL 211, ENGL 212 or ENGL 213.
An exploration of the essential skills needed to be a successful English tutor. Includes topics such as: definition of tutoring; setting up a tutoring session; formal and informal assessment; tutoring techniques; "what if..." tutoring situations; ending the session; computers and learning; writing and reading across the curriculum; and tutor as in-class assistant.
Special Notes: May be repeated once with faculty permission.

ENGL 304 British Women Writers 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Selective study of women writing in England from Middle Ages through the 20th century in both traditional literary genres and as theorists on women's issues.

ENGL 306 American Literature I 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
The study of major American writers primarily of the 19th century, including such writers as Cooper, Emerson, Poe, Hawthorne, Melville, Douglass, and Stowe.

ENGL 307 American Literature II 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
The study of major American writers primarily of the 20th century, including such writers as Dreiser, Wharton, Hemingway, Faulkner, Wright and Flannery O'Connor.

ENGL 308 American Women Writers 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Study of American women writers from the colonial period to the present. Emphasis on the social contexts in which women work.

ENGL 310 Ancient Literature 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Classical, Biblical, and Oriental literature in English translations.

ENGL 311 Advanced Exposition 3.0 CR
Prerequisite: ENGL 111, junior standing, and faculty permission.
Instruction in writing for students who wish to develop proficiency in organizing and composing essays of factual material in which they have genuine interest. Research paper required.

ENGL 312 Advanced Technical Writing 3.0 CR
Prerequisite: ENGL 212 or faculty permission.
Instruction in writing situations, tasks, and modes; the rhetorical and stylistic techniques; and the methods of gathering and documenting print resources likely to be used by professionals in the technologies and sciences.

ENGL 315 Medieval Literature 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
A selective survey of primarily Western literature from the 5th through the 15th century. Representative authors and genres.

ENGL 320 Renaissance Literature 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
A selective survey of primarily Western literature from the 15th century through about the middle of the 17th. Representative authors and genres.

ENGL 325 Neoclassical Literature 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
A selective survey of primarily British literature of the period 1660-1798.

ENGL 330 Literature of Romanticism 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
A study of the Romantic movements from late 18th to mid 19th century.

ENGL 340 The Victorian Period 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Studies in poetry and prose written by various English authors between 1830 and 1900, including such writers as Tennyson, Carlyle, Dickens, Browning, and Arnold.

ENGL 341 Modern Literature: 1890-1920 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
The contributions of major writers such as Isben, Chekhov, Crane, Cather, Lowell, Sandburg, Frost, Hardy, Yeats, Galsworthy, Lawrence, Shaw, and Proust.

ENGL 342 The Literature of Modernism 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
The study of major writers such as Mann, Kafka, Gide, Sartre, Woolf, Joyce, Eliot, Pound, Fitzgerald, Hemingway, O'Neill, and Williams.

ENGL 343 Contemporary Literature 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
A study of major works written since 1950 including selections from American, European, Asian and African writings.

ENGL 344 Contemporary Native American Literature 3.0 CR
Prerequisite: ENGL 201 and 202.
Survey of contemporary works by Native American writers such as Louise Erdrich, Joy Harjo, N. Scott Momaday, Leslie Marmon Silko, James Welch, and others.

ENGL 351 Poetry 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
An intensive study of the forms and techniques used by poets.

ENGL 352 Undergraduate Writers' Workshop: Poetry 3.0 CR
Prerequisite: ENGL 201 and 202 and faculty permission required.
Fees.
Practice in the writing of various poetic structures and close analysis of each student's work.
Special Notes: May be taken up to three times for degree credit.

ENGL 361 The Novel 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
The development of the novel with primary emphasis on major novelists such as Fielding, Richardson, Smollett, Sterne, Dickens, Zola, Dostoevski, Tolstoy, Joyce, James, Faulkner, and Sartre.

ENGL 362 Undergraduate Writers' Workshop: Fiction 3.0 CR
Prerequisite: ENGL 201 and 202 and faculty permission required.
Fees.
Practice in the writing of various fictional structures and close analysis of each student's work.
Special Notes: May be taken up to three times for degree credit.

ENGL 363 The Short Story 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
An examination of the development of the short story as a separate genre and an intensive study of the techniques used by writers in this form.

ENGL 371 Prose Nonfiction 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
A study of the chief forms of prose nonfiction such as formal and informal essay, biography, letter, journal, and review.

ENGL 372 Undergraduate Writers' Workshop: Nonfiction 3.0 CR
Prerequisite: ENGL 201 and 202 and faculty permission required.
Fees.
Writing nonfiction such as formal and informal essay, biography, letter, journal, and review. Critique of student productions.
Special Notes: May be taken up to three times for degree credit.

ENGL 381 Drama 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
An intensive study of the forms and techniques used by dramatists, including significant criticism from Aristotle to the present.

ENGL 382 Undergraduate Writers' Workshop: Drama for Stage and Screen 3.0 CR
Prerequisite: ENGL 201 and 202 and faculty permission required.
Fees.
Study and practice of various dramatic structures for stage and screen. Close analysis of each student's work.
Special Notes: May be taken up to three times for degree credit.

ENGL 383 Film Interpretation 3.0 CR
Fees.
An analysis of the unique "language" and elements of the film medium. Historical and contemporary examples of documentary, short subject, and feature film will be studied.

ENGL 413 Secondary Methods: English 4.0 CR
Prerequisite: Admission to teacher certification, ED 313 and ED 332. Concurrent enrollment in ED 400 required.
Cross-Listed: ED 413.
Approaches to teaching English in the secondary school, including goals for instruction, teaching techniques, and methods of evaluation. Students will be expected to participate in practical, hands-on learning activities to gain experience in planning instruction, using various instructional delivery methods, managing a classroom, and evaluating learning.

ENGL 414 Research Writing 3.0 CR
Prerequisite: ENGL 211 or 212 or 213 or 311.
Technical, specialized exposition, documentation, and research. Concentration on language, style and audience in scholarly articles. Papers in students' fields prepared for conference. Students should have a definite project in mind before enrolling.

ENGL 421 Chaucer 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Major poetry, with emphasis on the Canterbury Tales; a survey of Chaucerian criticism.

ENGL 424 Shakespeare 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Major works and a survey of Shakespearean criticism. Plays covered vary from semester to semester.
Special Notes: May be repeated once for credit with faculty permission.

ENGL 426 Milton 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Major poetry and prose, and a survey of Miltonian criticism.

ENGL 429 Major 20th Century Authors 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
In-depth study of a single author chosen by instructor.

ENGL 435 History of Criticism 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Critical theory from its classical origins to the present.

ENGL 436 Types of Modern Criticism 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Spectrum of major types of criticism practiced in the 20th century.

ENGL 437 Style and Stylistics 3.0 CR
Prerequisite: Faculty permission.
A systematic study of the techniques which characterize good prose and poetry and of the theoretical principles underlying the techniques.

ENGL 440 Topics in 20th Century Comparative Literature 3.0 CR
Prerequisite: ENGL 201 and 202.
Comparative analysis of works from international or other special literatures, such as ethnic American literatures. Selections from literature and contextual readings in poetics and literary history.
Special Notes: May be repeated once for credit with a change of subtitle.

ENGL 450 Linguistics and Language Teaching 4.0 CR
Prerequisite: LING 101.
A survey of linguistics principles and methods for teachers of English, ESL, and other languages. Includes topics such as language structure, language variation, the linguistics of reading, and the linguistics of writing. In addition to class time, requires two hours weekly practicum.

ENGL 452 English Grammar and Language Teaching 4.0 CR
Prerequisite: ENGL 211, 212 or 213.
An exploration of major features of American English grammar for teachers of English, ESL and other languages. Includes topics such as theories about the development of grammar competence, the tense-aspect system, the article system, types of modification, and structures that show relationships between ideas. Emphasis on developing practical teaching techniques. In addition to class time, requires weekly two hour practicum.

ENGL 475 Modern Grammar 3.0 CR
Prerequisite: LING 101 or faculty permission.
An inductive modern linguistic analysis of English emphasizing transformational grammar.
Special Notes: Recommended for students in education with a teaching major or minor in English.

ENGL 476 History of English Language 3.0 CR
Prerequisite: LING 101 is recommended but not required.
Origins and development of the English language from prehistoric times to the present.

ENGL 477 Linguistics and Literature 3.0 CR
Prerequisite: LING 101 and ENGL 201 and 202 or faculty permission.
An analysis of various forms of literature, using the techniques of modern linguistics.

ENGL 486 Adolescent Literature 3.0 CR
Prerequisite: ENGL 201 and 202 or faculty permission.
Reading and evaluation of literature for middle and high school students.

ENGL 487 Standard Written English 3.0 CR
Prerequisite: ENGL 211 or 212 or 213.
Subjects to be covered include the principles of traditional grammar, standard usage, and rhetoric.

ENGL 490 Selected Topics in English 1.0-3.0 CR
Prerequisite: ENGL 201 and ENGL 202.
Current topics in English language and literature, arising from special circumstances of demand or faculty expertise.
Special Notes: May be repeated for a maximum of 6 degree credits with a change of subtitle.

ENGL 499 Thesis Project 3.0 CR
Prerequisite: Faculty permission.
Special Note: May not be repeated for credit.

ENGL 601 Introduction to Graduate Studies in English 3.0 CR
Prerequisite: Graduate standing.
Advanced study and practice of the skills required for graduate studies in English. Involves sophisticated bibliographical research and textual editing, as well as an analysis of the nature and scope of the discipline itself and the languages peculiar to it.
Special Notes: Must be completed before the student advances to candidacy for the M.A.

ENGL 604 Studies in British Women Writers 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in the work of British women writers.
Special Notes: May be repeated once for degree credit with change of subtitle.

ENGL 606 Old English 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Emphasis is on acquiring a basic understanding of the nature and structure of the old English language. Selected prose and verse readings introduce Anglo-Saxon literature and culture.

ENGL 607 Studies in American Literature 3.0 CR
Prerequisite: Graduate standing.
Advanced study of particular topics and issues in American literature. Readings will include not only primary texts but also secondary discussions of theories of American literature and literary history.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 608 Studies in American Women Writers 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in the work of American women writers.
Special Notes: May be repeated once for degree credit with change of subtitle.

ENGL 615 Studies in Medieval Literature 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in medieval western literature.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 620 Studies in Renaissance Literature 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in the literature of the European Renaissance.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 625 Studies in Neoclassical Literature 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in the literature of the late 17th and 18th centuries.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 630 Studies in Literature of Romanticism 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in the literature of the Romantic period.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 636 Studies in Modern Criticism 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in 20th century critical theory and practice.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 637 Studies in Style and Stylistics: Linguistics and Verbal Art 3.0 CR
Prerequisite: Graduate standing.
Critical analysis and practical implementation of various styles and stylistic techniques for manipulating elements of sound, diction, and syntax.

ENGL 640 Studies in Victorian Period 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in the literature of England in the period 1830-1900.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 641 Studies in Modern Literature: 1890-1920 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in the literature of the period 1890-1920.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 642 Studies in Literature of Modernism 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in the literature of the Modernist period 1900-1950.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 643 Studies in Contemporary Literature 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular topics in the literature of the period 1950 to the present.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 650A Creative Writing Internship 3.0 CR
Prerequisite: Must be an MFA candidate nominated by the creative writing faculty.
An internship for students in the Master of Fine Arts program. Students selected for this internship will work with the editors of the Alaska Quarterly Review learning how to produce, manage and edit a nationally recognized literary journal.
Special Notes: May be repeated once for credit.

ENGL 650B Creative Writing Internship 3.0 CR
Prerequisite: Must be an MFA candidate nominated by the creative writing faculty.
An internship for students in the Master of Fine Arts program. Students selected for this internship will work with the editors of the Anchorage Daily News' We Alaskans magazine learning how to report, edit, research and write for that magazine.
Special Notes: May be repeated once for credit.

ENGL 651 Poetry 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular poetic forms, techniques, schools, or traditions.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 652 Graduate Writers' Workshop: Poetry 3.0 CR
Prerequisite: Graduate standing and faculty permission required.
Fees.
Advanced study and practice of the forms and techniques of poetry with close analysis of each student's work.
Special Notes: May be repeated for degree credit.

ENGL 661 Studies in the Novel 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of particular novel forms, techniques, schools, or traditions.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 662 Graduate Writers' Workshop: Fiction 3.0 CR
Prerequisite: Graduate standing and faculty permission required.
Fees.
Advanced study and practice in the writing of various fictional forms with close analysis of each student's work.
Special Notes: May be repeated for degree credit.

ENGL 663 Studies in the Short Story 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of the formal requirements and varieties of the short story genre.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 671 The Study of Nonfiction Prose 3.0 CR
Prerequisite: Graduate standing or faculty permission.
A study of the chief forms of nonfiction prose: formal and informal essay, biography, memoir, letter, journal, and review.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 672 Graduate Writers' Workshop: Prose Nonfiction 3.0 CR
Prerequisite: Graduate standing and faculty permission required.
Fees.
Advanced study and practice of the forms and techniques of nonfiction prose with close analysis of each student's work.
Special Notes: May be repeated for degree credit.

ENGL 681 Studies in Drama 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Advanced study of dramatic forms, techniques, schools and traditions.
Special Notes: May be repeated once for degree credit with a change of subtitle.

ENGL 682 Graduate Writers' Workshop: Drama for Stage and Screen 3.0 CR
Prerequisite: Graduate standing and faculty permission required.
Fees.
Advanced study and practice of various dramatic structures of stage and screen with close analysis of each student's work. Emphasis will be on the process of developing work for production.
Special Notes: May be repeated for degree credit.

ENGL 687 English Teaching Assistant Internship 3.0 CR
Prerequisite: Admission to the teaching assistant program.
Grading Policy: Pass/No Pass.
Internship in teaching freshman composition, including an orientation to composition theory and practice, supervised classroom teaching. Students will participate in the orientation and teach two sections of English 111.

ENGL 698 Individual Research 1.0-6.0 CR
Prerequisite: Faculty permission.

ENGL 699 Thesis 1.0-6.0 CR
Prerequisite: Faculty Permission.

EQE: ENVIRONMENTAL QUALITY ENGINEERING

Offered through the School of Engineering, Engineering Building (ENGR), Room 201, 786-1900

EQE 601 Environmental Quality Science Measurements 3.0 CR
Prerequisite: Faculty permission.
Fees.
Theory and laboratory procedures for determining quality of water supplies. Natural water quality, pollution loads and water and wastewater treatment plant parameters. Familiarization with "Standard Methods for Examination of Water and Wastewater." Experiments on unit processes of treatment systems are included along with consideration for solid waste and air pollution monitoring.
Special Notes: EQE sequence repeats every three semesters.

EQE 602 Water Quality Management 3.0 CR
Prerequisite: Faculty permission.
Fees.
Concepts, rationale, theory, institutions and engineering aspects of water quality management. Methods of water quality management; low flow augmentation; in-stream aeration; stream and estuarine analysis; ocean disposal systems; diffuser analysis and design; control of thermal effluents, industrial discharges and arctic applications.
Special Notes: EQE sequence repeats every three semesters.

EQE 603 Solid Waste Management 3.0 CR
Planning, collecting and disposing of solid waste; techniques of collection, transportation, disposal and resource recovery; solid waste environmental regulations and relationships to water, air, and land pollution; hazardous waste management.
Special Notes: EQE sequence repeats every three years.

EQE 604 Environmental Quality Evaluation 3.0 CR
Prerequisite: Graduate standing and faculty permission.
Fees.
Topics of environmental impact statements, environmental law (local, state, and federal), and environmental quality. Impact from projects of mining, highways, airports, pipelines, industrial development, water, wastewater and solid waste, and other theoretical considerations and case studies.
Special Notes: EQE sequence repeats every three semesters.

EQE 605 Chemical and Physical Water and Wastewater Treatment Processes 3.0 CR
Prerequisite: Graduate standing and faculty permission.
The theory and design of chemical and physical unit processes utilizing the treatment of water and wastewater. Sedimentation and flotation, ion exchange, adsorption, coagulation, precipitation, filtration, disinfection, reverse osmosis and aeration theories will be studied. Design problems for all unit processes.
Special Notes: EQE sequence repeats every three semesters.

EQE 606 Biological Treatment Processes 3.0 CR
Prerequisite: Graduate standing and faculty permission.
Fees.
Study of the theoretical and biological processes including activated sludge, trickling filters, lagoons, sludge digestion and processing, septic tanks, analysis and design, nutrient removal processes, biology of polluted waters, economics, state and federal regulations.
Special Notes: EQE sequence repeats every three semesters.

EQE 608 Fundamentals of Air Pollution 3.0 CR
Prerequisite: Graduate standing and faculty permission.
Fees.
Basic air pollution terms and their definitions. Sources and effects of air pollution. Meteorology and its relationship to air pollution. Pollution modeling and prediction. Combustion generated air pollution. Energy and air pollution. Regulations at the federal, state, and local levels. Indoor air quality.
Offered fall semesters of odd years.

EQE 609 Measure and Control of Air Pollution 3.0 CR
Prerequisite: EQE 608.
Fees.
Review of fundamental concepts of air pollution. Ambient air sampling methodology. Stationary source sampling for particulate pollutants. Summary of federal source sampling protocols. Particulate emission control technology. Gaseous emission control technology. Control of combustion processes. Toxic and hazardous air pollutants. Incineration of toxic and hazardous wastes. Risk assessments. Air pollution in Alaska.
Offered spring semesters of even years.

EQE 610 Environmental Ethics for Engineers 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Fees.
Introduces environmental ethics for practicing engineers. How environmental laws and regulations fit into these ethics. Professional ethics and public environmental policy discussions and case studies.

EQE 611 Biology of Water Quality 3.0 CR
Fees.
Concepts of water and wastewater biology including effects of land use practices, industrial/commercial development and other cultural effects. Topics include taxonomy of wastewater and indicator species, cellular chemical composition, microbial metabolism, interaction and growth kinetics as used by engineers in assessment of aquatic water quality. Applications of biotic distributions as assessment tools are explored as evaluation tools in measurement of environmental impact effects.

EQE 612 Restoration of Aquatic Systems 3.0 CR
Prerequisite: Faculty permission.
Fees.
Review of theory and application of remediation techniques for aquatic systems. Methods and techniques for remediation of lakes, rivers, and wetlands utilized by environmental engineers and scientists. Response of aquatic systems to remediation efforts following contamination by conventional pollutants, hazardous wastes, and other contaminants. Examination of criteria to determine end-point of recovery.

EQE 684 EQE Project 3.0 CR
Arranged between the advisor and the student. Generally the student has been admitted to candidacy for the master's degree and a project committee is formed. The student must take an oral exam defending the project.

EQE 698 Individual Research 1.0-6.0 CR
Prerequisite: Faculty permission.
A course to be designed between the student and faculty member to allow the students a chance to pursue special advanced interests in Engineering at the M.S. level.

EQE 699 Thesis 1.0-6.0 CR
Arranged between the advisor and the student. Generally the student has been admitted to candidacy for the Master's degree and a thesis committee is formed. The student must take an oral exam defending the thesis.

ES: ENGINEERING SCIENCE

Offered through the School of Engineering, Engineering Building (ENGR), Room 201, 786-1900

ES 103 Engineering Graphics 3.0 CR
Prerequisite: Open only to students who have been accepted into the undergraduate engineering program.
Fees.
Introduction to use of AutoCAD as a tool for engineering graphics. Orthographic projections, auxiliary views, sectional views, dimensioning. Development of detail and working drawings. Three-dimensional modeling. One moderate scale design project required.
Special Notes: Offered fall and spring semesters.

ES 111 Engineering Science 3.0 CR
Prerequisite: High school algebra and trigonometry or concurrent enrollment in MATH 200 required.
Fees.
A survey of engineering science and problem solving techniques, including static and dynamic equilibria, presentation of results, and engineering ethics. Students will be introduced to the use of computers and will participate in a design project.
Offered fall and spring semesters.

ES 201 Computer Techniques 3.0 CR
Prerequisite: MATH 107, 108 or concurrent enrollment in MATH 200 required.
Fees.
An introduction to programming and analysis using FORTRAN. Computer solution of problems in engineering and physics. Micro-computer and programmable calculator applications.
Offered fall and spring semesters.

ES 209 Engineering Statics 3.0 CR
Prerequisite: ES 111 or PHYS 211 and MATH 201.
Vector quantities, equilibrium including friction forces, structural mechanics, center of gravity, and moments of inertia are considered.
Offered fall semesters.

ES 210 Engineering Dynamics 3.0 CR
Prerequisite: ES 209.
Kinematics and kinetics of particles and rigid bodies are studied. Newton's law of motion, momentum and work and energy concepts are studied.
Offered spring semesters.

ES 301 Engineering Analysis 3.0 CR
Prerequisite: ES 201 and MATH 302.
Fees.
Application of mathematical tools to engineering with emphasis on mathematical formulation of typical engineering problems. Selected topics from all fields of engineering.
Offered fall semesters.

ES 309 Elements of Electrical Engineering 3.0 CR
Prerequisite: PHYS 212.
Electrical fundamentals: elementary circuits and theorems, transformers, motors (AC and DC). Elements of power systems: generation, transmission, distribution, load centers, overload protection, power factor; amplifiers, instrumentation components and systems.

ES 331 Mechanics of Materials 4.0 CR
Prerequisite: ES 209.
Stress-strain relations, torsion, review of shear and bending moments diagrams for beams, flexural and shearing stresses, buckling of columns, elementary design of beams and columns, combined stresses, welded, riveted and bolted connections.

ES 341 Fluid Mechanics 4.0 CR
Prerequisite: ES 210 and MATH 201.
Fees.
Statics and dynamics of fluids. Basic equations of hydrodynamics, dimensional analysis, and simple hydraulic machinery.
Offered fall semesters.

ES 346 Basic Thermodynamics 3.0 CR
Prerequisite: MATH 202 and PHYS 212.
Systems, properties, processes, and cycles. Fundamental principles of thermodynamics (first and second laws), and elementary applications.
Offered spring semesters.

ESL : ENGLISH-AS-A-SECOND LANGUAGE

Offered through the College of Arts and Sciences, Classroom Building (K), Room 222B, 786-1552/1731

ESL 061 Intermediate ESL 3.0 CR
Prerequisite: Satisfactory score on ESL Placement Test and interview.
For students at the intermediate level of English knowledge. Review the basic grammatical components of English, learn and practice listening skills, add words and idiomatic expressions to their vocabularies, learn and practice spelling rules. Covers writing as a process, gain phone skills and receive practice in using the library.
Offered at Kenai Peninsula College only.

ESL 066 ESL through Newspapers 1.0-4.0 CR
Prerequisite: Faculty permission.
Fees.
For ESL students of varied skill levels. Using newspapers to practice listening, speaking, reading, writing, and other skills. Some individual instruction.
Special Notes: May be taken for up to 4 credits in one semester and for up to 12 credits altogether.
Offered summer semesters.

ESL 070 ESL Reading and Composition I 1.0-4.0 CR
Prerequisite: ESL 062 or satisfactory score on ESL Placement Test.
Fees.
For intermediate ESL students. Reading, discussion, and vocabulary on topics of current interest. Learning to write paragraph-length compositions. Required homework and language lab work.
Special Notes: May be taken for up to 4 credits in one semester and for up to 8 credits altogether.

ESL 071 Pronunciation I 1.0-3.0 CR
Prerequisite: Satisfactory score on ESL Interview Level III.
Fees.
For intermediate ESL students. Practice of vowel and consonant sounds in casual and formal English. Emphasis on natural pronunciation, stress, phrase, and intonation patterns. Required homework and language lab work.
Special Notes: May be taken for up to 3 credits in one semester and for up to 6 credits altogether.

ESL 072 ESL Reading and Composition II 1.0-4.0 CR
Prerequisite: ESL 070 or satisfactory score on ESL Placement Test.
Fees.
For advanced ESL students. Longer, more difficult reading, discussion and vocabulary on topics of current interest. Learning to write short essays. Required homework and language lab work.
Special Notes: May be taken for up to 4 credits in one semester and for up to 8 credits altogether.

ESL 073 Pronunciation II 1.0-3.0 CR
Prerequisite: ESL 071 or satisfactory score on ESL Placement Test.
Fees.
For advanced ESL students. Practice of more complex vowel and consonant sounds, stress, phrase, and intonation patterns in casual and formal American English. Emphasis on relationships between pronunciation, spelling, and grammar. Required homework and language lab work.
Special Notes: May be taken for up to 3 credits in one semester and for up to 6 credits altogether.

ESL 075 Vocabulary Development I 1.0-4.0 CR
Prerequisite: ESL 072 or satisfactory score on ESL Placement Test.
Fees.
For intermediate ESL students. Instruction in different methods of acquiring informal and semiformal vocabulary. Emphasis on two-word verbs, link words, and popular idioms. Required homework and language lab work.
Special Notes: May be taken for up to 4 credits in one semester and for up to 8 credits altogether.

ESL 076 Vocabulary Development II 1.0-4.0 CR
Prerequisite: ESL 075 or satisfactory score on ESL Placement Test.
Fees.
For advanced ESL students. Instruction in different methods of acquiring formal vocabulary. Emphasis on the central idea method, roots, prefixes, and suffixes (combining forms). Required homework and language lab work.
Special Notes: May be taken for up to 4 credits in one semester and for up to 8 credits altogether.

ESM: ENGINEERING AND SCIENCE MANAGEMENT

Offered through the School of Engineering, Engineering Building (ENGR), Room 201, 786-1900

ESM 401 Cost Estimating 3.0 CR
Prerequisite: ESM 450.
Fees.
Principles, practices and procedures used in the preparation of engineering cost estimates. Exposition of the basic concepts and steps required to develop engineering type, labor and material based, and parametic cost estimates. Preparation of cost proposals and study of bidding procedures.
Special Notes: Stacked with ESM 610.

ESM 450 Economic Analysis and Operations 3.0 CR
Fees.
Fundamentals of engineering economy, project scheduling, estimating, legal principles, professional ethics, and human relations.
Special Notes: Not offered for credit toward the Master of Science in engineering management or science management.
Offered spring semesters.

ESM 601 Engineers in Organizations 3.0 CR
Prerequisite: B.S. degree in engineering or in a physical science or faculty permission.
Fees.
Development of organizations and techniques appropriate to managing engineering and scientific effort. Included will be a study of engineering and scientific activity and personnel in order to organize, motivate, evaluate, develop, and coordinate for maximum effectiveness, with due consideration to the goals of individuals.

ESM 602 Marketing for ESM 3.0 CR
Prerequisite: B.S. degree in engineering or in a physical science or faculty permission.
Fees.
Marketing of professional services and technical products, including new business development, proposal writing, bid preparation, and advertising for complex engineering and scientific products.

ESM 605 Engineering Economy 3.0 CR
Fees.
The science of fiscal decision making. Graduate level studies in problems of replacement, economic selections, income tax accounting, engineering evaluation and introduction to the problems of depreciation.

ESM 606 Advanced Engineering Economy 3.0 CR
Prerequisite: ESM 605 or undergraduate course in engineering economy.
Fees.
Case studies and research problems in engineering economy. Examples in the following areas will be included: present worth, internal rate of return, public projects, mutually exclusive alternatives, capital budgeting, income taxes, inflation and geometric gradients, uncertainty, replacement and retirement, and sources of funds.

ESM 608 **Legal Environment for Engineering Management** **3.0 CR**

Fees.

Devoted to those aspects of law specifically related to technical management: contracts, sales, real property, business organization, labor, patents, and insurance.

ESM 609 **Project Management** **3.0 CR**

Fees.

Organizing, planning, scheduling, and controlling projects. Use of CPM and PERT; computer applications. Case studies of project management problems and solutions.

ESM 610 **Cost Estimating** **3.0 CR**

Prerequisite: B.S. degree in engineering or in a physical science or faculty permission.
Fees.

Principles, practices and procedures used in the preparation of engineering cost estimates. Exposition of the basic concepts and steps required to develop engineering type, labor and material based, and parametric cost estimates. Preparation of cost proposals and study of bidding procedures. Students will manage the student project teams, prepare a research paper, and make a class presentation.
Special Notes: Stacked with ESM 401.

ESM 611 **Cost and Managerial Accounting** **3.0 CR**

Prerequisite: B.S. degree in engineering or in a physical science or faculty permission.
Fees.

Designed to prepare engineers and scientists to use basic and cost accounting data effectively in managing engineering and scientific effort.

ESM 613 **Management of Technical People** **3.0 CR**

Prerequisite: B.S. degree in engineering or in a physical science or faculty permission.

Human factors with which engineers and scientists will be involved in the work place. Includes labor and union concerns, human relations as a major factor in supervision, and other problems of the engineer or scientist in working with people.

ESM 617 **Technical Policy and Strategy** **3.0 CR**

Prerequisite: 9 credits in management and fiscal areas of ESM program or 9 credits beyond foundation courses in MBA program, or faculty permission.
Cross-Listed: BA 617.
Fees.

Issues and case studies of policy development, strategy, planning and management of technology in the overall corporate environment.

ESM 619 **Computer Simulation of Systems** **3.0 CR**

Prerequisite: BA 602 or ESM 620 or faculty permission.
Cross-Listed: BA 619.
Fees.

Intensive study of simulation concepts and methods, introduction to major simulation languages. Survey of simulation applications in various disciplines.

ESM 620 **Statistics for ESM** **3.0 CR**

Prerequisite: Undergraduate statistics course or faculty permission.
Fees.

Development of an overall perspective on the role of statistics within the framework of engineering and management decision making. Includes the use of statistical software.

ESM 621 **Operations Research** **3.0 CR**

Prerequisite: Undergraduate probability and statistics course.
Fees.

Mathematical techniques for aiding managerial decision making. Topics will include waiting line theory, inventory models, linear programming, transportation problems, dynamic programming, PERT/CPM, markov chains, and simulation. The emphasis is on the application of techniques to engineering management situations.

ESM 622 **Management Decisions under Uncertainty** **3.0 CR**

Prerequisite: Background in probability theory and proficiency in use of computer for spreadsheet analysis.
Fees.

Decision theory, risk and uncertainty, value of information, preference measurements, prioritization of alternatives, multiple objectives and hierarchical decisions. Case studies are incorporated into lectures.

ESM 684 **ESM Project** **3.0 CR**

Individual study of an actual engineering or science management problem, resulting in a report which includes recommendations for action.
Offered fall, spring, and summer semesters.

ESM 699 **ESM Thesis** **1.0-9.0 CR**

ET: ELECTRONICS TECHNOLOGY

Offered through the College of Career and Vocational Education, Gordon Hartlieb Building (GHB), Room 106, 786-1171

ET 060 **Modern Electronics** **2.0 CR**

Electronics course for students not specializing in electronics. Develops appreciation and basic understanding of modern electronics. Covers logically connected topics relevant to non-specialists without rigorous mathematical approach.

ET 101 **Basic Electronics: DC Physics** **4.0 CR**

Prerequisite: MATH 055 or equivalent.

Course assumes no previous knowledge of electronics and prepares the student for further study. Subjects included are basic physics of electricity, direct current and practices, magnetism, and use of test equipment. Two hours lab per week.
Offered at Kenai Peninsula College only.

ET 102 **Basic Electronics: AC Physics** **4.0 CR**

Prerequisite: ET 101.

Principles of alternating current, vectors, phase relationships, inductive and capacitive reactance and impedance. AC circuit analysis, series and parallel resonant circuits, transformers, and network analysis. Two hours lab per week.
Offered at Kenai Peninsula College only.

ET 103 **Electronic Calculations I** **4.0 CR**

3-hours lecture and 2-hours lab per week. Teaches calculation skills necessary to succeed in DC circuits. Numeric systems (binary, octal, hex), arithmetic, logarithms, and algebraic operations. Required lab practice of calculations taught in lectures.

ET 104 **DC Circuits** **4.0 CR**

Prerequisite: Concurrent enrollment in ET 106 required.

4-hours lecture per week. Principles of direct current electricity. Covers atomic structure, Ohm's law, Kirchhoff's laws, series circuits, parallel circuits, series-parallel circuits, network theorems, electronic meter theory, basic semiconductor theory, voltage sources. Emphasis on circuit analysis and problem solving.

ET 105 **Introduction to Computer Electronics** **4.0 CR**

Prerequisite: High school math and reading skills.
Fees.

3-hours lecture and two-hours lab per week. Introduces basic concepts of computer systems, and develops both operating and programming skills. Covers microcomputer systems and applications, computer related math and number systems, microcomputer operating systems, and assembly language programming. Completion of one or more machine or assembly language programs.

ET 106 **Electronics Laboratory I** **4.0 CR**

Prerequisite: Concurrent enrollment in ET 104 required.
Fees.

2-hours lecture and 4-hours lab per week. Class covers electronic experiments and projects for ET 104—DC Circuits. Familiarizes students with basic test equipment, soldering techniques, and personal safety. Lab experiments in voltage sources, current flow, resistance and projects involving series, parallel, and series-parallel circuits.

ET 111 **Electronics Laboratory II** **4.0 CR**

Prerequisite: Concurrent enrollment in ET 125 required.

Two semester hour laboratory class covering experiments and projects for AC Physics. This class will provide the student with the physical skills necessary for the study of alternating-current physics. Lab experiments in frequency measurement, AC voltage measurement, voltage-current phase angle, time constant, and resonant circuit will be covered.
Offered at Matanuska-Susitna College only.

ET 120 **Motors and Controls** **3.0 CR**

Cross-Listed: RH 120 and AGRI 133.

Provides understanding of principles of operation of motors, generators, transformers, and motor control apparatus. Study of definitions, symbols, diagrams, and illustrations gives a sound background in the language and basic principles associated with electricity, electrical equipment, electrical apparatus and electrical code principles.
Offered at Matanuska-Susitna College only.

ET 122 **Introduction to Electronic Devices** **3.0 CR**

Prerequisite: ET 125 or faculty permission.

A study of vacuum tube and solid state devices. Physics, construction, characteristics, parameters, application, and limitations are covered.
Offered at Matanuska-Susitna College only.

ET 123 **Electronic Circuit Fundamentals** **3.0 CR**

Prerequisite: ET 122 or faculty permission.

An analysis of basic electronic circuits. Power supplies, amplifiers, and oscillators. Operational and failure analysis of basic circuits, with troubleshooting procedures for each type.
Offered at Matanuska-Susitna College only.

ET 124 Electronic Calculations II 4.0 CR
Prerequisite: ET 103, 104, 105 and 106.
4-hours lecture per week. Covers Boolean algebra, trigonometry, graphs, analytic geometry, waveform analysis, and decibel (db) calculations. Lab consists of calculation practice necessary to master AC Physics course.

ET 125 AC Circuits 4.0 CR
Prerequisite: ET 103, 104, and 106.
3-hours lecture and 2-hours lab per week. Covers principles of alternating current and voltages through linear amplifiers, magnetics, impedance, circuits, resonance, filters, and basic power supplies. Lab consists of designing, constructing, and measuring circuits to reinforce theory covered in lectures.

ET 126 Principles of Logic and Gating 4.0 CR
Prerequisite: ET 104 and 105 recommended.
Fees.
4-hours lecture per week. Lab projects are assigned to be completed outside of class. Lecture covers number systems, basic logic circuits, digital switches, arithmetic circuits, registers, timing and counter circuits, displays, multiplexing and demultiplexing, D/A and A/D, and basic semiconductor memory circuits.

ET 127 Microprocessor Fundamentals 3.0 CR
Prerequisite: ET 126 or faculty permission.
Microprocessor theory and operation; topics covered include basic microprocessor architecture, how to program a microprocessor, how to interface a microprocessor to other equipment, and troubleshooting microprocessor circuits and systems.
Offered at Matanuska-Susitna College only.

ET 128 Solid State Electronics: Theory and Laboratory 4.0 CR
Prerequisite: ET 103, 104 and 106.
Fees.
3-hours lecture and 3-hours lab per week. Familiarizes students with AC measuring techniques and AC test equipment. Includes technical characteristics of bipolar transistors and diodes. Practice in advanced soldering and desoldering techniques.

ET 151 Basic Electricity 4.0 CR
Prerequisite: MATH 055 or equivalent.
A first course in electricity for the non-electronics major. Covers basic DC and AC theory including series, parallel, and series-parallel circuits, reactance, impedance and selected circuit analysis techniques. This lab will emphasize practical measurement with meters and oscilloscopes.
Offered at Kenai Peninsula College only.

ET 175 Technical Introduction to Microcomputers 3.0 CR
Provides the student with a survey of the field of microcomputers from a technical viewpoint. Coverage includes terminology, number systems, basic microcomputer architecture, assembly language programming, and MS/DOS operating system.
Offered at Kenai Peninsula College only.

ET 200 Residential Wiring 3.0 CR
Designed for those who want to wire their own homes or just understand more about electrical wiring. AC and DC theory, practical wiring including feeder and branch circuits, low-voltage wiring and alarm systems.
Offered at Kenai Peninsula College only.

ET 205 Transmitter Circuitry 3.0 CR
Prerequisite: ET 215 or faculty permission.
Methods and techniques used in the transmission of intelligence by AM, FM, and SSB radio propagation. The study of circuitry and antennas designed to modulate and transmit AM, FM, and SSB transmitters. Alignment and troubleshooting of AM, FM, and SSB transmitters.
Offered at Matanuska-Susitna College only.

ET 207 Rotating Machinery 3.0 CR
Prerequisite: ET 102.
Theory of operation of DC motors and generators, AC single-phase motors and generators, and AC poly-phase motors. Course includes operating characteristics of the devices and stresses application.
Offered at Kenai Peninsula College only.

ET 209 Receiver Circuitry 3.0 CR
Prerequisite: ET 205 or faculty permission.
Methods and techniques used in the reception, demodulation, detection, and reproduction of radio intelligence transmitted by AM, FM, and SSB. Block diagram and schematic interpretation of AM, FM, and SSB receivers. Alignment and troubleshooting procedures used in AM, FM, and SSB receivers.
Offered at Matanuska-Susitna College only.

ET 211 Amplifiers 3.0 CR
Prerequisite: ET 123 or faculty permission.
Amplifier theory, operation, and troubleshooting: topics covered will include the theory and operation of audio and video amplifiers, and power amplifiers. The student will use representative equipment to perform tests and alignments and troubleshoot malfunctioning equipment.
Offered at Matanuska-Susitna College only.

ET 215 Modulation, Mixing, and Detection 3.0 CR
Prerequisite: ET 211 or faculty permission.
Modulation and frequency conversion theory: topics covered will be frequency and time domain analysis; AM and FM modulation theories; principles of frequency conversion; and recovering intelligence from modulated waves.
Offered at Matanuska-Susitna College only.

ET 220 Wideband Systems I 3.0 CR
Prerequisite: ET 209 or faculty permission.
Television as a system. Introduction to video systems, including transmission, reception and system alignment.
Offered at Matanuska-Susitna College only.

ET 221 Wideband Systems II 3.0 CR
Prerequisite: ET 220 or faculty permission.
Introduction to vacuum tube and solid state color television circuits. Includes mechanical and electrical setups for television and color troubles not related to black-and-white television.
Offered at Matanuska-Susitna College only.

ET 225 Principles of Microwave Electronics 3.0 CR
Prerequisite: ET 221 or faculty permission.
Course in microwave electronics for the technician. Theory of wave propagation, microwave oscillators, and basic transmitting and receiving systems for radar and telecommunications.
Offered at Matanuska-Susitna College only.

ET 226 Industrial Electronics 3.0 CR
Prerequisite: ET 225 or faculty permission.
Introduction to the use of industrial electronics circuits and equipment. Theory of operation, magnetic amplifiers, motor speed controls, voltage and current control in DC and AC generators, synchro and servo systems, and large current poly-phase rectifiers.
Offered at Matanuska-Susitna College only.

ET 230 Telecommunications 4.0 CR
Prerequisite: ET 124, 125, 126, and 128.
Fees.
3-hours lecture and 2-hours lab per week. Prepares student electronic technicians to understand operation, construction, and maintenance of telephone sets, cables, and switching systems. Includes systems operation, 500-d telephone set, cable code distribution, characteristic impedance, decibel and x-y switching systems, frequency and time division multiplex, and principles of microwave transmission. Lab projects on telephone equipment.

ET 231 Audio 4.0 CR
Prerequisite: ET 124, 125, 126, and 128.
3-hours lecture and 2-hours lab per week. Presents circuitry and practical experience in troubleshooting audio home entertainment equipment. Includes audio amplifiers, transducers, tape recorders, phonographs, and electronically regulated power supplies. Lab projects using typical equipment.

ET 232 Applied ICs 4.0 CR
Prerequisite: ET 124, 125, 126, and 128.
Fees.
3-hours lecture and 2-hours lab per week. Study of ideal operation amplifier circuits. Covers amplification, generation of sinusoidal and special application waveforms, active filters, power supply regulation, and circuit timers. Lab projects using appropriate equipment.

ET 233 Computer Systems I 4.0 CR
Prerequisite: ET 105 and ET 126 or equivalent industrial experience. College level reading skills required as well as sufficient manual dexterity to make precision measurements.
Fees.
3-hours lecture and 2-hours lab per week. Microcomputer architecture based on 8080 S100 system. MPU architecture, memory types, and standard I /O theory. Observation of electronic signals, troubleshooting and CP/M patches.

ET 240 Application of Integrated Circuits 3.0 CR
Prerequisite: ET 126.
Coverage includes characteristics and interfacing information on DTL, TTL, and CMOS devices with emphasis on MSI and LSI chips. Microprocessor interfacing conversion will be covered.
Offered at Kenai Peninsula College only.

ET 241 Microcomputer Interfacing 3.0 CR
Prerequisite: ET 175 and ET 240.
Deals with the problems of communication between the computer operating system environment and the real-time, outside world. Specifically includes serial

communication, analog/digital and digital/analog conversions, discrete input/output multiplexing, and bus architecture.
Offered at Kenai Peninsula College only.

ET 242 Computer Peripheral Devices 4.0 CR
Prerequisite: ET 240.
Instruction in the maintenance and calibration of computer peripherals including floppy disk drives, printers, hard disk drives and terminals. Use of specialized test equipment will be covered.
Offered at Kenai Peninsula College only.

ET 245 Basic Electronics 4.0 CR
Prerequisite: ET 101 or ET 151.
Gives the student a broad background in semiconductor devices. Coverage includes diodes, transistors, FETs and operational amplifiers. The lab will emphasize troubleshooting techniques of practical semiconductor circuits.
Offered at Kenai Peninsula College only.

ET 246 Electronic Industrial Instrumentation 3.0 CR
Prerequisite: ET 245. Corequisite of MATH 101/105.
Explains the methods of analog electronic signal transmission. In addition, discusses the details of several actual pieces of equipment in-depth providing practice in establishing correct interconnectors. Basic concepts used in troubleshooting this type of equipment are also introduced.
Offered at Kenai Peninsula College only.

ET 250 Transmitters and Receivers 4.0 CR
Prerequisite: ET 230, 231, and 232.
Fees.
Methods and techniques used in transmission and reception of AM, SSB, and FM signals. Aligning and troubleshooting equipment. Block diagram and schematic interpretation, and use in troubleshooting.

ET 251 Video Systems Analysis 4.0 CR
Prerequisite: ET 230, 231, and 232.
An introduction to video systems, including television transmission and reception, computer monitors, and video recording principles. Emphasis is on diagnosing and repairing video equipment in the laboratory.

ET 252 Computer Systems II 4.0 CR
Prerequisite: ET 105, 126, and 233.
Fees.
Survey of microcomputers as applied to measurement and control of areas of selected emphasis. Topics include sensors and control devices, control theory, digital and analog process control. Experiments with selected sensors, stepper motors, D/A and A/D converters.

ET 253 Computer Systems III 4.0 CR
Prerequisite: ET 230, 231, 232, and 233.
Fees.
Microcomputer interfacing to standard peripheral equipment. Includes parallel and serial interfacing methods, transmission characteristics, multi-user architecture, and interfacing to auxiliary memory systems. Labs on parallel and serial interfacing with associated operating systems patches.

ET 290 Electrical Code 3.0 CR
Prerequisite: ET 151.
Introduces the student to the arrangement and application of the National Electrical Code. Feeder, distillation, and branch circuit calculations are covered. Wiring methods for hazardous locations are discussed and transformer and motor circuits are considered.
Offered at Kenai Peninsula College only.

ET 295 Electronics Technician Internship 1.0-3.0 CR
Prerequisite: Sophomore standing in the ET Program.
Grading Policy: Pass/No Pass.
Places students in generalized and specialized electronics positions related to student educational program and occupational objectives. Direct supervision by position supervisor and program faculty. Five student involvement hours with instructor plus 80 employment hours per credit.

ET 340 Digital Systems 4.0 CR
Prerequisite: ET 125, AT 274 or ES 309 or equivalent, and PHYS 110 or equivalent.
This course covers the fundamentals of design, selection, installation, operation, servicing, troubleshooting and repair of digital systems from logic and gating circuits through microprocessors and analog/digital interfacing.

ET 420 Applied Electronic Instrumentation 4.0 CR
Prerequisite: ET 125, AT 274 or ES 309 or equivalent, and PHYS 110 or equivalent.
Fees.
This course covers fundamentals of design, selection, installation, operation, servicing, troubleshooting and repair of electrical and electronic instrument systems.

ETT: EMERGENCY TRAUMA TECHNICIAN

Offered through the College of Career and Vocational Education, Gordon Hartlieb Building (GHB), Room 111, 786-1184

ETT 110 Emergency Trauma Technician 4.0 CR
Fees.
Alaska state certified basic emergency medical course beyond advanced first aid. The course emphasizes prevention, assessment, and care of injury and illness commonly encountered in both urban and rural settings.

FL : FOREIGN LANGUAGES

Offered through the College of Arts and Sciences, Department of Languages, Beatrice McDonald Building (BMB), Room 218, 786-1677

SELF-STUDY IN LANGUAGES

For those students who are highly motivated and capable of consistent effort without the reinforcement of a traditional classroom setting, a one-year self-study program by means of audio cassettes and books is available in some languages not otherwise offered at UAA. Students interested in this program should contact the Department of Languages, BMB 218, 786-1677, to find out which languages may be studied in this manner and which faculty member may be available to supervise their studies.

FL 101 Language Self-Study I 3.0 CR
Prerequisite: Some prior experience with learning a language other than one's native language.
Grading Policy: Pass/No Pass.
Fees.
Introduction to another language, its basic vocabulary and grammar, dialogues and phrases for survival in its cultural environment, by means of audiocassettes and workbooks. Oral facility is stressed, and reading and writing skills practiced primarily to enhance oral language development.
Special Notes: May be repeated for credit if language varies. Available in Danish (FL 101A), Finnish (FL 101B), Norwegian (FL 101C), and Swedish (FL 101D).

FL 102 Language Self-Study II 3.0 CR
Prerequisite: FL 101 in the specific language.
Grading Policy: Pass/No Pass.
Fees.
Continuation of FL 101 . Continued study of another language, its vocabulary and grammar, dialogues and phrases for survival in its cultural environments, by means of audiocassettes and workbooks. Oral facility is stressed, and reading and writing skills practiced primarily to enhance oral language development.
Special Notes: May be repeated for credit if language varies. Available in Danish (FL 102A), Finnish (FL 102B), Norwegian (FL 102C), and Swedish (FL 102D).

FL 400 Literature in Translation 3.0 CR
Selected readings in translation of works in a language other than English. May be a survey of a national literature, a genre course or be limited to one author or a group of authors. Students who speak the language of the original works may read them in the original but lectures and class discussion will be conducted in English.
Special Notes: May be repeated for credit with a change of subtitle. See schedule for specific offerings.

FL 476 Instructional Strategies in the Language Classroom 3.0 CR
Prerequisite: Basic fluency in a foreign language, actual or prospective teacher certification.
Cross-Listed: ED 476.
Instructional strategies of the language classroom which reflect the current emphasis on oral language acquisition and a multisensory approach to learning a Second-Language. Students develop their own activities in the appropriate target language.

CHIN: CHINESE

CHIN 101 Elementary Chinese I 4.0 CR
Fees.
Designed to teach students Mandarin Chinese, Pu-Tong Hua or Guo Yu, utilizing the Beijing Pinyin Latinized phonetic systems. Utilizes a practical approach to language instruction. Experiences in reading and writing the simplified characters as well as cross-cultural activities, e.g., guest speakers and field trips to attend activities with the Chinese community.

CHIN 102 Elementary Chinese II 4.0 CR
Prerequisite: CHIN 101 or faculty permission.
Fees.
A continuation of CHIN 101. Teaches conversational Chinese with Beijing Pinyin phonetized system and the simplified Chinese characters. Prepares one to transfer reading skills from Latinized Pinyin to the characters. Beginning composition of basic conversations, stories, and simple speech scripts in Chinese taught throughout the class.

CHIN 201 **Intermediate Chinese I** **4.0 CR**
Prerequisite: CHIN 102 or faculty permission.
Fees.
Continued training in conversation, grammar, and reading/writing simplified Chinese characters. Emphasis on everyday speech patterns and vocabulary development. Use of language lab required.

FREN: FRENCH

FREN 101 **Elementary French I** **4.0 CR**
Fees.
Introduction to the French language. This course presents the alphabet, basic phonetics, and fundamentals of grammar, and goes on to cover the regular and irregular verb conjugation of the present and past tenses. It includes basic vocabulary, cognates and idiomatic expressions. Oral exercises and repetition are emphasized to obtain correct pronunciation.

FREN 101E **Elementary French I** **3.0 CR**
Fees.
Introduction to the French language. This course presents the alphabet, basic phonetics, and fundamentals of grammar, and goes on to cover the regular and irregular verb conjugation of the present and past tenses. It includes basic vocabulary, cognates and idiomatic expressions. Oral exercises and repetition are emphasized to obtain correct pronunciation.
Special Notes: Offered at Extended Colleges only.

FREN 102 **Elementary French II** **4.0 CR**
Prerequisite: FREN 101 or equivalent.
Fees.
Continuing study of grammar and vocabulary. The conjugation of the remaining verbal forms: imperfect, future, conditional and various compound tenses will be studied as well as the imperative and the subjunctive moods. Practice in reading, speaking, and writing on themes of contemporary interest will stress good accent along with style.

FREN 102E **Elementary French II** **3.0 CR**
Prerequisite: FREN 101E or equivalent.
Fees.
Continuing study of grammar and vocabulary. The conjugation of the remaining verbal forms: imperfect, future, conditional and various compound tenses will be studied as well as the imperative and the subjunctive moods. Practice in reading, speaking, and writing on themes of contemporary interest will stress good accent along with style.
Special Notes: Offered at Extended Colleges only.

FREN 201 **Intermediate French I** **4.0 CR**
Prerequisite: FREN 102 or faculty permission.
Fees.
Review of the more complex grammatical structures and expansion of the vocabulary. This course will emphasize the reading of graded literary excerpts by contemporary French authors. Students will attempt to interpret their content while analyzing the structures and the expression. French pronunciation will be enhanced through classroom practice in reading and discussing materials and topics of current interest. Conducted in French.

FREN 201E **Intermediate French I** **3.0 CR**
Prerequisite: FREN 102E or faculty permission.
Fees.
Review of the more complex grammatical structures and expansion of the vocabulary. This course will emphasize the reading of graded literary excerpts by contemporary French authors. Students will attempt to interpret their content while analyzing the structures and the expression. French pronunciation will be enhanced through classroom practice in reading and discussing materials and topics of current interest. Conducted in French.
Special Notes: Offered at Extended Colleges only.

FREN 202 **Intermediate French II** **4.0 CR**
Prerequisite: FREN 201 or faculty permission.
Fees.
Completion of the grammar review. The four skills: reading, listening, speaking and writing will be intensified in order to achieve normal speech fluency for understanding and being able to engage in an ordinary conversation. The students will also endeavor to write short prose compositions or poetry to perfect their expression. Conducted in French.

FREN 202E **Intermediate French II** **3.0 CR**
Prerequisite: FREN 201E or faculty permission.
Fees.
Completion of the grammar review. The four skills: reading, listening, speaking and writing will be intensified in order to achieve normal speech fluency for understanding and being able to engage in an ordinary conversation. The students will also endeavor to write short prose compositions or poetry to perfect their expression. Conducted in French.
Special Notes: Offered at Extended Colleges only.

FREN 310 **Selected Topics in Advanced French** **3.0 CR**
Prerequisite: FREN 202.
Fees.
An advanced course for students interested in conversation, writing skills, cultural information about the French-speaking world. There will be a different topic each time the course is offered, e.g., Survey of French Literature, "Francophonie," Grammar, French Culture and Civilization, French Conversation, French Composition, Translation. Conducted in French.
Special Notes: May be repeated for credit.

FREN 432 **Studies of Literature and Culture** **3.0 CR**
Prerequisite: Reading ability in French equivalent to three years of college study.
Intensive study of authors, literary movements, periods, and/or genres. Students will also analyze cultural material other than texts. The course is conducted in French and may be repeated for credit when topics vary, e.g. French Literature from the Middle Ages, 16th, 17th, 18th, 19th, and 20th Centuries. It is offered as demand warrants.

GER: GERMAN

GER 101 **Elementary German I** **4.0 CR**
Fees.
Introduction for beginners with no prior knowledge of German. With the focus on oral communication, the course emphasizes listening comprehension, pronunciation, and everyday vocabulary. Students are also introduced to basic grammatical and sentence structures, to reading and writing the language, and to the culture of the German-speaking countries.

GER 101E **Elementary German I** **3.0 CR**
Fees.
Basic language course for beginners with little or no knowledge of German. Emphasis on everyday vocabulary, structure and current topics.
Special Notes: Use of language lab required outside of class time. Offered at Extended Colleges only.

GER 102 **Elementary German II** **4.0 CR**
Prerequisite: GER 101.
Fees.
Continuation of GER 101, designed for students able to comprehend and initiate very basic survival conversation on everyday topics, read short texts and write simple paragraphs. Students gain confidence in asking and answering questions, learn to sustain modest conversations, increase their vocabulary, reading and writing skills, and knowledge of grammatical and sentence structures, and deepen their understanding of the German-speaking cultures.

GER 102E **Elementary German II** **3.0 CR**
Prerequisite: GER 101E or equivalent.
Fees.
Continuation of GER 101E for students with some knowledge of German. Emphasis on everyday vocabulary, structure and current topics.
Special Notes: Use of language lab required outside of class time. Offered at Extended Colleges only.

GER 201 **Intermediate German I** **4.0 CR**
Prerequisite: GER 102.
Fees.
Further development of students' listening, speaking, reading, and writing proficiency, with continued emphasis on purposeful communication. Students gain greater confidence in speaking, become more adept at creating with the language, and begin to sustain connected discourse. They are introduced to the more sophisticated grammatical structures and to a wider range of current topics.

GER 201E **Intermediate German I** **3.0 CR**
Prerequisite: GER 102E or equivalent.
Fees.
Continuation of GER 102E with emphasis on useful, contemporary vocabulary. Develops understanding of cultures of major German-speaking countries and increases competence and confidence in speaking German. Review of major grammatical features.
Special Notes: Use of language lab required outside of class time. Offered at Extended Colleges only.

GER 202 **Intermediate German II** **4.0 CR**
Prerequisite: GER 201.
Fees.
For students able to communicate with some confidence, in German, on a variety of everyday topics. They will continue to build their vocabulary by increasing the range of conversational topics using authentic and more demanding audio-visual materials, and by reading longer and more sophisticated texts, e.g., from German literature or the contemporary press. They will review and thereby increase their command of grammatical structures.

GER 202E **Intermediate German II** **3.0 CR**
Prerequisite: GER 201E or equivalent.
Fees.
Continuation of GER 201E with same emphasis. Introduction to selected literary works, greater emphasis on writing than in previous semesters.
Special Notes: Use of language lab required outside of class time. Offered at Extended Colleges only.

GER 209 **German Grammar** **4.0 CR**
Prerequisite: GER 102.
Fees.
A systematic introduction to German grammar, from the basic to the more complex features. Students will get abundant oral and written practice in the application of grammatical principles and in speaking and writing idiomatic German. Most class activities conducted in German.

GER 310 **Selected Topics in Advanced German** **3.0 CR**
Prerequisite: GER 202 or comparable proficiency level.
Fees.
An advanced course for students interested in conversation practice, writing skills, and cultural information about the German-speaking world. There will be a different topic each time the course is offered, e.g., Austria, Germany today, Switzerland, contemporary women, conversation and composition, current events, film, and the media. Conducted in German.
Special Notes: May be repeated for credit.

JPN: JAPANESE

JPN 101 **Elementary Japanese I** **4.0 CR**
Fees.
Introduction, practice, and application of the basic spoken Japanese pronunciation, intonation, grammar, and oral composition.

JPN 101E **Elementary Japanese I** **3.0 CR**
Fees.
Introduction, practice, and application of the basic spoken Japanese pronunciation, intonation, grammar, and oral composition.
Special Notes: Offered at Extended Colleges only.

JPN 102 **Elementary Japanese II** **4.0 CR**
Prerequisite: JPN 101.
Fees.
Continued drill in speaking, listening, reading and writing in different situations. Emphasis on developing practical skills in oral and written "hiragana" communication.

JPN 102E **Elementary Japanese II** **3.0 CR**
Prerequisite: JPN 101E.
Fees.
Continued drill in speaking, listening, reading and writing in different situations. Emphasis on developing practical skills in oral and written "hiragana" communication.
Special Notes: Offered at Extended Colleges only.

JPN 201 **Intermediate Japanese I** **4.0 CR**
Prerequisite: JPN 102.
Fees.
Completion of basic grammar and continued practice in speaking, listening, reading, and writing. In addition to the "hiragana" reading and writing, "katakana" and "kanji" are to be studied. Besides the core textbooks, various tapes, videos and storybooks are to be used.

JPN 201E **Intermediate Japanese I** **3.0 CR**
Prerequisite: JPN 102E.
Fees.
Completion of basic grammar and continued practice in speaking, listening, reading, and writing. In addition to the "hiragana" reading and writing, "katakana" and "kanji" are to be studied. Besides the core textbooks, various tapes, videos and storybooks are used.
Special Notes: Offered at Extended Colleges only.

JPN 202 **Intermediate Japanese II** **4.0 CR**
Prerequisite: JPN 201.
Fees.
By being exposed to various Japanese family life-styles, customs, traditions, arts and society, students will expand their communicative skills in speaking and writing. Continued efforts to develop oral and written fluency in informal and formal situations.

JPN 202E **Intermediate Japanese II** **3.0 CR**
Prerequisite: JPN 201E.
Fees.
By being exposed to various Japanese family life-styles, customs, traditions, arts and society through reading books and audio visual media, students will expand their communicative skills in speaking and writing. Continued efforts to develop oral and written fluency in informal and formal situations.
Special Notes: Offered at Extended Colleges only.

JPN 301 **Advanced Japanese I** **4.0 CR**
Prerequisite: JPN 202.
Fees.
Continued efforts to achieve a higher level of fluency with more accuracy in expressing oneself and exchanging ideas. More "kanji" compound words, idioms, and sentence patterns are to be introduced. Conducted mainly in Japanese.

JPN 302 **Advanced Japanese II** **4.0 CR**
Prerequisite: JPN 301.
Fees.
Reading of contemporary texts of literature, business, social topics and others as a basis for composition and conversation. Approximately 250 more "kanji" characters must be mastered. Conducted mainly in Japanese.

JPN 310 **Selected Topics in Advanced Japanese** **3.0 CR**
Prerequisite: JPN 202.
Fees.
An advanced course for students interested in improving their communicative skills in spoken and written Japanese and in deepening their understanding of the Japanese people and culture. Each time the course is offered, different but closely related topics such as history and geography, politics and economy, education and technology, performing arts and films, traditions and modern trends, will be selected and emphasized.
Special Notes: The course may be repeated for credit.

KOR: KOREAN

KOR 101 **Elementary Korean I** **4.0 CR**
Fees.
Introduces Korean in the conversational mode, with exposure to grammatical structure, reading, writing, and some culture.

KOR 102 **Elementary Korean II** **4.0 CR**
Prerequisite: KOR 101.
Fees.
Continuation of KOR 101. Emphasizes conversational mode, with exposure to grammatical structure, reading, writing and some culture.

KOR 201 **Intermediate Korean I** **4.0 CR**
Prerequisite: KOR 102.
Fees.
Continuation of KOR 102. Emphasizes reading and writing with more advanced conversational skills and grammar. Activities designed to enhance appreciation of the Korean language, people, society, and culture.

LAT: LATIN

LAT 101 **Elementary Latin I** **3.0 CR**
Fees.
Introduction to language covering grammar, syntax, vocabulary and pronunciation.

LAT 102 **Elementary Latin II** **3.0 CR**
Prerequisite: LAT 101.
Continued development of grammar, syntax, and vocabulary; increasing emphasis on reading selected texts.

RUSS: RUSSIAN

RUSS 100 **Introduction to Russian Language and Culture** **4.0 CR**
Fees.
An introduction to the Russian language (Cyrillic alphabet, sounds, basic vocabulary, structure) and to culture and people in the Russian-speaking countries. Designed primarily for people who intend to travel to the former Soviet Union or who host Soviet visitors from there and want to be able to exchange very basic information with them.
Special Notes: Will be taught on a self-support basis.

RUSS 101 **Elementary Russian I** **4.0 CR**
Fees.
Introduces Russian language and culture for students with no background in Russian. Students learn alphabet and past and future tenses, and read simple paragraphs. Focuses on life in the Russian-speaking countries. Emphasizes conversation.
Special Notes: Requires use of language lab outside of class time.

RUSS 101E **Elementary Russian I** **3.0 CR**
Fees.
Introduces Russian language and culture for students with no background in Russian. Students learn alphabet and past and future tenses, and read simple paragraphs. Focuses on life in USSR. Emphasizes conversation.
Special Notes: Requires use of language lab outside of class time. Offered at Extended Colleges only.

RUSS 102 Elementary Russian II 4.0 CR
Prerequisite: RUSS 101.
Fees.
Students learn rudiments of Russian grammar while continuing to build vocabulary and conversational skills. Use of Russian language newspapers, magazines and atlases to enhance reading skills.
Special Notes: Requires use of language lab outside of class time.

RUSS 102E Elementary Russian II 3.0 CR
Prerequisite: RUSS 101E or equivalent.
Fees.
Students learn rudiments of Russian grammar while continuing to build vocabulary and conversational skills. Use of Soviet newspapers, magazines and atlases to enhance reading skills.
Special Notes: Requires use of language lab outside of class time. Offered at Extended Colleges only.

RUSS 105 Russian Language and Culture I 2.0 CR
Prerequisite: RUSS 101.
Fees.
Individualized Russian language projects involving aspects of Russian-speaking cultures developed from Russian language materials. Uses all four language skills: reading, writing, listening, and speaking.

RUSS 201 Intermediate Russian I 4.0 CR
Prerequisite: RUSS 102 or equivalent.
Fees.
Continuing study of rudimentary Russian grammar. Emphasizes vocabulary expansion, along with enhancement of speaking skills in real-life situations.
Special Notes: Requires use of language lab outside of class time.

RUSS 201E Intermediate Russian I 3.0 CR
Prerequisite: RUSS 102E or equivalent.
Fees.
Continuing study of rudimentary Russian grammar. Emphasizes vocabulary expansion, along with enhancement of speaking skills in real-life situations.
Special Notes: Requires use of language lab outside of class time. Offered at Extended Colleges only.

RUSS 202 Intermediate Russian II 4.0 CR
Prerequisite: RUSS 201 or equivalent.
Fees.
Introduces intermediate grammar concepts. Students read independently and discuss readings in class. Cultural material incorporated at all times.
Special Notes: Requires use of language lab outside of class time.

RUSS 202E Intermediate Russian II 3.0 CR
Prerequisite: RUSS 201E or equivalent.
Fees.
Introduces intermediate grammar concepts. Students read independently and discuss readings in class. Cultural material incorporated at all times.
Special Notes: Requires use of language lab outside of class time. Offered at Extended Colleges only.

RUSS 205 Russian Language and Culture II 2.0 CR
Prerequisite: RUSS 101 and RUSS 102.
Fees.
Development of Russian language skills at the intermediate level through conversation, listening, reading, and writing with emphasis on cultural activities. Intended for students who want to maintain or refresh language skills. All work done in Russian.

RUSS 310 Selected Topics in Russian Culture 1.0-3.0 CR
Prerequisite: RUSS 202.
Fees.
A high-intermediate/low-advanced level language class in which students become familiar with various aspects of Russian culture through reading, listening, discussing and writing about a particular topic.
Special Notes: Conducted in Russian. May be offered in separate 1-credit 4-week segments. May be repeated for credit with a change of subtitle. Offering contingent on grant funding.

SPAN: SPANISH

SPAN 101 Elementary Spanish I 4.0 CR
Fees.
Foundations of Spanish: alphabet, proper pronunciation, basic vocabulary and sentence structure. Grammar covers articles, gender of nouns, adjectives, pronouns, and regular/irregular verb patterns through preterite tenses. Emphasizes speaking and understanding Spanish through frequent classroom practice and lab exercises.
Special Notes: Use of language lab is required outside of class time.

SPAN 101E Elementary Spanish I 3.0 CR
Fees.
Foundations of Spanish: alphabet, proper pronunciation, basic vocabulary and sentence structure. Grammar covers articles, gender of nouns, adjectives, pronouns, and regular/irregular verb patterns through preterite tenses. Emphasizes speaking and understanding Spanish through frequent classroom practice and lab exercises.
Special Notes: Use of language lab is required outside of class time. Offered at Extended Colleges only.

SPAN 102 Elementary Spanish II 4.0 CR
Prerequisite: SPAN 101 or equivalent.
Fees.
Foundations of oral and written Spanish: continuation of basic Spanish vocabulary and grammar. Imperfect, future and conditional tenses, including their compound forms, will be studied along with other verbal patterns.
Special Note: Use of language lab is required outside of class time.

SPAN 102E Elementary Spanish II 3.0 CR
Prerequisite: SPAN 101E or equivalent.
Fees.
Foundations of oral and written Spanish: continuation of basic Spanish vocabulary and grammar. Imperfect, future and conditional tenses, including their compound forms, will be studied along with other verbal patterns.
Special Note: Use of language lab is required outside of class time. Offered at Extended Colleges only.

SPAN 201 Intermediate Spanish I 4.0 CR
Prerequisite: SPAN 102 or equivalent.
Fees.
Reviews fundamental structures of Spanish grammar and vocabulary. Gives special attention to command forms and present and past subjunctive. Familiarizes students with normal sound and usage of the language by taking dictation, reading and writing short compositions. Enhances essentials of conversational fluency through study of thematic vocabularies and idiomatic expressions.
Special Notes: Use of language lab is required outside of class time.

SPAN 201E Intermediate Spanish I 3.0 CR
Prerequisite: SPAN 102E or equivalent.
Fees.
Reviews fundamental structures of Spanish grammar and vocabulary. Gives special attention to command forms and present and past subjunctive. Familiarizes students with normal sound and usage of the language by taking dictation, reading and writing short compositions. Enhances essentials of conversational fluency through study of thematic vocabularies and idiomatic expressions.
Special Notes: Use of language lab is required outside of class time. Offered at Extended Colleges only.

SPAN 202 Intermediate Spanish II 4.0 CR
Prerequisite: SPAN 201 or equivalent.
Fees.
Continuation of SPAN 201. Includes review of grammar and study of new vocabulary and expressions. Emphasizes reading and writing of short compositions or essays. Articles from magazines and newspapers on issues of current interest will be analyzed and discussed to expand ability of students to read, write and speak fluently.
Special Notes: Use of language lab is required outside of class time.

SPAN 202E Intermediate Spanish II 3.0 CR
Prerequisite: SPAN 201E or equivalent.
Fees.
Continuation of SPAN 201E. Includes review of grammar and study of new vocabulary and expressions. Emphasizes reading and writing of short compositions or essays. Articles from magazines and newspapers on issues of current interest will be analyzed and discussed to expand ability of students to read, write and speak fluently.
Special Notes: Use of language lab is required outside of class time. Offered at Extended Colleges only.

SPAN 213 Conversacion y Cultura 2.0 CR
Prerequisite: One year of college Spanish or faculty permission.
Fees.
Second year Spanish conversation class. Presents reading materials and activities to increase student knowledge of Spanish and Latin American cultures.
Special Notes: May be repeated once for credit.

SPAN 291 Seminar in Individualized Instruction 1.0 CR
Prerequisite: One year of college Spanish or faculty permission.
Fees.
Independent supplemental work under teacher supervision.
Special Notes: May include working as classroom aide; may be repeated for credit when topic varies.

SPAN 301 Advanced Spanish I 3.0 CR
Prerequisite: SPAN 202 or equivalent familiarity with basics of all Spanish tenses.
Fees.
Grammar and composition class dealing with major grammatical exceptions in the language. Students will read, discuss and write about more difficult subjects or texts. Practice of translations and specific grammatical exercises and systemic vocabulary building. Conducted entirely in Spanish.
Offered fall semesters.

SPAN 302 Advanced Spanish II 3.0 CR
Prerequisite: SPAN 202 or equivalent familiarity with basics of all Spanish tenses.
Fees.
Grammar and composition class dealing with the finer points of oral expression and written style. Students will read, discuss and write about more difficult subjects or texts. Practice of translations and stylistic exercises and work on systemic vocabulary building. Conducted entirely in Spanish.
Offered spring semesters.

SPAN 310 Spanish Readings and Conversations 3.0 CR
Prerequisite: Two years of college Spanish or equivalent.
Fees.
Students will improve their conversational skills by participating in skits, interviews, debates, and discussions based on material read. Some grammar introduced informally, but emphasis is on improving listening and speaking skills. Books and activities vary from semester to semester.
Special Notes: May be repeated for credit.

SPAN 400 Hispanic Culture and Civilization 3.0 CR
Prerequisite: SPAN 302.
Panoramic survey of Hispanic culture and civilization. Folklore and customs, literature, music, painting and other artistic expressions are studied within the geopolitical, socioeconomic and religious context of Spain and Spanish America. Emphasizes multicultural patterns and contributions of their various peoples. Conducted entirely in Spanish.

SPAN 432 Studies in Literature and Culture 3.0 CR
(Selected Topics)
Prerequisite: Reading ability in Spanish equivalent to three years of college study.
Intensive study of authors, literary movements, periods, and/or genres. Students will also analyze cultural material other than texts. Conducted entirely in Spanish.
Special Notes: May be repeated for credit with a change of subtitle.
Offered as warranted by demand.

FORT: FORESTRY TECHNOLOGY

This program is offered in cooperation with the Alaska Vocational Technical Center in Seward. All forestry courses must be taken at AVTEC, the Technical Center in Seward. For further information contact: Admissions and Records Coordinator, Kenai Peninsula College, 34820 College Dr., Soldotna, AK 99669 , (907) 262- 5801.

FORT 105 Introduction to Forestry 3.0 CR
Introduction to forestry and identification of the different specialities and opportunities that exist in the profession. Instruction in the concepts of multiple use, the many products available from forest areas, and the role of the forestry technician as a specialist in each of several areas.

FORT 110 Land Surveying/Mapping 3.0 CR
Teaches proficiency in mapping, boundary location, and the use of maps for field orientation. The major instruments used will be chain tape, clinometer, calculator, and mapping compass. Includes survey problems which will require drafting maps or plats.

FORT 120 Forest Ecology and Dendrology 3.0 CR
Prerequisite: FSA 151 and FORT 105.
A field oriented course. Identification of all common trees and shrubs in the summer work locality, their ecological group associations, successional stages, and habitat. The influence of soil and climate upon survival and growth will be stressed.

FORT 125 Forest Regeneration 2.0 CR
Prerequisite: FORT 195 or FORT 120.
Emphasis on techniques available to the technician to insure forest regeneration on areas burned or logged.

FORT 130 Forest Entomology and Pathology 3.0 CR
Prerequisite: FORT 195 or FORT 120.
Entomology and pathology are combined here to reduce field time and increase diagnostic efficiency. Instruction in identifying many Alaskan forest insects and diseases. Common diseases and insects will be identified by observation of their injury symptoms on forest trees.

FORT 195 Forestry Practicum 3.0 CR
Prerequisite: FSA 151 and FORT 105.
Provides 17 weeks of guided educational experiences in the forests of Alaska allowing a realistic picture of future career opportunities by becoming familiar with agency expectations. Association with a variety of professional specialists broadens the training experiences.

FORT 205 Cruising and Scaling 2.0 CR
Prerequisite: FORT 195 or FORT 120.
Instruction in the methods of measuring forest products in the forest, as standing timber, and on the ground as logs or pulpwood. Make trial inventories of selected stands and measure and grade decked logs. Review in both fixed plot and variable plot cruising techniques.

FORT 215 Forest Growth and Silviculture 3.0 CR
Prerequisite: FORT 195 or FORT 120.
Explores the life of forest stands in terms of growth and survival, and the way growth can be controlled to produce desired forest products. Learn how to risk rate and measure the age, site index, density, and form class of forest stands. Explanation of the common means of improving growth or product quality.

FORT 220 Wildlife Management 3.0 CR
Prerequisite: FORT 205.
Describes habitat requirements, and methods that can be used to increase particular species. Includes methods of population inventories, control of excess animals, and techniques for determining carrying capacity. Review of stream protection and enhancement.

FORT 225 Forest Recreation 3.0 CR
Prerequisite: FORT 205.
Instruction in both theory and management of wildland recreation. Learn the problems created in the forest by various recreational users and common methods used to reduce these problems, improve recreational quality, and eliminate user conflicts. Review of construction and maintenance of recreational facilities and trails.

FORT 230 Remote Sensing 3.0 CR
Prerequisite: FORT 220.
Designed for making measurements and gathering information from aerial photographs. Emphasizes use of stereoscope and measuring instruments. Instruction in linear, area, and height measurements, scale conversations, and determination of scale. Identification of common objects and timber types will be practiced in sessions combining field and lab analysis.

FORT 235 Timber Harvesting and Sale Administration 4.0 CR
Teaches how to maximize profits for a company or agency while reducing environmental damage and providing for sustained yield of future forest harvests. Examination of ongoing timber sales and contracts. Explains the use and application of various forms of harvesting equipment.

FSA: FIRE SERVICE ADMINISTRATION

Offered through the College of Career and Vocational Education, Gordon Hartlieb Building (GHB), Room 111, 786-1184

These courses are taught at the Fire Department Training Center (FDTC), 1140 Airport Heights Rd., 278-2324.

FSA 101 Introduction to Fire Science 3.0 CR
Fees.
Introduction to fire service and fire protection. Fire service history, functions, and career opportunities. Public, quasi-public, and private fire protection services. Fire chemistry and physics, and fire loss analysis.

FSA 105 Fundamentals of Fire Prevention 3.0 CR
Fees.
Organization and functions of fire prevention. Inspections, surveying and mapping procedures, recognition of fire and life hazards, engineering and enforcing solutions to fire hazards, and public relations as affected by fire protection.

FSA 107 Fire Tactics and Strategy 3.0 CR
Fees.
Principles of fire control through utilization of personnel, equipment, and extinguishing agents of fire ground.

FSA 111 Fire Company Organization and Management 3.0 CR
Fees.
Review of fire department organization, planning, and supervision to meet organizational needs. Emphasis on company officer's role.

FSA 115 Fire Apparatus and Equipment 3.0 CR
Fees.
Fire apparatus designs, specifications, and performance capabilities. Effective utilization of apparatus in fire service emergencies.

FSA 117 Rescue Practices 3.0 CR
Fees.
Rescue problems and techniques, and emergency rescue equipment. Toxic gases and chemicals, radiation hazards, and care of victims. Includes emergency childbirth, respiration and resuscitation, and extrication.

FSA 121 Introduction to Fire Chemistry 3.0 CR
Fees.
Introduction to nomenclature, principles, and procedures of fire chemistry, supplemented by basic math and physics as related to fire problems.

FSA 123 Fire Investigation I 3.0 CR
Fees.
Determining types and causes of fires. Introduction to arson and incendiarism, including recognizing and preserving evidence, interviewing witnesses and suspects, arrest and detention procedures. Court procedures, giving court testimony, and related laws.

FSA 151 Wild Land Fire Control I 3.0 CR
Fees.
For employed firefighters and fire science majors. Covers fundamental factors affecting wild land fire prevention, fire behavior, and control techniques.

FSA 202 Fire Hydraulics 3.0 CR
Fees.
Review of mathematical hydraulic laws as applied to fire science. Application of formulas and calculations to hydraulics and water supply problems.

FSA 204 Hazardous Materials I 3.0 CR
Fees.
Introduction to basic fire chemistry and physics. Problems of flammability as encountered by firefighters when dealing with fuels and oxidizers. Elementary firefighting practices for hazardous materials in transit and storage.

FSA 206 Building Construction for Fire Protection 3.0 CR
Fees.
Fundamentals of building construction as related to fire protection. Classifications by occupancy and type of construction with emphasis on fire protection facilities, equipment, fire-resistive materials, and high-rise consideration.

FSA 210 Hazardous Materials II 3.0 CR
Fees.
Second semester course in hazardous materials. Covers handling, identification, and firefighting practices for explosive, toxic, and radioactive materials in transit and storage.

FSA 212 Related Codes and Ordinances 3.0 CR
Fees.
Background and interpretation of national, state, and local codes, ordinances, and laws which influence fire prevention field.

FSA 214 Fire Protection Equipment and Systems 3.0 CR
Fees.
Study of portable fire extinguishing equipment, protection devices, and systems for special hazards. Sprinkler, fire detection, and alarm systems.

FSA 216 Methods of Instruction for Fire Service 3.0 CR
Prerequisite: Faculty permission.
Grading Policy: Pass/No Pass.
Fees.
This is the State of Alaska "fire service training methods of instruction" course. Satisfies the state requirements for both basic and advanced MOI. Upon successful completion of this course the student will be eligible to test for state fire service instructor.

FSA 217 Advanced Rescue Practices 3.0 CR
Prerequisite: Basic background in fire science.
Fees.
Basic information and specific skill training on approach, evaluation, and safe completion of complicated rescues. Includes hands-on activities. Covers rescue equipment, extrication from vehicles, metropolitan rescues, natural disasters, and high places.

FST: FOODSERVICE TECHNOLOGY

Offered through the College of Career and Vocational Education, Lucy Cuddy Center (CUDY), 786-1487

FST 102 Food and Nutrition 3.0 CR
Chemical, biological, and social aspects of food and nutrition as related to commercial foodservice.

FST 103 Culinary Production I 4.0 CR
Prerequisite: Concurrent enrollment in FST 111. Corequisite FST 105.
Fees.
Principles, skills and techniques fundamental to professional foodservice operations. Emphasizes kitchen safety and sanitation, industry vocabulary, organization and timing, menu planning/recipe conversion, equipment use, food quality standards, proper food storage, and methods and techniques necessary for quantity food preparation.
Special Notes: Fee covers knife kit and uniforms used throughout the Foodservice program.

FST 104 Sanitation 2.0 CR
Thorough study of importance of sanitation in food service. Microbiology, equipment facilities, laws/codes, housekeeping methods, washing dishes and utensils, and handling wastes. A NIFI certification test is available at the end of the course.

FST 105 Orientation to Food Science 3.0 CR
Food science principles for quantity foodservice and for family food preparation. Overview of foodservice industry focusing on equipment use, safety, kitchen management and preparation techniques.

FST 107 Culinary Cost Control 2.0 CR
Prerequisite: Grade of C or better in MATH 054, or Math Placement Test for MATH 055.
Math principles applied within hospitality and institutional foodservice operations used during food production, inventory control and personnel management. Emphasis on preparing and understanding foodservice management statistics, using a ten-key calculator, computerized cash register, and computer spreadsheets.

FST 110 Food Standards 2.0 CR
Qualitative and quantitative measurements and other criteria in common use. Includes weights and measures, adulterants and additives, taste-testing, and can-cutting. Applications of color and texture as determinants of quality standards in food. This course is a food service purchasing course and is based upon federal food standards.

FST 111 Bakery Production I 4.0 CR
Prerequisite: Concurrent enrollment in FST 103. Corequisite FST 105.
Basic principles of production bakery foods preparation.

FST 113 Culinary Meats and Charcuterie 3.0 CR
Meat analysis. Study of meat fabrication, cuts, and their uses. Recognition of cuts and qualities. Demonstrations include fabrication and identification of cuts used in the foodservice industry.

FST 114 Beverages 2.0 CR
History of alcoholic and non-alcoholic beverages; their make-up and chemistry. The legal ramifications, serving and uses in food service. Dispensing equipment, set-up and maintenance are also discussed.

FST 115 Gourmet Cooking, Healthy Style 1.0 CR
Grading Policy: Pass/No Pass.
Fees.
A course that features "low fat" methods of cooking for home use. Students prepare and sample a variety of different foods including meat and meatless entrees, fresh and frozen vegetables, starches, appetizers, soups, salads, and holiday meals.

FST 201 Culinary Production II 4.0 CR
Prerequisite: Grade of C or better in FST 103, 105 and 111. Concurrent enrollment in FST 202.
Fees.
A la carte foodservice and a la minute methods of food preparation. Industry vocabulary, operations, timing, organization, safety, sanitation and techniques for a la carte preparation will be utilized in an actual line station kitchen set-up.

FST 202 Bakery Production II 4.0 CR
Prerequisite: Grade of C or better in FST 103, 105 and 111. Concurrent enrollment in FST 201.
Fees.
Expand the fundamentals of hotel and restaurant baking with an emphasis on bakery management and minimal supervision. Subjects will emphasize the production process, serving and portion controls, and safety and sanitation practices, as well as methods of enhancing salability of products.

FST 220 Foodservice Operations 3.0 CR
Operation responsibilities of the line supervisor, including purchasing, storeroom operations, distribution, serving, menu planning, recipe standardization, safety and first aid, maintenance and safe use of equipment, quality assurance, and worker/customer relations.
Special Notes: Students planning to take the Dietary Managers Certificate Exam must enroll concurrently in FST 295A. Recommended experience in foodservice operations.

FST 223 Advanced Foods: Buffet and Garde Manger 3.0 CR
Prerequisite: Grade of C or better in FST 201 and 202, or one year of hotel restaurant experience.
Fees.
Menu planning, organization and production techniques necessary for buffet-style service. Student will also be exposed to ice carving, tallow and dough sculpting, and preparation and presentation of terrines, pates, appetizers and display pieces essential to buffet service.

FST 224 Hospitality Service 3.0 CR
Prerequisite: FST 103, 105 and 111.
Examination, instruction, demonstration, and practice of the many ways foods are presented and served to customers. Includes dining room service of all types, waiter/waitress responsibilities, merchandising of foods and services, tabletop topography, napkin folding, cutlery and tableside cookery to include flambe. Identification of glassware, serviceware, and barware is included. Liquor liability and other legal ramifications are discussed.

FST 225 Menu Making/Facility Layout and Design 3.0 CR
Prerequisite: FST 103, 105, 111.
Menu design and layout of successful foodservice facilities. Consideration is given to menu composition, pricing strategies, and time and motion efficiency of facilities. Relationships among menu, nutrition, sales, purchasing, and facility are also explored.

FST 230 Foodservice Management 3.0 CR
Basic administrative and management responsibilities within hospitality and institutional foodservice industry. Emphasis on communication, problem solving, leadership, personnel planning, training and motivating, and organizational skills. Costs, cost control and the legal environment are also discussed.
Special Notes: Students planning to take the Dietary Managers Certificate Exam must enroll concurrently in FST 295B.

FST 233 Advanced Pastry 3.0 CR
Prerequisite: Grade of C or better in FST 201 and 202.
Fees.
Experience in working with more classical pieces in specialty baking and developing individual creativity in pastry art.

FST 295A Foodservice Operations Practicum 1.5 CR
Prerequisite: Concurrent enrollment in FST 220.
Grading Policy: Pass/No Pass.
Field experience course of 90 hours with 6 hours instructor contact. Assignments parallel topics in FST 220.

FST 295B Foodservice Management Practicum .5 CR
Prerequisite: Concurrent enrollment in FST 230.
Grading Policy: Pass/No Pass.
Field experience course of 45 hours with 4 hours instructor contact. Assignments parallel topics in FST 230.

FST 295C Foodservice Internship 3.0 CR
Prerequisite: Must have completed all other FST major requirements.
Grading Policy: Pass/No Pass.
Experience and education on the job. Will be completed in a career area of foodservice of the student's choosing. Requires a minimum of 180 hours of work experience with 15 hours of instructor contact.

FST 490 Current Topics in Foodservice and Nutrition 1.0-6.0 CR
Prerequisite: Faculty permission required.
Fees.
Provides advanced theoretical and/or experiential learning in foodservice or nutrition for the professional. Specific course content is determined by current industry trends and student needs.
Special Notes: Only 3 credits applicable to AAS degree. See schedules for specific titles to be offered.

FT: FISHERIES TECHNOLOGY

Offered through Kodiak College, Carol Hagel, Director, 117 Benny Bensen Dr., Kodiak, 99615, 486-4161

FT 100 Gillnet Hanging and Repair 1.0 CR
Theory and practice of gillnet hanging and repair, specifically applied to Alaska salmon and herring gillnet fisheries, including special techniques. Work on your own net.
Special Notes: Equipment to supplement your own may be necessary.
Offered at Kodiak College only.

FT 101 Alaska Trawl Nets and Midwater Nets 2.0 CR
Fees.
Overall view of trawl fisheries and nets in Alaskan waters, net designs, terminology, with emphasis on how to build and repair bottom and midwater nets.
Offered at Kodiak College only.

FT 102 Net Mending 1.0 CR
Grading Policy: Pass/No Pass.
Methods of repairing gillnets, seines, and trawls. Materials used in construction of webbing, twine types, trimming holes, mending holes, and inserting patches will be covered. Emphasis on proper knots and techniques.

FT 103 Outboard Maintenance and Repair 1.0 CR
Fees.
Preventive maintenance and troubleshooting of basic outboard motors.
Special Notes: Student supplies used outboard motor.

FT 105 Scuba Training 3.0 CR
Lectures on diving techniques, gear safety with emphasis on crisis situations, supplemented with work in pool and ocean environment. Diver's certificate given upon successful completion.

FT 113 Coastal Piloting and Navigation 3.0 CR
Fees.
Development of navigation techniques and familiarity with local water. Includes chart reading, compass, piloting, aids to navigation, and rules of the road.

GEOG: GEOGRAPHY

Offered through the College of Arts and Sciences, CAS Building, Room 330, 786-1535

GEOG 101 Introduction to Geography 3.0 CR
World regions and analysis of environments, with emphasis on major cultural realms.

GEOG 103 World Economic Geography 3.0 CR
Study of world economic activities. Physical and cultural bases, spatial growth and distribution patterns, and their significance in interregional and international development.

GEOG 109 Fundamentals of Meteorology 3.0 CR
Prerequisite: High school mathematics skills.
Cross-Listed: PHYS 109.
Introductory course in meteorology for non-specialists

GEOG 200 Alaskan Geography 3.0 CR
Introductory geographical survey of Alaska. Emphasis will be on the high latitude Alaskan lands and their potential for future development.

GEOG 205 Elements of Physical Geography 3.0 CR
Prerequisite: None. GEOG 101 or 103 recommended, but not required.
Analysis of the processes that form the physical environment and the resulting physical patterns. Study of landforms, climate, soils, water resources, vegetation, and their world and regional patterns. Optional laboratory of one additional credit.

GEOG 205L Elements of Physical Geography Laboratory 1.0 CR
Fees.
Optional laboratory of one additional credit.

GEOG 206 Forces of Nature 3.0 CR
In-depth examination of major natural forces that shape the face of earth. Various topics from earthquakes and volcanoes to violent storms, glaciers, and other natural phenomena. Application to formation of Alaska landscape.

GEOG 207 The Edge of Fire—a Physical Geography of the American West 3.0 CR
Prerequisite: GEOG 205 is recommended.
Physical geography of American west. Focus on coastal and southwest regions of United States (including Alaska and Hawaii). Effects upon regional landscape by earth forces: plate tectonics, vulcanism and glaciation.

GEOG 280 Seminar in Contemporary Issues (Topics Vary) 3.0 CR
Cross-Listed: Varies each semester depending on topic.
Offers an opportunity to analyze contemporary phenomena from a variety of social science perspectives, utilizing a team teaching approach, and offering a new area of focus each semester. This course employs an interdisciplinary approach to understanding today's world.

GEOL : GEOLOGY

Offered through the College of Arts and Sciences, Beatrice McDonald Building (BMB), Room 214, 786-1344

GEOL 100 Elements of Geology 4.0 CR
Fees.
Basic geology course covering glaciers, volcanoes, mineral resources, geologic processes, and other topics of interest to Alaskans. Lab utilizing simulated field trip approach with audiovisual, self-guided materials. Students make observations and draw conclusions from specimens and field evidence as seen in slides.

GEOL 102 Introduction to Mineral Prospecting 2.0 CR
Grading Policy: Pass/No Pass.
Survey of topics and field work forming a foundation for the beginning prospector and to aid in the discovery of mineral deposits.
Offered at Kenai Peninsula College only.

GEOL 103 Landscapes and Resources of Alaska 3.0 CR
Geologic origins of mountains and glaciers which make up Alaska's scenery. Designed for people who would like to know more about Alaska, including where and how some of its natural resources (gold, copper, coal, oil, etc.) occur.

GEOL 104 Natural History of Alaska 3.0 CR
Cross-Listed: BIOL 104.
Surveys important biological, physical and geological features of Alaska, and their development over time. Includes study of major landforms, ecosystems, wildlife and people.
Special Notes: Acceptable as elective credit only.

GEOL 105 Geology of America's National Parks 3.0 CR
An overview of the geologic story behind the magnificent scenery of America's national parks. Includes geologic features, processes, and fossils of selected areas.

GEOL 111 Physical Geology 4.0 CR
Prerequisite: MATH 055.
Fees.
Introduction to physical geology. Study of earth, its materials, and processes affecting changes on and within it. Laboratory training in use of topographic maps, and recognition of common rocks and minerals.

GEOL 111S Study Skills Supplement 1.0 CR
Prerequisite: Concurrent enrollment in GEOL 111.
Fees.
Aid to GEOL 111 students. Emphasizes skills to enhance comprehension, vocabulary, writing, and test-taking.

GEOL 112 Historical Geology 4.0 CR
Prerequisite: GEOL 111 or faculty permission.
Fees.
History of earth through geologic time from origin of universe to present, with emphasis on North America. Includes major geologic events, plate tectonics, major life forms of the past, and how they can be inferred from rock records. Lab includes identification of invertebrate fossils, understanding of geologic maps, principles of stratigraphy, and field trip.

GEOL 115 Environmental Geology 3.0 CR
Prerequisite: MATH 055.
An introduction to the study of applied geology. Environmental issues, focusing on geologic hazards, water and air quality, water supply, waste, energy, global systems, and planning utilizing technical, social, and political approaches to problem management.

GEOL 115L Laboratory in Environmental Geology 1.0-2.0 CR
Prerequisite: GEOL 100 or 111 or 115 or concurrent enrollment in GEOL 115.
Fees.
Investigation of problems in environmental geology related to hydrology, acid rain, pollution, and geologic hazards with emphasis on the Anchorage area. Independent study format includes reading, measurements, use of computer programs, and field trips.

GEOL 120 Alaska Mineral Resources 3.0 CR
Overview of mining activity in Alaska. Includes history of mining, current mining activity, analysis of the economic feasibility of mining in Alaska, and the origins of metallic mineral deposits using Alaskan mineral occurrences as examples.

GEOL 172 Introductory Topics in Geology 1.0-3.0 CR
Introduction to specific topics selected from a field in earth science. Topics chosen to reflect interest in specific areas or to address current topics not covered in traditional courses.
Special Notes: May be repeated.

GEOL 183 Planet Earth and the New Geoscience 2.0-3.0 CR
Telecourse focusing on the features of this planet including oceans, plate tectonics, resources and climate as well as the relationships of earth to the rest of the solar system. It includes recent discoveries in geophysics, oceanography and astronomy along with interpretation of data and graphic analysis.

GEOL 187 Out of the Fiery Furnace 1.0-2.0 CR
Telecourse focusing on minerals and their importance to the modern industrialized world. Examines the formation of different types of minerals, past and present mineral extraction methods, and impact of resources on past and present civilizations.

GEOL 189 Earth Revealed 1.0 CR
Telecourse which documents evidence of geologic principles at geographically diverse sites. The major geologic cycles and processes operating on the earth, geologic formations, earth history, earth's materials, and the interrelationships of geologic processes with man's activities.

GEOL 261 General Geology for Engineers 3.0 CR
Fees.
Applied geology: study of common rocks and minerals, landforms, erosion, transportation, and deposition of geologic materials with emphasis on engineering applications.

GEOL 304 Geomorphology 4.0 CR
Prerequisite: GEOL 112.
Fees.
Study of land forms and physical processes affecting their development. Lab includes interpretation of topographic maps and aerial photos.

GEOL 306 Structural Geology 4.0 CR
Prerequisite: GEOL 111, 112, and MATH 106.
Fees.
Origin, recognition, and interpretation of earth's primary and secondary structures with application to earth history, exploration and development of mineral resources. Laboratory includes projections, analysis of structural contours, cross sections, block diagrams and graphical solutions to structural problems.
Special Notes: Offered every other year.

GEOL 308 Sedimentation 4.0 CR
Prerequisite: GEOL 111.
Fees.
Survey of sediments including origins, classification, transportation, deposition, composition, structures, and diagenesis. Grain size, morphology, mineralogy, structures, and field practicum will be included in lab instruction.
Special Notes: Offered every other year.

GEOL 313 Mineralogy 4.0 CR
Prerequisite: GEOL 111, MATH 105, and CHEM 105 .
Fees.
Crystallography including external form and internal order. Crystal chemistry, atomic structure, crystal structure, and compositional variation, nature and origin of physical properties. Mineral association, occurrence, and paragenesis. Introduction to X-Ray crystallography and optical mineralogy. Laboratory includes determinative crystallography and systematic determinative mineralogy.
Special Notes: Lecture/Lab combined.

GEOL 314 Petrology 4.0 CR
Prerequisite: GEOL 313.
Fees.
Identification and classification of igneous, sedimentary, and metamorphic rocks; interpretation of textures, structures, and mineralogy of rocks; study of chemical and physical principles controlling the formation of rocks, importance of various rock types in economic and industrial arenas. Extensive study of hand specimens with emphasis on composition, texture, structure, and alteration.

GEOL 330 Field Trips in Geology 2.0 CR
Prerequisite: GEOL 111 or 115 and upper class standing or faculty permission.
Fees.
Geologic features, processes, and geologic history that can be seen in southcentral Alaska and understood through field experiences. Students expected to collect data and synthesize information related to geomorphology, structure, environmental geology, and paleontology.
Special Notes: Offered as need. May be repeated.

GEOL 372 Advanced Topics in Geology 1.0-3.0 CR
Prerequisite: GEOL 100 or 111 or 115 or faculty permission.
Special topics chosen to reflect current advances in geology or specialized fields. In-depth coverage above that given in traditional courses.
Special Notes: Offered every other year.

GEOL 401 Invertebrate Paleontology 4.0 CR
Prerequisite: GEOL 112.
Fees.
Systematics of invertebrate phyla which are important in the geologic record. Includes biostratigraphy, paleoecology, evolution and functional morphology. Emphasis in lab on taxonomy and evolution of all major fossil invertebrate groups.
Special Notes: Offered every other year.

GUID: GUIDANCE

Offered through Advising and Counseling Center, Business Education Building (BEB), Room 115, 786-4500

GUID 101 Introduction to Peer Advising 3.0 CR
Introduction to the peer advising model with emphasis on the information dissemination and paraprofessional counseling aspects. This course is the training class for the peer advising program.

GUID 104 Student Association Leadership I 3.0 CR
Prerequisite: Faculty permission.
Survey of student leadership topics including techniques of organizational planning, management, program planning, budgeting, group dynamics, communication and leadership theories and techniques. Application of techniques through program/service projects utilizing the Student Association as a laboratory.

GUID 150 Survival Skills for College Students 3.0 CR
Prerequisite: Placement. Contact department.
Fees.
Designed to increase student skills needed to reach educational objectives. Includes memory techniques, time management, library skills, lecture notes, goal setting and test taking. Techniques, skills, hints, aids, resources, ideas, methods and suggestions for student survival in college.

GUID 201 Peer Advising Practicum 2.0 CR
Prerequisite: GUID 101 and counselor recommendation.
Designed to provide advanced helping skills for student paraprofessionals involved in the peer advisor program. Participation in training, experiential learning activities and personal growth experiences enhances functioning as student helpers.

GUID 204 Student Association Leadership II 3.0 CR
Prerequisite: Faculty permission.
In-depth study of student leadership including organizational planning, management, program planning, budgeting, group dynamics, communication, and leadership theories and techniques as applied to the Student Association. Emphasis on identification of students' leadership qualities and development of strategies to enhance leadership skills. Application of skills utilizing the Student Association as a laboratory.
Offered at Kenai Peninsula College and Kachemak Bay Branch only.

HOME ECONOMICS

Offered through the College of Career and Vocational Education, Lucy Cuddy Center (CUDY), 786-1487

HECH: CONSUMER AND HOME ECONOMICS

HECH 192 Selected Topics in Assistive Care 1.0-5.0 CR
Provides enhancement of knowledge and skills for entrance and advancement in the field of residential assistive care. Selected topics cover improvement of technical and practical abilities in the areas of foods and nutrition, family sciences, human development and community resources.
Special Notes: May be taken for up to 15 credits with a change of subtitles. See schedules for specific title offerings.

HECH 276 Managing Home Resources 3.0 CR
Develops the necessary skills, knowledge, motivation and aptitudes to analyze and organize time, money, and energy in personal and family living situations. Explores relationship between personal and family management skills and workplace success skills as they relate to quality of life. Covers management concepts to improve problem solving techniques and long- and short-term decision making in the home.

HECH 277 Family and Parenting 3.0 CR
Develops and enhances skills for parents, health care providers, social service workers and other persons working within the family environment. Covers developmental stages within the family life cycle with emphasis on acquiring skills and techniques used to improve the quality of relationships within a family. A holistic approach to family and parenting is emphasized.

HECH 295 Practicum in Assistive Care 3.0 CR
Prerequisite: C or better in 9 credits of HECH 192, HECH 276 and one of PSY, HUMS or DN program course options.
Provides the opportunity to work in a variety of caregiving environments under the supervision of an agency coordinator and university faculty. Emphasizes direct application of caregiving skills while gaining knowledge and understanding of caregiving agencies and systems.

HEFM: FASHION MERCHANDISING

HEFM 181 Fashion Merchandising I 2.0 CR
Overview of fashion industry. Fashion terminology, types of retail organizations and their basic structures, and career placement in field.

HEFM 183 Fashion History and Trends 3.0 CR
Evaluation of fashions and trends from early civilizations through present day. Overview of fashion influences throughout the ages.

HEFM 185 Home Economics Entrepreneurship 2.0 CR
Development of one's own business. Covers fundamentals of entrepreneurship, business opportunities, financial guidance, and methods of self-evaluation.

HEFM 187 Display/Visual Merchandising 2.0 CR
Fees.
Basic course in visual merchandising or display. Ideas for types and placements of displays within retail businesses. Class participation required in design and set-up of actual displays.

HEFM 281 Fashion Merchandising II 3.0 CR
Prerequisite: HEFM 181 and HEFM 183.
Advanced course for students desiring more complex view of fashion merchandising. Covers responsibilities of buyers, managers, and their goals. Studies merchandising from stock planning and buying through actual purchase by customers.

HEFM 295 Merchandising Field Internship 4.0 CR
Prerequisite: HEFM 187, 218; HETC 121, 130; BA 131, 151, 160; and CIOS 161. Maintain a cumulative 2.5 GPA.
Offers qualified students actual merchandising experiences in the fashion industry. Student's work is planned and coordinated with business site coordinator and university instructor, and is directly supervised by host business site coordinator. Involves application of merchandising theory, skills, and knowledge.

HEFN: FOODS AND NUTRITION

HEFN 210 Creative Cookery: Meal Management 3.0 CR
Fees.
Planning, buying, preparing, and serving meals. Emphasis on meal management, cost, and nutrition.

HEID: HOUSING AND HOME INTERIOR DESIGN

HEID 161 Professional Floral Design I 2.0 CR
Fees.
Basic principles of floral art and design, flower identification and selection, and the use and care of equipment and supplies used in the floral industry. Includes dressing potted plants; making bows, corsages and basic arrangements using fresh plant materials. Emphasizes professional techniques and mechanics of design.

HEID 162 Professional Floral Design II 3.0 CR
Prerequisite: HEID 161.
Fees.
Continuation of HEID 161. Prepares students for initial employment in the commercial floral industry. Covers advanced specialized corsage making, fresh plant material arrangements, wedding and funeral designs, and stylized cultural designs such as Ikibana and European.

HEID 195 Professional Floral Design Practicum 3.0 CR
Prerequisite: HEID 161 and 162.
Offers retail experience in the floral design industry. Students work under both a retail and university supervisor performing a variety of tasks assigned by the store.

HETC: TEXTILES AND CLOTHING

HETC 120 Learn to Sew 1.0 CR
Basic principles of sewing and simple clothing construction. Includes use of sewing machine, selection of fabrics and patterns, and simple construction techniques. Students must provide own sewing equipment (except sewing machine) and all patterns and fabrics for class projects.

HETC 121 Basic Clothing Construction 3.0 CR
Fees.
For beginning students as well as those wishing to update techniques in quality and efficient garment construction. Experience in use of sewing machines and other equipment. Selection of patterns, fabrics, and notions, and construction of at least four garments. Stresses fundamental sewing techniques and unit construction.
Special Notes: Course may be repeated any number of times, but maximum 6 credits applicable toward degree requirements. Prerequisite for all other clothing classes.

HETC 122 Sewing Power 3.0 CR
Prerequisite: Sewing knowledge or HETC 120 or HETC 121.
Television course in clothing construction and wardrobe management. Introduction to basic sewing concepts, vocabulary, tools, materials, and skills. Analysis and planning of individual wardrobe through construction of "core wardrobe."

HETC 124 Sewing Topics 1.0-3.0 CR
Prerequisite: HETC 121 or 122 or basic sewing skills.
Flexible workshops offering variety of specialized clothing and textile skill techniques.
Special Notes: May be repeated any number of times, but a maximum of 6 credits applicable toward degree requirements.

HETC 129 Individualized Clothing Construction 1.0-3.0 CR
Prerequisite: HETC 121 or sewing ability.
Individualized course for students who wish to contract for construction of garments to meet personal needs. Students learn techniques to advance their own skills.
Special Notes: Course may be repeated any number of times with different skill emphasis each time, but maximum 6 credits applicable toward degree requirements.

HETC 130 Textiles 3.0 CR
Survey of natural and man-made fibers, yarns, fabric construction. Application of color, design, and finishes of textile products. Performance, selection, and care of textiles, and appreciation from consumer point of view.

HETC 180 Personal Profile 1.0 CR
Positive image development through personal analysis, wardrobe planning, and preparation for employment.

HETC 234 Pattern Drafting: Design 2.0 CR
Prerequisite: HETC 121 or advanced sewing ability.
Theory of flat pattern drafting and application of design methods to create original patterns. Techniques applied to design and construction of four half-sized garments and one full-sized outfit.

HIST: HISTORY

Offered through the College of Arts and Sciences, CAS Building, Room 330, 786-1535

HIST 101 Western Civilization I 3.0 CR
A survey of the origins of Western civilization in the Ancient Near East and subsequent development through 1650. The major political, social, economic, and intellectual developments will be emphasized.

HIST 102 Western Civilization II 3.0 CR
A survey of the developments in Western civilization from 1650 to the present. The major social, political, economic, and intellectual characteristics of Western society will be emphasized.

HIST 110 Seward History: A Local History Project 3.0 CR
Students will interview residents, research old newspapers and documents and read relevant books as they explore topics of local history. This is not a lecture/note taking course since students will be actively creating the course content as we go along.
Special Notes: Does not count for required history BA degree program.

HIST 115 Alaska: Land and its People 3.0 CR
A survey of Alaska from earliest days to present: its peoples, problems, and prospects.

HIST 121 East Asian Civilization I 3.0 CR
The Great Tradition: origin and development of civilizations of China and Japan, from beginnings to 1600, with emphasis on traditional social, political, and cultural institutions.

HIST 122 East Asian Civilization II 3.0 CR
The Modern Transformation: East Asia from 1600 to present, with emphasis on patterns of social cohesion, transition, and revolutionary change.

HIST 131 History of United States I 3.0 CR
A survey of the discovery and exploration, colonial period, American Revolution, the Constitution, federal period, Jeffersonian-Jacksonian democracy, the west, sectionalism, slavery and abolitionism, American culture, and Civil War.

HIST 132 History of United States II 3.0 CR
A survey of the Reconstruction of the South, the Far West, growth of industry and labor, "Gilded Age," imperialism, progressivism, World War I, "Roaring Twenties," Great Depression, isolationism and World War II, Cold War, modern American society, Vietnam and after.

HIST 147 Alaskan Workers Roundtable 1.0 CR
Provides exposure to current issues facing labor and key persons involved. Covers Alaska local hire controversy, unions and Alaska economy, and health and safety work places. Includes what Alaska Department of Labor does for workers, Alaska Public Employees Relations Act, future employment in Alaska, and other current issues.

HIST 200 History of Alaska Native Heritage 3.0 CR
History and prehistory of Alaska Native peoples, with emphasis on the Koniag of Kodiak Island. Consideration of traditional culture, cultural contacts, and current issues facing Alaska Natives.

HIST 225 Ancient History 3.0 CR
Prerequisite: None; HIST 101 recommended.
A survey of the origins and development of Western civilization from beginnings in Ancient Near East through end of the Roman Empire. Emphasis on interrelationships of political, social, economic, cultural, and intellectual movements in various cultures.

HIST 226 Medieval History 3.0 CR
Prerequisite: None; HIST 101 recommended.
A survey of the evolution of Western civilization from end of the Roman Empire to beginnings of Renaissance. Emphasis on interrelationships of political, social, economic, cultural, and intellectual movements.

HIST 230 Modern China 3.0 CR
A survey of China from 1800 to present. Rebellion, reform, revolution, and resistance to change will be emphasized.

HIST 231 Modern Japan 3.0 CR
A survey of Japan from 1600 to present. Changes within tradition, rise to power, and modern dilemmas will be emphasized.

HIST 235 History of American Indians 3.0 CR
Surveys histories of American Indian groups, prehistoric to present. Focuses on social, economic, and political effect of westward settlement. Emphasis on major tribes and leaders from Atlantic to Pacific.

HIST 237 American Civil War 3.0 CR
Study of North-South differences causing American Civil War, war itself in considerable detail, and legacy of that war for today.

HIST 238 Black History I 3.0 CR
Afro-American history from colonial times to 1865. Social, economic, psychological, religious, and racial aspects of Africa. Slave trade, slavery, slave trading nations, and Civil War. Impact of various racial theories and practices on Black/White relations.

HIST 239 Black History II 3.0 CR
Afro-American history from 1865 to present. Impact of technology, changing social and economic conditions, and international scene on Black Americans. Consideration of leaders, organizations, concepts and issues that affect Blacks and society at large.

HIST 242 History of Kodiak 3.0 CR
The history and development of Kodiak, beginning with the Native peoples and including the Russian discovery and occupation, World War II military expansion, and developments to the present day.

HIST 243 World War II and the Aleutians 3.0 CR
An analysis of the portion of World War II during which American territory was invaded, requiring land, sea, and air defense spanning a thousand mile battlefield. Special attention to Kodiak and its involvement in the war effort.

HIST 244 Studies in Film History 3.0 CR
Fees.
Selected topics in motion picture history. Ranges from genre studies (musicals, comedies, science fiction) to special areas of film history (animation, special effects, major stars and studios, significant directors). Subtitle varies.
Special Notes: May be repeated once for credit with a change of subtitle. Stacked with HIST 444.

HIST 245 The Movies 3.0 CR
Fees.
Examines the development of American motion pictures from the golden age of silent cinema to latest releases of today. Emphasis on motion picture genres (musicals, Westerns, science fiction), studio system, and major stars of studio era.

HIST 246 American Labor Movement 3.0 CR
An introduction to the history of the labor movement in the United States. This course will focus on the struggle of labor unions to attain their rights to organize, bargain collectively, and strike. Case studies of this often turbulent course will include: the Molly Maguires, AFL-CIO, Teamsters, and Knights of Labor.

HIST 247 Violence in America 3.0 CR
Focuses on different aspects of American violence. Urban violence, agrarian uprisings, ethnic and racial conflicts, industrial-labor disputes, and domestic rebellions associated with various American wars.

HIST 248 Contemporary American Labor History: The Last Half-Century 3.0 CR

Focus on history and development of labor since 1930 Great Depression. Emphasis on how labor has restructured, reorganized, reoriented, and redefined itself to face changing American/global economies and attitudes toward organized and unorganized work forces. Future of work as result of technologies, domestic and foreign policies, and shifts in work forces.

HIST 257 Gold Rush Era: Myth and Reality 3.0 CR

A general investigation into the Gold Rush Era of 1880-1905 in Alaska and the Yukon. The major emphasis will be upon the Klondike, but Juneau, Nome, and Fairbanks will also be investigated. Both fact and fiction will be utilized to understand the myth and reality of the era.

HIST 257A A Gold Rush Era: Alaska and the Yukon 3.0 CR

Western United States, Canada, and Alaska will be studied in detail to determine their significance as a part of the overall evolution of the Yukon-Alaska gold rush during the period of 1846-1920. California, Oregon, Washington, and British Columbia stampede activities will be considered as an introduction leading to culminating the gold rush era of the Yukon and Alaska.

HIST 261 Russian History 3.0 CR

Origins of early (Kievan) Russia, Mongol Era, and rise of Moscow. Modern Russia to 20th century.

HIST 265 Mysteries of the Past 3.0 CR

Historical survey of legends, myths, and superstitions of Western culture from period of early Mediterranean civilizations to present.

HIST 271 The Vietnam Project 3.0 CR

Explores years of conflict in Vietnam. Provides historical perspective with emphasis on period of United States participation. Deals with internal and international political participation. Deals with internal and international political contexts and basic themes in Vietnamese, French and United States history and culture that determined military and political outcomes.

HIST 280 Seminar in Contemporary Issues 3.0 CR

Cross-listed: PSY 280 or SOC 280.

Analyzes contemporary issues from a variety of social science perspectives.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Cross-listing varies each semester depending on topic.

HIST 310 Europe: 1500-1789 3.0 CR

Prerequisite: HIST 102 or faculty permission.

The Reformation and the War of Religion, the Thirty Years War, the rise of the European nation-states, the scientific revolution and the Enlightenment.

HIST 312 Europe: 1789-1870 3.0 CR

Prerequisite: HIST 102 or faculty permission.

French Revolution and Napoleonic Empire, the Concert of Europe, German and Italian Unification, Romanticism and the New Enlightenment, the Industrial Revolution.

HIST 314 Europe: 1870-1945 3.0 CR

Prerequisite: HIST 102 or faculty permission.

The Bismarckian system and its breakdown; the First World War; the Russian Revolution; Fascism and National Socialism; the Great Depression; the Second World War.

HIST 316 Europe Since 1945 3.0 CR

Germany and the problems of the peace, the Soviet Union and Eastern Europe, the Cold War, economic problems and the recovery. European integration and the development of the Common Market, NATO and the Warsaw Pact.

HIST 341 History of Alaska 3.0 CR

Prerequisite: Junior standing.

Introduction to background of Alaska and its relationship to America and the world, including anthropological aspects of Native groups, land bridge theory, Russian discovery, occupation and management, Orthodoxy, purchase, American organization and development, gold rushes, congressional definition and federalism, Native claims history, statehood, oil and the disposition of Alaska lands.
Special Notes: Stacked with HIST 641.

HIST 342 History of Russian America 3.0 CR

Prerequisite: Junior standing.

The history of Russian expansion to and the development of the American Pacific Northwest and Alaska, with Native ethnography and ethnology: 1648-1867.
Special Notes: Not a substitute for HIST 341. Will substitute for HIST 341 only in combination with HIST 343.

HIST 343 History of American Alaska 3.0 CR

Prerequisite: Junior standing.

The history of American expansion to and development of Alaska, including political, economic, social and cross-cultural aspects.

Special Notes: Not a substitute for HIST 341. Will substitute for HIST 341 only in combination with HIST 342.

HIST 354 Eyes on the Prize: America's Civil Rights Movement 3.0 CR

Telecourse based on the much acclaimed PBS/Blackside history of the modern civil rights movement. Eyes I ("America's Civil Rights Years") consists of six one-hour programs from the landmark school desegregation case, Brown v. Board of Education, to the student sit-ins and voter registration drives at Selma and elsewhere. Eyes II ("America at the Racial Crossroads") consists of eight one-hour programs from the rioting in Watts and Detroit to the new racial politics of the 1980's. Covers the years 1954-1985.

HIST 360 Modern Economic History 3.0 CR

Prerequisite: HIST 102 and ECON 201 or faculty permission.
Cross-Listed: ECON 360.

A survey of the economic history of the modern era (1600 to present). Emphasis will be placed on Western Europe and the United States. Additional coverage will be given to Japan, the Soviet Union and one Third World Nation.

HIST 381 American Women's History to 1870 3.0 CR

Prerequisite: HIST 131.

Explores the nature of American women's history and how women's lives in North America have changed over time. Major topics include the impact of the economy, family, sexuality, the community, and politics from the 17th century through the Civil War, and the rise of the women's movement.

HIST 382 American Women's History since 1870 3.0 CR

Prerequisite: HIST 132.

Explores the nature of American women's history from the Civil War to the present focusing on the political, economic, and social conditions of the past one hundred years which have shaped women's lives in the U.S. The class will be run as a seminar with introductory lectures or comments from each weekly topic.

HIST 401 The History of Warfare 3.0 CR

Prerequisite: HIST 101 and 102 or faculty permission.

A study of the history of warfare from the classical age to the present. The following topics are examined: the relationship between war and social, political and economic organization; the evolution of weapons systems; the growth of modern professional and mass armies; the "laws" of war; the development of modern strategic and tactical thought; and the impact of the atomic age.

HIST 402 The Second World War 3.0 CR

Prerequisite: HIST 102 or faculty permission.

The origins of the war in Europe and Asia. The grand strategies of the belligerents, the principal military operations, the relationship between science and war, and the mobilization of societies and economies for total war. Wartime diplomacy and the postwar settlements are also emphasized.

HIST 410 History of Modern Germany I 3.0 CR

Prerequisite: HIST 102 or faculty permission.

The history of Germany from the era of the French Revolution to World War I. The role of Metternich, the rise of German nationalism and fall of German liberalism, the problem of German unification, the period of the German Empire, and the events leading to World War I will be the major points emphasized.

HIST 411 History of Modern Germany II 3.0 CR

Prerequisite: HIST 102 or faculty permission.

The history of Germany from World War I to the present. The Weimar Republic, the Third Reich, World War II, occupation, and the origin, development, and relationship of the two existing German states will be the basic units studied.

HIST 418 Tudor and Stuart England 3.0 CR

Prerequisite: HIST 101 or faculty permission.

The history of England from accession of Henry VII down to the death of Anne. Major topics are the development of modern instruments of government, the English Reformation, and the ensuing religious struggle, the Civil War and Revolution, and the establishment of parliamentary government.

HIST 421 The Rise and Fall of Great Powers 3.0 CR

Prerequisite: One of: HIST 102 or 132 or PS 101 or 102.
Cross-Listed: PS 421.

The foundations and distribution of nation-state power in the modern world. Examines historical changes in the distribution of power in the modern international system, nation-state "rise" and "decline," and the impact of the end of the traditional Cold War.

HIST 423 Nuclear Weapons and National Strategies 3.0 CR

Prerequisite: One of: HIST 102 or 132 or PS 101 or 102.
Cross-Listed: PS 423.

Comparative analysis of the development of forces and strategies since 1945. Covers the U.S., Soviet Union, Great Britain, France, and the People's Republic of China. Includes an analysis of arms control and the problems of nuclear proliferation.

HIST 424 Imperial Russian History 3.0 CR
Prerequisite: HIST 101 and HIST 102.
Explores the socio-economic, political, and cultural foundations of imperial Russia from Peter the Great and concludes with the February Revolution of 1917. Major topics include the nature of autocracy, the role of serfdom, and the roots of Russia's revolutionary tradition.

HIST 425 Soviet Union 3.0 CR
Russian history from the origins of the Bolshevik revolution and concentrating on Lenin and his contribution to Marxism; the struggle between Trotsky and Stalin; Stalinization (purges and collectivization of agriculture); World War II and the Cold War; detente; and the arms race.

HIST 431 Colonies and Revolution 3.0 CR
Prerequisite: HIST 131 and 132 or faculty permission.
Settlement of British America, social, political, economic and ideological development of American colonies, prelude to revolution, the American Revolution, drafting of the Constitution, and the Federalist era.

HIST 434 Early National Period: 1800-1850 3.0 CR
Prerequisite: HIST 131 and 132 or faculty permission.
Jeffersonian policies and ideology; struggle with England and the War of 1812; transcontinental treaties and the Monroe Doctrine; the age of Jackson and westward expansion; the era of reform; and the Mexican War.

HIST 440 The American West Since 1850 3.0 CR
Prerequisite: HIST 131 and 132.
Study of major themes in western American history. Including economic, social and ideological change, and the historiography of the American West.

HIST 444 Advanced Studies in Film History 3.0 CR
Prerequisite: Junior standing.
Fees.
Advanced studies in selected topics in motion picture history. Topics range from genre studies (musicals, comedies, science fiction) to special areas of film history (animation, special effects, major stars and studios, significant directors). Subtitle varies.
Special Notes: May be repeated once for credit with a change of subtitle. Only 3 credits of HIST 444 may be applied to either a major or minor in history. Stacked with HIST 244.

HIST 451 Populists and Progressives: America, 1877-1917 3.0 CR
Prerequisite: HIST 132 or faculty permission.
The development of the reform state, from the rise of the People's Party to the progressive era presidencies of Roosevelt, Taft, and Wilson.

HIST 452 America in War and Peace: 1917-1945 3.0 CR
Prerequisite: HIST 132 or faculty permission.
An examination of Americans responding to the crises of war and depression.

HIST 453 America since 1945 3.0 CR
Topics will include the growth of presidential power; McCarthyism, the FBI, and civil liberties; the rise of the national security state; civil rights and antiwar movements of the 1960's and Watergate.
Special Notes: Stacked with HIST 653.

HIST 455 America and the World in the 20th Century 3.0 CR
An examination of the motivating forces behind modern American foreign policy. Special emphasis will be placed on intervention, the rise and eventual dominance of liberal internationalism, and the role of covert action in the foreign policy-making process.

HIST 460 Women of the World, History and Issues 3.0 CR
Prerequisite: HIST 101 and 102 or faculty permission.
Reviews the contributions of women to the development of civilization. Looks at women's present status and struggles in the light of prior events.

HIST 465 Early American Culture 3.0 CR
Prerequisite: HIST 131 and 132 or faculty permission.
Primary American ideas and values in their formative period, including Puritanism, democracy, equality, right of self-governance, education, free enterprise, self-criticism, and manifest destiny.

HIST 466 Modern American Culture 3.0 CR
Prerequisite: HIST 131 and 132 or faculty permission.
Primary American ideas and values in their maturity, including free enterprise, social gospel, evolution, individualism, success, freedom, criticism, and heroism.

HIST 477 Senior Seminar 3.0 CR
A course in research methodology intended for history majors and others, normally taken in the senior year of study. Students will prepare a major research paper, utilizing primary research material under the direction of department faculty.

HIST 478 Studies in Early American History 3.0 CR
Prerequisite: HIST 131 or faculty permission.
An examination of selected fundamental topics in early American history. Areas will be studied as student need and faculty expertise indicate. Subtitle varies.
Special Notes: May be repeated for credit with a different subtitle.

HIST 479 Studies in Modern American History 3.0 CR
Prerequisite: HIST 131 and 132 or faculty permission.
This course is intended to provide an intensive examination of selected fundamental topics in American history. Specific areas will be treated as student need and faculty expertise indicate. Subtitle varies.
Special Notes: May be repeated for credit with a different subtitle.

HIST 486 Studies in Modern Europe 3.0 CR
Prerequisite: HIST 102 or faculty permission.
This course is a study of selected important topics in modern European history. These include World War I, European Fascism and National Socialism, European Marxism, and World War II. The course will be offered as student need and faculty expertise indicate. Subtitle varies.
Special Notes: May be repeated for credit with a different subtitle.

HIST 641 Studies in Alaska History 3.0 CR
Advanced study of various topics in Alaska history, including Russian exploration, occupation and development, social conditions in the Russian period, the U.S. purchase, American development and economic relationships, political development, Native issues, environmental history, and changing perceptions.
Special Notes: Stacked with HIST 341. Not available for credit to students who have taken HIST 341.

HIST 653 The United States, 1945 to the Present 3.0 CR
Prerequisite: Senior standing or faculty permission.
Advanced study of selected topics in the political and cultural history of America since the Second World War.
Special Notes: Stacked with HIST 453. Not available for credit to students who have taken HIST 453.

HLTH: HEALTH

Offered through the College of Career and Vocational Education, Eugene Short Building (ESB), Room 129, 786-4676

HLTH 110 Principles of Radiography 3.0 CR
Prerequisite: Employment in medical office environment with radiographic capabilities or faculty permission.
Designed for employees in medical office environments. Introduces principles of diagnostic radiation and application to fundamentals of medical radiology.

HLTH 130 Standard First Aid and Adult CPR 1.0 CR
Fees.
Designed for students needing CPR and First Aid certification to meet degree or certificate program requirements as well as individuals on campus or in the community requiring such certification for employment. Completion provides students with national certification in basic First Aid and Adult CPR.

HLTH 131 Pediatric CPR and Lifesaving Skills 1.0 CR
Fees.
Designed for students needing Infant/Child CPR certification and general lifesaving and accident prevention techniques to meet degree or certificate program requirements as well as individuals on campus or in the community requiring such certification for employment. Completion provides students with national certification in Infant/Child CPR.

HLTH 150 Sports Physiology 3.0 CR
Prerequisite: BIOL 101 with or without lab or BIOL 111, 112 or one year of high school biology.
Fees.
Introduces practical information in human physiology and sports medicine. Covers prevention and care of athletic injuries. Emphasizes principles of cardiovascular endurance, weight control, strength and flexibility, nutrition, and sports performance. Develops training and conditioning programs. Hands-on training in physiological and personal fitness evaluations.

HLTH 155 Sports Injuries: Prevention and Care 3.0 CR
Fees.
Prevention and management of athletic injuries. Stresses prevention of injuries through proper techniques such as flexibility, strength, anaerobic, and aerobic training programs. Provides working knowledge of liabilities and responsibilities for care and management of injuries sustained during exercise and sports competitions. Principles and application of athletic training. Practice in taping techniques and other athletic training skills.

HLTH 160 Personalized Fitness: Testing and Exercise 3.0 CR
Fees.
Evaluation of personal fitness levels. Instruction in writing and implementing exercise programs and testing protocols for self and others. Hands-on experience using scientifically developed exercise plans and testing equipment. Physiologic principles and techniques to increase or maintain cardiovascular endurance, weight control, strength, and flexibility.

HS: HEALTH SCIENCE

Offered through the School of Nursing and Health Sciences, Administration Building (ADM), Room 279, 786-1854

HS 116 Seminar in Pathophysiology 1.0 CR
Prerequisite: Concurrent enrollment in HS 216 and faculty permission.
Grading Policy: Pass/No Pass.
A group tutorial seminar on selected pathophysiology concepts for students enrolled in HS 216 pathophysiology. Emphasis is upon study activities designed to enhance understanding of such processes as aberrant cell growth, respiratory insufficiency, organ failure and other topics associated with physiological decompensation.

HS 120 Drug Use and Abuse: Implications for Athletics 1.0 CR
Grading Policy: Pass/No Pass.
Introductory exploration of the use and abuse of drugs in the United States with particular emphasis on drug use and abuse in athletics and by athletes. Course includes an examination of specific drug categories that are used and abused by athletes and explores the potential short- and long-term consequences of such use in athletic and non-athletic endeavors. Recognition of signs and symptoms of drug abuse in self and others and guidelines for intervention when such signs are present are also included.

HS 216 Pathophysiology 4.0 CR
Prerequisite: Grades of C or better in BIOL 111, BIOL 112, and CHEM 104.
Basic conceptual study of disease and the resultant abnormal functioning. Key concepts are utilized to assist students to develop knowledge and understanding of basic physiologic mechanisms of disease.

HS 220 Core Concepts in the Health Sciences 3.0 CR
An orientation to health problems and issues. The basic dynamics of health and illness will be explored, the transition from infections to chronic illness will be examined, and the major health problems in the U.S. and Alaska will be defined. Medical, psychological, socio-cultural, and environmental factors will be related to health status and prevention of illness.

HS 250 Health Promotion 3.0 CR
Prerequisite: PSY 150 or faculty permission.
An emphasis on information essential to making decisions in the area of health critical to the student's well-being. Fundamental principles of good health are presented with emphasis upon personal choices in matters affecting one's life, such as diet, physical activity, rest, sexuality, abusable substances, safety and stress.

HS 303 Preventive and Therapeutic Nutrition 3.0 CR
Prerequisite: DN 203.
Role of food and dietary habits in prevention of diseases such as hypertension, heart disease, cancer and dental caries. Treatment of diabetes, alcoholic liver disease, obesity, anorexia nervosa, kidney disease, heart disease, and others by means of alterations in food consumption is covered.

HS 348 Interventions: Impacting Substance Abuse in Alaska 1.0 CR
Prerequisite: Sophomore standing or faculty permission.
Grading Policy: Pass/No Pass.
A forum for the examination of current perspectives on alcoholism and drug abuse. Areas to be covered include: treatment considerations and services for women; multicultural issues and ideas in treating alcoholism and other drug problems; therapeutic approaches for helping professionals; current information on popularly used drugs; and impact of Alaska's current social and legal controls on alcohol and other drugs.

HS 350 Introduction to Addiction Studies 3.0 CR
Prerequisite: PSY 111 or faculty permission.
Cross-Listed: PSY 350.
An introduction to various addictive disorders— alcoholism, drug abuse, gambling and eating-related problems. Special emphasis will be understanding the nature of alcohol and drugs, their action and effects on the body. Theories of addictive disorders, treatment, and prevention will also be addressed.

HS 360 Introduction to Exercise Physiology 3.0 CR
Prerequisite: BIOL 111 and BIOL 112.
Cross-Listed: PE 360.
Fees.
Intensive study of acute and chronic physiological adaptations to the stress of exercise, with special emphasis on physical exertion in the cold. Laboratory experiments will provide the opportunity for students to apply their practical knowledge.

HS 361 Biomechanics 3.0 CR
Prerequisite: Both of BIOL 111 and BIOL 112; Recommended both of PHYS 123 and PHYS 124.
Cross-Listed: PE 361.
A study of fundamental mechanics with application limited to the human body, especially in exercise and sports activities, with some laboratory demonstrations to develop skills in both qualitative and quantitative analyses.

HS 362 Introduction to Sports Medicine 3.0 CR
Prerequisite: BIOL 111 and BIOL 112.
An introduction to the basic concepts involved in the prevention, assessment, care, transport, treatment, and rehabilitation involved in athletic-related injuries.

HS 370 Medical Sociology 3.0 CR
Prerequisite: SOC 101 or faculty permission.
Cross-Listed: SOC 370.
A historical and contemporary overview of selected social, political, and economic factors that influence the provision of health care in America. Focuses on the relationship between health care and race, sex, social stratification, and geographical location. Brief international comparisons with alternative for-profit and not-for-profit national health care systems.

HS 379 Health Data Analysis 4.0 CR
Prerequisite: MATH 105 or Math Placement Test.
A first course on analysis of data commonly obtained in health research. Common practices and conventions of the presentation of health research results are presented. Current issues such as relative risk and life tables are also discussed.

HS 380 Research Methods in the Health Sciences 3.0 CR
Prerequisite: HS 379 or faculty permission.
Provides an introduction to formulation of research problems, research design, data collection, evaluation and interpretation, and report writing.

HS 381 Substance Abuse Treatment 3.0 CR
Prerequisite: HS/PSY 350.
Cross-Listed: PSY 381.
Introduction to theory and essential processes and techniques used in treating substance abuse. Specifically designed to emphasize an understanding of chemical dependency and its effects upon one individual, and to foster interpersonal communication skills.

HS 385 Drugs and Youth 3.0 CR
Prerequisite: HS/PSY 350 or faculty permission.
An analysis of psychoactive drug use among youth, encompassing a review of prevalence, motives for use, effects, and intervention strategies. Specific emphasis will be on special problems of youth, impacts on personality development, criminality, and prevention.

HS 400 Public Health and Epidemiology 3.0 CR
Prerequisite: HS 220, HS 379, HS 380 or faculty permission.
An introduction to the uses of epidemiologic methods in health. Topics will include natural history of diseases, levels of prevention, disease etiology, and sources of population health data. Emphasis is placed on descriptive rather than analytical epidemiology.

HS 433 Health Education: Theory and Practice 3.0 CR
Cross-Listed: NS 433.
Introduction to the principles, methods and resources used in health education. Examines psychosocial and cultural determinants of health behavior and their role in the development of effective health education strategies. Explores organizational, societal and professional issues influencing health education for individuals, groups and communities.

HS 460 Advanced Exercise Physiology 3.0 CR
Prerequisite: HS 360.
Intensive study of acute and chronic physiological adaptations to the stress of exercise, with special emphasis on physical exertion in the cold, with some laboratory demonstrations that will provide an opportunity for students to apply their practical knowledge.

HS 462 Advanced Sports Medicine 3.0 CR
Prerequisite: HS 362.
Continuation of HS 362, introduction to sports medicine. Emphasizes the skills and knowledge necessary to prevent injury as well as therapeutic means of treating injuries sustained during physical activity.

HS 465 Seminar in Human Performance 3.0 CR
Prerequisite: HS 360.
Basic philosophy and nature of scientific inquiry as it applies to selected topics of current interest and controversy in the specialization of human performance.

HS 466 Human Performance in the Cold 3.0 CR
Prerequisite: BIOL 111 and 112.
A specialized examination of the physiological effects of muscular exercise, physical conditioning and exertion, and the significance of these effects for health and for performance in the cold.

HS 471 Muscular Adaptation to Human Performance 3.0 CR
Prerequisite: HS 460.
Study of the effects of exercise on muscle structure and function encompassing muscle cell structure, contraction, fatigue, fiber types, anaerobic and aerobic energy systems.

HS 480 Contemporary Issues in Addiction Studies 1.0-3.0 CR
Prerequisite: HS/PSY 350 or faculty permission.
Course devised to cover topics that are consistent with contemporary issues related to the field of addiction studies. Subjects will focus on such areas as: aids and substance abuse, ethics, and drug testing. Other topics will reflect recent concerns in the field.
Special Notes: May be repeated for credit.

HS 483 Policy and Prevention in Health 3.0 CR
Prerequisite: HS 220 or faculty permission.
Analysis of health policies affecting the definition of health problems, provision of health services, and the development of prevention alternatives to treatment. Emphasizes community approaches to health policy and interventions over individual strategies for health improvement.

HS 486 Substance Abuse in Alaska 3.0 CR
Prerequisite: HS/PSY 350 or faculty permission.
Examination of the existing knowledge base about substance abuse in Alaska. Students will develop their own perspective about substance abuse in Alaska through discovering the existing literature, developing a comprehensive bibliography, and writing a review paper on a specific topic.

HS 487 Substance Abuse and the Family 3.0 CR
Prerequisite: HS/PSY 481 or faculty permission.
Review and exploration of theoretical perspectives and application of approaches to intervention and treatment of families impacted by substance abuse. Emphasis is on understanding the theoretical foundations and applications of family therapy approaches to substance abuse-related problems.

HS 488 Physiology and Pharmacology of Alcohol and Other Drugs 3.0 CR
Prerequisite: HS/PSY 350, BIOL 112, CHEM 104 or faculty permission.
Study of the physiological and pharmacological actions and effects of alcohol and other drugs, including the concepts of tolerance and dependence. Emphasis will be on physiological and pathological affects of substance abuse on the human body, particularly during adolescence.

HS 489 Program Evaluation in Health Services 3.0 CR
Prerequisite: HS 379 and HS 380, or faculty permission.
An advanced health science elective required for the examination of health programs, e.g., substance abuse treatment, mental health, correctional, physical health.

HS 491 Assessment and Treatment Planning in Substance Abuse 3.0 CR
Prerequisite: HS/PSY 350 and HS 379 or faculty permission.
A course in tests, measurement, and treatment planning focused exclusively on substance abuse assessment methods. Topics of classical theory, reliability, validity, test construction, item analysis, and treatment planning will be discussed. Each student will investigate a substance abuse assessment device based on topics covered in class.

HS 492 Health Problems of the North 3.0 CR
Prerequisite: Declared Health Science major, senior standing and good academic standing.
A specialized focus on health problems of the North (high latitudes) which result from cold weather, harsh environmental conditions and the interaction of human biorhythms and extreme seasonal variations in environmental factors affecting health.

HS 495 Practicum 3.0-6.0 CR
Prerequisite: Declared health sciences major, senior standing and good academic standing.
Grading Policy: Pass/No Pass.
Supervised field experience in health services delivery, planning, research, and/or professional practice. Program of study will be developed jointly with the student and performance will be evaluated by the field preceptor and the supervising faculty. A monthly practicum meeting with the faculty supervisor is required.
Special Notes: May be repeated for a maximum of 6 credit hours.

HS 625 Biostatistics for Health Professionals 3.0 CR
Prerequisite: Undergraduate statistics course with grade of C or better and graduate standing, or faculty permission.
Cross-Listed: NS 625.
Principles of statistical reasoning and quantitative skills for analyzing health-related data. Topics include the binomial, Poisson, and normal distributions, the treatment of rates, measures of location and dispersion, and testing of statistical hypotheses. Both descriptive and inferential statistics are illustrated in mortality and morbidity problem sets requiring manual or computer assisted calculations. The comparison of methodological techniques and the choice of appropriate statistical methods to answer clinical practice and research questions are stressed. This course is designed to enhance rather than substitute for statistical knowledge gained at the undergraduate level.

HS 625L Biostatistics for Health Professionals Lab 1.0 CR
Prerequisite: Graduate standing, concurrent enrollment in HS 625 or completion of HS 625.
Cross-Listed: NS 625L.
Grading Policy: Pass/No Pass.
Fees.
Elective computer laboratory to teach statistical computer packages to use in performing statistical data analysis.

HS 626 Principles of Epidemiology 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Principles and methods of epidemiologic research. Major topics include etiological factors of disease and injury, the distribution of health problems within populations, levels of prevention, and the concept of risk. The design of retrospective, cross-sectional, and prospective studies are examined, to illustrate odds ratio, relative risk, life tables and person-years. Other topics include the adjustment of rates.

HS 627 Intermediate Epidemiology and Biostatistics 2.0 CR
Prerequisite: HS/NS 625 and HS/NS 626.
A joint continuation of HS/NS 625 and HS/NS 626, with more emphasis on analytical skills. Lectures and a series of problem sets illustrate the quantification of risk, including relative risk, odds ratio, standardized mortality ratio, life tables, and person-years. Other topics include regression and the adjustment of mortality and morbidity rates.

HS 630B Epidemiology 2.0 CR
Prerequisite: Requires written permission from Biomedical Director.
Fees.
Introduction to principles of epidemiology and biostatistics, emphasizing application to clinical medicine. Three broad topics: 1) health and disease in community; 2) interpretation of research results; and 3) clinical epidemiology.

HS 644 Research in Health Behavior 2.0 CR
Prerequisite: Graduate standing or faculty permission.
An inquiry into the psychosocial aspects of human behavior as it affects the physical health of individuals. Research from nursing, social psychology, behavioral medicines and health psychology is reviewed, providing opportunities for students to understand how health-related attitudes, values, beliefs, and norms affect health promotion and illness recovery. Emphasis is placed on reviewing studies which incorporate models, theories, and concepts that are useful in explaining or predicting health behavior, especially prevention.

HS 646 Health Education 2.0 CR
Prerequisite: Graduate standing or faculty permission.
Theory and method for promoting voluntary changes in health-related behavior with a focus on primary prevention. Develops skills in specifying behavior influencing a health problem and delineating predisposing, enabling and reinforcing factors that can be modified. Includes specifying target behaviors for change, selection of educational strategies, population versus individual perspective, and the use of persuasive communication.

HS 655 Principles of Health Protection 2.0 CR
An overview of environmental and regulatory procedures designed to protect the public's health. Health effects and control procedures for major physical and biological health hazards are reviewed, including communicable diseases, air pollution, traumatic injury, and the contamination of food, water, and milk. The historical and legal basis for health protection activities are also discussed.

HUM: HUMANITIES

Offered through the College of Arts and Sciences, CAS Building, Room 335, 786-1731

HUM 205 Fridays Ten 'til Two 1.0 CR
Fees.
Interdisciplinary program of lectures and discussions led by faculty and community leaders.
Special Notes: Stacked with EAH 049. See schedule for current title offering.

HUM 211 Introduction to Humanities I 3.0 CR
Prerequisite: ENGL 111.
Integrated exploration of fundamental principles of literature, music, philosophy, and visual arts.

HUM 212 Introduction to Humanities II 3.0 CR
Prerequisite: ENGL 111.
A study of a given historical period or periods with reference to art, literature, philosophy, and music.

HUM 220 Film as/and Literature 3.0 CR
An exploration of what makes good literature and good film, and the relationship between the two genres. This course focuses on how literary and cinematic expression differs, and how—or if—the former translates into the latter. Students learn to read novels, plays, and short stories critically and to watch films critically. Two critical essays required; readings are numerous.

HUM 250 Myths and Contemporary Culture 3.0 CR
Prerequisite: ENGL 111 or SPCH 111 or faculty permission. College level discussions and writing skills are required.
Survey of the origin, function, and history of myths which affect contemporary culture. From the earliest Sumerian epic to Joseph Campbell's "The Hero with a Thousand Faces," myths will be traced through their transformations in literature, sculpture, music, painting, and folk tales.

HUMS: HUMAN SERVICES

Offered through the College of Career and Vocational Education, Beatrice McDonald Building (BMB), Room 106, 786-1536

HUMS 101 Introduction to Human Services 3.0 CR
Fees.
Overview of human services. Includes traditional and contemporary helping approaches, plus characteristics, values, and professional roles of human service workers. Covers human service consumers, their problems and functioning, helping systems and strategies, environmental change processes, and legal and ethical issues.

HUMS 106 Introduction to Social Welfare 3.0 CR
Prerequisite: SOC 101.
Cross-Listed: SOC/SWK 106.
Analyzes social inequality and American social welfare system. Traces historical development of government response to social inequality. Explores historical and persisting dilemmas—ethical, political, social and economic—explicit and implicit in social welfare provisioning. Assists in understanding of social welfare problems and their solutions.

HUMS 121 Advocating for Victims of Domestic Violence or Sexual Assault 2.0 CR
Cross-Listed: SWK 121.
Grading Policy: Pass/No Pass.
Focuses on developing the skills and knowledge needed to be an effective advocate for victims of domestic violence and sexual assault. Provides historical perspective, identifies physical, sexual and emotional abuse that defines battering. Explains cycle of violence, power and control issues and why women stay in abusive relationships. Identifies five stages of living without violence (denial, self-blame, help seeking, ambivalence and living violence free lives). Discusses ways of helping victims become survivors.
Offered at Matanuska-Susitna College only.

HUMS 122 Substance Abuse as a Contemporary Problem 3.0 CR
Fees.
Examines cultural values and norms, and social attitudes toward alcohol and drug abuse. Impact of abuse on personal functioning and interpersonal relations.

HUMS 123 Public Education and Prevention in Substance Abuse 3.0 CR
Fees.
Use of community organization knowledge and skills for development of educational and preventive programs in substance abuse.

HUMS 131 Introduction to the Family Teaching Model 3.0 CR
Grading Policy: Pass/No Pass.
Theory, techniques, and practices of the family teaching model for social skills training in family and group settings.
Offered at Kodiak College only.

HUMS 150 Marriage, Divorce and Intimate Relationships in the 90's 3.0 CR
Fees.
Exploration of behaviors, values, attitudes and consequences of contemporary patterns of marriage, divorce and intimate relationships from the perspectives of American culture, ethnic groups and students. Issues examined include values and attitudes toward family, sex roles, sexuality, marriage and divorce; six traditional and contemporary relationship options; dynamics of intimate relationships; and relationships in the future.

HUMS 153 Human Relations 3.0 CR
Cross-Listed: PSY 153.
Fees.
A survey of human relations to include communication, problem solving, interaction, relationship, choice and change skills.

HUMS 155 Human Relations in the Work Place 3.0 CR
Fees.
A survey of communication, problem solving and interaction skills as applied to the world of work.

HUMS 223 Introduction to Paraprofessional Counseling I 3.0 CR
Cross-Listed: PSY 223.
Fees.
Focuses on systematic approach to effective helping and helping skills which fall into the following skill categories: skills for understanding, skills for comfort and crisis intervention, and skills for positive action.

HUMS 231 Applied Behavioral Analysis I 2.0 CR
Overview of behavioral analysis and its implementation by direct care providers who work with populations requiring specialized interventions. Includes social learning theory, specific behavior management procedures and techniques, teaching new behaviors, reducing undesirable behaviors, task analysis and data collection and interpretation. Emphasis on student skill development in working with emotionally disturbed and developmentally disabled youth and adults and socially maladapted youth.

HUMS 232 Applied Behavioral Analysis II 2.0 CR
Prerequisite: HUMS 231 or faculty permission.
Offers in-depth understanding and proficiency in applied behavioral analysis. Application of skills in teaching new behaviors, reducing undesirable behaviors, and managing behaviors among varied populations requiring specialized interventions. Also examines integration of counseling and behavioral programming.

HUMS 235 Substance Abuse Counseling for Paraprofessionals 3.0 CR
Prerequisite: HUMS/PSY 223.
A skill-based course dealing with counseling techniques used by human service workers in a substance abuse agency. Includes assessment, diagnosis, treatment planning and prevention.

HUMS 250 Cultural Issues in Human Services 1.0 CR
Fees.
Introduction to intercultural communication through examination of communication as a unit of culture. Thought, communication, and behavior patterns of various world views. Cultural orientation and interaction styles, and techniques for effective contact with individuals with differing cultural characteristics.

HUMS 255 Group Facilitation for Human Service Workers 3.0 CR
Prerequisite: PSY/HUMS 223.
Develops goal setting, reciprocation, task identification, and personal growth group facilitation skills. Includes ethical and paraprofessional considerations, group leadership, management and evaluation skills, and discussion of basic issues in group membership and facilitation.

HUMS 256 Groups and Organizations 3.0 CR
Fees.
Introduces basic theories, practices and issues of relevance to working in human service agencies and develops skills to work effectively in an organizational setting. As a result of this course, the student should be more effective in observing, analyzing and coping with the social, psychological and political dynamics of service delivery groups and organizations.

HUMS 262 Human Services Practicum I 4.0 CR
Prerequisite: HUMS 101, PSY/HUMS 223, and faculty permission.
Fees.
Arranged placement in community human service agency. Emphasis on observation of agency structure and functioning, professional relationships, and inter-agency relationships. Application of beginning helping skills with agency clients. Weekly in class seminar to facilitate integration of knowledge, skills, and values.

HUMS 263 Human Services Practicum II 4.0 CR
Prerequisite: HUMS 262 and faculty permission.
Fees.
Continuation of HUMS 262. Emphasizes increasing responsibility for direct client services. Problem assessment, case planning and management, and preparation for entry level professional responsibilities. Weekly in class seminar to facilitate integration of knowledge, skills, and values. Agency placement arranged.

HUMS 264 Human Services Practicum III 3.0-4.0 CR
Prerequisite: HUMS 263.
Continuation of HUMS 263. Emphasizes high level of responsibility for direct client services or special projects conducted within agency. Designed to increase professional skills or add new roles or specialized skills. Optional weekly in class seminar.
Special Notes: Offered as warranted by demand.

HUMS 324 Introduction to Paraprofessional Counseling II 3.0 CR
Prerequisite: PSY/HUMS 223 or faculty permission.
Cross-Listed: PSY 324.
Fees.
Focuses on 11 major paraprofessional counseling skill clusters. Course emphasis will be skill performance in a direct service context.

HUMS 350 Men and Masculinity 3.0 CR
Prerequisite: SOC 101 or PSY 111.
Fees.
Examines perspectives on masculinity and male sex role from historical, cultural and social-psychological perspectives with focus on males as clients in the human service setting. Examines the dynamics of male socialization and its influence on men in areas such as family and work, sexuality, and physical and mental health. Attention given to implications for prevention and human service delivery.

ID: INTERIOR DESIGN

Offered through the College of Arts and Sciences, Arts Building (ARTS), Room 302, 786-1783

ID 141 Interior Design 3.0 CR
Beginning interior design survey course. Design theory as related to planning and decorating homes. Particular emphasis on developing individual styles, color schemes, floor, wall and window coverings, basic lighting, and interior furnishings.

ID 143 Drafting for Interior Design 3.0 CR
Basic drafting techniques related to interior design. Covers uses of various media and tools, floor plans, elevations, sections, and isometric drawings.

ID 146 Interior House Planning Seminar 1.0 CR
Study of organization of interior space to suit occupant activities and interests. Enables students to understand manipulation of limited amounts of interior space, thereby creating multiple options for acceptable living areas.

ID 148 Interior Design Laboratory I 3.0 CR
Prerequisite: AET 101 or ID 143.
Fees.
Enables students to continue applying theories by solving specified problems.

ID 150 Interior Finishes 3.0 CR
Prerequisite: ID 141 and passing score on MATH 055 Placement Test.
Enables students to study specific background interior modules in depth. Wall coverings, window treatments, ceilings, and floor coverings.

ID 158 Interior Design Laboratory II 3.0 CR
Prerequisite: ID 148 and SPCH 111.
Fees.
Applying design theories to solving specific problems. Stresses professional presentations.

ID 242 Contemporary Furnishings 3.0 CR
Prerequisite: ID 141, ART 261 and ART 262 recommended.
Survey course to acquaint students with interior furnishings from 1900 to present. Emphasis on obtaining working knowledge of contemporary furnishings, including designs, materials, and sources.

ID 245 Basic Lighting Principles 3.0 CR
Prerequisite: ID 141
Acquaints students with fundamentals of lighting for residential structures. Students explore areas of light and color, lighting equipment and sources, light manipulation and control.

INTL : INTERNATIONAL STUDIES

Offered through the College of Arts and Sciences, CAS Building, Room 363, 786-4897

INTL 301 Canada: Introductory Survey 3.0 CR
Multidisciplinary introduction to Canadian society, including Canadian geography, anthropology, history, sociology, politics, law, economics and culture. The course is team-taught by faculty from a number of disciplines.
Special Notes: Satisfies university-wide general education degree requirements.

INTL 302 Canada: Contemporary Issues 3.0 CR
Prerequisite: INTL 301 or faculty permission.
Contemporary Canadian issues and topics, including health and environment, northern development, US-Canada relations, Canadian international relations, the multilingual society, education, arts and humanities, and northern engineering.

INTL 303 Canada: Selected Topics 3.0 CR
Each offering focuses on a different aspect of Canadian life. Topics include anthropology and Native peoples of Canada, history, sociology, politics, economics and resources, film, theatre, literature, education, and the health system.
Special Notes: Stacked with INTL 603.

INTL 603 Canada: Selected Topics 3.0 CR
Prerequisite: Graduate standing.
Advanced study of different aspects of Canadian life. Topics include Canadian anthropology and Native peoples, art, economics and resources, history, literature, politics, Quebec and the French fact in Canada, sociology and theatre.
Special Notes: May be repeated for credit a maximum of four times with a change of subtitle. Stacked with INTL 303.

JPC: JOURNALISM AND PUBLIC COMMUNICATIONS

Offered through the College of Arts and Sciences, Classroom Building (K), Room 104, 786-1506

JPC 101 Introduction to Mass Communication 3.0 CR
Fees.
A survey of the media of mass communication and their functions in modern society: newspapers, magazines, books, movies, radio, television, and the advertising and public relations industries.

JPC 105 Writing for Publications 3.0 CR
Introduction to journalistic writing for publications such as campus newspapers. Writing and editing features, news stories, and editorials. Additional topics may include advertising, copywriting and taking photos for publications.
Special Notes: For non JPC majors and minors.

JPC 111 Understanding Aural and Visual Communications 3.0 CR
Prerequisite: JPC 101 or faculty permission.
Aural and visual literacy and appreciation. The course studies how sounds and images are used to inform, entertain, persuade and transmit culture. Radio, film and television programs are analyzed: how they are made, their processes and how they effect individuals and society.

JPC 121 Basic Video Production 2.0-3.0 CR
Non-broadcast applications of television production techniques. Takes a professional approach to basic video camera, lighting and editing techniques, and script preparation applied in a laboratory setting. Recommended for those interested in the uses of television for education, training or business.
Special Notes: For non JPC majors and minors.

JPC 201 Newswriting 3.0 CR
Prerequisite: JPC 101, ENGL 211 or 213 or 311, typing ability, and faculty permission.
Structure of news stories, various news leads and feature stories; gathering and evaluating information for simple news stories; and writing stories.

JPC 205 Feature Writing 3.0 CR
Nonfiction writing for magazines and newspapers. Writing, rewriting, editing and submitting articles for publication. Introduction to style, interviewing techniques, and issues of libel and ethics.
Special Notes: For non JPC majors and minors.

JPC 212 Editing 3.0 CR
Prerequisite: JPC 201.
Editing copy and graphics and preparing them for publication. Students edit copy, write headlines and captions, crop and size pictures and are introduced to newspaper and magazine design. Ethical and legal concerns in editing also are addressed.

JPC 215 History of Mass Communication 3.0 CR
Development of the print, film, and broadcast communication media from their beginnings to the present, and their roles as institutions in American society.

JPC 224 Beginning Photography 3.0 CR
Cross-Listed: ART 224.
Fees.
Basic principles including camera functions and the utilization of these functions for artistic expression through the processing and printing of black and white film.

JPC 300 Photojournalism 3.0 CR
Prerequisite: JPC 111, JPC 201, JPC/ART 224.
Fees.
Creating effective photos and photo essays for newspapers, magazines, and television. Learning to recognize, develop and create photo stories; how to

coordinate words and photos and to lay them out on a page. Photo editing. How to present material to potential markets.

JPC 301 Advanced Newswriting 3.0 CR
Prerequisite: JPC 201.
Advanced newsgathering and writing techniques covering a wide scope of subjects. Emphasis is on reporting in the community under conditions approximating those of a newsroom.

JPC 310 Audio Production 3.0 CR
Prerequisite: JPC 111.
Fees.
Techniques of sound production. Survey of the history and formats of radio. Audio production techniques are introduced for radio, television, film, and sound/slide presentations. Students produce documentary, dramatic or commercial studio projects.

JPC 311 Magazine Writing 3.0 CR
Prerequisite: JPC 301, or two English composition courses and faculty permission.
Article writing for publication in magazines, preparation of query letters, market analysis, and manuscript writing. Includes discussion of ethical and legal issues of special concern in magazine writing.

JPC 316 Producing for Film and Television 3.0 CR
Prerequisite: JPC 111 or faculty permission.
Fees.
Principles and techniques of video and film production; concepts, script, production planning, camera, audio, lighting, and editing. Teaches basic principles common to film and television production through the use of portable color video cameras and video tape editing systems.

JPC 320 Principles of Public Relations 3.0 CR
Prerequisite: JPC 101 or faculty permission.
Function of public relations and its role in society. Principles, history and practice of public relations in business, educational institutions, social welfare organizations, government and military services; process of influencing and public opinion; responsibilities of the public relations practitioner to his principles, media and public.

JPC 323 Color Photography 3.0 CR
Prerequisite: JPC/ART 224.
Cross-Listed: ART 323.
Fees.
Advanced techniques in color transparencies, color negatives, and color printing.
Special Notes: May be repeated for credit.

JPC 324 Intermediate Photography 3.0 CR
Prerequisite: JPC/ART 224 or faculty permission.
Cross-Listed: ART 324.
Fees.
Further development of photographic skills. Includes photographic perception of awareness, ideas and concepts, and the "fine print."

JPC 325 Writing for Film and Television 3.0 CR
Study and practice in writing for film and television, including dramatic, docu-dramatic, educational and documentary forms. Concentration on the development of basic visualization skills for writers and techniques in proposal, concept, treatment and scriptwriting.

JPC 326 Principles of Advertising 3.0 CR
Prerequisite: JPC 101 or department permission.
Theory and practice of advertising; including strategy, media use, creation and production of advertisements and measurement of advertising effectiveness.

JPC 328 Advertising Campaign 3.0 CR
Prerequisite: JPC 329, JPC 326 or faculty permission.
Fees.
Planning and execution of advertising campaign, marketing and consumer research, organization and function of advertising agencies, selection of media, etc.

JPC 329 Graphics and Publication Design 3.0 CR
Prerequisite: JPC 212 or faculty permission.
Fees.
Understanding of design principles, graphics, typography and layout for various types of publications, and study of print production methods. Practice is combined with theory.
Special Notes: Students provide specified graphics art tools.

JPC 330 Advanced Public Relations 3.0 CR
Prerequisite: JPC 212, JPC 320, JPC 329 or faculty permission.
Use of controlled and uncontrolled (public) media to achieve motivation of target audiences; case studies and typical problems, planning and preparation of communication materials; and application of public relations concepts and techniques.

JPC 331 Experimental Photography 3.0 CR
Prerequisite: JPC/ART 324.
Cross-Listed: ART 331.
Fees.
Exploration of various special effects and techniques. Emphasizes creativity using various photographic processes.
Special Notes: May be repeated for credit.

JPC 341 Broadcast Journalism Production 3.0 CR
Prerequisite: JPC 201, JPC 310, JPC 316 or faculty permission.
Fees.
Focus on all phases of broadcast news from laboratory practice in gathering and editing to contemporary trends and issues in broadcast journalism. Laboratory experience involves tapes and films; all work done against absolute deadlines.

JPC 350 Directing for Film and Television 3.0 CR
Prerequisite: JPC 316.
Fees.
Film and video authorship; individual projects. Emphasizes the role of director as author, and stresses advanced techniques in dramatic or documentary student projects.

JPC 364 Advertising Strategy 3.0 CR
Prerequisite: JPC 201 and JPC 326.
Fees.
Principles of advertising management including planning, scheduling and client relations. Emphasis on techniques for creative strategy and media strategy.

JPC 365 Advertising Creativity 3.0 CR
Prerequisite: JPC 201 and JPC 326.
Fees.
Principles of the creative process used in advertising. Uses theory as basis for development and application of creative skills at the professional level in the creation of individual advertisements and campaigns.

JPC 367 History of Photography 3.0 CR
Cross-Listed: ART 367.
Fees.
Evolution of photography; 1816 to the present. Surveys style, approach, content and form of the major trends in Europe and America.

JPC 400 Practicum 1.0-3.0 CR
Prerequisite: Faculty permission.
Combines practical application of theories, concepts, and practices with classroom instruction. Production experience may be in areas of journalism, telecommunications, public relations, advertising, or photography.
Special Notes: Variable credits determined by faculty. Only 3 credits for one internship or practicum may be taken as a part of the 36 credits for the major.

JPC 401 Specialized Writing 3.0 CR
Prerequisite: JPC 301 or faculty permission.
For students interested in writing in-depth background and feature articles for publication in newspapers and/or magazines. Information gathering from a variety of selected fields. Includes discussion of story ideas, writing techniques and marketing procedures for free-lance work.
Special Notes: May be repeated for credit.

JPC 413 Communications Law 3.0 CR
Cross-Listed: JUST 413.
Fees.
Legal rights, privileges, and regulations of press, radio, television, and films; libel, contempt, copyright, rights of privacy; and decisions of regulatory bodies.

JPC 416 Information Age Communication 3.0 CR
The social effects of new communications media. Includes examination of technologies that affect media organizations and ones that are making new media possible. Also includes examination of the telecommunications policy process and the implications for society of pursuing different policy alternatives.

JPC 423 Advertising and Public Relations Photography 3.0 CR
Prerequisite: JPC/ART 324.
Cross-Listed: ART 423.
Fees.
Emphasizes lighting for form, texture, and separation as advertising. Industrial and public relations photography is explored.
Special Notes: May be repeated for credit.

JPC 424 Advanced Photography 3.0 CR
Prerequisite: JPC/ART 324.
Cross-Listed: ART 424.
Fees.
Development of images that reflect individual expression. Provides for individual portfolio development.
Special Notes: May be repeated for credit.

JPC 435 Communication Research 3.0 CR
Prerequisite: AS 252.
Introduction to research in mass communication, including historical development and impact, research design, data collection and analysis. Projects will provide practice in using research in such areas as precision journalism, media management, public relations planning and evaluation, and advertising campaigns.

JPC 440 The Press: Issues and Answers 3.0 CR
A comprehensive study of how effectively the press (print and electronic) responds today to its obligations in the varied and demanding society it is duty bound to serve.

JPC 450 Internship in Journalism 3.0 CR
Prerequisite: JPC majors with junior or senior standing, and faculty permission.
Professional work experience in appropriate areas of journalism.
Special Notes: Only 3 credits for one internship or practicum may be taken as a part of the 36 credits for the major.

JPC 451 Internship in Public Relations or Advertising 3.0 CR
Prerequisite: JPC majors with junior or senior standing, and faculty permission.
Professional work experience in appropriate areas of public relations or advertising.
Special Notes: Only 3 credits for one internship or practicum may be taken as part of the 36 credits for the major.

JPC 452 Internship in Telecommunications 3.0 CR
Prerequisite: JPC majors with junior or senior standing, and faculty permission.
Professional work experience in appropriate areas of telecommunication.
Special Notes: Only 3 credits for one internship or practicum may be taken as part of the 36 credits for the major.

JPC 453 Internship in Photography 3.0 CR
Prerequisite: JPC majors with junior or senior standing, and faculty permission.
Professional work experience in appropriate areas of photography.
Special Notes: Only 3 credits for one internship or practicum may be taken as part of the 36 credits for the major.

JPC 490 Selected Topics in Communication 1.0-3 0 CR
Prerequisite: Faculty permission
Fees.
Focus on current topics related to a specific area of communication. Specific topics to be announced.
Special Notes: May be repeated for credit. A maximum of 3 credits may be applied to the 36 credit requirement of the major.

JUST: JUSTICE

Offered through the School of Public Affairs, Justice Center, CAS Building, Room 306,786-1810

JUST 110 Introduction to Justice 3.0 CR
Survey of philosophies, functions and methods of social control with emphasis on role of law and those involved in its administration—police, courts, and correction organizations. Includes study of history, organization, processes, and problems related to law and justice agencies in a heterogeneous, democratic society.
Special Notes: This course is a prerequisite to most Justice courses.
Offered fall and spring semesters.

JUST 111 Torts 3.0 CR
Prerequisite: JUST 110 or PARL 101.
Study of fundamental principles of law of torts. Survey of legal pleadings used to commence tort claims in court actions. Research assignments in which students investigate sample tort claims.

JUST 115 Contracts 3.0 CR
Prerequisite: JUST 110 or PARL 101.
Laws related to formation of contracts. Includes offer, acceptance, consideration, defenses to formation and enforcement of contracts, excuse, discharge, and damages.

JUST 153 Evidence 3.0 CR
Prerequisite: JUST 110 or PARL 101. Either may be taken concurrently with faculty permission.
Kinds and degrees of evidence, and rules governing admissibility of evidence in court.

JUST 203 Juvenile Delinquency 3.0 CR
Prerequisite: SOC 101 or faculty permission.
Cross-Listed: SOC 203.
A conceptual approach to deviant and delinquent behavior, contributing social problems, adolescence as a subculture with emphasis on the juvenile code and treatment procedure.

JUST 210 Principles of Corrections 3.0 CR
Prerequisite: JUST 110 or JUST 251.
An introduction to the basic concepts of probation and parole; the use of authority in corrective services; institutional methods; a study of popular and professional concepts in corrections.

JUST 221 Justice Organization and Management 3.0 CR
Prerequisite: JUST 110.
Survey of organization and management of police, court, correctional and legal operations, agency roles, goals, structural arrangements and administrative practices; applicability of theory and research; techniques and instruments of organization and management; and principles of change.

JUST 225 Labor Law 3.0 CR
Fees.
Study of legislative acts and court decisions in labor law. Examines laws governing labor-management relations, organization and representation of employees, and regulation of economic weapons. Also covers enforcement of collective bargaining agreements, their content, negotiation, and administration through grievance procedures and arbitration, and inter-union and intra-union relations.

JUST 227 Probate 3.0 CR
Prerequisite: PARL 101 or JUST 110.
Uniform Probate Code as adopted in Alaska. Substantive rights of spouses and families, probate procedures, and formal testacy. Personal, representative, and supervised administration, distribution and non-profit transfers.

JUST 230 Domestic Relations 3.0 CR
Prerequisite: JUST 110 or PARL 101.
Laws relating to marriage and divorce, support and property rights. Adoptions, guardianship, abortion, and juvenile rights in family settings.

JUST 233 Minorities and Justice Careers 3.0 CR
An explication of the justice system designed particularly for minority students, especially Alaskan Natives, and for others seeking a practically-oriented introductory perspective to the justice field. Emphasis is on the functions of professionals within the justice system. Includes an introduction to law and a legal writing and research skills development seminar. Requires participation in a practicum.
Offered summer semesters.

JUST 241 Business Law I 3.0 CR
Cross-Listed: BA 241.
Introduces legal aspects of business activities. Emphasizes basic principles, institutions, and administration of law in contracts, employment, torts, property, agency, real estate, and insurance.

JUST 242 Business Law II 3.0 CR
Prerequisite: JUST/BA 241.
Cross-Listed: BA 242.
Emphasizes basic principles, institutions, and administration of law in suretyships, partnerships, corporations, trusts, bankruptcy, negotiable instruments and sale of goods.

JUST 250 Development of Law 3.0 CR
Prerequisite: JUST 110.
Study of underlying philosophy, development and structure of law with emphasis on the law system of the U.S. and Alaska. Includes "civil" precedents of such constitutional provisions as "due process" and "equal protection" in the U.S. Bill of Rights; criticisms of law; review of Native law ways; and procedures for changing law.
Offered spring semesters.

JUST 251 Criminology 3.0 CR
Prerequisite: JUST 110.
The study of deviant behavior and theories of crime causation and their relationship to society, law and law enforcement.

JUST 255 Criminal Investigation 3.0 CR
Prerequisite: JUST 110.
Fees.
Fundamentals of investigation. Crime scene search and recording, collection and preservation of physical evidence, and scientific aids. Modus operandi, sources of information, interviews and interrogations, follow-up, and case preparation.

JUST 320 Crime Prevention 3.0 CR
Examination of crime prevention strategies and concepts not usually found in law enforcement efforts. The legal, moral and ethical considerations and problems of human and environmental manipulation are explored in an interdisciplinary context. Emphasizes new and innovative approaches to preventing criminal behavior.

JUST 330 Justice and Society 3.0 CR
Prerequisite: JUST 110 or faculty permission.
The evolutionary influence of ideology, technology and social interests on the justice system. The dynamic impact of long-term emerging concepts such as

"equality" and "privacy" will be viewed against the background of requirements of political and economic organization.
Offered fall semesters.

JUST 343 Constitutional Law 3.0 CR
Prerequisite: One of: JUST 110, PS 101.
Cross-Listed: PS 343.
An introduction to American constitutional law through study of selected Supreme Court cases. Among the topics considered are judicial review; separation of powers; property, commerce, and taxation; liberties guaranteed by the Bill of Rights; equal protection; and privacy. Comparisons are made with the Alaska Constitution.

JUST 344 Courts and Civil Liberties 3.0 CR
Prerequisite: JUST 343.
Intensive study of the development of political and civil rights with particular emphasis on the period since 1937. Focuses on cases and literature of the Supreme Court and considers various influences on judicial decision making.

JUST 350 Contemporary Correctional Issues 3.0 CR
Prerequisite: JUST 110.
A survey course designed to acquaint the student with policy formulation problems related to both traditional and modern concepts of correctional programming. The roles of the executive, legislative and judicial branches of government in determining correctional policy will be examined. Policy issues in both pre-trial and post-conviction facilities will be covered and the trend toward privatization of correctional facilities and programs will be discussed.

JUST 352 Substantive Criminal Law 3.0 CR
Cross-Listed: PARL 352.
Prerequisite: JUST 110 or PARL 101.
Study of elements, purposes, and functions of substantive criminal law. Includes casebook study of general law of crimes and defenses with concentration on Alaska cases and statutes in Alaska Criminal Code. Historical and philosophical concepts are covered.

JUST 354 Criminal Procedure 3.0 CR
Cross-Listed: PARL 354.
Prerequisite: JUST 110 or PARL 101.
Emphasis upon legal limitations of police and right of people to be secure from government under protection of Federal and Alaska Constitutions. Concentration on laws of arrest, search and seizure, wiretapping, electronic surveillance, and exclusionary rule. Interrogations and confessions, lineups and other pretrial identification procedures, right to counsel, trial by jury, entrapment, and double jeopardy. Study of cases decided by U.S. and Alaska Supreme Courts, along with applicable Alaska Statutes and Alaska Rules of Criminal Procedure.

JUST 360 Justice Processes 3.0 CR
Prerequisite: JUST 110.
Study of processes and issues in police, court and correctional agency operations. Definition of goals; organizational design and development, organizing and managing financial, personnel and management processes; budget, union, communication, record; community-based programs; inspection, and program assessment. Contemporary administrative process problems.
Offered spring semesters.

JUST 365 Comparative Justice Systems 3.0 CR
Justice systems are examined on a global basis, in contrast with American justice systems, as a basis for a comparative approach to present-day national and international problems in crime and the administration of justice. Varying approaches—continental, Anglo-American and Eastern—to policing, corrections, legal systems and social order are reviewed and evaluated.

JUST 370 Judicial Policy and Court Administration 3.0 CR
Prerequisite: JUST 110 and JUST 221.
A review of the Alaska court system, its problems, management, policies and procedures. Analysis of issues related to court operations and policies and alternatives to the current situation.

JUST 380 Social Service Law 3.0 CR
Cross-Listed: SWK 380.
Prerequisite: JUST 110 or PARL 101.
Principal legal problems encountered by service professionals in fields such as health, employment, welfare and social work, with special emphasis on professional liabilities and poverty law.

JUST 385 Urban Police Problems 3.0 CR
Prerequisite: JUST 110.
Exploration of a variety of contemporary problems and issues related to the provision of urban police services. Issues considered may include alternatives to arrest, patrol methods, police officer-citizen relations, job stress, and use of deadly force.

JUST 413 Communications Law 3.0 CR
Cross-Listed: JPC 413.
Fees.
Legal rights, privileges, and regulations of press, radio, television, and films, libel, contempt, copyright, rights of privacy, and decisions of regulatory bodies.

JUST 440 Police Administration 3.0 CR
Prerequisite: JUST 110 and JUST 221.
Focuses on critical issues and situations faced by police executives. Among the areas studied are decision making, organizational strategies and services mixes, citizen complaint systems, change strategies and models, information systems, personnel management, financial administration and productivity measurement.

JUST 445 Probation, Parole and Community Corrections 3.0 CR
Prerequisite: JUST 210.
Study of community-based alternatives to incarceration for adult and juvenile offenders. The purposes, operations and organization of probation and parole agencies and the decision making responsibilities of probation and parole officers will be examined. Private and public community residential programs will be analyzed.

JUST 451 Research and Policymaking 4.0 CR
Prerequisite: JUST 110 and AS 252, upper class standing.
An overview of social research methods and procedures as related to justice policy development, implementation and assessment. Students are exposed to the policymaking process, qualitative and quantitative information producing tools, research utilization strategies and research proposal writing.
Special Notes: Laboratory is required.
Offered fall semesters.

JUST 454 Evaluation Research and Change 3.0 CR
Cross-Listed: SOC 454.
Prerequisite: Social science methods course.
Application of evaluation research to policy-making process. Presents evaluative research strategies including monitoring, process evaluation, cost-benefit analysis and impact evaluation. Special attention given to designing evaluation projects, analyzing and interpreting results, preparing and presenting evaluation research reports in justice, human and community service fields.
Offered spring semesters.

JUST 455 Rural Justice 3.0 CR
Prerequisite: JUST 110.
Multidisciplinary study of "bush justice" in rural Alaska and in other arctic settings including Greenland and Canada. A study of the interplay of law ways of Alaska Natives and early white populations with the developing military, territorial and state systems. Special focus on small village justice systems, traditional and modern; roles of police, councils, judges and others in the system, criminal and civil law; and alternatives to urban models proposed or tested in rural settings.

JUST 456 Anthropology and the Law 3.0 CR
Cross-Listed: ANTH 456.
This course will study variations cross-culturally in forms of social control of law, including traditional Alaska Native forms. Moving beyond the purely theoretical concerns of law cross-culturally, this course will investigate legal service delivery problems in cross-cultural settings, drawing upon both anthropological knowledge and jurisprudence in cross-cultural settings. Ways for improving legal service delivery systems will be examined.

JUST 462 Indian Law and the Settlement Act 3.0 CR
Prerequisite: JUST 110 and JUST 250.
A study of the legal history and current legal status of Alaska Native people. Attention will be given to the social, cultural and legal history of American Natives in general and Alaska Natives in particular; the U.S. policies concerning Natives and their rights, law of corporations and the corporate structure of the Settlement Act, and legal rights, money control, and land management under Alaska Native Claims Settlement Act.

JUST 465 Legislation 3.0 CR
Relationship of ordering words and procedural language to policy objectives. Drafting and interpretation of rules, regulations, and ordinances. Legal system design.

JUST 475 Juvenile Procedure 3.0 CR
Prerequisite: JUST/SOC 203 or faculty permission.
A practical clinical course providing comprehensive coverage of the Alaska children's code and juvenile law procedures.

JUST 480 Correctional Systems Management 3.0 CR
Prerequisite: JUST 110 and JUST 251.
Focuses on the management of correctional rehabilitation. Probation, imprisonment, parole and community-based corrections concepts are explored in-depth. Legal aspects of correctional administration, prisoner rights, and judicial involvement in penal systems. Correctional decision making processes, participatory management and citizen involvement are assessed. International comparisons of correctional systems are utilized to explore organizational and management options.

JUST 487 Seminar in American Legal History 3.0 CR
Prerequisite: JUST 250 or faculty permission.
Selected topics, including the criminal law of slavery, the emergence of the negligence principle, the history of conspiracy, the Salem witch trials and school desegregation in Little Rock are explored by student analysis of primary historical data including reports, trial transcripts and contemporary reports.

JUST 488 Research Practicum 1.0-6.0 CR
Prerequisite: JUST 451 or equivalent and faculty permission.
The application of research skills to the study of a problem in the justice field. Involves field research and related independent study.

JUST 491 Natural Resources Law 3.0 CR
An introduction to the law of land and resource development, with special emphasis on land and water use regulation and public land issues.

JUST 495 Justice Agency Internship 1.0-6.0 CR
Prerequisite: Junior or senior standing and faculty permission. Signature required.
Field experience prescribed to provide selected students with opportunities to apply knowledge, theory and understanding gained from course work in justice agency settings. These specially arranged internships will enable students to broaden and extend their knowledge in practical environments.

JUST 625 Seminar in Criminal Violation 3.0 CR
An advanced criminology seminar which will explore the application of various theories of crime causation to specific kinds of criminal violation. Students will use criminological theory in an effort to explain different types of criminal behavior and to assess both methods of prevention and potential treatment of the violator. Topics will include: crimes of violence, crimes against the public order, organized crime, white collar crime, etc.

JUST 630 Justice Administrative Theory and Practice 3.0 CR
An advanced seminar to study policy development and the application of theory and research in the administration of justice organizations. Theories, practices, innovations and administrative strategies will be explored.

LING: LINGUISTICS

Offered through the College of Arts and Sciences, Classroom Building (K), Room 222B, 786-1731.

LING 101 The Nature of Language 3.0 CR
A beginning course in study of language. Introduction to systematic analysis of human language and description of its grammatical structure, distribution, and diversity.

LS: LIBRARY SCIENCE

Offered through the College of Arts and Sciences, Library Reference Desk, 786-1848

LS 101 Library Skills 1.0 CR
Grading Policy: Pass/No Pass.
Self-paced study in college library skills and resources common to libraries in general, with particular reference to the UAA library.
Special Notes: No class sessions are held. Course to be completed within semester with individual assignments completed according to schedule set by student and approved by faculty.

LS 111 Library Skills 2.0 CR
Introductory course in college library skills. Familiarizes the student with reference materials found in most academic library collections. Covers use of the catalog, indexes and basic reference materials, and provides guidance in selecting and researching a topic.
Offered at Matanuska-Susitna College only.

LS 410 Introduction to Archives Administration 3.0 CR
Prerequisite: Graduate or upper-division students with concentration in Humanities or Social Sciences.
Introduction to basic principles of archives and manuscripts administration. Covers principles and terminology, records appraisal and management, the arrangement and description of collections, conservation, security and outreach.

MA: MEDICAL ASSISTING

Offered through the College of Career and Vocational Education, Allied Health Sciences Building (AHS), Room 160, 786-1241

MA 101 Medical Terminology I 3.0 CR
Medical terminology, including analysis of its roots and origins. Anatomical, diagnostic, operative, and laboratory terminology of human body systems and selected medical specialities. Emphasis on spelling and pronunciation.

MA 104 Medical Terminology II 3.0 CR
Prerequisite: MA 101 or current employment in health occupation.
Advanced medical terminology. In-depth examination of more complex medical terms of human body systems and specialties of medicine.

MA 120 Medical Office Procedures I 4.0 CR
Prerequisite: Acceptance into Medical Assisting program or faculty permission.
Fees.
Introduction and orientation to administrative and business aspects of medical offices and duties of medical office receptionist or administrative assistant. Includes medical law and ethics, reception and telephone procedures, orientation to health sciences, public relations, professionalism, and psychology of patient care.

MA 125 Medical Office Procedures II 4.0 CR
Prerequisite: MA 120 or faculty permission.
Fees.
Continued study of business aspects of medical offices, including health insurance claims processing, bookkeeping, billing and collection procedures, and medical office procedures.

MA 140 Medical Transcription I 3.0 CR
Prerequisite: 45 WPM typing speed, MA 101 or concurrent enrollment, or current employment in health occupation.
Fees.
Practice in machine transcribing of medical dictation, including medical report format and terminology.

MA 141 Medical Transcription II 3.0 CR
Prerequisite: Faculty permission. 45 WPM typing speed, MA 101, MA 140, or concurrent enrollment in MA 140.
Fees.
More advanced and complex machine transcribing of medical dictation.

MA 150 Clinical Procedures I 4.0 CR
Prerequisite: Acceptance into Medical Assisting program or faculty permission.
Fees.
Introduction to clinical duties of Medical Assistants and basic clinical procedures in medical offices. Care of patients in examining room, use and care of medical instruments and supplies, and assisting physicians with clinical procedures.

MA 155 Clinical Procedures II 4.0 CR
Prerequisite: MA 150 or faculty permission.
Fees.
Continuation of MA 150, with introduction to clinical duties of medical assistants and basic clinical procedures in medical offices. Includes electrocardiography, pharmacology, hematology, and radiology.

MA 195 Medical Office Externship 5.0 CR
Prerequisite: Faculty permission and completion of all courses required for Certificate in Medical Assisting with grade of C or better.
Students serve as medical assistant externs in private medical offices and clinics as final preparation for employment. Duties assigned and supervised by physicians and medical assistants. Students spend five full days weekly, for six weeks, in medical offices and clinics.

MATH: MATHEMATICS

Offered through the College of Arts and Sciences, CAS Building, Room 154, 786-1742 or 786-4824

MATH 050 Math Modules (050A-C) 3.0 CR
Three credit course divided into modules which may either be taken together as a block or separately. Together, these modules cover arithmetic skills as a prelude to elementary algebra (MATH 055).
Special Notes: Equivalent to MATH 054. Credit will not be given for both MATH 054 and 050. If a student registers and satisfactorily passes all modules, a total of 3 credits will be earned.
Offered at Kenai Peninsula College only.

MATH 050A Basic Mathematics 1.0 CR
Includes addition, subtraction, multiplication, and division (the four basic operations) on whole numbers, fractions, and decimals. Computation involving ratios, proportions and percents is also included. The topic of math anxiety will be dealt with throughout the course.
Offered at Kenai Peninsula College only.

MATH 050B Review of Math Concepts 1.0 CR
Prerequisite: MATH 050A or placement.
Includes a review of elementary geometry (area and perimeter calculations), order or operations and an introduction to mathematical expressions using variables and polynomials.
Offered at Kenai Peninsula College only.

MATH 050C **Preparing for Algebra** **1.0 CR**
Prerequisite: MATH 050B or placement.
Explores mathematical expressions using exponents and radicals. Also included is an overview of properties of equalities, solving equations, and elementary word problems.
Offered at Kenai Peninsula College only.

MATH 054 **Pre-Algebra** **3.0 CR**
Fees.
Basic concepts of pre-algebra mathematics. Includes arithmetic operations and applications, whole numbers, fractions, decimals, ratio and proportion, percent, area and volume, exponents, radicals, signed numbers, and solution of simple equations.
Special Notes: Equivalent to MATH 050. Credit will not be given for both MATH 050 and MATH 054. Math Placement Test not required.

MATH 055 **Elementary Algebra** **3.0 CR**
Prerequisite: MATH 054 with grade of C or higher or Math Placement Test.
Fees.
Beginning algebra course. Includes operations with signed numbers and polynomials, factoring, exponents, radicals, algebraic fractions, solution of linear equations, systems of equations, linear inequalities, and quadratic equations. Basic graphing.

MATH 060 **Essential Mathematics** **4.0 CR**
Fees.
Teaches the concepts of basic arithmetic and introductory algebra. Develops ability to perform algebraic manipulations to the level where this knowledge can be used in intermediate algebra and in other disciplines. Includes operations on whole numbers, fractions, decimals, ratio, proportion, percent, measurement systems, topics from consumer mathematics, operations and properties of real numbers, order of operations, evaluation of literal expressions and formulas, simplifying algebraic expressions, solution of linear equations and inequalities, with polynomials, factoring and special products, fundamental operations with algebraic fractions, Cartesian graphing of linear equations and inequalities in two variables, solution of quadratic equations, elementary systems of equations. Time permitting: geometry of figures, scientific notation and variation.
Special Notes: Equivalent to MATH 054 and MATH 055. Credit will not be given for both MATH 055 and MATH 060. Placement Test not required.

MATH 065 **Plane Geometry** **3.0 CR**
Prerequisite: MATH 055 or 060 with grade of C or higher or Math Placement Test.
Fees.
Fundamental concepts of plane geometry. Methods of proof, elementary logic, congruent triangles, parallel lines, angle relationships, ratio, proportion, similarity, regular polygons, circles, and constructions.

MATH 101 **Technical Mathematics** **3.0 CR**
Prerequisite: MATH 050 or MATH 054 with grade of C or higher or Math Placement Test.
Provides mathematical skills for students enrolled in technical and vocational programs. Includes basic arithmetic, operations with signed numbers, solving equations with one and two variables, formula evaluation and rearrangement, introduction to trigonometry, right triangle trigonometry, and solving job-related mathematical problems.

MATH 102 **Business Math** **3.0 CR**
Designed for students with a modest mathematical background who wish to develop skills in applied business mathematics and financial matters. Topics include simple and compound interest, notes, present value, trade and cash discounts, markup/markdown, payrolls, depreciation, casualty insurance, sales and property tax, installment buying and business statistics.

MATH 103 **Concepts of Mathematics** **3.0 CR**
A cultural sequence for students with limited background in mathematical thought and history. Emphasizes mathematical reasoning rather than formal manipulation. Exposes non-math students to diversity of topics in mathematics and teaches deductive reasoning. Topics chosen from arithmetic, geometry, number theory, topology, algebra, and analysis.
Offered at Kodiak College only.

MATH 105 **Intermediate Algebra** **3.0 CR**
Prerequisite: MATH 055 or 060 with grade of C or higher or Math Placement Test.
Fees.
Presumes solid foundation in elementary algebra. Includes sets, properties of real numbers, exponents and radicals, solution of first and second degree equations and inequalities. Also covers word problems, fundamental operations with polynomials, factoring, special products, rational expressions, functions, conic sections, Cartesian graphing of first and second degree equations and inequalities, systems of equations, and introduction to logarithmic and exponential functions.

MATH 106 **College Algebra and Trigonometry** **7.0 CR**
Prerequisite: MATH 105 or two years of high school algebra with a grade of C or higher or Math Placement Test.
Fees.
Review and extension of topics from MATH 105. Covers logarithmic and exponential functions, binomial theorem, graphs and equations of conic sections, solution of equations greater than second degree, mathematical induction, function theory, inverses, inequalities, determinants, matrices and systems of equations, sequences and series, combinatorics and probability. Angular measure and trigonometric functions, complex numbers, DeMoivre's theorem, solution of right and oblique triangles, solution of trigonometric equations, inverse trigonometric functions and vectors.
Special Notes: Combines content of MATH 107 and 108 in 7 credit course. A student may apply no more than 7 credits from any combination of MATH 106, 107 and 108 toward the graduation requirements for any baccalaureate degree.

MATH 107 **College Algebra** **4.0 CR**
Prerequisite: MATH 105 or two years of high school algebra with grade of C or higher or Math Placement Test.
Fees.
Review and extension of topics from MATH 105. Covers logarithmic and exponential functions, binomial theorem, graphs and equations of conic sections, solution of equations greater than second degree, mathematical induction, combinatorics and probability, function theory, inverses, inequalities, determinants, matrices and systems of equations, sequences and series.
Special Notes: A student may apply no more than 7 credits from any combination of MATH 106, 107 and 108 toward the graduation requirements for any baccalaureate degree.

MATH 108 **Trigonometry** **3.0 CR**
Prerequisite: MATH 107 or two years of high school algebra with grade of C or higher or Math Placement Test.
Fees.
Covers angular measure and trigonometric functions, fundamental trigonometric identities, composite angle identities, and graphs of trigonometric functions. Also includes complex numbers, DeMoivre's theorem, solution of right and oblique triangles, solution of trigonometric equations, inverse trigonometric functions and vectors. Provides calculation practice helpful for physics, engineering and survey technology courses.
Special Notes: A student may apply no more than 7 credits from any combination of MATH 106, 107 and 108 toward the graduation requirements for any baccalaureate degree.

MATH 150 **Mathematics Computer Laboratory** **1.0 CR**
Prerequisite: MATH 105 unless taken concurrently.
This is a hands-on companion to mathematics courses ranging from intermediate algebra to calculus and differential equations. Students will use computer software to solve mathematical problems. The numerical, symbolic and graphic capabilities of the software will be systematically studied. Students will receive individualized instruction.
Offered at Kenai Peninsula College only.

MATH 200 **Calculus I** **4.0 CR**
Prerequisite: Either MATH 106 or MATH 107 and MATH 108 with grade of C or higher or Math Placement Test.
Fees.
Review of functions and analytic geometry, limits, derivatives of trigonometric and rational algebraic functions, curve sketching, basic integration of power functions, the definite integral, and applications of differentiation and integration.

MATH 201 **Calculus II** **4.0 CR**
Prerequisite: MATH 200 with grade of C or higher.
Fees.
Differentiation and integration of exponential, logarithmic and trigonometric functions. Parametric equations, arc length, polar co-ordinates, techniques of integration, and infinite series.

MATH 202 **Calculus III** **4.0 CR**
Prerequisite: MATH 201 with grade of C or higher.
Fees.
Vectors, partial differentiation and multiple integration.

MATH 205 **Mathematics for Elementary School Teachers I** **3.0 CR**
Prerequisite: Two years of high school mathematics, including at least one year of algebra, or Math Competency Test, offered by the UAA School of Education. Math Competency Test compulsory at UAA.
Elementary set theory, numeration systems, and algorithms of arithmetic, logic, divisors, multiples, integers, rational numbers, number theory, solving equations and inequalities, graphing, problem solving strategies, consumer math, and geometry. Includes use of appropriate materials for teaching these topics.

MATH 206 **Mathematics for Elementary School Teachers II** **3.0 CR**
Prerequisite: MATH 205.
Continuation of MATH 205. Topics include real number systems and subsystems, algebra, graphing, logic, geometry, topology, measurement, metric system, probability

and statistics, and calculators. Includes use of appropriate materials for teaching these topics.

MATH 231 Introduction to Discrete Mathematics 3.0 CR
Prerequisite: MATH 107 or two years of high school algebra and Math Placement Test.
Logic in its connections with mathematical proof, set theory, Boolean algebra, and combinatorial circuits; techniques of counting; elements of graph theory. Additional topics related to the mathematics of computing may include graph and tree traversal, finite automata, and the basics of complexity and formal languages.

MATH 270 Applied Finite Mathematics for the Managerial Sciences 3.0 CR
Prerequisite: MATH 105 or two years high school algebra or Math Placement Test.
Fees.
Linear equations and inequalities, algebra of matrices, introductory linear programming, logarithms and exponential functions. Applications emphasizing the relationships of these mathematical concepts to quantitative decision making in managerial sciences.

MATH 272 Calculus for Managerial Sciences 3.0 CR
Prerequisite: MATH 270 or MATH 107 or equivalent.
Fees.
Functions and graphs, differentiation, exponential and logarithmic functions, antidifferentiation and integration, functions of several variables. Applications of these mathematical concepts.

MATH 302 Ordinary Differential Equations 3.0 CR
Prerequisite: MATH 202.
Nature and origin of differential equations, first order equations and solutions; linear differential equations with constant coefficients, systems of equations, power series solutions, operational methods, Laplace transform methods and applications.

MATH 303 Introduction to Modern Algebra 3.0 CR
Prerequisite: MATH 202.
Introduction to sets, groups, rings and fields.

MATH 305 Geometry 3.0 CR
Prerequisite: MATH 202.
Topics selected from such fields as Euclidean and non-Euclidean plane geometry, affine geometry, projective geometry, and topology.

MATH 306 Discrete Methods 3.0 CR
Prerequisite: MATH 201 or MATH 231 or faculty permission.
Graph theoretical and combinatorial problem solving. Discrete models for applied problems are introduced and algorithmic as well as closed form solution techniques are applied.

MATH 314 Linear Algebra 3.0 CR
Prerequisite: MATH 201 and faculty permission or MATH 202.
Linear equations, finite dimensional vector spaces, matrices, determinants, linear transformations, and characteristic values. Inner product spaces.

MATH 321 Analysis of Several Variables 3.0 CR
Prerequisite: MATH 202 and MATH 314.
Vector calculus, exterior calculus, optimization techniques, and integration with applications. Emphasizes the use of linear and multilinear algebra techniques to generalize the basic methods of calculus to several independent and dependent variables.

MATH 324 Advanced Calculus 3.0 CR
Prerequisite: MATH 202.
Investigations of the limit concept with special reference to functions on the real line, sequences, and series of real numbers and integration of continuous functions.

MATH 371 Probability Models 3.0 CR
Prerequisite: AS 307 or equivalent; MATH 201.
Theory and applications, including moment generating functions, conditional expectation, Poisson processes, Markov chains, and topics selected from: branching processes, queueing theory, random walks, and reliability theory.

MATH 403 Introduction to Real Analysis 3.0 CR
Prerequisite: MATH 324.
Sets, real numbers, function, topology of metric spaces, and mappings.

MATH 406 Topics in Applied Mathematics 1.0-4.0 CR
Prerequisite: Faculty permission.
The mathematical methods underlying treatment of specific real-world problem areas. The applications will vary and course credit level will be determined at time of offering. Methods will be analytical, statistical, discrete and algebraic in combination.
Special Notes: Primarily for senior-level math, computer science, science and engineering students; may be repeated more than once for credit.

MATH 407 Mathematical Statistics I 3.0 CR
Prerequisite: AS 307 and MATH 202 or faculty permission.
Topics include probability spaces, mathematical expectation, moments, moment generating functions, probability mass functions, probability density functions, functions of random variables, and modes of convergence.

MATH 408 Mathematical Statistics II 3.0 CR
Prerequisite: MATH 407.
Continuation of MATH 407. Includes sampling distributions, limit theorems, order statistics, point estimation, sufficient statistics, interval estimation, hypothesis testing, and decision theory.

MATH 410 Introduction to Complex Analysis 3.0 CR
Prerequisite: MATH 202.
Analytic functions, Cauchy's theorem, sequences and series, integration and residues.

MATH 420 Foundations of Mathematics 3.0 CR
Prerequisite: MATH 202.
Acquaints prospective secondary teachers with the historical development of mathematical concepts in algebra, geometry, number theory, analytical geometry, and calculus from ancient times. Emphasizes modern trends in secondary school mathematics and interrelationship with other disciplines and modern technology.

MATH 422 Partial Differential Equations 3.0 CR
Prerequisite: MATH 302.
Analysis and solution of partial differential equations. Initial and boundary value problems for elliptic, hyperbolic and parabolic types will be classified and solved. Additional topics will be chosen by faculty member teaching the course.

MATH 495 Mathematics Practicum 1.0-3.0 CR
Prerequisite: MATH 202 and faculty permission.
Provides upper-division mathematics majors the experience of teaching mathematics. Student will be responsible for 3-hours per week in the mathematics laboratory per credit.
Special Notes: May be repeated more than once. No more than 3 credits can be applied to a degree.

MATH 601 Abstract Algebra 3.0 CR
Prerequisite: MATH 303 and MATH 314.
Topics in groups, rings, fields, linear algebra, modules, categories, and Galois theory.

MATH 604 Elementary Number Theory 3.0 CR
Prerequisite: MATH 303.
Study of integers and their properties. Includes congruencies, diophantine equations, distribution of primes, quadratic reciprocity, and algebraic numbers.

MATH 607 Advanced Mathematical Statistics 3.0 CR
Prerequisite: MATH 408.
Study of the theory of probability, discrete and continuous random variables, multivariate probability distributions, estimators and their properties, limit theorems, hypothesis testing, linear models, analysis of variance, and nonparametric statistics.

MATH 620 Topics in Mathematics for Teachers K-12 1.0-4.0 CR
Prerequisite: Certified teacher in the State of Alaska.
Problem solving and logic are emphasized. Topics are chosen from Euclidean and non-Euclidean geometry, probability and statistics, algebra, number theory and topology.
Special Notes: May not be used to satisfy UAA degree requirements in mathematics. Specific course credit will be determined each time the course is offered depending upon the topics to be presented by the instructor. May be repeated for credit an indefinite number of times.

ME: MECHANICAL ENGINEERING

Offered through the School of Engineering, Engineering Building (ENGR). Room 201, 786-1900

ME 601 Sound Control and Measurement 3.0 CR
Prerequisite: Faculty permission.
Characteristics of sound, methods and scales used to measure and characterize sound, and engineering approaches used to control sound levels.

ME 685 Arctic Heat and Mass Transfer 3.0 CR
Prerequisite: Graduate standing or faculty permission.
An introduction to the principles of heat and mass transfer with special emphasis on application to problems encountered in the Arctic such as ice and frost formation, permafrost, condensation, and heat loss in structures.
Offered spring semesters of alternate years.

ME 687 Arctic Materials Engineering 3.0 CR
Prerequisite: CE 603 or faculty permission.
The performance of materials subjected to temperature extremes typical of the Arctic are examined. Specific topics covered include metallic and nonmetallic solids, fuels and lubricants, batteries, electrical considerations, corrosions and human performance.
Offered spring semesters.

MECH: MECHANICAL TECHNOLOGY

Offered through Kenai Peninsula College, Ginger Steffy, Director, 34820 College Dr., Soldotna, 99669, 262-5801

MECH 101 Introduction to Machine Shop 4.0 CR
Fees.
The fundamentals of safe machine shop practice including the operation of the lathe, vertical mill, band saw, drill press, grinders, cut-off saw, and radial drill. Precision measurement, single point threading and off-hand drill sharpening are taught with emphasis on repair work.
Offered at Kenai Peninsula College only.

MECH 102 Intermediate Machine Shop 4.0 CR
Prerequisite: MECH 101 or faculty permission.
Fees.
A continuation of safe shop fundamentals to include metallurgy, gears, fits, broaching, tapers, indexing and dividing, rotary table, multiple lead threads, carbide tools, and finishes. The use of machinery as required for machine repair. More complex projects will be completed by the student.
Offered at Kenai Peninsula College only.

MECH 110 Reciprocating Engines 3.0 CR
Prerequisite: MECH 101.
Theory and application of reciprocating engines and their auxiliary systems. Disassembly and reassembly of engines. Regular maintenance routines. Primarily oriented toward large diesel and natural gas stationary engines.
Offered at Kenai Peninsula College only.

MECH 115 Gasoline Engine Rebuilding 3.0 CR
Discusses in detail the operating principles of aspirated, non-computerized automotive engines. Includes hands-on practice in rebuilding procedures including value grinding, bearing fitting, and cylinder boring.
Offered at Kenai Peninsula College only.

MECH 120 Pumps 3.0 CR
Prerequisite: MATH 101 and MECH 101.
Operations, maintenance, commissioning and troubleshooting of centrifugal and positive displacement pumps. Disassembly and reassembly of pumps, bearings, packing and mechanical seals.
Offered at Kenai Peninsula College only.

MECH 130 Dynamic Compressors 3.0 CR
Prerequisite: MATH 101 and MECH 101.
Fees.
Theory of operation, maintenance, and troubleshooting of centrifugal and axial flow compressors and their auxiliary systems.
Offered at Kenai Peninsula College only.

MECH 131 Positive Displacement Compressors 3.0 CR
Prerequisite: MATH 101 and MECH 101.
Fees.
Theory of operation, maintenance, and troubleshooting of reciprocating, screw, lobe, and sliding vane compressors and their auxiliary systems.
Offered at Kenai Peninsula College only.

MECH 201 Advanced Machine Shop 4.0 CR
Prerequisite: MECH 102 or faculty permission.
Fees.
Advanced projects will be completed by students to include surface grinding, heat treatment of metals, hardness testing, shaft straightenings, and machining couplings. Other topics will be lapping, magna-flux, boring operations, effects of welding on machining, keyed assemblies, collets and torque.
Offered at Kenai Peninsula College only.

MECH 202 Advanced Machine Shop II 4.0 CR
Prerequisite: MECH 201.
Fees.
Emphasis on repair with imagination. Includes design, sketching, machining, and completing advanced repair projects. Covers original concepts and creative repair methods.
Offered at Kenai Peninsula College only.

MECH 265 Combustion Gas Turbines 3.0 CR
Prerequisite: MATH 101, MECH 101 and MECH 130.
Operations, maintenance and troubleshooting of gas turbine engines and their auxiliary systems. Disassembly and reassembly of engines.
Offered at Kenai Peninsula College only.

MECH 266 Steam Turbines 3.0 CR
Prerequisite: MATH 101 and MECH 101.
Operations, maintenance and troubleshooting of single and multiple stage steam turbines and their auxiliary systems.
Offered at Kenai Peninsula College only.

MECH 272 Vibrations and Balancing 3.0 CR
Prerequisite: MATH 101 and ET 151.
Fundamentals of vibration analysis on rotating machinery. Shop and field balancing of rotating elements. Theory and application of balancing machines and instrumentation.
Offered at Kenai Peninsula College only.

MECH 273 Machine Shop Lab 1.0 CR
Prerequisite: Three semesters of machine shop or faculty permission.
Fees.
Advanced machine shop practice to include more involved projects, machine tool set-ups, and techniques. Emphasizes student planning, executing, and completing projects at a high level.
Offered at Kenai Peninsula College only.

MEDT: MEDICAL LABORATORY TECHNOLOGY

Offered through the College of Career and Vocational Education, Allied Health Sciences Building (AHS), Room 160, 786-1241

MEDT 132 Introduction to Medical Laboratory Technology 3.0 CR
Fees.
Introduction to organization of hospital laboratories and certification of personnel. Overview of hematology, urinalysis, immunology, microbiology, chemistry, and blood banking.

MEDT 148 Phlebotomy 8.0 CR
Fees.
For career preparation or skill upgrading. Covers collection of blood specimens from patients by skin puncture and venipuncture for testing and analysis, and preparation and maintenance of equipment. Also includes professional patient interaction, care and handling of specimens, computer entry and clerical record keeping.

MEDT 202 Clinical Chemistry 6.0 CR
Prerequisite: Grade of C or better in CHEM 105 and one of: BIOL 105, BIOL 106, BIOL 111, BIOL 112, BIOL 240.
Fees.
Laboratory techniques and studies in blood, urine, and body fluid chemistries. Emphasis on principles of reactions and quality control. Practical application of techniques learned.

MEDT 203 Clinical Microbiology 6.0 CR
Prerequisite: Grade of C or better in CHEM 105 and one of: BIOL 105, BIOL 106, BIOL 111, BIOL 112, BIOL 240.
Fees.
Handling of specimens. Bacterial morphology and growth requirements. Media preparation, sterilization, disinfection, and asepsis. Isolation, identification, and sensitivity testing of pathogenic bacteria.

MEDT 204 Hematology 4.0 CR
Prerequisite: None. Recommend grade of C or better in CHEM 105 and one of: BIOL 105, BIOL 106, BIOL 111, BIOL 112, BIOL 240.
Fees.
Beginning hematology covering origin and function of blood cells, identification of normal cells, blood cell counting and other routine hematological tests, automation and quality control.

MEDT 205 Advanced Hematology 3.0 CR
Prerequisite: MEDT 204 (may be taken concurrently), grade of C or better in CHEM 105 and one of: BIOL 105, BIOL 106, BIOL 111, BIOL 112, BIOL 240.
Fees.
Coagulation, leukemia, anemia, and other hematological disorders, special hematological procedures, and identification of abnormal cells.

MEDT 206 Serology 3.0 CR
Prerequisite: Grade of C or better in CHEM 105 and one of: BIOL 105, BIOL 106, BIOL 111, BIOL 112, BIOL 240.
Fees.
Basic principles of serology and immunology. Techniques and tests used for detection of immunological diseases, and quality control.

MEDT 207 Immunohematology 4.0 CR
Prerequisite: MEDT 206.
Fees.
Organization and function of blood banks, donor screening, blood grouping, and compatibility testing. Hemolytic disease of newborns, and blood storage and shipment.

MEDT 208 Urine Analysis 3.0 CR
Prerequisite: Grade of C or better in CHEM 105 and one of: BIOL 105, BIOL 106, BIOL 111, BIOL 112, BIOL 240.
Fees.
Studies in normal and abnormal renal function. Routine urine chemistry and microscopic determinations. Special urine chemistry procedures and quality control.

MEDT 209 Parasitology and Mycology 2.0 CR
Prerequisite: Grade of C or better in one of: BIOL 105, BIOL 106, BIOL 111, BIOL 112, BIOL 240.
Fees.
Instruction in morphologic identification of common helminths, protozoa, and fungi which cause human diseases. Instruction in performing routine laboratory procedures for diagnosis of these infections.

MEDT 210 Instrumentation in Clinical Laboratory 2.0 CR
Prerequisite: Grade of C or better in CHEM 105 and one of: BIOL 105, BIOL 106, BIOL 111, BIOL 112, BIOL 240.
Fees.
Overview of chemistry instrumentation present in clinical laboratories. Includes principles of operation and hands-on experience. Covers fundamentals of electricity, photometry, computers, automation, and electrodes.

MEDT 295 Clinical Practicum 12.0 CR
Prerequisite: Grade of C or better in MEDT 202, 203, 204, 205, 206 207, 208, 209, and 210 or concurrent enrollment and faculty permission.
Fees.
Clinical practicum in area hospitals for clinical chemistry, clinical microbiology, hematology, serology, immunohematology, urine analysis, parasitology and microbiology, and instrumentation. Application of theories and principles.

MT: MARINE TECHNOLOGY

Offered through Kenai Peninsula College, Ginger Steffy, Director, 34820 College Dr., Soldotna, 99669, 262-5801

MT 122 Small Engine Maintenance and Repair 3.0 CR
Maintenance and operation of small gasoline engines. Application of these engines to pumps, chain saws, and outboard motors.
Offered at Kenai Peninsula College only.

MT 123 Loran and Radar Navigation 1.0 CR
Grading Policy: Pass/No Pass.
Development of an understanding of LORAN and radar and their practical applications and use in navigation. Includes interference problems on vessels, installation and interpretation of radar images.
Special Notes: Students are encouraged to bring their own LORAN to class.
Offered at Kenai Peninsula College Kachemak Bay Branch only.

MT 230 Boat Operator License Prep 2.0 CR
Grading Policy: Pass/No Pass.
Covers weather, first aid, seamanship, pollution control, navigation, rules of the road, etc., all of which a basic understanding is necessary to pass the USCG examination to operate a marine vessel for hire.

MT 231 Vessel Commercial License Preparation 3.0 CR
Grading Policy: Pass/No Pass.
Preparation for passing the USCG license exam for motor boat operator of uninspected passenger vessels, and master, inland and near coastal.
Offered at Kenai Peninsula College only.

MT 232 Practical Navigation/Small Craft 2.0 CR
Grading Policy: Pass/No Pass.
Covers topics such as tides and currents, compass use, weather and chart reading, finding position, military clock, plotting and LORAN navigation.
Offered at Kenai Peninsula College only.

MT 233 Master License Prep/Under 100 Gross Ton 2.0 CR
Prerequisite: MT 230 or boat operator license.
Grading Policy: Pass/No Pass.
Covers topics to prepare a person to pass the USCG examination for the boat master license under 100 gross ton. Includes rules of the road, CFR and UPV regulations, seamanship, fire fighting, aids to navigation, LORAN, compass, gyro and lifesaving.

MT 235 Marine Survival Equipment, Procedures, and Drills 1.0 CR
Grading Policy: Pass/No Pass.
Focus on survival equipment and procedures used in an emergency at sea. Includes drill instructor requirements for documented fishing vessels. Hands-on training with life rafts, EPIRBs, immersion suits, and fire fighting. Pool session and on board drills will also be conducted. USCG approved.

MUS: MUSIC

Offered through the College of Arts and Sciences, Arts Building (ARTS), Room 356, 786-1595

MUS 101 Noon Singers 2.0 CR
Fees.
Performance-oriented training chorus. Students should demonstrate secure pitch and basic knowledge of rhythm and notes.
Special Notes: May be taken four times for credit.

MUS 101A Community College Chorus 2.0 CR
Grading Policy: Pass/No Pass.
Performance-oriented class for community choral singing.
Offered at Kenai Peninsula College only.

MUS 102 Community Chorus I 2.0 CR
Prerequisite: Admission by audition only.
Fees.
Performance-oriented large chorus. Established community organization for singers who read music, demonstrate secure rhythm and pitch, and produce acceptable vocal sound.
Special Notes: May be repeated once for credit.

MUS 103 Community Band 2.0 CR
Grading Policy: Pass/No Pass.
This course is for anyone who is interested in playing a musical instrument with a structured, established band. The age group of participants ranges from 14 to 70. Experience ranges from beginners to professionals.
Offered at Matanuska-Susitna College only.

MUS 105 Jazz Techniques Lab 2.0 CR
Prerequisite: Admission by audition only.
Performance-oriented group for students with intermediate to advanced instrumental skills. Focuses on reading, rehearsal, and study of contemporary music adapted for big band sound or jazz ensemble.

MUS 111 Fundamentals of Music 3.0 CR
Rudimentary work in the elements of music and an introduction to notation, rhythm, scales, keys, intervals, and musical terminology. Designed for students with little or no background in music reading, or as a refresher course for those who have studied music.

MUS 112 Practical Theory 3.0 CR
Prerequisite: MUS 111 or faculty permission and ability to read music in treble and bass clef in all keys.
Elementary study of harmony and melody; formation of scales, modes, intervals, chords, inversions, and simple harmonic progressions. Writing and harmonizing of melodic lines.

MUS 113 Sightsinging and Dictation I 2.0 CR
Prerequisite: Ability to read treble and bass clef.
Develops skills for sightsinging (singing melody correctly at first reading without using instrument) and learning pitch and interval recognition so that melody never seen but only heard can be written on paper. Dictation is used to transcribe pop/folk or self-composed tunes. Knowledge of major scales and key signatures is helpful.

MUS 114 Sightsinging and Dictation II 2.0 CR
Prerequisite: MUS 113.
Sightsinging major and minor melodies containing accidentals, modulations, and syncopated rhythms. Dictation develops recognition of all interval types, major and minor triads, and major, minor, and dominant seventh chords.

MUS 115 Jazz Theory I 3.0 CR
Prerequisite: Ability to read music, theory background, basic ability on an instrument.
Detailed study of jazz using modulation, sequence, transposition, arranging, and voicing through analysis and dictation. Course is adapted to individual students on keyboard or other instruments.

MUS 116 Jazz Theory II 3.0 CR
Prerequisite: MUS 115 or faculty permission.
Application of skills obtained in MUS 115. Modulation, sequence, transposition, arranging, and voicing are studied, with compositions performed by lab groups. Copyright preparation is discussed.

MUS 121 Music Appreciation 3.0 CR
Enhancement of listener understanding and enjoyment of various musical styles. Investigation of music through the ages: Medieval through contemporary.
Special Notes: May not be counted towards the degree requirements for music majors pursuing either a BA or BM degree.

MUS 124 History of Jazz 3.0 CR
History and development of jazz from its early heritage to the present, emphasizing representative styles and individual or group contributors. Recordings, guest artists, and possible field trips enhance regular classroom activities.

MUS 131 Music Theory I 3.0 CR
Prerequisite: Concurrent enrollment in MUS 133 required.
Organization of musical materials with emphasis on diatonic functional harmony. Introduction to part writing and keyboard skills.

MUS 132 Music Theory II 3.0 CR
Prerequisite: MUS 131 or faculty permission. Concurrent enrollment in MUS 134 required.
Continuation of MUS 131, emphasizing part writing and melody harmonization. Introduction of non-harmonic tones and modulation and development of practical keyboard skills.

MUS 133 Sightsinging and Ear Training I 2.0 CR
Prerequisite: Concurrent enrollment in MUS 131 required.
The development of skills in hearing and reading music. The course features the study of intervals and chords and common metrical patterns.

MUS 134 Sightsinging and Ear Training II 2.0 CR
Prerequisite: MUS 133 or faculty permission. Concurrent enrollment in MUS 132 required.
Continuation of MUS 133, emphasizing rhythmic, melodic and harmonic dictation.

MUS 140 Fingerstyle Guitar I 2.0 CR
Fees.
Beginning course for those who do not read music or have limited experience with the guitar. Students develop repertoire of traditional, folk, and contemporary music using 13 basic chord shapes, alternating bass technique, simple note reading skills, and six basic fingerstyle guitar patterns.
Special Notes: Student must furnish own 6-string acoustic guitar.

MUS 141 Fingerstyle Guitar II 3.0 CR
Prerequisite: MUS 140 or ability to note read melodies on guitar in key of C major; acquaintance with fingerstyle technique and concept of alternating bass. Audition required for students who have not completed MUS 140.
Fees.
Continuation of MUS 140. Bar chords, bass runs, and major scale studies are introduced. Accompaniment skills are broadened to include 13 fingerstyle patterns, some in compound time.

MUS 142 Guitar Chord Theory 3.0 CR
Prerequisite: Ability to read music on the treble staff. May be taken concurrently with MUS 141.
Fees.
One semester theory course for the guitar, including analysis and construction of scales, intervals, and chords. Transposition and assignment of chords to melodies and ear training exercises to develop aural recognition of scales, intervals, and chords.
Special Notes: Instrument required.

MUS 143 Recorder I 1.0 CR
Fundamentals of recorder technique. Introduction to notereading in keys having up to 2 sharps or flats, using folk and classical arrangements for soprano, alto, and tenor recorder.
Special Notes: Instrument required.

MUS 144 Recorder II 1.0 CR
Prerequisite: MUS 143 or faculty permission.
Continuation of MUS 143. Emphasizes development of proper recorder techniques and includes reading in keys having up to four sharps or flats, using folk and classical arrangements for soprano, alto, and tenor recorder.
Special Notes: Instrument required.

MUS 147 Classical Guitar I 2.0 CR
Prerequisite: Basic guitar skills and ability to read music.
Survey of guitar literature, periods, and styles. Refinement of basic skills: Sightreading, ornamentation, tone coloretion, and rhythmic interpretation.

MUS 148 Classical Guitar II 2.0 CR
Prerequisite: MUS 147 or faculty permission.
Continuation of MUS 147. Emphasizes proper interpretation and performance of classical guitar repertoire. Teaches intermediate techniques and notereading skills.

MUS 149 Voice Lessons I 1.0-2.0 CR
Fees.
Vocal techniques using theatre songs and folk music, designed to improve performing and musical skills.
Offered at Kenai Peninsula College only.

MUS 150 Piano Class I 1.0 CR
Fees.
Fundamentals of piano techniques. Introduces note reading in five-finger positions in the keys of C and G, using folk and classical arrangements in simple meter. Classes conducted in piano lab.

MUS 151 Piano Class II 1.0 CR
Prerequisite: Faculty permission only.
Fees.
Continuation of MUS 150. Develops proper piano technique, including note reading skills in extended positions in the keys of C, F, and G. Uses folk, classical, and blues arrangements in simple meter, and introduces syncopation. Classes conducted in piano lab.

MUS 152 Voice Class I 1.0 CR
Prerequisite: Ability to match pitches.
Study and practice of basic fundamentals of singing and song interpretation, stressing attitude and correct practice habits. Introduces and expands general knowledge of singing: Mechanism, technique, repertoire, and performance practices.
Special Notes: Ability to read music not a prerequisite.

MUS 153 Voice Class II 1.0 CR
Prerequisite: MUS 152 or faculty permission.
Study and practice of basic fundamentals of singing and song interpretation, stressing posture, breath control, and tone production. Introduces and expands general knowledge of singing: Mechanism, technique, repertoire, and performance practices.

MUS 154 Functional Piano I 1.0 CR
Prerequisite: MUS 131 or equivalent, or concurrent enrollment in MUS 131 required.
Helps music majors obtain performance, sightreading, and harmonization/transposition skills needed to pass Piano Proficiency Examination. Emphasizes basic reading skills and keyboard coordination.

MUS 155 Functional Piano II 1.0 CR
Prerequisite: MUS 154.
Continuation of MUS 154, using simple literature, sightreading exercises, major scales and cadences, and simple tunes with primary triads.

MUS 157 Woodwind Class I 1.0 CR
Prerequisite: Ability to read music and basic skills on chosen instrument.
Trains woodwind players to perform effectively as soloists and in ensembles. Covers orchestral, jazz, chamber, and solo styles and a wide repertoire of woodwind literature.
Special Notes: Prior ensemble experience preferred.

MUS 159 String Class II 1.0 CR
Prerequisite: MUS 158.
Continuation of MUS 158.

MUS 161 Private Lessons 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Private music instruction in brass, guitar, harpsichord, organ, percussion, piano, strings, voice, and woodwinds.
Special Notes: Performance majors enroll for 2 credits.

MUS 162 Private Lessons 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 161.
Special Notes: Performance majors enroll for 2 credits.

MUS 163 Private Lessons (Non-major) 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Private lessons in brass, guitar, harpsichord, organ, percussion, piano, strings, voice and woodwinds for non-majors.

MUS 164 Private Lessons (Non-major) 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 163.

MUS 202 Community Chorus II 2.0 CR
Prerequisite: Admission by audition only.
Fees.
Performance-oriented large chorus. Established community organization for

singers who read music, demonstrate secure rhythm and pitch, and produce acceptable vocal sound.
Special Notes: May be repeated once for credit.

MUS 221 History of Music I 3.0 CR
Music before 1750. Explores stylistic developments and structure through Medieval, Renaissance, and Baroque eras within their historical context.

MUS 222 History of Music II 3.0 CR
Music since 1750. Explores stylistic developments and structure through Classical, Romantic, and Twentieth Century eras within their historical context.

MUS 231 Music Theory III 3.0 CR
Prerequisite: MUS 132 or faculty permission. Concurrent enrollment in MUS 233 required.
Functional harmony featuring part writing and melody harmonization and introducing chromatic harmony. Covers modulation, secondary dominant functions, and other altered chords along with analysis of binary and ternary forms.

MUS 232 Music Theory IV 3.0 CR
Prerequisite: MUS 231 or faculty permission. Concurrent enrollment in MUS 234 required.
Continuation of MUS 231. Features borrowed chords and other types of chromatic harmonies. Surveys twentieth century harmony.

MUS 233 Sightsinging and Ear Training III 2.0 CR
Prerequisite: MUS 134 or faculty permission. Concurrent enrollment in MUS 231 required.
Develops advanced skills in hearing and reading music. Features modulation, chromaticism and complex rhythmic patterns.

MUS 234 Sightsinging and Ear Training IV 2.0 CR
Prerequisite: MUS 233 or faculty permission. Concurrent enrollment in MUS 232 required.
Continuation of MUS 233.

MUS 240 Fingerstyle Guitar III 3.0 CR
Prerequisite: MUS 141, 142 and faculty permission.
Fees.
Develops intermediate fingerstyle skills using contemporary folk music repertoire. Teaches 14 patterns, moving bass line, ornamentation, bass instrumental technique, and syncopation. Continues ear training and scale studies. Introduces arranging and notereading in second position.

MUS 241 Fingerstyle Guitar IV 3.0 CR
Prerequisite: MUS 142, 240 and faculty permission.
Fees.
Continuation of MUS 240. Emphasizes arranging skills including bridging, instrumentals, medleys, and bass lines. Continues notereading in 2nd, 4th and 5th positions, with ear training exercises to develop transcribing skills, and intermediate fingerstyle patterns and chord study.

MUS 242 Solo Fingerstyle Guitar 1.0 CR
Prerequisite: MUS 142, 240, 241 and faculty permission.
Fees.
Develops intermediate bass instrumental technique and introduces treble fingerstyle instrumental in 2nd, 4th and 5th positions. Continues notereading studies in 5th and 7th positions and presents basic composition skills. Students perform given repertoire and original arrangements.

MUS 249 Voice Lessons II 1.0-2.0 CR
Prerequisite: MUS 149 or faculty permission.
Fees.
Continuation of MUS 149.
Offered at Kenai Peninsula College only.

MUS 250 Piano Class III 1.0 CR
Prerequisite: MUS 151 or faculty permission.
Fees.
Continuation of MUS 151. Develops proper piano technique emphasizing ensemble playing and notereading in keys having up to 2 sharps and flats, using folk, popular, and classical arrangements in simple and compound meter. Classes conducted in piano lab.

MUS 251 Piano Class IV 1.0 CR
Prerequisite: MUS 250 or faculty permission.
Fees.
Continuation of MUS 250. Develops piano technique emphasizing ensemble playing and note reading in keys with three or more sharps and flats. Uses folk, popular, and classical arrangements in simple and compound meter. Classes conducted in piano lab.

MUS 252 Voice Class III 1.0 CR
Prerequisite: MUS 153 or faculty permission.
Study and practice of basic fundamentals of singing and song interpretation, stressing basic diction principles, vowel and consonant production, vowel equalization, and production of two- and three-vowel sounds. Expands general knowledge of singing: mechanism, technique, repertoire, and performance practices.

MUS 253 Voice Class IV 1.0 CR
Prerequisite: MUS 252 or faculty permission.
Study and practice of basic fundamentals of singing and song interpretation, stressing legato and sostenato technique, agility and flexibility, stage presence, and interpretation. Expands general knowledge of singing: mechanism, technique, repertoire, and performance practices.

MUS 254 Functional Piano III 1.0 CR
Prerequisite: MUS 155.
Continuation of MUS 155, using performance skills of lower intermediate piano literature; sight reading of hymn-style four part vocal music; and harmonization and transposition in major keys, using primary and secondary triads.

MUS 261 Private Lessons 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 162.

MUS 262 Private Lessons 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 261.

MUS 263 Private Lessons (Non-major) 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 164.

MUS 264 Private Lessons (Non-major) 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 263.

MUS 280 Basic Conducting 2.0 CR
Prerequisite: MUS 131 or faculty permission.
Introduces principles of conducting. Explores time-beating, use of left hand, score reading, and transposition as it relates to conducting.

MUS 301 University Singers 2.0 CR
Prerequisite: New members by audition.
Rehearsal and performance of chamber vocal literature from Renaissance up to and including 20th Century contemporary literature. Ensemble credit for vocal majors.
Special Notes: May be repeated for credit.

MUS 302 Chamber Music and Accompanying 2.0 CR
Prerequisite: New members by audition.
Ensemble course for pianists. Covers the art of accompanying singers and instrumentalists and relevant skills such as sightreading and scorereading. Advanced vocalists and instrumentalists are also encouraged to enroll.
Special Notes: May be repeated for credit.

MUS 303 University Wind Ensemble 2.0 CR
Prerequisite: New members by audition.
In-depth rehearsal and performance of original band music and transcriptions from Renaissance up to and including 20th Century literature.
Special Notes: May be repeated for credit.

MUS 307 University Sinfonia 2.0 CR
Prerequisite: New members by audition.
The intensive study of chamber orchestra literature leading to public performance. The nucleus of the repertoire is string music for intermediate and advanced performers. Wind and percussion players are added for specific works.
Special Notes: May be repeated for credit.

MUS 313 Opera Workshop 1.0-3.0 CR
Prerequisite: Faculty permission required.
Grading Policy: Pass/No Pass.
The study, rehearsal, production, and performance of selected works from the standard operatic repertoire.
Special Notes: May be repeated for credit.

MUS 331 Form and Analysis 3.0 CR
Prerequisite: MUS 232 or faculty permission.
Structural principles and stylistic analysis of music of the 18th and 19th centuries.

MUS 361 Private Lessons 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 262.

MUS 362 Private Lessons 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 361.

MUS 363 Private Lessons (Non-major) 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 264.

MUS 364 Private Lessons (Non-major) 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 363.

MUS 371 Brass Methods and Techniques 2.0 CR
Prerequisite: MUS 132.
Instruction in the brass instruments. The course is part of the teacher training program.
Special Notes: Student must be able to read music fluently while holding/performing on the brass instruments.

MUS 372 Woodwind Methods and Techniques 2.0 CR
Prerequisite: MUS 132.
Instruction in the woodwind instruments. The course is part of the teacher training program.

MUS 373 String Methods and Techniques 2.0 CR
Prerequisite: MUS 132.
Instruction in the stringed instruments of the orchestra. The course is part of the teacher training program.

MUS 374 Voice Methods and Techniques 2.0 CR
Prerequisite: MUS 132.
Instruction in musical use of the voice. The course is part of the teacher training program.

MUS 375 Percussion Methods and Techniques 2.0 CR
Prerequisite: MUS 132.
Instruction in the percussion instruments. The course is part of the teacher training program.

MUS 381 Choral Conducting 2.0 CR
Prerequisite: MUS 232 or faculty permission.
Principles of conducting and interpreting choral music.

MUS 382 Instrumental Conducting 2.0 CR
Prerequisite: MUS 232 or faculty permission.
Principles of conducting and interpreting instrumental music.

MUS 405 University Jazz Ensemble 2.0 CR
Prerequisite: New members by audition.
The rehearsal and performance of big band jazz. Music will be selected from a variety of styles and eras including swing, rock, fusion and pop.
Special Notes: May be repeated for credit.

MUS 406 Jazz Singers 2.0 CR
Prerequisite: New members by audition.
Fees.
Choral ensemble, with emphasis on public performances of vocal jazz literature.
Special Notes: May be repeated for credit.

MUS 408 University Percussion Ensemble 2.0 CR
Prerequisite: New members by audition.
The study and performance of percussion chamber music including 20th century literature for percussion as well as transcriptions of earlier music.
Special Notes: May be repeated for credit.

MUS 409 University Guitar Ensemble 2.0 CR
Prerequisite: MUS 242 and new members by audition. Recommended: prior ensemble or solo recital experience.
Fees.
Study and performance of traditional repertoire, Latin and European folk music, and popular and classical themes arranged for two or more guitars. Provides experience in sight reading and refines practice and memorization skills. Emphasizes stylistic interpretation and stage delivery.
Special Notes: May be repeated for credit.

MUS 420 Medieval and Renaissance Music 3.0 CR
Prerequisite: MUS 222 and MUS 232.
Musical developments in Europe up to 1600. In-depth study of sacred and secular monophony, polyphony, choral and instrumental music. Requires intensive listening and reading of music.
Special Notes: BA Music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.

MUS 421 Music in the Baroque Period 3.0 CR
Prerequisite: MUS 222 and MUS 232.
Musical style from 1600 to 1750. In-depth study of keyboard music, opera, oratorio and cantata, and instrumental music. Requires intensive listening and reading of music.
Special Notes: BA Music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.

MUS 422 Music in the Classical Period 3.0 CR
Prerequisite: MUS 222 and MUS 232.
Musical style from 1720 to 1830. In-depth study of the music of pre-classic composers and Haydn, Mozart, and Beethoven. Requires intensive listening and reading of music.
Special Notes: BA Music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.

MUS 423 Music in the Romantic Period 3.0 CR
Prerequisite: MUS 222 and MUS 232.
Musical style from 1820 to 1900. In-depth study of orchestral and choral music, opera, lieder, and music for piano. Requires intensive listening and reading of music.
Special Notes: BA Music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.

MUS 424 Music in the 20th Century 3.0 CR
Prerequisite: MUS 222 and MUS 232.
Musical developments since 1900. In-depth study of serialism, neo-classicism, neo-romanticism, expressionism, primitivism, minimalism, and styles since 1950. Requires intensive listening and reading of music.
Special Notes: BA Music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.

MUS 431 Counterpoint 3.0 CR
Prerequisite: MUS 232 or faculty permission.
Study of the contrapuntal techniques of the 16th and 18th centuries. Features writing in appropriate vocal and instrumental forms.

MUS 432 Orchestration 3.0 CR
Prerequisite: MUS 232 or faculty permission.
Principles and practices of composing and transcribing music for various instrumental ensembles, including band and orchestra.

MUS 461 Private Lessons 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 362.

MUS 462 Private Lessons 1.0-2.0 CR
Prerequisite: Faculty permission.
Fees.
Continuation of MUS 461.

MUS 467 Piano Master Class 2.0 CR
Prerequisite: Faculty permission.
Seminar in performance practice for pianists. Comparative analysis and discussion of piano literature and close examination of its styles and periods (early Baroque through 20th Century). At least one performance or research project required each semester.
Special Notes: Mandatory each semester for piano performance majors; 8 credits minimum required for piano majors in MUS ED. May be repeated for credit.

MUS 468 Voice Master Class 2.0 CR
Prerequisite: Faculty permission required.
Performance and discussion of the styles and periods of vocal literature ranging from the Renaissance to contemporary repertoire. Weekly in class performance trains the student to be more at ease and effective in singing.
Special Notes: May be repeated for credit.

MUS 469 Guitar Master Class 2.0 CR
Prerequisite: One of MUS 147, MUS 240, or private lessons.
Designed to improve the effectiveness of guitar performance, build confidence and stage presence by exploring technique and interpretation through actual stage experience. Problems arising from public performance will be discussed and solutions offered. The proper stylistic approach to works of specific composers will be addressed.

MUS 471 Elementary Music Methods 3.0 CR
Prerequisite: ED 210, ED 336 and all corequisites thereto; all general education requirements and admission to the School of Education.
Cross-Listed: ED 471.
Principles, procedures, and materials for teaching music to children at the elementary level.
Special Notes: Offered Fall and Spring semesters.

MUS 472 Secondary Music Methods 3.0 CR
Prerequisite: Admission to teacher certification, MUS 232 and ED 332.
Cross-Listed: ED 472.
Methods and problems of teaching music in junior and senior high schools with emphasis on the general music program.

NS: NURSING SCIENCES (4-YEAR PROGRAM)

Offered through the School of Nursing and Health Sciences, Administration Building (ADM), Room 279, 786-1854

NS 301 Processes of Professional Nursing 3.0 CR
Prerequisite: Grade of C or better in ENGL 111 and ENGL 211/212 or 213 and PHIL 101/201 or ENGL 120.
Introduction to the processes of professional nursing including interpersonal, interactive, and profession building processes. Provides beginning practice in critical thinking skills required in professional nursing and introduces concepts, theories and ideas which are the basis of later in-depth nursing courses.

NS 302 Processes of Professional Nursing for RN's 3.0 CR
Prerequisite: Grade of C or better in ENGL 111 and 211 or 212 or 213, and PHIL 101 or 201 or ENGL 120, and RN Licensure.
Introduction and beginning practice in various critical thinking skills that are basic to the practice of professional nursing. Introduces theory and application of change process and returning to school syndrome. Provides opportunities for application of communication theory, nursing process and teaching/learning principles.

NS 305 Health Assessment of Individuals 3.0 CR
Prerequisite: Grade of C or better in NS 301, HS 216 and PSY 150; admission to Clinical Nursing major.
Fees.
Skills and tools for the objective collection of health-related data; interview techniques, history taking, and physical examination are emphasized.

NS 306 Fundamentals of Nursing 4.0 CR
Prerequisite: Grade of C or better in HS 216 and NS 301; admission to Clinical Nursing major.
Fees.
Theory and practice of basic nursing care skills, including medical asepsis and infection control, basic hygiene, positioning, mobility assistance, nutritional maintenance, eliminative assistance, medication and oxygen administration, wound care, use of respiratory assist devices, and admission and transfer procedures. Basic skills are presented first in class and then practiced in simulation laboratory and in clinical practice settings.

NS 309 Pharmacology in Nursing 3.0 CR
Prerequisite: Grade of C or better in HS 216.
Fees.
Consideration of prescription and non-prescription drugs used in the therapeutic management of individuals experiencing common pathophysiologic conditions and in promoting health. Emphasis is on the development of understanding of common indications, mechanisms of action, potential beneficial and adverse effects and on the planning of nursing interventions to maximize the therapeutic effect and to minimize the adverse effects of pharmacologic agents within drug categories.

NS 310 Medical Surgical Nursing 7.0 CR
Prerequisite: Grades of C or better in NS 305, NS 306, and NS 309.
Fees.
Nursing care of potentially and acutely ill adults experiencing medical and surgical illnesses. Application of fundamental nursing skills and development of advanced nursing skills and processes in acute medical surgical care settings.

NS 311 Care of the Childbearing Family 4.0 CR
Prerequisite: Grade of C or better in NS 310.
Fees.
Care of the childbearing family during normal and altered states of health. Emphasis on the application of the nursing process and other skills of critical thinking and on the role of the professional nurse as an educator and a client advocate. Clinical experiences include antepartal, intrapartal, postpartal, and neonatal settings.

NS 312 Care of the Childrearing Family 4.0 CR
Prerequisite: Grade of C or better in NS 310.
Fees.
Application of nursing and other caring processes and critical thinking skills to provide professional nursing care to childrearing families. Focus of course content is on the provision of care to families with infants, children, and adolescents who are experiencing altered states of health.

NS 318 Professional Perspectives in Nursing 3.0 CR
Prerequisite: Prior completion or concurrent enrollment in NS 310.
Exploration of the development and evolution of professional nursing practice. Content is organized around the many and varied role activities of the professional nurse and the professional and social trends most likely to influence role development in the future.

NS 319 Research in Nursing 3.0 CR
Prerequisite: Grade of C or better in NS 310, NS 318, and a statistics course.
Introduction to research methods in nursing and health care. Emphasis on identification of researchable questions, problem formulation, research design, data collection and analysis. Exploration of the role of the professional nurse prepared at varying educational levels and on strategies for the application of nursing research findings in clinical practice.

NS 320 Ethical-Legal Implications in Nursing 3.0 CR
Prerequisite: Grade of C or better in NS 310 and NS 318.
Discussion of legal implications inherent in professional nursing practice. Application of ethical decision making processes to common problems encountered in health care settings.

NS 331 Current Issues and Trends in Maternal-Child Nursing 2.0 CR
Prerequisite: RN choosing articulation option for BS completion.
Current issues and trends in childrearing and childbearing nursing will be covered. These trends include adolescent pregnancy, genetic and sexual counseling, infertility counseling, cultural aspects of maternal-child nursing, family nursing theory, the utilization of nursing research in maternal-child research, and emerging perinatal technology.

NS 403 Community Nursing I 4.0 CR
Prerequisite: Grade of C or better in all required 300 level Nursing courses or RN licensure in Alaska.
Fees.
Theory and practice of community health nursing. Emphasis includes health promotion and prevention strategies with individuals, families, and small groups.

NS 404 Community Nursing II 3.0 CR
Prerequisite: Grade of C or better in NS 403 and NS 415.
Fees.
Health promotion and protection as applied to population groups and large aggregates. Emphasis on nursing decisions that identify, intervene, and evaluate population-based health risks. Structure and function of community processes that influence population health care are included.

NS 405 Psychiatric-Mental Health Nursing 6.0 CR
Prerequisite: Grade of C or better in all required 300 level Nursing courses.
Fees.
Theory and application of mental health nursing principles to the care of clients with psychiatric disorders and developmental and situational crises. Explores community resources and other support systems in the promotion of community mental health.

NS 407 Advanced Medical Surgical Nursing 3.0 CR
Prerequisite: Grade of C or better in NS 403, 405, and 415.
Fees.
Continued development of professional nursing skills necessary to meet the needs of ill adults. Emphasis and clinical experience are on the care of elderly clients and those who require critical care, rehabilitation, and other skilled nursing care services in traditional and non-traditional settings, including the home.

NS 409 Psychiatric-Mental Health Nursing I (Exam for Credit) 3.0 CR
Prerequisite: RN licensure in State of Alaska; admission to RN option with nursing major.
Grading Policy: Pass/No Pass.
Competency validation of the knowledge and skills in psychiatric-mental health nursing that are typically included in associate degree and diploma nursing education programs.

NS 410 Psychiatric-Mental Health Nursing II 3.0 CR
Prerequisite: Successful performance on NS 409 exam.
Fees.
Advanced concepts in psychiatric-mental health nursing. Emphasis on case finding and referral in the community, nursing management of individuals and families with chronic mental health disruptions in community settings, and on promotion of community mental health.

NS 414 Ethical, Legal and Professional Issues in Nursing 4.0 CR
Prerequisite: RN licensure; successful completion of all challenge exams.
Explores the development of professional nursing practice with emphasis on inherent ethical dilemmas and legal implications encountered in a variety of roles. Social trends likely to influence future practice are examined. Ethical decision making processes are applied to clinical problems.

NS 415 Nursing Management 3.0 CR
Prerequisite: Grade of C or better in NS 311, 312, and 319 or RN licensure.
Basic theories of management in relation to the health care delivery system. Emphasis is on the role of the professional nurse at various levels of the organizational hierarchy within health care settings.

NS 416 Concentration in Clinical Nursing 4.0 CR
Prerequisite: Grade of C or better in all nursing courses; corequisite NS 320.
Grading Policy: Pass/No Pass.
Fees.
Integration and synthesis of knowledge and skill competencies basic to professional nursing practice. Emphasis is on adjustments to the realities of practice situations. Clinical sites are selected in relation to individual student interests and learning needs.

NS 417 Management in Nursing 3.0 CR
Prerequisite: RN Licensure.
Basic theories and organization in relation to health care delivery systems. Emphasizes the role of the professional nurse in health care organizations and presents an overview of skills and techniques used for effective leadership and management of health care services. Registered nurse students integrate knowledge and skills gained from their own clinical practice into a theoretical context for use in future management decision making.

NS 422 Nursing Interventions for the Critically Ill Adult 2.0-3.0 CR
Prerequisite: Grade of C or better in all required 300 level Nursing courses.
Fees.
Emphasizes the specific nursing care needs of critically ill adults and the role of the critical care nurse. Case studies are used to assist students to apply the nursing process to the care of critically ill adults to promote movement of the client from critical illness to recovery and independence. Clinical experiences consist of participant observation in a variety of critical care settings.

NS 423 Transcultural Nursing 3.0 CR
Prerequisite: Grade of C or better in NS 310 or RN licensure in Alaska.
Examination of sociocultural factors that influence health, illness, and health-related human behavior. Introduction to concepts that place health-related behaviors within a cultural context and to the elements of a culturally sensitive approach to clients seeking professional nursing care services.

NS 424 Issues in Women's Health 3.0 CR
Prerequisite: Grade of C or better in NS 311, or RN licensure in State of Alaska.
Exploration of current issues, research, controversies affecting women's health with a focus on health promotion and maintenance. Life cycle issues will be addressed. Special needs and interventions for unique populations will be addressed. The focus on health promotion and maintenance and an advocacy viewpoint suggest this course for health professionals.

NS 425 Nursing Care during Transport 2.0 CR
Prerequisite: Grade of C or better in NS 311 and 312 or RN licensure in Alaska.
Principles and theory underlying care of clients being transported by ground or air transportation including transfer from field or hospital situations to critical care units. Special needs and interventions for unique populations will be addressed. Pre-transport stabilization, equipment considerations, altitude physiology, transport stresses, safety, legal implications, communications, and post transport evaluation are discussed.

NS 427 Care of Victims of Family Violence 3.0 CR
Prerequisite: Grade of C or better in NS 311 or NS 312, or RN licensure in State of Alaska.
Fees.
Overview of family violence, including medical, physical, and emotional abuse and neglect of target at-risk groups. Focus is on developing an interdisciplinary perspective for understanding causation and treatment issues. Dynamics of the problem are explored from the perspectives of various theorists. Emphasis is on the development of increased personal self-awareness to the complexity of feelings and issues in family violence and on the relationship of nursing to social work, justice, and corrections in the context of domestic violence programs.

NS 428 Nursing the Chemically Dependent Client 2.0-3.0 CR
Prerequisite: Grade of C or better in NS 310 or RN licensure in Alaska.
In-depth study of the psychopharmacologic and sociocultural effects of chemical dependency. Students learn to utilize the nursing process to design strategies for the nursing management of chemically dependent client systems. Clinical experiences include participant observation in a variety of settings where chemically dependent clients are commonly encountered.

NS 429 Perioperative Nursing 3.0 CR
Prerequisite: Grade of C or better in NS 310 or RN licensure in Alaska.
Fees.
Introduction to the operating room, its origin and purpose, including functions of the operating room team members. Covers the perioperative nursing role as it relates to a client undergoing surgery. The nursing process is utilized as a basis for planning, implementing, and evaluating individualized care.

NS 430 Rural Health Care 3.0 CR
Prerequisite: Corequisite NS 310 or RN licensure in Alaska.
Fees.
Rural health care analyzed from a problem solving framework. Specific issues to be addressed include: historical perspectives of rural health care; behavioral, cultural, and environmental factors affecting health; access to and utilization of health care systems; responsibility for rural health care policy; and strategies for improving rural health. Alaskan communities are utilized as a focus for the clinical portion of the course.

NS 431 Human Sexuality in Health and Illness 3.0 CR
Prerequisite: Grade of C or better in NS 311, or RN licensure in State of Alaska.
Explores physiological, psychological and social nature of human sexuality and implications for nursing profession. Emphasizes individual and group sexual behavior. Explores impact of illness on sexuality and role of professional nurse.

NS 432 Political Action in Nursing and Health Care 3.0 CR
Prerequisite: Grade of C or better in NS 306 or RN licensure in Alaska.
Fees.
An exploration of the political process on the local, state, and national levels as it relates to nursing practice and health care issues. Includes analysis of political strategies that can be applied in professional nursing practice to support effectiveness in meeting client advocacy responsibilities.

NS 433 Health Education: Theory and Practice 3.0 CR
Prerequisite: Grade of C or better in NS 306.
Cross-Listed: HS 433.
Introduction to the principles, methods and resources used in health education. Examines psychosocial and cultural determinants of health behavior and their role in the development of effective health education strategies. Explores organizational, societal and professional issues influencing health education for individuals, groups and communities.

NS 434 Special Considerations in the Health Care of the Elderly 3.0 CR
Prerequisite: Grade of C or better in NS 310.
Overview of issues which affect older adults and their lifestyles. Addresses normal physiological and psychosocial aging changes, and health concepts of prevention, promotion, and protection. Includes issues affecting care giving of older family members in a multitude of settings. Explores health policies which have financial, legal, and ethical implications. Highlights special needs of Alaskan elderly.

NS 435 Disaster Management in Health Care 3.0 CR
Prerequisite: Junior standing in the department or faculty permission.
Overview focusing on types of disasters, their effects and the subsequent role of federal, state, and local agencies in management. Examines roles of the health care agency and the individual health care provider. Examines pre-hospital and in-hospital support services utilization.

NS 436 Home Health Nursing 3.0 CR
Prerequisite: Grade of C or better in all required 300 level Nursing courses.
Application of medical-surgical, psychiatric, and community nursing knowledge and skill to the nursing management of health disrupted clients requiring nursing services in home settings.

NS 610 Pharmacology for Primary Care 2.0 CR
Prerequisite: Licensed health care provider, or senior nursing status, or faculty permission.
An advanced level pharmacology course that assists health care professionals in the selecting, prescribing, and monitoring of pharmaceutical agents utilized in the primary care setting in the community. Over-the-counter as well as legend drugs will be included. Emphasis is on the pharmacodynamics of medications most commonly utilized for respiratory diseases, ear infections, genitourinary diseases, preventive health, skin problems, minor musculoskeletal problems, and preparations commonly utilized in women's health care.

NS 620 Nursing Research Methods 4.0 CR
Prerequisite: Grade of C or better in undergraduate research course and basic statistics course.
Fees.
Principles of the research process including nursing research problem identification, literature review, development of conceptual framework, research design, sampling, and data collection methods, data analysis and proposal writing. Enhancement of skills for evaluation of nursing research. Seminar expedites planning of Master's degree research in nursing.

NS 621 Nursing Theory 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Integration of theory from a variety of disciplines to explain human responses in health and illness. Theories are analyzed for adequacy as they relate to conceptualization, measurement and application. Theories to be covered include selected theories about adaptation, coping, promotion, prevention and change.

NS 622 Family Theory for Advanced Nursing Practice 3.0 CR
Prerequisite: BS in nursing and faculty permission.
Development of systemic, structural, and cross-cultural family theory underlying advanced nursing practice across specializations to provide support to the core

curricula of the graduate program. Addresses the family as a primary social group in process of change and adaptation to both health and social forces. Emphasis will be on assessment and planning interventions for the family as the unit of health care.

NS 624 Qualitative Research in Nursing 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Focus on qualitative approach in gaining nursing knowledge. Broad range of topics including case study, content analysis, participant and nonparticipant observation, open-ended interviews, document study, and an introduction to "grounded theory" methods. Students will be required to select one method for in-depth exploration.

NS 625 Biostatistics for Health Professionals 3.0 CR
Prerequisite: Undergraduate statistics course with Grade of C or better and graduate standing, or faculty permission.
Cross-Listed: HS 625.
Principles of statistical reasoning and quantitative skills for analyzing health-related data. Topics include the binomial, Poisson, and normal distributions, the treatment of rates, measures of location and dispersion, and testing of statistical hypotheses. Both descriptive and inferential statistics are illustrated in mortality and morbidity problem sets requiring manual or computer assisted calculations. The comparison of methodological techniques and the choice of appropriate statistical methods to answer clinical practice and research questions are stressed. This course is designed to enhance rather than substitute for statistical knowledge gained at the undergraduate level.

NS 625L Biostatistics for Health Professionals Lab 1.0 CR
Prerequisite: Graduate standing, concurrent enrollment in NS 625 or completion of NS 625.
Cross-Listed: HS 625L.
Grading Policy: Pass/No Pass.
Fees.
Elective computer laboratory to teach statistical computer packages to use in performing statistical data analysis.

NS 626 Principles of Epidemiology 3.0 CR
Prerequisite: Graduate standing or faculty permission.
An introduction to the principles and methods of epidemiologic investigations and their application in the health sciences. Major topics include etiological factors of disease and injury, the distribution of health problems within populations, levels of prevention, and the concept of risk. The design of retrospective, cross-sectional, and prospective studies are examined. Clinical applications within nursing, medicine, pharmacy, social work, nutrition and health care administration are emphasized.

NS 642 Professional Nursing in Perspective 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Processes for development of new roles for the advanced nurse specialist. Current and changing patterns of health care delivery and theoretical frameworks from various social science sources are used. Examples of issues discussed include practice arrangements, legal and ethical questions, marketing of nursing services and establishing support networks.

NS 650 Advanced Community Health Nursing I 4.0 CR
Prerequisite: Graduate standing.
Fees.
Nursing assessment and diagnostic skills using a population-based perspective. The identification of existing and potential health problems of families and populations are emphasized. The application and synthesis of basic public health sciences is initiated. History, trends, and issues within community and public health nursing are reviewed. A series of field and laboratory experiences in health assessment permit the student to work in various community nursing agencies to apply assessment skills.

NS 651 Advanced Community Health Nursing II 4.0 CR
Prerequisite: NS 650 and NS/HS 625.
Fees.
The planning and delivery of nursing activities that improve the health of population groups. The concepts of change, diffusion of innovation, and strategic planning are applied to health behavior and public policy decisions that promote, maintain and protect the public's health.

NS 652 Advanced Community Health Nursing III 4.0 CR
Prerequisite: NS 650 and 651
The evaluation of nursing and health care activities from a population perspective. Students are given opportunities to understand the scientific basis of evaluation research as applied to nursing programs that promote, protect, and maintain public health. A series of field projects, case studies, and lectures provide experience related to cost benefit and cost effectiveness analysis, quality assurance methods, judging the efficacy of treatments, and the design of evaluation programs in community and public health nursing.

NS 657 Occupational and Environmental Health 3.0 CR
Prerequisite: Graduate standing or faculty permission.
An overview of factors within the environment and work site that influence public health. Environmental topics include the identification and control of health problems related to wastes, animals, pollution and the contaminants of food, water, and milk. Occupational emphasis is placed on the epidemiology of work related problems, principles of industrial hygiene, and the health risk of various occupations.

NS 658 Public Health Policy 3.0 CR
Prerequisite: Graduate standing or faculty permission.
An analysis of the procedures by which government and private agencies make decisions that affect the health of population groups. The influence of lay, professional and special interest groups are explored in relation to health legislation, allocation of resources, and the setting of public health priorities. Current issues in public health policy are examined, focusing on how policy is changed, interpreted and implemented.

NS 660 Family Nurse Practitioner I 4.0 CR
Prerequisite: Graduate standing and admission into FNP track. Basic physical assessment skills. Knowledge of basic anatomy/physiology, pharmacology and growth and development. Current CPR Certification. Individual malpractice insurance policy.
Fees.
Beginning preparation in primary care. Includes advanced history and physical assessment skills for clients of all ages. Clinical emphasis includes acquisition of skills and diagnostic evaluation methods required for management of clients.

NS 661 Family Nurse Practitioner II 4.0 CR
Prerequisite: NS 660.
Fees.
Builds on and allows for utilization of advanced practice skills learned in NS 660. Assessment, diagnosis and treatment of clients with disorders of the reproductive system, respiratory tract and the musculoskeletal system. Includes management of the obstetrical client. Emphasis on care of clients through the life span.

NS 662 Family Nurse Practitioner III 5.0 CR
Prerequisite: NS 661.
Fees.
Continued preparation for advanced nursing practice. Assessment, diagnosis and treatment or referral of clients with disorders of the cardiovascular, endocrine, gastrointestinal, integumentary, and neurological systems. Recognition and management of severe infections and chronic disease. Emphasis on care of clients through the life span.

NS 663 Family Nurse Practitioner, Clinical Concentration 3.0 CR
Prerequisite: NS 662.
Fees.
Integration and synthesis of knowledge and skill competencies requisite to advanced professional nursing practice. Provides intensive practice in an expanded role under preceptor supervision at appropriate clinical sites. Includes seminar on campus.

NS 670 Advanced Psychiatric/Mental Health Nursing I 3.0 CR
Prerequisite: Graduate standing and faculty permission.
Fees.
Focuses on the theory, research and clinical approaches related to the psychosocial health of individuals and groups. Current trends and issues in the treatment of psychiatric-mental health problems are discussed in the context of influence on practice. Particular attention is given to interpersonal dynamics and behavior as basic processes by which assessment and interventions occur. Clinical experiences provide students the opportunity to apply and test psychosocial theory and therapeutics.

NS 671 Advanced Psychiatric/Mental Health Nursing II 3.0 CR
Prerequisite: Graduate standing and faculty permission.
Fees.
Focuses on the theory, research and clinical literature related to the psychosocial health of families. Current trends and issues in family research and clinical applications are discussed in the context of the influence of psychiatric-mental health nursing practice. Particular attention is given to family structure and processes as a basis for assessment and intervention. Clinical experiences provide students opportunity to apply and test family theory and therapeutics.

NS 672 Advanced Psychiatric/Mental Health Nursing III 3.0 or 6.0 CR
Prerequisite: Graduate standing and faculty permission.
Fees.
Current trends and approaches to the organization and delivery of mental health services are analyzed. The professional literature is critically reviewed, emphasizing etiological factors, planning, and decision making regarding mental health problems and personnel. Characteristics of the sociocultural environment are examined giving particular attention to major influences on mental health conditions. Current research findings are evaluated for purposes of assessment, planning, and implementation of services for high risk, multicultural, and under served populations. The role of the nurse is analyzed and developed through clinical experience.

NS 674 Topics in Advanced Psychiatric/Mental Health Nursing 4.0 CR

Prerequisite: Graduate standing and faculty permission.

Development of theory and clinical skills related to advanced psychiatric/mental health nursing with individuals, groups, and families with selected psychiatric/mental health needs.

Special Notes: Selected topics will be announced in published class schedule. May be taken once for credit.

NS 675 Biophysical Perspectives of Psychosocial Disabilities 2.0 CR

Prerequisite: Graduate standing or faculty permission.

Analysis of biophysical processes influencing psychosocial behavior in response to endogenous and exogenous stimuli. Research and theory of neuroendocrine mechanisms in psychosocial disabilities are examined. Critical analysis of nursing therapeutics and biophysical therapeutic modalities used in modification of psychosocial disabilities.

NS 681 Analysis of Health Services 3.0 CR

Prerequisite: Baccalaureate degree or senior level (last semester) in baccalaureate program.

Comprehensive overview of the evolution and major components of the health service system in the United States. System performance, directions being taken by major providers, characteristics of resources (financial, personnel, and technological), are discussed. Dimensions of policy making in health are also discussed.

NS 682 Administrative Services 3.0 CR

Prerequisite: Completion of or concurrent enrollment in NS 681.

Elements of administrative processes within the health care system. Personal and interpersonal competencies and maximization of resource allocation to optimize effective leadership and management are emphasized.

NS 682L Administrative Services Field Work 1.0 CR

Prerequisite: RN License in Alaska. NS 682 or concurrent enrollment.

Grading Policy: Pass/No Pass.

Elective clinical experience in application of administrative theory in health care settings. Students work directly with preceptor in the care setting.

NS 695 Practicum in Health Care Administration 4.0 CR

Prerequisite: NS 681, PADM 601, PADM 624, PADM 628.

Seminar and practicum emphasizing integration and application of advanced administrative theory and skills.

NS 699 Thesis 2.0-3.0 CR

Prerequisite: Graduate standing and NS 620.

Under the guidance of the thesis advisor and in conjunction with thesis committee, student develops, refines and implements a research proposal.

NURS: NURSING (2-YEAR PROGRAM)

Offered through the School of Nursing and Health Sciences, Administration Building (ADM), Room 279, 786-1854

NURS 055 Health Care Assistant 3.0 CR

Prerequisite: High school diploma, GED/life skills equivalent. Faculty permission required.

Fees.

Trains health care assistants in basic skills necessary to assist nurses and to be efficient health care team members. Students are supervised in the multi-sensory laboratory to practice the basic nursing assistant skills.

Special Notes: This course is conducted in five weeks.

NURS 065 Health Care Assistant Practicum 2. 0 CR

Prerequisite: NURS 055 and faculty permission.

Provides health care assistants with theory and clinical experiences to assist nurses in an acute care, long-term, or home health facility.

Special Notes: This course is conducted in three weeks. A certificate is awarded upon completion.

NURS 101 Nursing Process 2.0 CR

Introduction to nursing process as systematic approach to identifying patient problems and providing nursing care.

NURS 120 Nursing Fundamentals 7.0 CR

Prerequisite: Admission to Associate Degree Nursing Program; corequisites ENGL 111, BIOL 111, and PSY 150.

Fees.

Fundamental skills and principles underlying nursing interventions. Nursing process is taught as a method to identify and meet each patient's basic nursing care needs which are prioritized according to Maslow's Hierarchy. Focus is on predicted responses in the healthy state; concepts related to health disruptions are introduced. Additional emphasis is on assessment for special needs according to developmental level.

NURS 125 Adult Nursing I 7.0 CR

Prerequisite: Grade of C or better in ENGL 111, BIOL 111, PSY 150, and NURS 120; corequisites BIOL 112, BIOL 240, and NURS 180.

Fees.

Introduction to nursing care of ill adults; builds upon knowledge gained in Nursing Fundamentals. Students learn pathophysiology, treatment options, and nursing care for adult patients with health problems that require some alteration of lifestyle to enable performance of activities of daily living. Application of theory occurs in acute and skilled care settings with increasingly complex clients.

NURS 180 Basic Nursing Pharmacology 3.0 CR

Prerequisite: Grade of C or better in ENGL 111, PSY 150, BIOL 111, and NURS 120; corequisites NURS 125, BIOL 112, and BIOL 240.

Fees.

Introduction to drug therapy. Emphasis on basic pharmacology principles, drug action, correct dosages, methods of administration, and evaluation of patient response. Nursing process is used to identify priorities for care of patients receiving specific medications.

NURS 220 Perinatal Nursing 5.0 CR

Prerequisite: Grade of C or better in NURS 125, NURS 180, BIOL 112, and BIOL 240; corequisite DN 203.

Fees.

Utilization of the nursing process in providing care for the perinatal patient within the context of the health-illness continuum; students learn to care for clients in normal and low risk situations as well as for the clients with high risk complications of childbearing. Additionally, students learn to provide care for the normal and high risk newborn. Nursing care skills are developed in relation to the developmental stages for the perinatal patient and family. Clinical experiences include antepartal, intrapartal, postpartal and neonatal care settings.

NURS 222 Pediatric Nursing 4.0 CR

Prerequisite: Grade of C or better in NURS 125, NURS 180, BIOL 112, and BIOL 240; corequisites NURS 220 and DN 203.

Fees.

Utilization of the nursing process and theories of growth and development as a framework for providing nursing care and fostering health promotion for infants, children, and adolescents and their families. Focus on normal growth and maturation and on acute and chronic alterations of health and development. Clinical experience includes care of children from birth through adolescence.

NURS 225 Adult Nursing II 6.0 CR

Prerequisite: Grade of C or better in NURS 220, NURS 222, and DN 203; corequisite NURS 250.

Fees.

Application of the nursing process as students expand their knowledge of pathophysiology and provide care for medical-surgical patients with acute, complex, and life-threatening disorders. Students are required to demonstrate competence in performance of psychomotor skills and critical thinking in the clinical and classroom setting.

Special Notes: NURS 255 is usually taken concurrently.

NURS 250 Psychiatric Nursing 4.0 CR

Prerequisite: Grade of C or better in NURS 220, NURS 222, and DN 203.

Fees.

Psychodynamics of the major mental illnesses and the principles of psychiatric nursing. Emphasis is placed on application of the nursing process utilizing nursing principles to care for inpatients at all developmental levels. Students adapt their communication skills to facilitate therapeutic interventions with patients experiencing mental illness.

Special Notes: NURS 225 and NURS 255 are usually taken concurrently.

NURS 255 Staff Nurse: Legal, Ethical, and Organizational Issues 1.0 CR

Prerequisite: Grade of C or better in NURS 220, NURS 222, and DN 203; corequisites NURS 225 and NURS 250.

Introductory seminar on application of the nursing process to legal, ethical, and organizational dilemmas encountered in daily nursing practice. Includes consideration of the role of staff nurse within the organization; students develop knowledge necessary to function effectively in the staff nurse role as a member of the nursing and health care teams. Legal limits of nursing practice and trends in the regulation of nursing practice are discussed.

NURS 292 Seminar: Current Issues in Health Care 1.0 CR

Prerequisite: Successful completion of NURS 260 or equivalent.

Grading Policy: Pass/No Pass.

Explores current issues and trends that impact care provided by nurses in the acute and long-term care environments. Areas to be addressed include legal and ethical issues, social and cultural trends, impact of economics on health care. Group discussion and oral presentations based upon current literature.

Special Notes: Class meets two hours per week for 7 1/2 weeks.

NURS 295 Intensive Clinical Practicum 2.0 CR
Prerequisite: Successful completion of NURS 260 and NURS 261. Good physical health.
Grading Policy: Pass/No Pass.
Concentrated clinical work to familiarize graduating nurses with clinical registered nurse responsibilities.
Special Notes: Two-week duration. 32 hours per week with preceptor and 2 hours per week in seminar. Some lifting may be required.

PADM: PUBLIC ADMINISTRATION

Offered through the School of Public Affairs, Library Building (LIB), Second Floor, 786-1770

PADM 601 Public Administration in the Contemporary Society 3.0 CR
Prerequisite: Faculty permission.
Introduction to the field of public administration. The course deals with the scope, nature, history, current context, and basic conceptual tools in the study of public administration. Topics covered include social, economic, and political environments of public administration, bureaucratic politics, power and authority, law, ethics and administration, basic models, and comparative administration.

PADM 602 Seminar in Public Management 3.0 CR
Prerequisite: Faculty permission.
Introduction to basic management skills as well as concepts, approaches, and issues in organization structure, human resources administration, and budgeting and finance administration.

PADM 603 Management Analysis 3.0 CR
Prerequisite: Faculty permission.
Introduction to organizational and systems analysis, systems theory, information systems, procedure analysis, management planning, and management problem solving.

PADM 604 Research Methods in Administration 3.0 CR
Prerequisite: Introductory course in statistics.
Methods and techniques of empirical research. Scientific method, design of research, data collection and analysis methods, survey sampling, and statistical analysis including use of computers in data analysis.

PADM 606 The Policymaking Process 3.0 CR
Prerequisite: Faculty permission.
Fees.
Examination of the nature of public policy and the policymaking process. The course considers the policy environment, levels and types of policy, models of the policy process, the uses of social science research in policymaking, and the role and limits of public participation. Alaska and national cases are used to illustrate basic concepts and issues.

PADM 610 Organizational Theory and Behavior 3.0 CR
Prerequisite: Graduate standing or faculty permission.
Role of the administrator, theories of complex organizations and their administration, administrative leadership, and ethics. A detailed study of organized behavior, including concepts of leadership style, authority, and organizational change.

PADM 617 Public Sector Productivity 3.0 CR
Prerequisite: PADM 610.
Application of technology as well as behavioral and organizational theory to improve productivity in public organizations. Special attention will be given to problems of measurement.

PADM 618 Accountability, Law and the Administrative Process 3.0 CR
Prerequisite: Faculty permission.
The problems of maintaining a responsive bureaucracy subject to democratic controls; implications of administrative due process of law; and selected case studies in state and federal administration.

PADM 620 Internship in Public Administration/Policy 3.0 CR
Prerequisite: Faculty permission.
Applied work experience in public administration or policy analysis. The course consists of the equivalent of three months of full-time work in an approved state, federal, local, or private agency, under the supervision of a senior agency employee in cooperation with a faculty advisor. An internship journal and a final internship report are required.

PADM 624 Human Resources Administration 3.0 CR
Prerequisite: Faculty permission.
Fundamental human resource topics dealing with problems in private and public sectors from an interdisciplinary viewpoint. Current and future development in selection and placement, classification and compensation, training and development, collective bargaining and managerial behavior, performance and effectiveness will be examined.

PADM 628 Administration of Financial Resources 3.0 CR
Prerequisite: Faculty permission.
Public financial organization, problems of financial management in government units, revenue sources, budgetary planning and control, methods of debt financing and intergovernmental relationships.

PADM 630 Administrative Problems in Alaska 3.0 CR
Prerequisite: Faculty permission.
Rural and small city administration; impact of government on the economy; fiscal management policies; technical assistance, loans, subsidies, contracts, public enterprise; and resource administration.

PADM 632 Quantitative Approaches to Policy Analysis 3.0 CR
Prerequisite: PADM 604 or equivalent.
Fees.
Applications of regression analysis and related techniques to a broad range of policy issues. The course focuses on the use of parametric statistics as the basis for policy decisions, using Alaska data to test policy-oriented hypotheses.
Special Notes: Student is expected to utilize the computer lab for two hours per week.

PADM 634 Resource Policy Administration 3.0 CR
Prerequisite: Faculty permission.
Fees.
Examination of the politics and economics of natural resource policy and administration. Emphasis on current national issues and Alaska cases. Focuses on the uses of basic political science and economic concepts in analyzing resource policy issues and alternative policy objectives, means, and consequences in resource policy administration.

PADM 635 Policy Analysis and Program Evaluation 3.0 CR
Prerequisite: Faculty permission.
Critical examination and application of approaches to policy analysis and program evaluation for the public sector.

PADM 640 Alternative Dispute Resolution 1.0-3.0 CR
Reviews literature and principles of alternative dispute resolution. Focuses on negotiation and mediation as ways to resolve individual conflicts, group conflicts and public disputes.

PADM 659 Administrative Policy Seminar 3.0 CR
Prerequisite: Faculty permission, based on substantial completion of MPA program. The core comprehensive exam must be passed before the student may enroll in the capstone course.
Capstone course for Master of Public Administration program. Includes in-depth discussions of case studies illustrating problems of organizational change, decision making, problem solving, and the interrelated processes of policy formulation, implementation, and evaluation. Emphasis on student participation, including presentation of a major policy or administrative report.

PADM 671 Selected Topics in Public Administration 3.0 CR
Prerequisite: Faculty permission.
Analysis of selected public administration issues. Topics will be announced in the published class schedule.

PADM 689 Doctoral Seminar in Public Administration 8.0 CR
Prerequisite: Admission to doctoral program.
Scope and method of public administration; historical and philosophical perspective; and role of government bureaucracies in society. The course is part of the joint university of Alaska Anchorage/University of Southern California doctoral program.

PADM 699 Thesis 1.0-6.0 CR
Prerequisite: Faculty permission.
Under direction of faculty advisor and thesis committee, student will design and complete a research project.

PARL: PARALEGAL STUDIES

Offered through the School of Public Affairs, Justice Center, CAS Building, Room 306, 786-1810

PARL 101 Introduction to Law 3.0 CR
Introduces legal processes in democratic society. Includes skills for conducting basic legal research.

PARL 215 Paralegal Studies 3.0 CR
Foundation course for legal studies area. Explores role, responsibilities, and ethics of paralegal activities and relationship of paralegals to lawyers. Study of paralegal responsibilities including statute and regulation formats, litigation, insurance, probate and real estate. Covers interviewing, investigation, writing and application of social science techniques to paralegal problems.

PARL 235 Factual Investigation and Interviewing 2.0 CR
Prerequisite: PARL 101 and PARL 215.
Study of the fundamentals of investigation. Scene investigation and recording, collection and preservation of physical evidence and scientific aids. Sources of information, interviews, follow-up and case preparation.

PARL 236 Ethics and Paralegals 1.0 CR
Prerequisite: PARL 101 and PARL 215.
Course deals systematically with nine canons of the American Bar Association as they address practical problems of legal assistants who work under the supervision of attorneys. Focus upon rules and opinions directed at the practitioners of law in Alaska. Discussion of regulation by bar associations and attorneys.

PARL 238 Civil Procedure 3.0 CR
Prerequisite: PARL 101.
Introduction to procedural concepts of civil litigation with an emphasis on jurisdiction, venue, service of process, parties, pleading and discovery, trial processes, appellate review, and the common law doctrine of res judicata. Types of pleadings in civil actions, including complaints, answer and reply, joinder of parties and claims, class actions, discovery, motion practice, trial, and appeal.

PARL 256 Legal Research I 3.0 CR
Prerequisite: PARL 101 and ENGL 111.
Fees.
Intensive introduction to legal research tools and techniques, including retrieval of case and statutory authority, use of encyclopedias, legal periodicals, treatises and other secondary authority, proper case citation form, use of computerized research and drafting of legal memoranda.
Special Notes: Strong writing background required.

PARL 295 Paralegal Internship 3.0 CR
Prerequisite: Admission to Paralegal Certificate program and 18 credits of Justice or Paralegal courses.
Introduces Paralegal students to practical application of legal skills learned in the Paralegal core curriculum. On-the-job-training through placement in law office, government or public interest agency requires a minimum of 150 hours of supervised work under a paralegal and/or attorney coordinated with faculty supervisor.

PARL 352 Substantive Criminal Law 3.0 CR
Prerequisite: JUST 110 or PARL 101.
Cross-Listed: JUST 352.
Study of elements, purposes, and functions of substantive criminal law. Includes casebook study of general law of crimes and defenses with concentration on Alaska cases and statutes in Alaska Criminal Code. Historical and philosophical concepts covered .

PARL 354 Criminal Procedure 3.0 CR
Prerequisite: PARL 101 or JUST 110.
Cross-Listed: JUST 354.
Emphasis upon legal limitations of police and right of people to be secure from government under protection of Federal and Alaska Constitutions. Concentration on laws of arrest, search and seizure, wiretapping, electronic surveillance, and exclusionary rule. Interrogations and confessions, lineups and other pretrial identification procedures, right to counsel, trial by jury, entrapment, and double jeopardy. Study of cases decided by U.S. and Alaska Supreme Courts, along with applicable Alaska Statutes and Alaska Rules of Criminal Procedure.

PARL 362 Commercial Law 3.0 CR
Prerequisite: PARL 101.
Commercial law constitutes a study of the paralegal's role in a commercial practice with emphasis on such topics as contracts, remedies, bankruptcy, business formation and organization.

PARL 375 Litigation 3.0 CR
Prerequisite: PARL 238 or 354; PARL 256 recommended.
Fees.
Forms of dispute settlement with emphasis on negotiative processes, mediation, arbitration, settlement in the legal context, litigation, the management of discovery, trial and evidence.

PARL 456 Advanced Legal Analysis and Writing 4.0 CR
Prerequisite: PARL 256 and one of: ENGL 211, 212 or 213.
Fees.
Extensive research and written work applying legal principles to assigned fact patterns. Develops students' ability to perform objective written evaluations of legal issues in legal memoranda as well as persuasive advocacy in formal briefs.
Special Notes: Requires knowledge of basic legal research techniques and the Uniform System of Citation, and use of computerized legal research.

PARL 470 Law of Government Regulation 3.0 CR
Prerequisite: PARL 101.
Administrative law and procedure in the context of federal, state and local agencies operating in Alaska. Includes consideration of unfair competition and anti-trust law from the perspective of the businessman and consumer.

PE: PHYSICAL EDUCATION

Offered through the School of Education, Classroom Building (K), Room 217, 786-1771

PE 100 Physical Activities and Instruction 1.0 CR
Instruction, practice, and activity in variety of physical activities, sports and dance in separate sections.

PE 150 Orientation to Physical Education 2.0 CR
Introduces basic theories and methods for achieving and maintaining high standards of physical fitness. Survey of community and school sports, and exercise programs as they relate to developing positive, long-term, knowledgeable attitudes towards personal health. Orientation in current physical education and recreation activity, methods, and theory courses.
Special Notes: Open to all students; required of all physical education majors.
Offered fall semesters.

PE 151 Sports Proficiency—Recreational Sports 2.0 CR
Develops understanding of rules and regulations and minimal skill level in these recreational sports: archery, bowling, fencing, physical fitness, riflery, skiing, and weight lifting.
Offered fall semesters.

PE 152 Sports Proficiency—Team Sports 2.0 CR
Develops understanding of rules and regulations and minimal skill level in these team sports: basketball, volleyball, soccer, softball, flag football, and hockey.
Offered spring semesters.

PE 153 Sports Proficiency—Individual Sports 2.0 CR
Develops understanding of rules and regulations and minimal skill level in these individual sports: tennis, handball/racquetball, swimming, golf, track, and field.
Offered spring semesters.

PE 200 Varsity Sports 1.0 CR
Prerequisite: Coach permission.
Student-athlete participation in a recognized intercollegiate varsity sport such as Cheerleading, Hockey, Cross-Country Running, Skiing, Swimming, Volleyball, Women's Basketball, Men's Basketball, and Gymnastics.
Special Notes: Registration required during semester of competition. Restricted to one credit each academic year.

PE 246 Advanced First Aid 3.0 CR
Fees.
Develops functional first aid capabilities for physical education teachers who may be required to provide emergency first aid care prior to care by qualified medical personnel. Requires written and practical examinations.
Special Notes: Successful completion of course satisfies requirements for American red cross certification in advanced first aid.
Offered fall semesters.

PE 301 Sports Theory and Coaching 2.0 CR
Methods of coaching, playing and training in a variety of team sports played primarily at the junior and senior high school levels. Emphasizes both individual and team skills. Includes a basic understanding of all rules, organization, administration, theories and strategies for these games.

PE 303 Techniques in Team Sports 2.0 CR
Techniques for teaching the various team sports played primarily at the junior and senior high school levels. Emphasizes both individual and team skills. Includes a basic understanding of all rules, organization, administration, theories and strategies for these games.
Offered fall semesters.

PE 304 Techniques in Winter Sports 2.0 CR
Methods of teaching skills and coaching teams in snow and ice sports.

PE 305 Techniques in Individual and Dual Sports 2.0 CR
Techniques for teaching and coaching in a number of individual and dual sports to include a thorough understanding of the roles, theories, strategies, organization and administration, participation and skill development.
Offered fall semesters.

PE 306 Techniques in Gymnastics 2.0 CR
Methods and practice in teaching tumbling and gymnastics apparatus.

PE 309 Techniques in Aquatics 2.0 CR
Prerequisite: Faculty permission.
Satisfies requirements for American red cross certification for basic rescue and water safety, and certification for basic swim instructor or water safety instructor.
Offered spring semesters.

PE 310 Techniques in Rhythms and Dance 2.0 CR
Methods and practice in teaching rhythmic activities and dance.
Offered spring semesters.

PE 321 Practicum in Physical Education 1.0 CR
Prerequisite: Permission of department chairperson.
Student serves as a student-assistant in PE 100 class, or obtains an equivalent experience in a local school or recreation program.
Special Notes: May be repeated for maximum of four credits.
Offered fall and spring semesters.

PE 332 Tests and Measurements in Physical Education 3.0 CR
Theory and application of the evaluation process in physical education including basic statistics; formation of measurable behavioral objectives; written test construction; survey of fitness and skill tests; their selection, administration and interpretation of results; and the use of basic computer programs to calculate various statistical values.
Offered fall semesters.

PE 340 Sports and Recreation Management 2.0 CR
A survey of core areas of private and public recreation management. Includes management, finance, budgeting, marketing, personnel administration, planning, and research. Analysis of recreation opportunities and programs in Alaska including legal issues and land status.

PE 360 Introduction to Exercise Physiology 3.0 CR
Cross-Listed: HS 360.
Prerequisite: BIOL 111 and 112.
Intensive study of acute and chronic physiological adaptations to the stress of exercise, with special emphasis on physical exertion in the cold. Laboratory experiments will provide the opportunity for students to apply their practical knowledge.

PE 361 Biomechanics 3.0 CR
Cross-Listed: HS 361.
Prerequisite: BIOL 111 and BIOL 112; PHYS 123 and PHYS 124 recommended.
A study of fundamental mechanics with application limited to the human body, especially in exercise and sports activities, with some laboratory demonstrations to develop skills in both qualitative and quantitative analyses.

PE 363 Introduction to Athletic Training 3.0 CR
Prerequisite: BIOL 112.
Fees.
An introduction to the care and prevention of athletic injuries, exploring the basic anatomical mechanisms of injury. Practical experience in taping and bandaging for pre-activity and post-injury conditioning.

PE 400 Physical Education Fieldwork 3.0 CR
Prerequisite: Admission to teacher certification program and concurrent enrollment in PE 406 required.
Practical field experience in elementary and secondary classrooms in local public schools. Individual schedules are arranged for time in the schools. Students gain practical experience in implementing instructional strategies, classroom management, and school procedures.

PE 406 Methods of Teaching Physical Education 3.0 CR
Prerequisite: Concurrent enrollment in PE 400 required.
Philosophy, curriculum development, methods for facilitating learning and behavior modification, measurement and evaluation, observations and teaching in elementary and secondary school physical education.

PE 408 Elementary School Physical and Health Education 3.0 CR
Cross-Listed: ED 408.
Prerequisite: ED 210, ED 336 and all corequisites thereto; all general education degree requirements and admission to School of Education.
Philosophy, source materials, group activities and program planning; participation required to gain skills and techniques of teaching health education and physical activities for elementary grade children.
Offered fall and spring semesters.

PE 425 Organization and Administration of Physical Education 3.0 CR
Philosophy, methodology, and problems of planning, organizing, directing, and evaluating school programs in physical education, intramural sports and inter-school athletics.
Offered spring semesters.

PE 430 Adaptive Physical Education 3.0 CR
Organization of adaptive physical education programs, orientation to common physical and mental disabilities, and the theories and techniques employed in teaching and evaluating handicapped students in physical education.
Offered fall semesters.

PE 460 Socio-Psychological Bases of Physical Education and Sport 3.0 CR
Prerequisite: PSY 111.
An examination of theoretical and applied psychological and sociological parameters as they pertain to sports participation and physical activity.
Offered fall semesters.

PE 470 Human Motor Learning and Performance 3.0 CR
Prerequisite: PSY 111.
Examination of theoretical and applied psychological parameters as they pertain to motor skill acquisition and human motor performance.
Offered spring semesters.

PER: PHYSICAL EDUCATION AND RECREATION

Offered through the College of Community and Continuing Education, Classroom Building (K), Room 126, 786-1468

PER 101 Survey of Team Sports 1.0 CR
Fees.
Survey a variety of team sports to improve athletic proficiency and cardiovascular fitness. PER sports activities may include water polo, volleyball, basketball, walleyball, broomball, badminton, pickleball, softball, and/or racquetball.
Special Notes: May be repeated for credit.

PER 102 Badminton 1.0 CR
Fees.
Basic rules and fundamentals including grip, footwork, position, serve, strokes, and strategy of singles and doubles.
Special Notes: May be repeated for credit.

PER 103 Basketball 1.0 CR
Fees.
Covers basic rules and fundamentals including dribbling, passing, shooting and offensive and defensive strategies by use of drills and games.
Special Notes: May be repeated for credit.

PER 104 Soft Aerobics 1.0 CR
Fees.
Designed for individuals who are not familiar with or have not participated in regular exercise for a period of time and would like to begin a fitness program. Exercise to music for cardiovascular, flexibility and strength improvement.

PER 105 Beginning Handball 1.0 CR
Fees.
Basic rules and fundamentals. Develops handball skills and game strategies.
Special Notes: May be repeated for credit.

PER 106 Beginning Racquetball 1.0 CR
Fees.
Basic rules and fundamentals. Defensive and offensive strategies of game.
Special Notes: May be repeated for credit.

PER 108 Walleyball 1.0 CR
Fees.
Basic rules and fundamentals of game including strategy, serve and hit techniques, positioning, and general skill development through drills and matches.
Special Notes: May be repeated for credit.

PER 110 Beginning Swimming 1.0 CR
Fees.
Teaches and develops proper breathing method and basic strokes for those with little or no swimming background. Introduces crawl stroke and elementary backstroke. Emphasizes personal water safety.
Special Notes: May be repeated for credit.

PER 111 Springboard Diving 1.0 CR
Fees.
Designed to give students basis for diving recreationally or competitively at university or masters level. Covers stretching and flexibility, psychological preparation, and basic and optional dives used in competition.
Special Notes: May be repeated for credit.

PER 112 Beginning Volleyball 1.0 CR
Fees.
Fundamentals including rules, serving, passing, setting, and attacking. Covers offensive and defensive strategies of game.
Special Notes: May be repeated for credit.

PER 113 Shape Up with Weights 1.0 CR
Fees.
Warm-up with stretching and jogging. Strengthens and conditions major muscle groups using free weights and Nautilus equipment. Covers cardiovascular exercise

and basic nutritional information.
Special Notes: May be repeated for credit.

PER 114 Beginning Weight Training 1.0 CR
Fees.
Improves strength, physical conditioning, and general sports performance through correct use of nautilus equipment, free weights and use of body weight and resistance.
Special Notes: May be repeated for credit.

PER 115 Yoga 1.0 CR
Participation in Kundalina Yoga. Includes physical exercise, breathing techniques and practice in concentration and deep relaxation.
Special Notes: May be repeated for credit.

PER 117 Beginning Ice Skating 1.0 CR
Fees.
Introduces warm-ups and basic techniques for skating: forward, backward, stops and turns.
Special Notes: May be repeated for credit.

PER 118 Aerobics 1.0 CR
Fees.
Exercise to music for cardiovascular, flexibility, and strength improvement.
Special Notes: May be repeated for credit.

PER 119 Beginning Karate 1.0-3.0 CR
Fees.
Introduces main techniques of karate. Covers three main aspects: individual training, applied training with opponent, and auxiliary exercises to increase skills.
Special Notes: May be repeated for credit.

PER 120 Swimnastics 1.0 CR
Fees.
Aerobic exercise performed in the water and designed to help swimmers and non-swimmers slim down, tone up muscles, and gain flexibility. Designed to attain and maintain physical fitness through controlled water activities using a wide variety of muscles while submerged in the water.

PER 123 Beginning Bowling 1.0 CR
Fundamentals for the beginner. Covers bowling technique, posture and position, and scoring.
Special Notes: May be repeated for credit.

PER 125 Beginning Golf 1.0 CR
Basic rules and fundamentals including use of irons and wedges, putting, club selection, strategy, and practice rounds.
Special Notes: May be repeated for credit.

PER 126 Stretching and Toning 1.0 CR
Fees.
Non-aerobic exercises to increase agility and to develop muscular tone. Exercise with music helps increase flexibility, gain a greater range of motion, reduce stress, and improve muscular strength.
Special Notes: May be repeated for credit.

PER 135 Hockey 1.0 CR
Fees.
Prerequisite: Basic skating ability.
Introduces hockey including rules, power skating techniques, puck handling, basic offensive and defensive strategy, passing, and shooting through drills and games.
Special Notes: May be repeated for credit.

PER 136 Soccer 1.0 CR
Introduces soccer including rules, conditioning, dribbling, basic offensive and defensive strategy, passing, heading, traps, and shooting through drills and matches.
Special Notes: May be repeated for credit.

PER 140 Dance Fitness and Exercise 1.0 CR
Ballet and modern dance techniques for strength, flexibility, and muscle tone.
Special Notes: May be repeated for credit.

PER 141 Beginning Tai Chi 1.0 CR
T'ai Chi Ch'uan is a complete exercise which helps achieve good health and tranquility while increasing energy and balancing strength. Designed for the beginner who would like to learn how to relax and become more aware of his/her body.

PER 142 Kung Fu 1.0 CR
Fees.
Kung Fu seeks to achieve harmony between oneself and the universe through training and discipline on the physical, mental and spiritual level. Northern Shaolin Kung Fu provides basic understanding of the philosophy, principles and applications.

PER 143 Kendo 1.0 CR
Fees.
Covers the theory, techniques, and methods of training. Kendo, one of the oldest martial arts, was originally the Japanese feudal art of swordsmanship. Practiced with bamboo swords and protective clothing for the purpose of training mind and body.

PER 144 Tae Kwon Do 1.0 CR
Fees.
Encompasses a brief history and fundamental techniques employed in the Korean martial art of Tae Kwon Do. Techniques include basic defensive blocks, punching, basic kicks, and open sparring. Instruction will cover both mental and physical aspects of self-defense.

PER 151 Introduction to Aerobic and Fitness Instruction 4.0 CR
Fees.
Introduces concepts in basic exercise physiology, anatomy and kinesiology, nutrition and weight control, injury prevention, music selection, choreography and teaching exercise techniques. Conducted in classroom and studio setting for hands-on experience.

PER 206 Intermediate Racquetball 1.0 CR
Prerequisite: PER 106 or equivalent skills.
Fees.
Emphasizes game strategy and improving skills.
Special Notes: May be repeated for credit.

PER 208 Power Aerobics 1.0 CR
Prerequisite: PER 118 or equivalent skills.
Fees.
Advanced exercise program to music for cardiovascular, flexibility, and strength improvement with the use of exercise aids.

PER 210 Intermediate Swimming 1.0 CR
Prerequisite: PER 110 or equivalent skills. Student should be able to swim the crawl stroke a minimum of one pool length using good breathing technique.
Fees.
Develops and refines breast, side, and other advanced strokes. Covers diving and personal safety.
Special Notes: May be repeated for credit.

PER 212 Intermediate Volleyball 1.0 CR
Prerequisite: PER 112 or equivalent skills.
Fees.
Emphasizes improving skills and strategies of the game.
Special Notes: May be repeated for credit.

PER 213 Emergency Water Safety and Lifeguarding 2.0 CR
Prerequisite: PER 210 or faculty permission.
Fees.
Advanced course in lifeguarding. Deals with common hazards in aquatic facilities and lifeguarding duties in general as well as advanced techniques in lifesaving skills. Successful completion results in Red Cross certification.
Special Notes: May be repeated for credit.

PER 216 Basic Water Safety and Emergency 1.0 CR
Prerequisite: Must be able to swim 20 lengths, surface dive and standing front dive.
Fees.
Accredited American Red Cross course covering 21 units required for lifeguard certificate.
Special Notes: May be repeated for credit.

PER 217 Intermediate Figure Skating 1.0 CR
Prerequisite: PER 117 or equivalent skills.
Fees.
Introduces jumps, spins, edges and turns.
Special Notes: May be repeated for credit.

PER 218 National Aquatics School 1.0 CR
Prerequisite: Set by American red cross; varies depending on selection of course materials.
Fees.
Intense one week water safety program resulting in Red Cross certification. Choose from water safety instructor or adaptive aquatic instructor; advanced lifesaving or lifeguarding; or CPR and first aid. Select one, two, or all three tracks.
Special Notes: May be repeated for credit.

PER 219 Intermediate Karate 1.0-3.0 CR
Prerequisite: PER 119 or equivalent skills.
Fees.
Continuation of PER 119. Covers basics review, injury prevention, philosophy, introduction to various schools and styles, and conditioning. Emphasis on refinement of basic moves, offensive and defensive strategy, and acquisition of intermediate moves and techniques.
Special Notes: May be repeated for credit.

PER 220 Swimming Conditioning 1.0 CR
Prerequisite: PER 210 or equivalent skills.
Fees.
Improves skills, physical conditioning, and knowledge of training and competition. Training and conditioning on an individual basis according to abilities. Designed for adult intermediate to competitive level swimmers.

PER 223 Intermediate Bowling 1.0 CR
Prerequisite: PER 123 or equivalent skills.
Provides bowling instruction to the person who knows basic techniques and wishes to further develop skills.
Special Notes: May be repeated for credit.

PER 241 Intermediate Tai Chi 1.0 CR
Prerequisite: PER 141 or faculty permission.
T'ai Chi Ch'uan is a complete exercise which helps achieve good health and tranquility while increasing energy and balancing strength. Designed for students interested in expanding prior knowledge and participating in the 36 movements of Chen style T'ai Chi Ch'uan.

PER 250 Adaptive Aquatics Instructor 3.0 CR
Prerequisite: PER 213 or faculty permission.
Fees.
Instruction in physical management, sociology, use of adaptive equipment, and body mechanics of the motor impaired for pool recreation and conditioning. Emphasizes safety and implementing progressive range of motion development, sensory stimulation, conditioning, and motor skill improvement.
Special Notes: May be repeated for credit.

PER 251 Issues in Aerobic and Fitness Instruction 4.0 CR
Prerequisite: PER 151.
Fees.
Special issues include application of health screening, emergency first aid procedures, injury, treatment, specialized music selection and equipment, legal issues, choreography, and teaching techniques for specialized populations. Aquatics, weight training, prenatal, geriatrics, stress reduction, and other specialty programs will be explored.

PER 264 Advanced Weight Training 1.0 CR
Prerequisite: Prior weight training or faculty permission.
Fees.
Strength development for persons already reasonably fit.
Special Notes: May be repeated for credit.

PER 266 Advanced Racquetball 1.0 CR
Prerequisite: PER 205 or equivalent skills.
Fees.
Emphasizes advanced game strategy and develops advanced skills.
Special Notes: May be repeated for credit.

PER 268 Advanced Figure Skating 1.0 CR
Prerequisite: PER 217 or equivalent skills.
Fees.
Develops advanced skills in jumps, turns, and spins.
Special Notes: May be repeated for credit.

PER 278 Alaska Native Sports Traditions 2.0 CR
Develops understanding and introduces skills of Native sport, game and dance traditions (as practiced by World Eskimo Indian Olympics). Hands-on practice of sports, games, and dances.

PETE: PETROLEUM ENGINEERING

Offered through the School of Engineering, Engineering Building (ENGR), Room 201, 786-1900

PETE 101 Introduction to the Petroleum Industry 3.0 CR
Survey of the petroleum industry from exploration through refining.

PETE 301 Petroleum Drilling Engineering 3.0 CR
Prerequisite: PHYS 211, MATH 201 or faculty permission.
Fundamental principles of rotary oil well drilling and the engineering principles used in actual field practice. Includes a field trip to observe drilling rig and related support equipment.

PETE 302 Oil Well Design and Production 3.0 CR
Prerequisite: PHYS 211, MATH 201 or faculty permission.
Fundamental principles underlying the analysis, design and engineering of petroleum production systems.

PETE 304 Petroleum Reservoir Engineering 3.0 CR
Prerequisite: MATH 201 and PHYS 212.
Quantitative study of behavior prediction of volumetric and water drive oil and gas reservoirs by material balance.

PETE 630 Water Flooding 3.0 CR
Prerequisite: Background knowledge in petroleum reservoir engineering.
Advanced treatment of fundamental concepts and procedures used in the design of water flooding processes in petroleum reservoirs.

PETE 661 Advanced Well Testing 3.0 CR
Prerequisite: Background knowledge in petroleum reservoir engineering.
Equations for transient flow of single phase fluids through porous media, extension to multiphase flow, isolated and developed multiwell flow, conventional draw-down and build-up analysis, log-log type curve analysis, interference testing, fractured wells, pulse tests, and drill stem tests.

PETR: PETROLEUM TECHNOLOGY

Offered through Kenai Peninsula College, Ginger Steffy, Director, 34820 College Dr., Soldotna, 99669, 262-5801

PETR 105 Petroleum Science I 3.0 CR
Prerequisite: MATH 055 or faculty permission.
Surveys physical and chemical properties of hydrocarbon gases and liquids. Introduces fluid flow processing including head, friction, and fluid power. Introduces basic unit processes such as two-phase and three-phase separation.
Offered at Kenai Peninsula College only.

PETR 106 Petroleum Science II 3.0 CR
Prerequisite: PETR 105 and either MATH 105 or MATH 101.
Basic heat and material as balances encountered in surface processing operations. Applies hydrocarbon properties to specific process material balances. Operation of gas-oil separators, gas dehydration equipment, fired heaters and boilers, and cryogenic natural gas processing.
Offered at Kenai Peninsula College only.

PETR 120 Surface Oil Field Equipment I 3.0 CR
Specializes in oil field equipment and terminology for drilling-related activities.
Offered at Kenai Peninsula College only.

PETR 121 Surface Oil Field Equipment II 3.0 CR
Prerequisite: PETR 120 or faculty permission.
Continuation of PETR 120. Emphasizes post-drilling operations such as well stimulation fundamentals, well logging and wireline procedures, knowledge of water flood and gas lift procedures and equipment. Introduces fishing and directional drilling.
Offered at Kenai Peninsula College only.

PETR 140 Industrial Process Instrumentation I 3.0 CR
Prerequisite: Math 054 and Reading Placement Test.
Covers physics of pressure, temperature, level and flow; mechanical and electrical aspects of instruments used to control dynamics of processes. Also covers dynamics of automatic control including proportional control, automatic reset, derivative action and integral timing.
Offered at Kenai Peninsula College only.

PETR 142 Process Instrumentation for Engineers 3.0 CR
Prerequisite: Faculty permission.
Process instrumentation for the mechanical or chemical engineer who desires exposure to the functions of automatic control systems in the modern dynamic process plant. A familiarization in today's industry.
Offered at Kenai Peninsula College only.

PETR 144 Industrial Process Instrumentation II 3.0 CR
Prerequisite: PETR 140 with C grade or better.
Continuation of PETR 140, but places emphasis on repair, maintenance, and calibration, as well as hands-on physical training on a wide variety of process instruments. Completion of many remaining chapters from PETR 140 textbook pertinent to related classes.
Offered at Kenai Peninsula College only.

PETR 146 Process Control Loop Tuning 1.0 CR
Prerequisite: Two years of industrial experience.
Provides hands-on training for operators and technicians in the matching of controller performance to process behavior.
Offered at Kenai Peninsula College only.

PETR 150 Mechanical Drafting for the Petroleum Industry 3.0 CR
Introduces sketching, and mechanical and process piping drafting. Emphasizes process piping symbols and flow systems used in petro-chemical industry.
Offered at Kenai Peninsula College only.

PETR 155 Blueprint Reading 3.0 CR
Covers basics of reading machine, welding, architectural, instrumentation, hydraulic, and process flow drawings. Includes freehand sketching of simple mechanical and flow diagrams.
Offered at Kenai Peninsula College only.

PETR 170 Fundamentals of Mechanics 3.0 CR
Introduces basic mechanical maintenance skills. Includes general knowledge with shop practice of bearings, drive components, lubrication, rigging, and internal combustion engines.
Offered at Kenai Peninsula College only.

PETR 227 Logging and Log Analysis 3.0 CR
Prerequisite: Faculty permission.
Provides job skills in the area of well logging and log analysis. Includes logging tools, methods, and procedures for running tools, the basic physics of logging tools, and data acquisition. Covers elementary analysis of both open and cased hole logs.
Offered at Kenai Peninsula College only.

PETR 228 Petroleum Reservoir Engineering I 3.0 CR
Prerequisite: PETR 106, PETR 120, and faculty permission.
Introduces properties of petroleum reservoirs, associated rock structure, traps, fluid migrations, porosity, permeability, fluid saturations, draw-downs, recovery schemes, reservoir drives, completion calculations, recovery predictions, abandonments, mapping, and deviation surveys.
Offered at Kenai Peninsula College only.

PETR 229 Production Engineering 3.0 CR
Prerequisite: Faculty permission.
Continuation of PETR 228. Covers analysis and remedial work performed throughout life of hydrocarbon reservoirs, artificial pressure maintenance, and water flood.
Offered at Kenai Peninsula College only.

PETR 230 Practical Distillation 3.0 CR
Prerequisite: PETR 105 and PETR 140.
Practical approach to operation of grass roots distillation operation patterned after a small refinery; includes tower operation and process of fractionating crude oil.
Offered at Kenai Peninsula College only.

PETR 231 Production Plant Operations 3.0 CR
Prerequisite: PETR 105 and PETR 140.
Introduces operating equipment, and start-up and shut-down procedures using process simulation. Requires interpretation of typical flow sheets.
Offered at Kenai Peninsula College only.

PETR 235 Petroleum Laboratory Standards 3.0 CR
Prerequisite: PETR 105 or faculty permission.
Students will perform standard water analysis according to API RP-45, and associated standards, specific water flood analysis for water quality and scale formation, physical petroleum analysis relating to quality control for sales purposes, environmental parameter monitoring and recording, and instrumental analysis as time permits.
Offered at Kenai Peninsula College only.

PETR 240 Industrial Process Instrumentation III 3.0 CR
Prerequisite: PETR 144 with grade of C or better.
Study of methods, installation, and identification of proper instruments for use with particular industrial processes, and operation of instrumentation under live load conditions through use of sophisticated process simulators.
Offered at Kenai Peninsula College only.

PETR 244 Industrial Process Instrumentation IV 3.0 CR
Prerequisite: PETR 240 with grade of C or better.
Explores techniques used in designing and developing control loops. Control loop engineering and developments of loops for maximum efficiency and energy control. Program will develop basic engineering skills.
Offered at Kenai Peninsula College only.

PETR 270 Industrial Mechanical Equipment 3.0 CR
Introduces basics of piping systems and components, pump design and alignment, compressors and pneumatic motors, steam generation and steam turbines, hydraulic components and circuits, and gas combustion turbines. Includes hands-on disassembly and assembly of pumps, valves, compressors, and turbines. Also assembling of hydraulic circuits and associated problems.
Offered at Kenai Peninsula College only.

PHIL: PHILOSOPHY

Offered through the College of Arts and Sciences, Classroom Building (K), Room 219, 786-1756

PHIL 101 Introduction to Logic 3.0 CR
Analyzes argumentation and informal fallacies; introduces deductive logic, and examines inductive evidence in scientific and practical reasoning.

PHIL 201 Introduction to Philosophy 3.0 CR
Introduces works of influential thinkers, both ancient and modern, in the Western philosophical tradition. Emphasizes central problems of knowledge, reality, and good and evil.

PHIL 211 History of Philosophy I 3.0 CR
Introduction to the great thinkers of the Greek, Latin, Medieval, and Renaissance periods in Western civilization. Comparative examination of cosmological, religious, ethical, political, and scientific ideas which shaped each of these epochs.

PHIL 212 History of Philosophy II 3.0 CR
Introduces great thinkers of the 17th century scientific revolution, the Enlightenment, German Idealism, contemporary positivism and existentialism. Comparative examination of cosmological, ethical, political, and scientific ideas which shaped each of these periods.

PHIL 213A Eastern Philosophy and Religion 1.0 CR
Survey of philosophical-religious traditions of the Far East: Confucian, Taoist, Buddhist (including Zen), and Hindu.
Special Notes: One credit requires regular attendance and minimal weekly assignments (Pass/No Pass grading). Does not satisfy the Humanities GER.

PHIL 213B Eastern Philosophy and Religion 2.0-3.0 CR
Survey of philosophical-religious traditions of the Far East: Confucian, Taoist, Buddhist, (including Zen), and Hindu.
Special Notes: Two credits requires two major examinations (letter grade awarded). Three credits requires third examination or term paper (letter grade awarded). Students taking this course to satisfy the Humanities GER must complete it for 3 credits.

PHIL 214 Western Religion 3.0 CR
Prerequisite: None. ENGL 111 recommended.
A survey and comparative study of the major religious traditions of the West: Judaism, Christianity, and Islam. Concepts of redemption and revelation, the life of worship, and religious transformation will be stressed.

PHIL 301 Ethics 3.0 CR
An introduction to the great moral thinkers of Western civilization and the use of their ethical systems in an attempt to resolve contemporary issues such as abortion, euthanasia, equal rights, civil disobedience, and professional ethics.

PHIL 310 Philosophy of Love 3.0 CR
Examines a variety of concepts of and approaches to the experience of love and human isolation as these developed in both the Eastern and Western philosophical traditions.

PHIL 320 Existentialism 3.0 CR
Prerequisite: None. Recommended completion of at least one PHIL course above the 100 level.
Existentialism is a recent movement in philosophy that studies the obstacles to creating personal meaning and the sources of spiritual anxiety and alienation. Intensive study of the methods and theories of the major philosophers of this movement (Kierkegaard, Nietzsche, Heidegger, and Sartre) with attention to their philosophical backgrounds and some influences of their work on the feminist movement, psychotherapy, literature, and theology.

PHIL 401 Aesthetics 3.0 CR
An investigation into the nature of art and the creative process from both an historical and theoretical perspective, utilizing especially the philosophy of the ancient Greeks, the Romantic thinkers and contemporary semiotics.

PHIL 421 Philosophy of the Social Sciences 3.0 CR
A general introduction to the philosophical problems common to the social sciences, focusing on issues concerning method, epistemology, and modes of explanation.

PHYS: PHYSICS

Offered through the College of Arts and Sciences, Engineering Building (ENGR) Room 333/335, 786-1238

PHYS 101 Survey of Physics 3.0 CR
Prerequisite: MATH 055.
Introduces basic concepts in physics. Emphasizes historical development of scientific theories, concentrating on basic aspects of the major areas of physics, including mechanics, thermodynamics, electricity and magnetism, and optics.
Special Notes: Designed for general interest or to prepare non-science students for entry into PHYS 123/124.

PHYS 109 Fundamentals of Meteorology 3.0 CR
Cross-Listed: GEOG 109.
Prerequisite: High school algebra.
Introduces meteorology for non-specialists.

PHYS 110 Physics for Technicians 4.0 CR
Prerequisite: MATH 055 or equivalent. Aviation Maintenance Technology students must obtain a signature from the AMT faculty advisor/chairperson to register for this course.
Fees.
Basic instruction in mechanics, thermodynamics, and physical properties of matter.
Special Notes: Designed to meet physics requirements of several industrial and career related programs, but primarily the AMT program.

PHYS 115 Physical Science I for Technicians 4.0 CR
Prerequisite: MATH 055 or equivalent.
Fees.
Exposes students to basic concepts in physics. Presents general knowledge of science rather than an in-depth study of any one field.

PHYS 116 Physical Science II for Technicians 4.0 CR
Prerequisite: MATH 055 or equivalent.
Fees.
Exposes students to basic concepts in chemistry, astronomy, meteorology, and geology. Presents general knowledge of science rather than an in-depth study of any one field. Material presented to show interrelatedness and interdependence of these scientific fields.

PHYS 123 Basic Physics I 4.0 CR
Prerequisite: MATH 105 and high school trigonometry.
Fees.
Non-calculus introduction to mechanics, fluids, and thermodynamics. Emphasizes motion, forces, gravitation, fluid motion, and laws of thermodynamics. Limited emphasis on historical development of physics.

PHYS 124 Basic Physics II 4.0 CR
Prerequisite: PHYS 123.
Fees.
Non-calculus introduction to electricity and magnetism, waves, optics, light, some modern and nuclear physics. Limited emphasis on historical development of physics.

PHYS 211 General Physics I 4.0 CR
Prerequisite: PHYS 123 and MATH 200. Corequisite MATH 201.
Fees.
Calculus-based course covering classical mechanics (statics and dynamics of translational and rotational motion), fluids, elasticity, and introduction to thermodynamics.

PHYS 212 General Physics II 4.0 CR
Prerequisite: PHYS 124, PHYS 211, MATH 201. Corequisite MATH 202.
Fees.
Calculus-based course emphasizing basic electromagnetic theory, waves, fundamentals of geometric and physical optics, and light.

PHYS 303 Modern Physics 3.0 CR
Prerequisite: PHYS 212 and MATH 302.
Introduces modern physics, including special relativity, atomic and molecular physics, electromagnetic radiation, solid-state physics, elementary particles, simple transport theory, kinetic theory, and concepts of quantum mechanics.

PHYS 311 Mechanics I 4.0 CR
Prerequisite: PHYS 212.
Newtonian mechanics, analysis of harmonic oscillators, kinematics and dynamics, static and moving coordinate systems, central forces, and applications.

PHYS 312 Mechanics II 4.0 CR
Prerequisite: PHYS 311.
Systems of particles, rigid bodies, statics, fluid dynamics, introduction to tensors and Lagrangian mechanics.

PHYS 313 Thermodynamics and Statistical Physics 3.0 CR
Prerequisite: PHYS 212 and MATH 202 (MATH 302 strongly recommended).
Thermodynamic systems, equations of state, the laws of thermodynamics, changes of phase, thermodynamics of reactions, kinetic theory, and introduction to statistical mechanics.

PHYS 410 Electricity and Magnetism 3.0 CR
Prerequisite: PHYS 212 and MATH 202. MATH 302 and 314 strongly recommended.
Covers static electric fields in free space and material media; steady current systems and associated magnetic effects. Also includes magnetostatics, Maxwell's equations, radiation, and a discussion of the implications of relativity theory.

PHYS 413 Introduction to Relativity Theory 3.0 CR
Prerequisite: PHYS 212 and MATH 202. MATH 302, 305, 314, and PHYS 213 recommended.
Covers Einstein's Special Theory of Relativity; also includes selected topics from General Relativity theory, centered on the derivation of Einstein's field equation and its fundamental applications.

PMED: PARAMEDIC TECHNOLOGY

Offered through the College of Career and Vocational Education, Gordon Hartlieb Building (GHB), Room 111, 786-1184

PMED 101 Paramedic Concept and Technique 7.0 CR
Prerequisite: EMT I knowledge or equivalent, and acceptance in Paramedic Technology training program.
Theory of emergency medicine. Stresses cardiology as well as drug therapy in emergency field situations.

PMED 102 Paramedic Laboratory 3.0 CR
Prerequisite: EMT I knowledge or equivalent, and acceptance in Paramedic Technology training program.
Practical experience in paramedicine. Hospitals in Anchorage area serve as teaching environments for most sessions.

PMED 195A Paramedic Internship 8.0 CR
Prerequisite: EMT I knowledge or equivalent, and acceptance in the Paramedic Technology training program.
Under supervision of experienced paramedics or physicians, students use knowledge and skills acquired in formal course work. Students respond to routine calls with paramedic units. Provides opportunities for learning relevant case material and evaluation under stress of actual working conditions.

PMED 195B Paramedic Practicum 12.0 CR
Prerequisite: EMT I knowledge or equivalent, and acceptance in Paramedic Technology training program.
Paramedic students participate as observers on paramedic units, as observers and participants in emergency rooms, and as interns on paramedic units. Ratio of observation to participation changes as students gain experience.

PS: POLITICAL SCIENCE

Offered through the College of Arts and Sciences, CAS Building, Room 363, 786-4897

PS 100 First -Year Seminar in Politics 3.0 CR
Prerequisite: Faculty permission required.
An introduction to politics through leading works; readings vary from year to year.
Special Notes: Restricted to students who have 30 credits or fewer.

PS 101 Introduction to American Government 3.0 CR
An introduction to the historical and constitutional foundations of American government; the political activities of parties, groups, and the media; public decision-making by the executive, Congress, and the courts; and current economic, environmental, social, and foreign issues and policies.

PS 102 Introduction to Political Science 3.0 CR
An introduction to the discipline of political science focusing on the whole realm of political science concepts, political activities, and political processes, worldwide.

PS 201 Politics in the Global Arena 1.0-3.0 CR
A topic of contemporary or continuing interest in comparative politics, international relations, or foreign policy, treated at an introductory level.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle.

PS 202 Topics in American Politics 1.0-3.0 CR
A topic of contemporary or continuing interest in American politics, treated at an introductory level.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle.

PS 203 Topics in Alaska Politics 1.0-3.0 CR
A topic of contemporary or continuing interest in Alaska politics, treated at an introductory level.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle.

PS 311 Comparative Politics 3.0 CR
A comprehensive introduction and review of this major subfield of the discipline of political science. The subject matter, goals and purposes, concepts, and methods of comparative politics are covered. This course prepares students for comparative analysis of politics.

PS 312 Nation-State Case Studies 3.0 CR
Prerequisite: PS 311.
A detailed analysis and comparison of the political systems of several selected independent, sovereign nation-states. The cases selected for study represent contrasting types of political systems and different regions of the world.

PS 321 International Relations 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
A comprehensive introduction to the concepts, processes, and structures of international relations. Topics include the international environment, the nation-state

system, transnational institutions, diplomacy, and war. Selected contemporary international issues and the state of international organization are also treated.

PS 322 United States Foreign Policy 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
A comprehensive introduction to United States foreign policy. Constitutional provisions and the politics of policy making are treated. This course also focuses on contemporary foreign policy problems.

PS 323 United States Defense Policy 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
An analysis of major issues in contemporary United States defense policy. The course covers constitutional provisions, institutions, and policy making. The history of post-Vietnam nuclear and conventional programs and the impact of fiscal constraint, arms control, and a changing international environment are also treated.

PS 324 Model United Nations 1.0 or 3.0 CR
Fees.
A student simulation of the United Nations General Assembly. Acting as nation-state delegates, students research and debate a topic of international concern.
Special Notes: To earn 1 credit students must prepare to debate by acquainting themselves with their nation-state and the topic. To earn 3 credits students must also submit two term papers. May be repeated once for credit.

PS 331 Political Philosophy 3.0 CR
An introduction to political philosophy, with emphasis on the study of regimes; selected regimes are examined through the writings of political philosophers.

PS 332 History of Political Philosophy I: Classical 3.0 CR
Political philosophy from Plato to Marsilius, with emphasis on natural right.

PS 333 History of Political Philosophy II: Modern 3.0 CR
Political philosophy from Machiavelli to Nietzsche, with emphasis on liberalism and its critics.

PS 341 Congress 3.0 CR
Prerequisite: One of: PS 101, PS 102 , junior standing.
The organization of Congress and its role in the American political system. Theories of representative government, the internal dynamics of Congress, and forces influencing Congress's ability to act within the constitutional system are among the topics examined.

PS 342 The American Presidency 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
The evolution of the executive branch of United States government. The course focuses on presidential power, relations with Congress, presidential selection, contemporary policy making, and the Constitution.

PS 343 Constitutional Law 3.0 CR
Prerequisite: One of: PS 101, JUST 110 .
Cross-Listed: JUST 343.
An introduction to American constitutional law through study of selected Supreme Court cases. Among the topics considered are judicial review; separation of powers; property, commerce, and taxation; liberties guaranteed by the Bill of Rights; equal protection; and privacy. Comparisons are made with the Alaska Constitution.

PS 344 State and Local Politics 3.0 CR
Prerequisite: PS 101.
State and local politics and governments in the United States and their interrelationships. The course focuses on how the political process works, how decisions are made, and current issues and policies.

PS 345 Alaska Government and Politics 3.0 CR
Prerequisite: PS 101.
Governmental structures and the political process in Alaska. The course examines the history of government in Alaska, the cultural diversity of the population, and its effect on politics, contemporary policy issues, and political change.
Special Notes: May be applied to the Alaska culture and history requirements for State of Alaska teacher recertification.

PS 346 Alaska Native Politics 3.0 CR
The politics and governments of Alaska Natives. The course focuses on the history of Native/non-Native relations, contemporary issues and possibilities, and comparative case studies in Canada, Siberia, Greenland, and Scandinavia.
Special Notes: May be applied to the Alaska culture and history requirements for State of Alaska teacher recertification.

PS 347 Public Administration 3.0 CR
Prerequisite: PS 101.
A survey of the techniques of administering public agencies in the United States and the political and environmental factors that influence their application. The subject matter includes theories of public organization, intergovernmental relations, the role of public administration in the policy making process, and comparison with private sector organizations.

PS 348 Public Policy 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
An examination of the ways in which public policies are made, why they take the form that they do, and the importance of ideas for the development of public policy. Alternative approaches to policy making, the constraints of the policy making process, the interrelationships between public policy issues, and the continuity of policies within issue areas are among the topics emphasized.

PS 351 Political Sociology 3.0 CR
Cross-Listed: SOC 351.
An introduction to the social aspects of politics and the nature and distribution of power in society: an examination of the dynamic relationship of the political process and the institutions of society.

PS 352 Public Opinion and Political Behavior 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
An exploration of the relation between public opinion, political behavior, and political activity. The course considers the beliefs, attitudes, values, and opinions of different nationalities and the sources, dynamics, and effects of these views.

PS 361 Social Science Research Methods 3.0 CR
Prerequisite: One of: PS 102 , SOC 101.
Cross-Listed: SOC 361.
An introduction to research methods, including definition of research problems, development of hypotheses, experimental and non-experimental research design, sampling, and data collection and analysis. Students participate in field exercises to develop critical capacities for evaluating research studies.

PS 400 Senior Seminar in Politics 3.0 CR
Prerequisite: Senior standing and a declared major or minor in Political Science.
Leading questions in political science approached from several different areas of the discipline; questions vary from year to year.

PS 411 Tribes, Nations, and Peoples 3.0 CR
Prerequisite: One of: PS 101, PS 102 , junior standing.
The politics of tribes, nations, and peoples lacking state representation. Case studies will be drawn from Africa, Asia, Australia, North and South America, the South Pacific, Europe, and the Soviet Union. The course focuses on the nature of traditional societies, the history of colonialism and imperialism, and current problems and policies.

PS 412 Comparative Political Economy 3.0 CR
Prerequisite: One of: PS 101, PS 102, ECON 201.
The dynamic interaction of politics and economics in a variety of local, national, and international settings. The course considers how power determines the nature of the economic system and how the economic process redistributes power and wealth.

PS 413 Comparative Case Study 3.0 CR
Prerequisite: PS 311.
A detailed examination of a single political system, covering its constitution, political ideas and beliefs, political processes and behavior, governmental structures and functions, public policy, and political change and stability.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. When subtitle has a Canadian focus, the course may be used in lieu of INTL 303 for purposes of the Canadian Studies minor.

PS 419 Studies in Comparative Politics 1.0-3.0 CR
Prerequisite: PS 311.
An examination of some aspect of politics from a comparative perspective. The course may focus on political units (such as the European Community), on political structures (such as political parties), or on political processes (such as elections) to enhance a comparative understanding of politics.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 619.

PS 421 The Rise and Fall of Great Powers 3.0 CR
Prerequisite: One of: PS 101, PS 102, HIST 102, HIST 132.
Cross-Listed: HIST 421.
The foundations and distribution of nation-state power in the modern world. The course examines historical changes in the distribution of power in the modern international system, nation-state "rise" and "decline," and the impact of the end of the traditional Cold War.

PS 423 Nuclear Weapons and National Strategies 3.0 CR
Prerequisite: One of: PS 101, PS 102 , HIST 102 , HIST 132.
Cross-Listed: HIST 423.
Comparative analysis of the development of forces and strategies since 1945. The United States, the Soviet Union, Great Britain, France, and the People's Republic of China are covered. The course includes an analysis of arms control and the problems of nuclear proliferation.

PS 424 International Law and Organization 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
An examination of the nature, subjects, and status of international law, and the purposes, roles, and development of international organizations. The course considers the significance of internaticnal law and organization in the contemporary global arena. Specific issues are analyzed to demonstrate the application of international law and the operation of international organizations.

PS 429 Studies in International Relations 1.0-3.0 CR
Prerequisite: One of: PS 321, PS 322.
A detailed examination of selected important topics in international relations.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 629.

PS 431 The American Political Tradition 3.0 CR
Prerequisite: One of: PS 331, PS 333.
The political theory of liberal democracy examined in its application to crucial events in American political history.

PS 432 Contemporary Political Thought 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
The political thought of authors who shape, define, or interpret contemporary politics.

PS 433 Theories of War and Politics 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
Theories of the origins, purposes, and morality of war. Also covered are the relationships between forms of government and war and the alternatives to war in the modern international system.

PS 439 Studies in Political Philosophy 1.0-3.0 CR
Prerequisite: One of: PS 331, PS 332, PS 333.
Questions in political philosophy examined by close reading of selected texts; readings vary from year to year.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 639.

PS 441 Urban and Metropolitan Government 3.0 CR
Prerequisite: PS 101; PS 344 or PS 345 recommended.
An examination of government and politics in densely populated urban areas of the world. In addition to focusing on governmental structures, intergovernmental relations, and patterns of urban regionalism, the importance of change in economics, demographics, and national policies will be emphasized, using case studies.

PS 449 Studies in American Politics 1.0-3.0 CR
Prerequisite: One of: PS 341, PS 342.
An in-depth examination of some important aspect of American politics. Categories examined will vary from year to year and include, but are not limited to, a focus on issues, processes, institutions, and events.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 649.

PS 451 Political Parties and Group Politics 3.0 CR
Prerequisite: One of: PS 101, PS 102, junior standing.
A study of the activities of political parties and interest groups. The course examines the history, organization, purposes, resources, successes, and failures of political parties and groups and explains their relation to public opinion, elections, the media, and those who make decisions.

PS 452 Campaigns and Elections 3.0 CR
Prerequisite: One of: PS 101, PS 102 , junior standing.
An analysis of electoral politics. Phases of elections, from the decision to run through nominations, primaries, and the final choice of voters will be covered. Political parties, campaign finance, effects of the media, voter apathy, national and local races, controversial issues, and ideas for reform will be discussed.

PS 453 Organization Theory 3.0 CR
Prerequisite: Both of: PS 101, junior standing; PS 347 recommended.
The diversity of theory applied to public sector organizations, and the relationship between theory and the way in which public organizations function. Major concepts and theories include leadership, communication, informal and formal group dynamics, organizational humanism, organizational development, and organization culture.

PS 454 Internship in Political Science 1.0-3.0 CR
Prerequisite: One of: PS 101, PS 102; and faculty permission required.
An opportunity for students to apply the subject matter of political science to the practical life of the community. Internships are available in a variety of governmental and private settings and require a formal agreement between the student, the faculty member, and the supervisor; a work evaluation; and a student report.
Special Notes: Internships vary; may be repeated once for credit with a different internship.

PS 459 Studies in Political Behavior 1.0-3.0 CR
Prerequisite: One of: PS/SOC 351, PS 352.
A detailed examination of selected topics in political behavior.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 659.

PS 619 Studies in Comparative Politics 1.0-3.0 CR
Prerequisite: PS 311.
An examination of some aspect of politics from a comparative perspective. The course may focus on political units (such as the European Community), on political structures (such as political parties), or on political processes (such as elections) to enhance a comparative understanding of politics.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 419; not available for credit to students who have taken PS 419 with the same subtitle.

PS 629 Studies in International Relations 1.0-3.0 CR
Prerequisite: One of: PS 321, PS 322.
A detailed examination of selected important topics in international relations.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 429; not available for credit to students who have taken PS 429 with the same subtitle.

PS 639 Studies in Political Philosophy 1.0-3.0 CR
Prerequisite: One of: PS 331, PS 332, PS 333.
Questions in political philosophy examined by close reading of selected texts; readings vary from year to year.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 439; not available for credit to students who have taken PS 439 with the same subtitle.

PS 649 Studies in American Politics 1.0-3.0 CR
Prerequisite: One of: PS 341, PS 342.
An in-depth examination of some important aspect of American politics. Categories examined will vary from year to year and include, but are not limited to, a focus on issues, processes, institutions, and events.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 449; not available for credit to students who have taken PS 449 with the same subtitle.

PS 659 Studies in Political Behavior 1.0-3.0 CR
Prerequisite: One of: PS/SOC 351, PS 352.
A detailed examination of selected topics in political behavior.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Stacked with PS 459; not available for credit to students who have taken PS 459 with the same subtitle.

PSY: PSYCHOLOGY

Offered through the College of Arts and Sciences, CAS Building, Room 214, 786-1711

PSY 100 Understanding People 3.0 CR
Entry-level non-technical introduction to psychology and causes of human behavior. Useful for re-entering college students, non-majors, and international students seeking to improve study skills or English usage.
Special Notes: Does not satisfy BA or BS in psychology degree requirements.

PSY 111 General Psychology 3.0 CR
Introduces psychology through presentation of outstanding research and theories. Includes physiological, developmental, abnormal, perception, motivation, learning, and personality.

PSY 112 Psychology Short Courses 1.0 CR
Fees vary.
Presents topics in general psychology. Specific topics to be announced.
Special Notes: May be repeated for a maximum of 3 credits.

PSY 120 Parenting: More than Discipline 3.0 CR
Cross-Listed: ED 120.
Introduces parenting and how it differs from discipline. Discusses three parenting styles. Emphasizes nurturing, communicating, setting limits, and making maturity demands.

PSY 130 Crisis Line/Shelter Advocacy 1.0 CR
Basic listening skills and crisis intervention techniques. Overview of domestic violence, adult and child sexual assault, legal alternatives, and community resources. Offered at Kodiak College only.

PSY 135 Domestic Violence and Sexual Assault Advocacy Training 1.0 CR
In-depth review of fundamentals of domestic violence and sexual assault advocacy with specific emphasis on law enforcement, legal, medical, and social

services. Focuses on regulation and program standards, dynamics of advocacy case work, development of techniques of effective interaction with clients, and working knowledge of community resources.
Offered at Kodiak College only.

PSY 143 Death and Dying 3.0 CR
Fees.
An examination of the event of death and the process of dying in contemporary society. Psychological aspects of loss, grieving, and acceptance of one's own mortality are presented along with an exploration of helping services available in the local community. Social issues involving death are discussed.

PSY 150 Human Development 3.0 CR
Reviews aspects of human development and changes which occur during a person's lifetime. Covers prenatal period, infancy, early and middle childhood, adolescence, and early, middle, and late adulthood.

PSY 153 Human Relations 3.0 CR
Cross-Listed: HUMS 153.
Fees.
A survey of human relations to include communication, problem solving, interaction, relationship, choice and change skills.

PSY 169 Human Sexuality 3.0 CR
Introduces topics of human sexual functioning including physiology, psychology, sociology, philosophy, and morality of human sexuality practices and love.

PSY 170 Rational Living 1.0 CR
Fees.
Study of rational-emotive therapy, general semantics, decision making, and communication theory. Examines how people create neurotic emotions and block effective behavior, and styles of ongoing daily self-counseling.

PSY 203 Assertiveness Training 3.0 CR
Prerequisite: One social science course.
Examines destructive and self-defeating behaviors and attitudes. Explores alternative ways of communicating feelings, beliefs, and opinions honestly, directly, appropriately, and effectively. Assertiveness skills learned through experiences and feedback in class and self-change projects out of class.

PSY 223 Introduction to Paraprofessional Counseling I 3.0 CR
Cross-Listed: HUMS 223.
Fees.
Focuses on systematic approach to effective helping and skills in the following categories: skills for understanding, skills for comfort and crisis intervention, and skills for positive action.

PSY 230 Psychology of Adjustment 3.0 CR
Prerequisite: One social science course.
Study of sources and problems of stress. Examines self-esteem and interpersonal relationships from perspective of personal coping skills. Emphasizes taking control of one's life.

PSY 244 Early Childhood Development 3.0 CR
Prerequisite: PSY 111 or faculty permission.
Surveys human development from prenatal period to five years. Discusses physical/motor, social/emotional, and linguistic/intellectual development. Students visit early childhood programs in the community in order to gain skill in "seeing" development and in recognizing individual styles of interacting with materials, other children, and adults.

PSY 245 Child Development 3.0 CR
Prerequisite: One social science course.
Study of physical, emotional, cognitive, and social aspects of a child's development from prenatal period to beginning of adolescence. Includes theoretical view of development and effects of genetics, environment, and socialization.

PSY 260 Statistics for Psychology 3.0 CR
Prerequisite: Both of: PSY 111 and MATH 105. Recommended Corequisite PSY 261.
Presents basic descriptive and inferential statistical techniques used in psychology. Covers measures of central tendency, variation, correlation, regression, hypothesis testing, parametric and nonparametric tests for independent and dependent groups, one and two way analysis of variance.
Special Notes: Does not satisfy the general education quantitative requirement.

PSY 261 Introduction to Experimental Psychology 4.0 CR
Prerequisite: PSY 111. Recommended Corequisite PSY 260.
Fees.
Introduces and applies the scientific approach to understanding behavior. Explores the foundations of behavioral research, with emphasis on experimental methodology. The laboratory component provides actual examples of data collection, analysis and interpretation.

PSY 265 Psychology of Abnormal Behavior 3.0 CR
Prerequisite: PSY 111 or faculty permission.
Identifies continuum from normality through everyday upsets and emotional crisis to extremely deviant behavior. Current DSM nomenclature is used.

PSY 280 Seminar in Contemporary Issues 3.0 CR
Cross-Listed: SOC 280 or HIST 280.
Analyzes contemporary issues from variety of social science perspectives.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Cross-listing varies each semester depending on topic.

PSY 313 Psychology of Women 3.0 CR
Prerequisite: Junior level standing, or 6 credits of psychology, or faculty permission.
Examines how women behave, think, and feel. Major topics are sex-role development, the effects of sexism, pornography, and violence against women, gender differences, female sexuality and health issues, love relationships, femininity, masculinity, and androgyny, and adjustment and mental disorders.

PSY 316 Motivation and Emotion 3.0 CR
Prerequisite: Both of: PSY 111 and 261.
Fees.
Examines the basic theories and phenomena associated with motivational states and emotional experiences. Human motives are described and related to various forms of behavior. Characteristics of emotional states are identified.

PSY 324 Introduction to Paraprofessional Counseling II 3.0 CR
Prerequisite: PSY/HUMS 223 or faculty permission.
Cross-Listed: HUMS 324.
Fees.
Focuses on 11 major paraprofessional counseling skill clusters. Course emphasis will be skill performance in a direct service context.

PSY 328 Comparative Psychology 3.0 CR
Prerequisite: PSY 111 and one other psychology course.
A survey of animal behavior throughout the phylogenetic scale. Application of theories to human behavior will be included but not emphasized.

PSY 350 Introduction to Addiction Studies 3.0 CR
Prerequisite: PSY 111 or faculty permission.
Cross-Listed: HS 350.
An introduction to various addictive disorders— alcoholism, drug abuse, gambling and eating-related problems. Special emphasis will be understanding the nature of alcohol and drugs, their action and effects on the body. Theories of addictive disorders, treatment, and prevention will also be addressed.

PSY 353 Application of Statistics to Social Sciences 3.0 CR
Prerequisite: Introductory social science course and social research methods course.
Cross-Listed: SOC 353.
Demonstrates application of statistics to various types of studies in the social sciences. Students analyze social science journal articles utilizing statistics.

PSY 355 Learning and Cognition 4.0 CR
Prerequisite: PSY 261 and either PSY 260 or AS 252.
Fees.
An overview of major learning principles including classical conditioning, operant conditioning, memory structure and function, forgetting, and transfer.
Special Notes: A laboratory component provides a series of exercises illustrating important learning principles.

PSY 366 Perception 3.0 CR
Prerequisite: Both of: PSY 111 and 261.
Fees.
Presents current theories and phenomena which effect how we perceive the world around us. Explores the capacities and limitations of the sensory apparatus, particularly vision. Considers implications of the human tendency to "misperceive" situations.

PSY 368 Personality Theories 3.0 CR
Prerequisite: PSY 261 and either PSY 260 or AS 252.
A survey of theories of personality with contemporary relevance. Emphasizes relevant research findings. Develops student competencies in the understanding and prediction of human behavior, thought and feeling.

PSY 370 Physiological Psychology 3.0 CR
Prerequisite: PSY 261 and either PSY 260 or AS 252.
Structures and functions of the central nervous system and how these may explain behavior phenomena.

PSY 372 Community Psychology 3.0 CR
Prerequisite: PSY 111 and one other psychology course.
An examination of interaction theories and research applied to communications, dynamics of power, confrontation and conflict, and creative problem solving.

PSY 375 Psychology of Social Behavior 3.0 CR
Prerequisite: PSY 261 and either PSY 260 or AS 252.
Focuses on the behavior of individuals in social situations and examines why individuals behave, think, and feel as they do in the presence of others. Includes social perceptions and inferences, prejudice, interpersonal conflict, self-awareness, attitudes, conformity, group processes, and environmental influences on social behavior.

PSY 381 Substance Abuse Treatment 3.0 CR
Prerequisite: HS/PSY 350.
Cross-Listed: HS 381.
Introduction to theory and essential processes and techniques used in treating substance abuse. Specifically designed to emphasize an understanding of chemical dependency and its effects upon one individual, and to foster interpersonal communication skills.

PSY 398 Individual Research 3.0 CR
Prerequisite: PSY 260, PSY 261, and faculty permission.
Grading Policy: Pass/No Pass.
Fees.
Participation in a collaborative research group under the supervision of a faculty member. The student will help formulate a research question and assist in carrying out the study. The findings will be reported in a paper or presented at a conference.
Special Notes: May be repeated for a maximum of 9 credits.

PSY 411 Undergraduate Proseminar 1.0 CR
Prerequisite: Senior standing.
Grading Policy: Pass/No Pass.
A forum for discussion of issues related to psychology, especially those not regularly addressed by the baccalaureate curriculum. The content varies every semester. A cross-section of viewpoints is offered by different, invited speakers, most of whom are selected from outside the psychology department.
Special Notes: Stacked with either PSY 611 or PSY 612. May be repeated for a maximum of 3 credits.

PSY 412 Systems and Theories of Psychology 3.0 CR
Prerequisite: PSY 261 and either PSY 260 or AS 252.
Influential theories and concepts related to contemporary psychology and an overview of psychological thought for the potential graduate student.

PSY 420 Research Methods in Experimental Psychology 3.0 CR
Prerequisite: Both of PSY 111 and 261; one of PSY 260 or AS 252.
Fees.
A survey of the essential elements of research design, from formulating an experiment, statistically analyzing the data, to interpreting and reporting the results. Useful to those anticipating a project (such as thesis) and also valuable to those who wish to better understand the research reports they read.

PSY 425 Clinical Psychology 3.0 CR
Prerequisite: Prior completion of PSY 265 or concurrent enrollment and three other psychology courses.
A survey of current psychotherapeutic approaches, including basic assumptions, techniques and related research findings. A discussion of ethics and professional issues is included.

PSY 427 Field Experience in Psychology 3.0 CR
Prerequisite: Declared psychology major and 12 credits of psychology. For non-majors, faculty permission required.
Grading Policy: Pass/No Pass.
Undergraduates working in supervised settings that provide psychological services. The course exposes advanced psychology majors to information about a wide variety of Alaskan human services. Students assist and observe six hours per week in one of these agencies.
Special Notes: Stacked with PSY 627. May be repeated for credit with faculty permission; maximum of six credits may be applied to psychology major and psychology minor.

PSY 445 Strategies of Behavior Change 3.0 CR
Prerequisite: PSY 355.
Techniques and applications in applied behavior analysis and behavioral change strategies (e.g., social skills, classroom management, desensitization, modeling, cognitive behavior therapy, video training). Provides exposure to selected agencies in supervised practice.

PSY 451 Psychodynamic Theory 3.0 CR
Prerequisite: PSY 265 and PSY 368.
Provides an overview of theories of psychoanalysis and psychodynamic approaches to development and personality structure. Theories are discussed primarily within a compare-and-contrast framework; however, relevant empirical investigations supporting or critiquing psychodynamic theory are also discussed and critiqued. Focus is placed on theorists such as Freud, Jung, Horney, and Kohut. Developmental research and its implications for this school of thought is presented and discussed.
Special Notes: Stacked with PSY 635.

PSY 455 Developmental Disabilities Overview 3.0 CR
Prerequisite: 12 credits in any combination of the following: Psychology/Social Work/Special Education/Nursing/Health Sciences/Human Services. Junior standing.
Surveys major issues in developmental disabilities, including those of particular relevance to services in Alaska. Topics include biological and environmental bases of disabilities, social and learning development through the life span, educational and vocational development, systems of intervention, cultural, family, and legal issues.
Special Notes: Required course for most students working and studying in the University Affiliated Program. Stacked with PSY 642.

PSY 465 Cross-Cultural Psychology 3.0 CR
Prerequisite: PSY 111 and three other psychology courses; PSY 425 recommended.
Ethnic-cultural values, attitudes and beliefs are explored as they relate to counseling situations. Examines how behavioral styles, manifestations of psychopathology and effective counseling methods are affected by ethnic-cultural factors.
Special Notes: Stacked with PSY 654.

PSY 473 Psychological Testing 3.0 CR
Prerequisite: PSY 111 and one of: PSY 260 or AS 252.
Fees.
Standardized psychological tests in applied areas. Administration, scoring, and interpretation of established tests, and study of ethical standards applied to development and administration of tests.

PSY 482 Advanced Treatment of Substance Abuse 3.0 CR
Prerequisite: HS/PSY 381 or faculty permission.
Emphasis is on conceptualizing treatment of substance abuse as a continuum from intervention to after-care. Skills developed in counseling techniques are built upon and applied to various substance abuse care studies.

PSY 485 Health Psychology 3.0 CR
Prerequisite: Both of: PSY 111 and 370.
Fees.
Psychological aspects of health and disease are presented with an emphasis on current research. Includes stress and stress reduction, relations between behavior and health, psychological aspects of pain and chronic illnesses, psychological factors in successfully obtaining medical treatment.

PSY 490 Distinguished Practitioners Series 1.0 CR
Prerequisite: 12 credits of psychology.
Topics in clinical or applied psychology presented by practicing members of the professional community. Specific titles as announced.
Special Notes: May be repeated for a maximum of 6 credits with a change of subtitle. Stacked with PSY 675.

PSY 492 Senior Seminar: Contemporary Issues in Psychology 3.0 CR
Prerequisite: Declared psychology major or minor and completion of four psychology courses.
Seminar for senior students who are pursuing a major or minor in psychology to discuss issues in contemporary psychology.
Special Notes: Check schedules for specific titles being offered. Stacked with PSY 675.

PSY 498 Individual Research 3.0 CR
Prerequisite: PSY 398 and faculty permission.
Grading Policy: Pass/No Pass.
Fees.
Serve as a project leader in a collaborative research effort under the supervision of a faculty member. The research group will select a topic for research, read relevant studies, formulate a research question and carry out an original study. The findings will be reported in a paper or presented at a conference.
Special Notes: May be repeated for a maximum of 9 credits.

PSY 499 Senior Thesis 3.0 CR
Prerequisite: Senior standing in psychology and PSY 420 or current enrollment and advisor's signature.
Independent or collaborative research under faculty supervision. Culminates in document prepared to publication standards. Presentation at Behavioral Sciences Conference of the North is encouraged.

PSY 611 Professional Seminar A 3.0 CR
Prerequisite: Admission to M.S. Clinical Psychology program.
Grading Policy: Pass/No Pass.
Forum for discussion of issues of concern to professional psychologists and scientists in general and to UAA graduate students in particular. Topics include ethics, program development, professional development, and other timely issues.
Special Notes: Content is varied so that PSY 611 and PSY 612 can be taken in either order. Stacked with PSY 411.

PSY 612 Professional Seminar B 3.0 CR
Prerequisite: Admission to M.S. Clinical Psychology program.
Grading Policy: Pass/No Pass.
Forum for discussion of issues of concern to professional psychologists and scientists in general, and UAA graduate students in particular. Topics include domestic violence, developmental psychology, multicultural psychology, substance abuse, and other timely issues.
Special Notes: Content is varied so that PSY 612 or PSY 611 can be taken in either order. Stacked with PSY 411.

PSY 622 Psychopathology 3.0 CR
Prerequisite: PSY 265 and admission to M.S. Clinical Psychology program.
Thoroughly familiarizes students with the diagnostic process that precedes psychotherapy and treatment planning, utilizing the most current diagnostic and statistical manual of mental disorders. Provides an overview of types of psychopathology and reviews associated research to enhance diagnostic accuracy and understanding.

PSY 623 Psychotherapy Skills 3.0 CR
Prerequisite: PSY 425 or concurrent enrollment; admission to M.S. Clinical Psychology program.
Fees.
Psychotherapy skills training course including theory, techniques, professional issues, and experience. Students participate in videotaped interviews to practice and refine psychotherapy techniques and skills.

PSY 624 Group Therapy 3.0 CR
Prerequisite: PSY 623 or concurrent enrollment; admission to M.S. Clinical Psychology program.
Theories of group dynamics and exploration of group processes for a variety of populations. Includes interpretation and analysis of interactional and interpersonal patterns. Features an experiential component of group participation and leadership.

PSY 626 Family Therapy 3.0 CR
Prerequisite: PSY 623 or concurrent enrollment; admission to M.S. Clinical Psychology program.
Fees.
Covers systems theory of family dynamics and behavioral exchange concepts. Includes critical survey of prevailing interventions, emphasizing couples therapy and whole family techniques. Covers interaction analysis and observation of recorded or analog family therapy.

PSY 627 Agency and Community Field Experience 3.0 CR
Prerequisite: Admission to M.S. Clinical Psychology program.
Grading Policy: Pass/No Pass.
Involves work in community agencies under close supervision by field and campus supervisors. Provides pre-practicum experiences with some direct services, but mainly extensive observation, to be integrated with relevant theoretical and empirical literature.
Special Notes: Stacked with PSY 427. May not be applied as elective credit to the M.S. degree in Psychology, though it may apply for credit to interdisciplinary masters degree programs.

PSY 630 Career Counseling 3.0 CR
Prerequisite: PSY 623 and admission to M.S. Clinical Psychology program.
Fees.
A survey of theory and practice of career counseling throughout the life-span of development. Several current theories concerning the progress of career choice will be examined with respect to the appropriate stages of development. Students also explore the specific methods, techniques, and assessment tools available to assist clients in making responsible career decisions.

PSY 631 Cognitive Behavior Therapy 3.0 CR
Prerequisite: PSY 623 and 445 or concurrent enrollment; admission to M.S. Clinical Psychology program.
Behavioral strategies of major clinical relevance (e.g., treatment of anxiety, depression). Procedures (including behavioral assessment) are examined in detail and related to evidence for efficacy, with emphasis on adult populations.

PSY 633 Psychological Assessment 3.0 CR
Prerequisite: PSY 473: corequisite PSY 623; admission to M.S. Clinical Psychology program.
Fees.
Administering, scoring and interpreting assessment tools (especially intelligence and personality measures), and writing psychological reports, resulting in a meaningful individual or group evaluation.

PSY 635 Advanced Psychodynamic Theory and Therapy 3.0 CR
Prerequisite: PSY 265, 368, and admission to M.S. Clinical Psychology program.
Provides in-depth analysis of modern theories of psychoanalysis and psychodynamic approaches to development, personality, psychopathology and treatment. Theories are discussed primarily within an applied framework; however, relevant empirical investigations are also discussed and critiqued. Focus is placed on theorists such as Kohut, Masterson, Winnicott, and other modern psychoanalysts. Practical application, critical thinking and research design and investigation are stressed.
Special Notes: Stacked with PSY 451; PSY 635 cannot be applied toward the M.S. degree in Clinical Psychology if PSY 451 was previously taken for credit.

PSY 637 Organizational Environments 3.0 CR
Prerequisite: PSY 623 and admission to M.S. Clinical Psychology program.
Study of human service delivery including knowledge of "living environments," effective supervision, and agency management. Includes a practical component in the supervised development of model agency protocols.

PSY 638 Child-Clinical Psychology 3.0 CR
Prerequisite: PSY 623; corequisite PSY 445; admission to M.S. Clinical Psychology program.
Treatment of childhood behavior problems affecting abnormal and normal children, particularly those encountered by practicing psychologists and pediatricians. Examines the empirical basis for various forms of parent advice, parent training, and direct clinical intervention.

PSY 639 Advanced Research Methods 3.0 CR
Prerequisite: PSY 420 or SOC 352; admission to M.S. Clinical Psychology program.
Fees.
Teaches advanced research design for graduate students beginning research-related work. Provides systematic coverage of research designs and journal publication procedures. Students develop research topics, conduct initial literature review, identify appropriate publication outlets, address ethical issues, delineate necessary pilot studies, and present plan for conduct, interpretation and publication of research work.

PSY 641 Applications of Community Psychology 3.0 CR
Prerequisite: Corequisite PSY 623; admission to M.S. Clinical Psychology program.
Systems models of community change and self-support. Students develop and initiate community interventions, which may include group self-management packages.

PSY 642 Issues in Developmental Disabilities 3.0 CR
Prerequisite: Graduate standing in psychology or related area.
Presents issues of importance to the field of severe and persistent disabilities of particular relevance to Alaska. The etiology and the social, educational, and vocational, implications are focused on consequences and strategies for service providers. Students may select topics such as autism, early intervention, remote area services, aging, families, and so one, according to their interests.
Special Notes: Stacked with PSY 455.

PSY 645 Advanced Psychotherapy Skills 3.0 CR
Prerequisite: PSY 622 and PSY 623. Faculty permission required for non-M.S. Clinical psychology students.
Reviews various types of advanced therapeutic skills (e.g., gestalt techniques, paradoxical intervention, relaxation training) as they are relevant with regard to different diagnoses presented by clients. Reviews the research literature for specific disorders and their correlated recommended treatments.

PSY 650B Systems of Human Behavior I 3.0 CR
Prerequisite: Requires written permission of the Director of the Biomedical program.
Fees.
Selected overview of contributions from behavioral sciences to clinical practice of primary care physician. Sensitizes students to impact of such factors as cultural background, social role, sexual identity and belief system upon their effectiveness as a physician; to appreciate role of behavioral factors in major management problems faced in medical practice; to acquire skills in analyzing behavior, defining behavioral objectives, and designing practice treatment strategies to obtain these objectives.

PSY 654 Cultural Issues in Psychotherapy 3.0 CR
Prerequisite: PSY 623; admission to M.S. Clinical Psychology program.
Places focus on understanding the role that ethnic and cultural issues can play in psychotherapy relationships. Opportunities are provided to gain the awareness, knowledge, and skills necessary to become more effective in cross-cultural psychotherapy situations.
Special Notes: Stacked with PSY 465; PSY 654 cannot be applied toward the M.S. degree in Clinical Psychology if PSY 465 was previously taken for credit.

PSY 665A Psychotherapy Practicum: Psychological Assessment 1.0 CR
Prerequisite: PSY 623 and PSY 633; admission to M.S. Clinical Psychology program.
Fees.
Applied technique course focusing on specific issues and problems in psychological assessment.

PSY 665B Psychotherapy Practicum: Psychological Services Center 3.0 CR
Prerequisite: PSY 622 and PSY 623; admission to M.S. Clinical Psychology program.
Fees.
Applied technique course focusing on psychotherapy issues and problems

encountered in the general psychotherapy setting. All course work will be done in the departmental Psychological Services Center.

PSY 665C **Psychotherapy Practicum: Community Agency** **1.0-3.0 CR**
Prerequisite: PSY 622 and PSY 623; admission to the M.S. Clinical Psychology program or an interdisciplinary M.S. degree housed in Psychology.
Fees.
Applied techniques course focusing on specific psychotherapy techniques or intervention issues such as consultation,. family preservation, or case management as well as problems encountered in specific mental health settings. All course work will be done at a designated community or campus agency.

PSY 670 **Psychotherapy Internship** **3.0-6.0 CR**
Prerequisite: PSY 665B; candidacy status; admission to M.S. Clinical Psychology program; students must have passed the department comprehensive exam.
Fees.
Supervised psychotherapy experiences with actual clients in a variety of settings. Requires attendance of staff meetings, and training meetings as negotiated with the supervisor. Settings will be assigned according to the student's chosen specialization area.
Special Notes: Open only to graduate students admitted to the Clinical Psychology M.S. degree program. A total of a one-semester full-time equivalent of clinical involvement is required for graduation. A total of 6 credits is required for the degree.

PSY 675 **Selected Topics in Psychotherapy** **1.0-3.0 CR**
Prerequisite: PSY 623; admission to M.S. Clinical Psychology program or faculty permission.
A combined theory and technique course focused on specifically designated issues and problems in counseling and psychotherapy. Designed for students seeking advanced training in special areas of clinical psychology.
Special Notes: Stacked with either PSY 490 or PSY 492.

PSY 689 **Advanced Psychological Assessment** **3.0 CR**
Prerequisite: PSY 473 and PSY 633; admission to M.S. Clinical Psychology program.
Fees.
Presents advanced psychological assessment topics and techniques such as the Rorschach Inkblot Test, the Thematic Apperception Test and other projective techniques. Also teaches integrative report-writing and involves practical application.

PSY 695 **Teaching Practicum in Psychology** **3.0 CR**
Prerequisite: Admission to the M.S. degree program in Clinical Psychology or M.S. interdisciplinary degree program housed in the department of Psychology and faculty permission.
Grading Policy: Pass/No pass.
Provides the psychology student an opportunity to learn basic principles of classroom teaching under close faculty supervision. Responsibilities include lecture preparation, exam construction, lecturing, grading, and other teaching-related tasks as agreed upon by the student and supervising faculty in a written contract.

PSY 698 **Individual Research** **1.0-4.0 CR**
Prerequisite: Admission to graduate studies in psychology and faculty permission.
Selected pre-thesis activities, such as literature reviews, protocol development, and pilot studies. May alternatively include individual contributions to team research projects.

PSY 699A **Thesis: Research** **1.0-6.0 CR**
Prerequisite: PSY 639; candidacy status; and permission of thesis chair.
Involves independent research under the supervision of an individual graduate study committee that is also monitored by an outside reader. Culminates in a document prepared to publication standards and a public presentation.
Special Notes: Students may enroll for variable credit, but a total of 6 credits is required for graduation.

PSY 699B **Thesis: Public Service** **1.0-6.0 CR**
Prerequisite: PSY 639; candidacy status; and permission of thesis chair.
Involves independent research under the supervision of an individual graduate studies committee that is also monitored by an outside reader. Culminates in a document prepared to publication standards and a public presentation.
Special Notes: Students may enroll for variable credit, but a total of 3 credits is required for graduation.

PSY 699C **Thesis: Creative Component** **1.0-6.0 CR**
Prerequisite: PSY 639; candidacy status; and permission of thesis chair.
Involves independent research under the supervision of an individual graduate studies committee that is also monitored by an outside reader. Culminates in a document prepared to publication standards and a public presentation.
Special Notes: Students may enroll for variable credit, but a total of 3 credits is required for graduation.

RH: REFRIGERATION AND HEATING

Offered through Matanuska-Susitna College, Glenn Massay, Director, P.O. Box 2889, Palmer, 99645, 745-9721

RH 101 **Refrigeration and Air Conditioning I** **4.0 CR**
Fees.
Assumes no previous knowledge of refrigeration or air conditioning. Introduces the fundamentals of refrigeration and air conditioning theory. Explores compressors, condensers, evaporators, metering devices, and related components. Instruction in use of basic hand and power tools and testing devices applicable to the trades, and experimentation with mechanical compression refrigeration system training devices.
Offered at Matanuska-Susitna College only.

RH 103 **Technical Math for Refrigeration and Heating I** **3.0 CR**
Practical use of mathematics as applied to trade and vocational work, designed to increase skills involving trade and technical problems. Covers fractions, decimals, percentage, powers of numbers, and basic algebraic elements. Also explores geometric concepts, ration and proportion, scale drawings, and trigonometric functions.
Offered at Matanuska-Susitna College only.

RH 105 **Electrical Circuits for Refrigeration and Heating I** **3.0 CR**
Fees.
Assumes no previous knowledge of electricity or electronics. Explores the fundamentals of energy, sources of electricity, conductors and semiconductors, insulators, and electric motors. Students apply principles and develop skills by using test instruments and training devices.
Offered at Matanuska-Susitna College only.

RH 107 **Physics for Refrigeration and Heating I** **3.0 CR**
Prerequisite: RH 103 or equivalent and faculty permission.
Fees.
Assumes no previous knowledge of physics. Explores basic physical laws related and applied to the refrigeration and heating fields and associated terminology. Students apply theoretical knowledge to training devices and make fundamental calculations related to operating performance of equipment.
Offered at Matanuska-Susitna College only.

RH 120 **Motors and Controls** **3.0 CR**
Cross-Listed: AGRI 133 and ET 120.
Provides understanding of principles of operation of motors, generators, transformers and motor control apparatus. Study of definitions, symbols, diagrams, and illustrations gives a sound background in the language and basic principles associated with electricity, electrical equipment, electrical apparatus and electrical code principles.
Offered at Matanuska-Susitna College only.

RH 122 **Refrigeration and Air Conditioning II** **4.0 CR**
Prerequisite: RH 101, 103, 105 and 107 or equivalent and faculty permission.
Fees.
Introduces and analyzes the chemical composition and properties of various refrigerants. Application of this analysis to "shop-job" situations, using "live" equipment and refrigeration training devices by diagnosing and correcting various malfunctions. Instruction in the safe handling and storage of refrigerants.
Offered at Matanuska-Susitna College only.

RH 124 **Domestic Refrigeration and Heating I** **3.0 CR**
Prerequisite: RH 101, 103, 105, and 107 or equivalent and faculty permission.
Fees.
Provides familiarization with the design, construction, and servicing of household refrigerators and freezers. Includes hands-on testing and servicing of these units as well as experimentation with various training devices. Repair methods will be explored and demonstrated.
Offered at Matanuska-Susitna College only.

RH 126 **Electrical Circuits for Refrigeration and Heating II** **3.0 CR**
Prerequisite: RH 101, 103, 105, and 107 or equivalent and faculty permission.
Fees.
Explores schematic wiring diagrams and electrical circuits, alternating current, electric meters, single-phase motors, motor protection, and three-phase motors. Familiarization exercises dealing with air conditioning circuits and the ability to troubleshoot malfunctioning equipment will be covered.
Offered at Matanuska-Susitna College only.

RH 128 **Drafting for Refrigeration and Heating I** **3.0 CR**
Prerequisite: RH 101, 103, 105, and 107 or equivalent and faculty permission.
Assumes no previous knowledge of graphic arts. Explores projection theory, orthographic and pictorial presentations, sectional drawings, and auxiliary views to enable student to prepare simple working drawings.
Offered at Matanuska-Susitna College only.

RH 201 Commercial and Ammonia Refrigeration 4.0 CR
Prerequisite: RH 122 or equivalent.
Fees.
Provides an understanding of commercial refrigeration systems including hot gas defrosting, lubrication, contaminants, pipe sizing, etc. Introduces ammonia refrigeration including safety start-up and diagnosis of an operational ammonia liquid overfeed system.
Offered at Matanuska-Susitna College only.

RH 202 Physics for Refrigeration and Heating II 3.0 CR
Prerequisite: RH 101 and 107 or equivalent and faculty permission.
Fees.
Introduces practical aspects of psychrometrics, load calculation, heat quantities, insulation factors and coefficients, and heat and water vapor flow through structures.
Offered at Matanuska-Susitna College only.

RH 203 Control Systems for Refrigeration and Heating II 3.0 CR
Prerequisite: RH 126.
Fees.
Explores schematic wiring diagrams and electrical circuits, alternating current, electric meters, single-phase motors, motor protection, and three-phase motors. Lab exercises deal with installing and troubleshooting refrigeration, heating, and motor controls.
Offered at Matanuska-Susitna College only.

RH 207 Drafting for Refrigeration and Heating II 3.0 CR
Prerequisite: RH 128.
Fees.
Introduces drafting skills required in the layout of piping, duct, and schematic diagrams for use in heating and air conditioning. Emphasizes symbols associated with plumbing, duct work, and electrical trades.
Offered at Matanuska-Susitna College only.

RH 225 Heating Plants I—Residential 4.0 CR
Prerequisite: RH 105 and 126 or equivalent and faculty permission.
Fees.
Assumes no previous knowledge of residential heating plants. Introduces knowledge and skills needed to work in the field of residential heating. Instruction ranges from beginning maintenance skills to advanced troubleshooting and systems.
Offered at Matanuska-Susitna College only.

RH 226 Heating Plants II—Commercial 4.0 CR
Prerequisite: RH 105 and 106 or equivalent and faculty permission.
Fees.
Explores commercial heating devices and systems. Covers mixed air temperature control systems (air handling), commercial gas heat systems, three-phase commercial single-package air conditioning, direct spark gas ignition systems, and heavy oil burner systems. Emphasizes troubleshooting and hands-on experience.
Offered at Matanuska-Susitna College only.

RH 229 Solid State Electronics for Refrigeration and Heating 3.0 CR
Prerequisite: RH 126 or equivalent and faculty permission.
Fees.
Assumes no previous knowledge of electronics. Explores semiconductors, diodes, transistors, transistor amplifiers, electron tubes, power supplies, photo-electricity, thermo-electric cooling, inductive heating and dielectric heating.
Offered at Matanuska-Susitna College only.

RH 230 Selected Topics in Refrigeration and Heating 1.0 CR
Prerequisite: Concurrent enrollment in RH 225, RH 226, and RH 229.
Fees.
Variety of topics of interest in heating, ventilation, air conditioning and refrigeration (HVACR) such as computer modeling, economic analysis, performance optimization, combustion efficiency analysis, etc.
Offered at Matanuska-Susitna College only.

SMS: SURVEYING AND MAPPING

Offered through the College of Career and Vocational Education, Beatrice McDonald Building (BMB), Room 210, 786-1172

SMS 135 Introduction to Surveying and Mapping 2.0 CR
Introduction to the professions of surveying and mapping, including professional obligations and ethics. Hands-on projects in instrumentation, survey computations, photogrammetry, remote sensing, legal research, and CADD mapping. Field trips to government and private surveying and mapping firms.

SMS 136 Survey Measurements and Computations 3.0-4.0 CR
Fees.
Introduction to survey measurement techniques, including use of tapes, EDM's, levels, and theodolites. Methods of recording and reducing field data. Field adjustment of levels and theodolites. Use of programmable hand-held calculators and desk-top computers to compute directions, survey errors, closures, adjustments, and area.
Special Notes: SMS majors must enroll in 4 credits.

SMS 137 Fundamentals of Automated Mapping 3.0 CR
Prerequisite: Concurrent enrollment in SMS 138 or comparable experience as approved by faculty.
Fees.
Principles of computer-aided design and drafting. Introduction to AutoCAD and related hardware. Basic drafting principles in lettering, line and circle geometry, line quality, line types, coordinate systems, plat dimensioning, border and title block construction, and the use of layers. Use, preparation, and reproduction methods for mapping. AutoCAD mapping of a small urban survey.

SMS 138 Survey Computer Fundamentals 2.0 CR
Fees.
Introduction to IBM compatible PC's. Operation of MS/DOS systems. Hardware components and surveying and mapping software programs. Basic programming for surveyors and mappers.

SMS 142 Survey Computer Programming 2.0 CR
Theory and use of hand-held programmable calculators such as the HP-41C. Instruction in keyboard functions, simple programming and editing, branching, subroutines and flags. Writing specialized programs for surveying computations.

SMS 145 Topographical Surveying and Mapping 4.0 CR
Prerequisite: SMS 136 or comparable experience as approved by faculty.
Fees.
Methods of gathering survey data for horizontal and vertical control and for topographical and hydrographical mapping. Operation of total stations and data collectors. Transferring data from collectors to computers. CADD mapping of topography. Project involving field work, computations, and CADD mapping of topography.

SMS 146 Geometric Computations 3.0 CR
Prerequisite: SMS 136 or comparable experience as approved by faculty.
Fees.
Methods of adjusting survey data. Intersection of geometric lines. Design and determination of curvilineal and required areas. Adjustment of retracement surveys. AutoCAD mapping project.

SMS 235 Construction Surveying and Mapping 4.0 CR
Prerequisite: SMS 145 or comparable experience as approved by faculty.
Fees.
Methods of gathering survey data for construction drawings. Field survey techniques for construction projects. Staking for building location, curb and gutter, storm and sanitation pipes, slope and grade. Horizontal and vertical curve computations. Small construction project involving field work, computations, and CADD mapping.

SMS 236 Cadastral Boundary Law 4.0 CR
Prerequisite: SMS 146 or comparable experience as approved by faculty.
U.S. rectangular system and surveys within the public domain. Restoration and reestablishment of lost and obliterated corners. Riparian determinations. Researching the legal record. Use of law library and government records offices. Research project.

SMS 245 Specialized Survey and Plat Applications 4.0 CR
Prerequisite: SMS 146 or comparable experience as approved by faculty.
Fees.
Survey measurements using high technology. Evaluation of survey data gathering methods. Astronomical description; celestial system and observations. Survey and mapping applications for urban surveys.

SMS 246 Geodetic Computations 3.0 CR
Prerequisite: SMS 146 or comparable experience as approved by faculty.
Fees.
Introduction to geodetic computations of geographical positions. Map projections. State plane coordinate systems. Protracted township computations. Coordinate transformations.

SMS 247 Remote Sensing 3.0 CR
Fees.
Introduction to photo interpretation. Geometry of photogrammetry. Imaging systems. Applications of remote sensing in archeology, agriculture, and forestry. Engineering applications and mining patterns. Urban industrial patterns.

SMS 248 Intermediate Automated Mapping 3.0 CR
Prerequisite: SMS 137 or comparable experience with faculty permission.
Fees.
Mapping standards and accuracies. Professional liability of mappers. Customizing side-bar and pull-down menus. Advanced plotting techniques. Digital terrain modeling. Projects include urban plats, topographical maps by digital terrain models, and plan and profile drawings.

SMS 250 Survey Employment Practicum 2.0 CR
Prerequisite: Completion of at least 12 SMS credits.
Application of surveying theory and techniques while employed for at least five weeks with a professional licensed surveying firm or with a government agency that performs surveying or mapping. Students secure their own employment positions. Evaluations by both employer and UAA faculty.

SMS 335 CADD Mapping and Programming 4.0 CR
Prerequisite: SMS 137 and SMS 138 or comparable experience as approved by faculty.
Fees.
Advanced principles of computer-aided design and drafting. Organization, filing, and data base principles. Hardware and software functions. Creating macros and menus. Digitizing concepts. Programming to customize and tailor drawings. Creating and transferring DXF files. Creating and enhancing civil and survey maps.

SMS 336 Photogrammetric Mapping 3.0 CR
Prerequisite: SMS 247 or comparable experience as approved by faculty.
Techniques used in mapping by photogrammetry. Survey methods of photogrammetric ground control. Photo identification and interpretation. Techniques in the use of stereoscopes and photogrammetric plotters.

SMS 345 Land Development and Design 4.0 CR
Prerequisite: SMS 335 or comparable experience as approved by faculty.
Fees.
Concepts governing land development. Analysis of soil, topography, geometry, environmental impact, and aesthetic principles in land planning. Permitting process. Federal, state, and municipality platting regulations. Subdivision design and platting using CADD.

SMS 346 Writing and Interpreting Legal Descriptions 4.0 CR
Prerequisite: SMS 236 or comparable experience as approved by faculty.
Fees.
Study of boundary evidence and location in sequence conveyances and simultaneous conveyances. Writing legal descriptions. State riparian rights. Alaska state statutes governing surveying and mapping. Legal research project.

SMS 435 Geographical/Land Information Systems 4.0 CR
Prerequisite: SMS 246 and 335 or comparable experience as approved by faculty.
Fees.
Introduction to GIS/LIS systems including components, structure, and data base design, development, and management. Transformation of data to common coordinate systems, scale changes, and the development of statistics from overlay procedures. Attribute data manipulation and analysis. GIS/LIS packages developed within the public and private sectors and their applications. General map projections.

SMS 436 Survey Adjustments and Analysis 4.0 CR
Prerequisite: SMS 246 or comparable experience as approved by faculty.
Analysis of errors and adjustments in survey measurement. Surveying and mapping accuracies. Propagation of variances and covariances. Methods of least squares adjustments—leveling and traversing.

SMS 445 Positioning Systems 4.0 CR
Prerequisite: SMS 436 or comparable experience as approved by faculty.
Fees.
Introduction to positional systems. Geodesy concepts. Doppler and inertial surveying systems. Global positional systems. Analysis of advantages and limitations of equipment and software.

SMS 446 Professional Survey Practice 3.0 CR
Prerequisite: SMS 236 and 450 or comparable experience as approved by faculty.
Fees.
Ethical considerations for the professional. Preparation of proposals and contracts. Professional business practices. Management principles. Organization and management of large survey projects. Presentation of senior survey project.

SMS 450 Senior Survey Project 3.0 CR
Prerequisite: Completion of 50 SMS credits.
Planning, executing, and analyzing a survey project while employed by a cooperating professional organization. Project report presented in oral, written, and graphic format while enrolled in SMS 446.

SOC: SOCIOLOGY

Offered through the College of Arts and Sciences, CAS Building, Room 372, 786-1714

SOC 101 Introduction to Sociology 3.0 CR
Introduction to science of humans as social animals, emphasizing social processes which give rise to and shape human's language, experiences, perception, meaning, and behavior. Multiple frameworks used in understanding and predicting human behavior.

SOC 106 Introduction to Social Welfare 3.0 CR
Prerequisite: SOC 101.
Cross-Listed: HUMS/SWK 106.
Analyzes social inequality and the American social welfare system. Traces historical development of government response to social inequality. Explores historical and persisting dilemmas—ethical, political, social and economic—explicit and implicit in social welfare provisioning. Assists in understanding of social welfare problems and their solutions.

SOC 115 Elderhostel: The Alaskan Adventure 1.0 CR
Grading Policy: Pass/No Pass.
Overview of components of the Alaskan adventure: history, natural history, anthropology, literature, and geology. Emphasis on Kachemak Bay.
Offered at Kenai Peninsula College only.

SOC 140 Surges of Change, Reform or Revolution 3.0 CR
Review of U.S. labor movement and feminist movement over past century. Overview of recent revolutionary movements in Third World countries. Required readings in addition to documentary films.

SOC 142 Sociology of Sexuality 3.0 CR
Explores social construction of sexual attitudes and behavior. Draws upon sociological theory and research to demonstrate how sexual behavior is shaped by societal and cultural forces. Aids in understanding of sexual processes and social issues such as diversity, health, sexual preference, violence, and sexual dysfunctions.

SOC 201 Social Problems and Solutions 3.0 CR
Survey of some of today's major social problems such as criminal and violent behavior, corporate crime, sexual deviations, health problems, poverty, discrimination, urban decay, and environmental pollution. Examines how social issues become social problems, the causes of problems, and the dynamics involved in arriving at policies and solutions.

SOC 202 The Social Organization of Society 3.0 CR
Examination of various ways in which societies develop social structures such as belief, value, symbol, and normative systems to lend predictability to human interactions. Explores why such structures are needed by human societies and implications of varying structures.

SOC 203 Juvenile Delinquency 3.0 CR
Prerequisite: SOC 101.
Cross-Listed: JUST 203.
Conceptual approach to deviant and delinquent behavior, contributing social problems, adolescence as a subculture. Emphasis on juvenile code and treatment procedure.

SOC 222 Small and Rural Communities 3.0 CR
Overview of organization, viability, change and problems of small communities and villages in rural areas; their relations to larger and regional systems; and factors which affect their future as autonomous units.

SOC 242 An Introduction to Marriage, Family and Intimate Relationships 3.0 CR
Prerequisite: A social science course recommended.
Introduction to sociological study of contemporary patterns relating to marriage, family and other intimate relationships. Also explores impact of gender roles, ethnicity and racial background on beliefs, values, attitudes and behaviors.

SOC 246 Adolescence 3.0 CR
Prerequisite: SOC 101 or PSY 111.
Introduction to the world of the adolescent. Examines various patterns of physical, social, intellectual and emotional development during adolescence and effects of social class, ethnicity, race and gender.

SOC 275 Social Psychology 3.0 CR
Prerequisite: SOC 101 and/or PSY 111.
Examination of the effects of group interaction on individuals' values, attitudes and behavior. Focuses on such topics as perception, interpersonal relationships, conformity, aggression and helping behavior. Emphasizes theory, research, and application.

SOC 280 Seminar in Contemporary Issues 3.0 CR
Cross-Listed: PSY 280 or HIST 280.
Analyzes contemporary issues from a variety of social science perspectives.
Special Notes: Subtitle varies; may be repeated for credit with a different subtitle. Cross-listing varies each semester depending on topic.

SOC 307 Demography 3.0 CR
Prerequisite: SOC 101.
Analysis of world populations: growth and decline patterns, migratory trends and ecology; worldwide implications to current population growth; critical review of major theoretical contributions, with introduction to demographic methods.

SOC 309 Urban Sociology 3.0 CR
Prerequisite: SOC 101.
Growth and development of urban communities with reference to migration patterns, differentiation of functions, ecological patterns of land use, social control, and secondary group associations of metropolitan magnitude.

SOC 310 Sociology of Aging 3.0 CR
Prerequisite: SOC 101.
A comparative analysis of the social status and role of the aging in various societies with emphasis on problems of aging in contemporary U.S.

SOC 342 Sexual, Marital and Family Lifestyles 3.0 CR
Prerequisite: SOC 101 or faculty permission.
An upper-division course which emphasizes theories and research that explain today's marital, family and sexual lifestyles, as well as class and cultural variations found in the U.S. It includes a survey of why and how people meet, interact, love, fight, change, sustain or dissolve relationships, have children and age together.

SOC 343 Sociology of Deviant Behavior 3.0 CR
Prerequisite: SOC 101.
A study of the social etiology of deviant behavior, both criminal and non-criminal with an emphasis on the nature of group interaction, and an examination of the institutions involved.

SOC 347 Sociology of Religion 3.0 CR
Prerequisite: SOC 101.
The study of the historical development and functional significance of religion, values, and forms of institutions, groups, reform movements, and their influence on social organization.

SOC 350 Sociology of Work 3.0 CR
Prerequisite: SOC 101 or faculty permission.
Reviews work life and changes in types of work over time in industrial societies. Emphasis is on understanding the interactions among work and such things as communities, families and the self.

SOC 351 Political Sociology 3.0 CR
Cross-Listed: PS 351.
Introduces social aspects of politics and nature and distribution of power in society: examines the dynamic relationship of the political process and the institutions of society.

SOC 353 Application of Statistics to Social Sciences 3.0 CR
Prerequisite: Introductory social science course and social research methods course.
Cross-Listed: PSY 353.
Demonstrates application of statistics to various types of studies in the social sciences. Students will analyze social science journal articles that utilize statistics.

SOC 361 Social Science Research Methods 3.0 CR
Prerequisite: One of: SOC 101 or PS 102.
Cross-Listed: PS 361.
Introduces research methods, including definition of research problems, development of hypotheses, experimental and non-experimental research design, sampling, and data collection and analysis. Students participate in field exercises to develop critical capacities for evaluating research studies.

SOC 363 Social Stratification 3.0 CR
Prerequisite: SOC 101.
The study of the differential distribution of social power, privilege and life chances in class and caste as the basis for social organization. Emphasis on occupational, educational, and other correlates which determine social structure.

SOC 370 Medical Sociology 3.0 CR
Prerequisite: SOC 101 or faculty permission.
Cross-Listed: HS 370.
Provides a historical and contemporary overview of selected social, political, and economic factors that influence the provision of health care in America. Focuses on the relationship between health care and race, sex, social stratification, and geographical location. Brief international comparisons with alternative for-profit and not-for-profit national health care systems.

SOC 373 Strategies of Community Change 3.0 CR
Prerequisite: SOC 101.
Practical methods for planning, organizing and implementing community development programs in urban and rural settings. Course covers both planned programs of community change and general community organizing. Students will be expected to develop a project for community action.

SOC 377 Men, Women and Change 3.0 CR
Prerequisite: SOC 101 or SOC/PSY 275.
Examines how gender in our society affects from birth individuals' roles, socialization, achievements, opportunities, and overall personality and self-development. Studies changes that have taken place over the past several decades. Relevant theories and research form the foundation of the course.

SOC 387 Gay and Lesbian Lifestyles 3.0 CR
Prerequisite: SOC 101 and PSY 111.
An overview of historical and theoretical factors relevant to gay and lesbian psychosocial development. Participation and acceptance in religion, the military, education, and the work force will be considered with some emphasis on civil rights and discrimination.

SOC 402 Theories of Sociology 3.0 CR
Prerequisite: SOC 101.
Major sociological theories and theorists of western civilization; review of important contributions and approaches of various "national schools" with emphasis on current American and European trends.

SOC 404 Environmental Sociology 3.0 CR
Prerequisite: SOC 101.
A critical analysis of the interactions between society and the environment from an ecological perspective, focusing on processes of industrial and economic growth, natural resource development, community change and social impact assessment, environmental values and environmental movement, land use planning and resource management decision making, and comparative perspectives on man's relation to and use of the natural environment.

SOC 405 Social Change 3.0 CR
Prerequisite: SOC 101.
Social change in long-time perspective, with emphasis on social movements and the influence of technology.

SOC 407 Formal Organizations 3.0 CR
Prerequisite: SOC 101.
Cross-Listed: SWK 407.
Focus on modern organizations in terms of the interrelationships between their purposes, structures, functions, the people who compose them and the people they serve. Modern organizations are studied within the framework of their historical development, contemporary models and the needs and possibilities of the future. Particular attention is given to social welfare.

SOC 408 American Minority Groups 3.0 CR
Prerequisite: SOC 101.
Present status of ethnic, religious and national minorities and their changing sociological, economic, and political status.

SOC 452 Violence in Intimate Relationships 3.0 CR
Prerequisite: SOC 101 required; social research methods recommended or faculty permission.
The study of violence among individuals who are at least theoretically linked together in intimate relationships (e.g., family members, lovers and dates) from a sociological perspective. Thus, the course focuses on factors in society such as norms, laws and institutes that may produce and/or perpetuate violence among intimates. In addition, the course focuses on current prevention and treatment programs aimed at reducing this type of violence.

SOC 454 Evaluation Research and Change 3.0 CR
Prerequisite: A social science methods course.
Cross-Listed: JUST 454.
Application of evaluation research to policy-making process. Presents evaluative research strategies including monitoring, process evaluation, cost-benefit analysis, and impact evaluation. Special attention given to designing evaluation projects, analyzing and interpreting results, preparing and presenting evaluation research reports in justice, human and community service fields.

SOC 487 Sociology Practicum 3.0 CR
Prerequisite: Faculty permission.
Course in which student participates in a significant field research project and/or community action/agency program that applies sociological skills and analysis toward the resolution of specific social problems. Students attend a seminar, class or individual meeting with a faculty member on a weekly basis, and complete a minimum of six hours each week in the field on an approved research or community project which does not have to be localized in the Anchorage area. All students will be expected to participate in the design and program formulation of the project and a final term or progress paper will be required.
Special Notes: May be repeated once for credit.

SOC 491 Senior Sociology Seminar 1.0 CR
Prerequisite: Senior standing or faculty permission.
Weekly seminar for senior level sociology students to discuss major issues, applications and career alternatives in contemporary sociology. Focus of course is familiarization with roles held in Alaska by professionals with sociological training. Offered spring semesters.

SPCH: SPEECH

Offered through the College of Arts and Sciences, CAS Building, Room 378, 786-1551

SPCH 111 Fundamentals of Oral Communication 3.0 CR

Talking with greater ease and listening more effectively in individual and group situations. Improvement in organizing ideas and exchanging thoughts, opinions, information and data. Practice in understanding and using language and the informative speaking process. Students practice speaking and listening skills by participating in group activities and by giving individual speeches.

SPCH 125 Communications in the Labor Field 3.0 CR

Examines basic skills necessary to be understood. Emphasizes four specific forms of communication directly related to the labor movement including: public speaking, small group dynamics, negotiations and parliamentary procedure.

SPCH 212 Speech Pathology 3.0 CR

Covers development of speech and language and various pathologies that may occur. Reviews physiology and neurology of speech and its chronological development.

SPCH 236 Interviewing 3.0 CR

Examines theories and individual responsibilities in informational, employment and persuasive interviews. Practice of face-to-face interpersonal communication relationships through role-playing in class.

SPCH 237 Interpersonal Communication 3.0 CR

Personal and group interaction demonstrating communication techniques. Includes both verbal and non-verbal experiences in improving communicative relationships.

SPCH 241 Public Speaking 3.0 CR

Theories and practices of setting forth facts and ideas as well as persuasion in the platform speaking situation. Training in effective selection, organization and presentation of material to large audiences in various speaking situations.

SPCH 305 Intercultural Communication 3.0 CR

Prerequisite: SPCH 111.

Explores theories, perspectives, and experiences of communication in intercultural and cross-cultural relations.

SPCH 320 Debate and Deliberation 3.0 CR

Prerequisite: SPCH 111 or faculty permission.

Learning to understand and discuss controversial topics. Fact-finding and presentation of information that relates to and supports one side of a controversial topic. Classroom experience in speech presentation and decision making based on factual presentations and logical conclusions.

SPCH 335 Discussion 3.0 CR

Nature and operation of discussion groups. Use of evidence, reasons, reflective thinking, group psychology, participant and leader behavior. Discovers and develops techniques best suited for effective group discussion. Emphasizes decision making process and ability to contribute constructively to it. Group dynamics theory and application.

SPCH 343 Business and Professional Communications 3.0 CR

Examines barriers to spoken and written communication. Teaches the art of listening, outlining and arranging material, and body and voice usage in oral communication. Covers verbal responsibilities in information exchange and group communication experience. Students participate in resume writing, letters of application and the job interview. Practice in leadership and conducting of effective meetings.

SPCH 346 Oral Interpretation 3.0 CR

Prerequisite: SPCH 111.

Theory and practice of the art of oral interpretation to stimulate an understanding and responsiveness to prose, poetry and drama, and to develop the ability to convey to others, through oral reading, an appreciation of literature.

SPCH 360 Forensics 3.0 CR

Prerequisite: Prior experience in public speaking and faculty permission.

Advanced study for competitive speakers. Emphasis on individual competitive events: informative speaking, extemporaneous speaking, impromptu speaking, oratory, communication analysis, readers' theater, debate, and oral interpretation of literature. Students develop competition-worthy speeches with faculty guidance.

Special Notes: May be repeated once for credit.

SPCH 380 Theories of Human Communication 3.0 CR

Prerequisite: SPCH 111.

Covers major communication theories, principles, and research paradigms in interpersonal, group, organizational, and public contexts.

SWK: SOCIAL WORK

Offered through the College of Arts and Sciences, CAS Building, Room 352, 786-1724

SWK 106 Introduction to Social Welfare 3.0 CR

Prerequisite: SOC 101.

Cross-Listed: SOC/HUMS 106.

Analyzes social inequality and American social welfare system. Traces historical development of government response to social inequality. Explores historical and persisting dilemmas—ethical, political, social, and economic—explicit and implicit in social welfare provisioning. Assists in understanding of social welfare problems and solutions.

SWK 121 Advocating for Victims of Domestic Violence or Sexual Assault 2.0 CR

Cross-Listed: HUMS 121.

Grading Policy: Pass/No Pass.

Focuses on developing the skills and knowledge needed to be an effective advocate for victims of domestic violence and sexual assault. Provides historical perspective, identifies physical, sexual and emotional abuse that defines battering. Explains cycle of violence, power and control issues and why women stay in abusive relationships. Identifies five stages of living without violence (denial, self-blame, help seeking, ambivalence and living violence free lives). Discusses ways of helping victims become survivors.

Offered at Matanuska-Susitna College only.

SWK 122 Introduction to Hospice: Volunteer Training 1.0 CR

Prerequisite: Hospital homecare program staff or volunteer.

Grading Policy: Pass/No Pass.

Includes the philosophy of hospice; physical, psycho-social and spiritual needs of the terminally ill and appropriate interventions; care of the family; therapeutic communications; death and dying; and bereavement follow-up.

Offered at Matanuska-Susitna College only.

SWK 206 Introduction to Social Work 3.0 CR

Prerequisite: SWK/SOC/HUMS 106.

Introduces the profession of social work and its place in the social welfare institution. Special emphasis is placed upon client-centered generalist social work and the knowledge, skills, abilities and values necessary for professional practice. Fields of practice are studied in terms of the programs and services provided to client systems and social work's role within these fields.

SWK 324 Social Work Research 3.0 CR

Prerequisite: AS 252.

Definition of client-centered research questions, selection of theoretical frameworks, development of research designs, sampling, data collection, analysis and reporting. Students are expected to engage in a practice related research project and develop the skills necessary for utilization of existing research.

SWK 342 Human Behavior in the Social Environment 3.0 CR

Prerequisite: PSY 150.

Identification and analysis of various theoretical frameworks for understanding human behavior with emphasis on interactions between the individual and the environment. A social systems model serves as the organizing framework for addressing the behavior and development of individuals, groups, families, organizations, and communities with emphasis on the reciprocal influences between individuals, societal institutions, and diverse economic, political, and psychological variables which impact and influence behavior, growth, development and change.

SWK 343 Human Behavior: Diversity and Discrimination 3.0 CR

Prerequisite: SWK 342 or faculty permission.

Examination of human diversity in relation to ethnic, racial, cultural and other minority group affiliation and membership. Discrimination against various groups will be addressed with focus on individual and group development, opportunity, aspirations and self-concept.

SWK 360 Interviewing for Generalist Social Work Practice 3.0 CR

Prerequisite: SWK/HUMS/SOC 106, SWK 206; completion of general education requirements.

Grading Policy: Pass/No Pass.

Fees.

Identification, understanding and skill development of interviewing and problem solving skills for generalist social work practice. Attention is given to self-awareness, ethical decisions, cultural and ethnic diversity, and the problem solving process in individual, family and group intervention in social work practice. A planned volunteer experience in a community agency is included in the laboratory experience.

SWK 380 Social Service Law 3.0 CR
Prerequisite: JUST 110 or PARL 101.
Cross-Listed: JUST 380.
Principal legal problems encountered by service professionals in fields such as health, employment, welfare and social work, with special emphasis on professional liabilities and poverty law.

SWK 406 Social Welfare: Policies and Issues 3.0 CR
Prerequisite: SWK 305 or faculty permission.
The formulation of social welfare policy as the result of interacting social, political and economic factors. Emphasis is placed on analyzing various current social welfare policies and on various methods of influencing policy development and change.

SWK 407 Formal Organizations 3.0 CR
Prerequisite: SOC 101.
Cross-Listed: SOC 407.
Focus on modern organizations in terms of the interrelationships between their purposes, structures, functions, the people who compose them, and the people they serve. Modern organizations are studied within the framework of their historical development, contemporary models and the needs and possibilities of the future. Particular attention is given to social welfare organizations.

SWK 409 Introduction to Child Welfare 3.0 CR
Survey of public and private child welfare services from a historical perspective and examination of current child welfare services available to children and their families. National standards for services are reviewed along with policy development, legislation, funding and research related to programs, and service delivery. Services such as in-home support, permanency planning, child protection, foster care, adoption and residential care will be addressed.

SWK 410 Child Placement: Prevention and Practice 3.0 CR
After a brief historical perspective of child welfare services, this course considers the services which prevent placement, reviews legal, social and diagnostic considerations involved in placement decisions, and teaches skills in handling separation feelings of parents and children. Placement resources will be discussed, with emphasis on permanency planning and matching children and parental needs with programs and services.

SWK 443 Mental Health Practice, Programs and Services 3.0 CR
Study of mental health problems presented by people and the response of service delivery systems. A broad overview of current mental health programs and service delivery systems is presented including their development through history. The political and economic issues of mental health policy making will be addressed as will differential intervention strategies and the needs of specific target groups.

SWK 444 Health Care and Social Work Services 3.0 CR
Exploration of the health needs and requests of client systems in relation to social work practice, health care policies, systems of service delivery and ethnic/cultural diversity. The impact of health, illness and disease on client systems will be addressed along with the interrelationship of mind and body on behavior, growth, achievement and change.

SWK 445 Women's Issues in the Human Services 3.0 CR
Examines effects of sex discrimination, stereotyped views of women, and power differentials on planning and delivery of social services to women. Addresses both overt and subtle examples of service delivery which reinforce traditional gender-based concepts of women. Also discusses corrective approaches to gender bias.

SWK 461A Social Work Practice I 3.0 CR
Prerequisite: SWK 360; concurrent enrollment in SWK 461B; admission to BSW program.
Fees.
Fundamentals for generalist social work practice with emphasis on values, skills and problem- solving for application to client systems in need of professional intervention. Assessment and planning for social work practice with individuals, families, groups, communities and organizations.

SWK 461B Social Work Practicum I 6.0 CR
Prerequisite: SWK 360; concurrent enrollment in SWK 461A; admission to BSW program.
Fees.
Beginning social work practicum/field placement in which concepts, knowledge, skills and values are applied to client-centered problem-solving in generalist social work practice. Emphasis is on application of generalist practice skills in the areas of interviewing, assessment and planning for client system intervention. Taken concurrently with SWK 461A, the student completes 16 hours a week in an approved agency under the supervision of a field instructor appointed by the university and participates in a weekly field work seminar.

SWK 462A Social Work Practice II 3.0 CR
Prerequisite: SWK 461A and SWK 461B; concurrent enrollment in SWK 462B.
Fundamentals for generalist socia work practice with emphasis on problem-solving application to client systems in need of professional intervention. Building on assessment and planning processes in SWK 461A, intervention application, evaluation, termination and follow-up generalist social work practice with individuals, families, groups, communities and organizations are covered.

SWK 462B Social Work Practicum II 6.0 CR
Prerequisite: SWK 461A and SWK 461B; concurrent enrollment in SWK 462A.
Fees.
Social work practicum/field placement relative to client-centered problem-solving in generalist social work practice. Emphasizes generalist practice skills of designing, planning, implementing, evaluating and terminating change efforts with various client systems. Social work roles are applied and analyzed along with associated tasks required for generalist practice and entry into the profession. Taken concurrently with SWK 462A, the student spends 16 hours a week in an approved agency under the supervision of a field instructor appointed by the university and participates in a weekly field work seminar.

SWK 470 Social Work with the Aging and Elderly 3.0 CR
Prerequisite: SOC 310 or faculty permission.
Development of concepts related to psychological, biological and economic issues of aging and the role of social work in responding to those issues. Gerontological content from human behavior, social policy, research and direct/indirect practice is analyzed in relation to social work practice with people who are aging and elderly.

SWK 490 Selected Topics in Social Work 1.0 CR
Focus on current topics related to social work services, diverse client groups and field of practice.

TECH: TECHNOLOGY

Offered through the College of Career and Vocational Education , Beatrice McDonald Building (BMB), Room 106, 786- 4677

TECH 310 NDE for Managers and Technicians 3.0 CR
Prerequisite: Junior standing and Math 107.
Provides an understanding of the various methods of nondestructive examination and the scientific principles upon which they are based and how they interact with various technical concerns. Broadens the education of junior/senior students in all technical and professional disciplines relevant to testing objects in a manner that does not affect future usefulness.

TECH 402 Operational Safety 3.0 CR
Study of safety as a vital element of human behavior. Covers governmental influence, hazard awareness and control, operational considerations in the workplace, accidents and planning. Allows students to apply content to occupational specialities.

TECH 412 Advanced Technical Experiences: Discipline Area 1.0-9.0 CR
Prerequisite: Junior standing or admission into the VTE graduate program.
Cross-Listed: VE 412.
Designed to offer students an opportunity to participate in activities to increase mastery of their specific vocational discipline. These may include participation in classes offered by industry, proprietary schools or other agencies. Each will be evaluated on an individual basis and must support the student's professional objectives. The National Guide to Education Credit for Training Programs will be used whenever appropriate.

TECH 415 Accident Investigation 4.0 CR
Prerequisite: TECH 402.
Covers system safety approach to accident investigation. Provides processes and analytical tools for accident investigation and analysis to include: MORT-Management Oversight and Risk Tree, Change Analysis, Barrier Analysis, Events and Causal Factors Charting, Root Cause Analysis, MORT Based Event Analysis, Operational Readiness Analysis, Step Analysis and Task Performance Analysis.

TECH 416 Safety Appraisal Methodology 3.0 CR
Prerequisite: TECH 402.
Covers systems methodology for safety appraisals, audits and reviews. Provides processes and methodologies for developing comprehensive appraisal programs which can be applied to all work processes and environments.

TECH 422 Senior Project 3.0 CR
Prerequisite: Senior standing and department permission required.
Selection and completion of a project under faculty supervision. Projects are typical or problems which graduates must solve in their career field. Project results are presented in a formal report. Minimum 135 hours total time.

TECH 433 Project Design, Implementation and Control 3.0 CR
Prerequisite: Senior standing and MATH 107 or MATH 106.
Covers principles and practices of project planning, implementation and control. Focus is on the tools and techniques of project planning. Implementation and control applicable to managers and technicians.

TECH 443 Total Quality Leadership 3.0 CR
Prerequisite: Senior standing, MATH 106 or MATH 107.
Fees.
Covers principles and practice of total quality leadership and continuous improvement. Focuses on the tools and techniques of total quality leadership, continuous improvement applicable to technicians and managers.

TECH 495 Technical Internship 3.0 CR
Prerequisite: Formal admission into the BST/VTE Program.
Cross-Listed: VE 495.
Provides work experience as well as a familiarization with supervisory and management practices used by various individuals in business operations, e.g. general manager, production manager, director of quality control, floor supervisor, etc. Requires at least 160 hours work experience and 30 hours of instructor contact time.
Special Notes: May be repeated twice for credit.

THR: THEATRE

Offered through the College of Arts and Sciences, Arts Building (ARTS), Room 332 , 786-1792

THR 101 Theatre Practicum: Performance 1.0-3.0 CR
Participation in main stage productions as an actor, director, or assistant director.

THR 111 Introduction to the Theatre 3.0 CR
Survey of theatre with focus on artists who contribute to theatrical production viewed within the context of historical styles and development.

THR 115 Field Studies in Theatre 1.0 CR
A study tour to another country or area which has a significant history of theatre and allied performing arts. Specific attention to theatre architecture, production techniques and the place of drama in the specific cultural milieu.

THR 121 Acting I 3.0 CR
An introduction to basic acting techniques with stress on creativity, concentration, relaxation, physical and vocal awareness, and the Stanislavsky method of acting.

THR 124 Dance for the Musical Theatre 2.0 CR
Cross-Listed: DNCE 124.
Fees.
Basic stage dance/performance techniques. Covers styles of dance from early 1900's to the present.

THR 131 Theatrical Production Techniques 3.0 CR
Introduction to mechanics of stage production. Emphasizes safe and practical use of tools, equipment and materials employed in scene shop, lighting, backstage and costume work. Students master basic practices and techniques required for effective production work in each area.

THR 141 Stagecraft I 3.0 CR
Beginning course in technical theatre. Covers elements of theatrical production and scenic construction.

THR 151 Make-Up for the Theatre 3.0 CR
Fees.
Basic principles of make-up for actors, teachers, directors and other theatrical workers. Emphasizes make-up as it is affected by the structure of the face, make-up techniques and materials, theatrical lighting, character interpretation and illusory and plastic relief. Covers historical make-up and hair styles in classical plays.

THR 201 Theatre Practicum: Technical 1.0-3.0 CR
Participation in main stage productions as member of technical staff. Credit for scene crew, light crew, props, costume crew, make-up crew, stage management, and publicity.

THR 221 Movement for the Actor 3.0 CR
Prerequisite: THR 111 and THR 121.
Intermediate study of acting with emphasis on expression through movement. Work includes analysis and developmental physical skills.

THR 243 Scene Design 3.0 CR
Fundamental principles of design for the stage, including drafting, rendering, theory, analysis, and practice.

THR 257 Costume Design and Construction I 3.0 CR
Prerequisite: THR 131.
Basic principles of costume design with emphasis on research and rendering techniques. Overall study of costume and fashion history and its relation to theatre productions and designs.

THR 301 Advanced Practicum: Performance 1.0-3.0 CR
Prerequisite: Faculty permission.
Performance practicum for juniors and seniors: participation in main stage productions as an actor, director, or assistant director.

THR 311 Representative Plays I 3.0 CR
Prerequisite: ENGL 111 and junior standing.
A survey course of dramatic literature from Greek drama to 1800. Emphasis is placed upon the playwright's work and relationship to the production of these plays in their own time and in today's theatre.

THR 312 Representative Plays II 3.0 CR
Prerequisite: ENGL 111 and junior standing.
A survey of dramatic literature from 1800 to the present. Emphasis is placed upon the playwright's work and relationship to the production of these plays in their own time and in today's theatre.

THR 315 Playwriting Workshop 3.0 CR
Study and practice of script development for the stage. Class will involve staged readings of student work.

THR 321 Characterization 3.0 CR
Prerequisite: THR 121 or faculty permission.
Intermediate techniques in characterization, script analysis, and their application to scene study.

THR 324 Voice for the Actor 3.0 CR
Prerequisite: THR 121.
Introduces the acting student to a series of exercises designed specifically to free and increase the expressive power of their natural vocal instrument. Concentration includes relaxation, breath control, and increased vocal range through the development of the human resonating ladder, with the primary goal being emotional honesty. Also some work in articulation.

THR 325 Theatre Speech 3.0 CR
Prerequisite: THR 324.
Fees.
Continuation of THR 324 with focus on the articulatory components of speech. Through the manipulation of these elements, and in combination with tempo/rhythm, facial posture, resonance focus, lilt patterns, and a knowledge of both history and national character, the acting student will develop an appreciation and systematic approach for the acquisition of foreign dialects.

THR 328 Acting Shakespeare 3.0 CR
Prerequisite: THR 121.
Intensive exploration of text-based analysis of Shakespearean characters. Emphasis will be placed on scene and character study in a studio setting.

THR 329 Combat for the Stage 3.0 CR
Prerequisite: THR 121, 221 or equivalent.
Fees.
Acquaints the student with the fundamentals of stage combat as a part of theatrical production. Course is based on techniques practiced by the Society of American Fight Directors. Introduces unarmed combat, rapier and dagger, and a third style chosen by the instructor from amongst quarterstaff, broadsword, or courtsword.

THR 331 Directing I 3.0 CR
Prerequisite: THR 221, THR 243 and THR 257.
Direction of short plays for drama lab productions.

THR 341 Stagecraft II 3.0 CR
Prerequisite: THR 141 or faculty permission.
Advanced problems and techniques of technical theatre production. Course is keyed to recent developments in the technical production areas.

THR 343 Scenic Design II 3.0 CR
Prerequisite: THR 243.
Continuation and expansion of THR 243 reflecting most recent trends in theatre practice. Advanced course teaching more complex techniques. Emphasizes design theory and script analysis with concentration on various rendering and modeling methods.

THR 347 Lighting Design 3.0 CR
Prerequisite: THR 243.
A course in theory and practice of design and execution of lighting and associated electrical effects for the stage. Primary focus will be on theatrical lighting with additional material on related fields.

THR 357 Costume Design and Construction II 3.0 CR
Prerequisite: THR 257.
Advanced work in costume design and construction. This course is a continuation of THR 257.

THR 401 Advanced Practicum: Technical 1.0-3.0 CR
Prerequisite: Faculty permission.
Technical practicum for juniors and seniors. Emphasis is on participation as a crew member for main stage productions in the areas of stage management, lighting, scenery, costume, and publicity.

THR 411 History of the Theatre I 3.0 CR
Prerequisite: Junior or senior standing and completion of written communication general college requirements.
Study of theatre history from Greek to 1800 period. The history and the influence of different cultures, traditions and technology on the development of the theatre as a social institution.

THR 412 History of the Theatre II 3.0 CR
Prerequisite: Junior or senior standing and completion of written communication general college requirements.
Continuation of THR 411. Theatre history from 1800 to modern.

THR 413 Dramatic Theory and Criticism 3.0 CR
Study of theories and criticism of drama and theatrical art from Aristotle to the present.

THR 435 Directing II 3.0 CR
Prerequisite: THR 331.
Advanced directional analysis of a dramatic work and public presentation of a play.

THR 445 Advanced Theatre Production 3.0 CR
Prerequisite: Junior level course in area of specialization.
Advanced technical theatre course with emphasis as selected by student in scenery design, lighting, stagecraft, costume, or directing.

THR 480 Theatre Internship 5.0-15.0 CR
Prerequisite: Junior standing or permission of chair.
Advanced theatre production course with emphasis as selected by students in direction, acting, scenery and lighting, costume design and construction, or theatre management.
Special Notes: Total of internship activity applicable toward graduation is 15 credits.

THR 490 Selected Topics in Performance 3.0 CR
Prerequisite: THR 121 and junior standing.
Current topics in theatrical performance resulting from special demands of the theatre season or special faculty expertise.
Special Notes: May be repeated for credit with a change of subtitle.

THR 491 Selected Topics in Technical Theatre 3.0 CR
Prerequisite: THR 257 or THR 243.
Fees.
Current topics in technical theatre theory and practice. Includes studio work.
Special Notes: See schedules for specific titles being offered.

VE: VOCATIONAL EDUCATION

Offered through the College of Career and Vocational Education, Beatrice McDonald Building (BMB), Room 106, 786-4677

VE 301 Principles of Technology 3.0 CR
Fees.
Application of basic physics to the work place. Emphasis is on principles of applied physics in areas such as force and force transformers, energy and power, waves and vibrations, radiation and light, and their application in technology and the work place.
Special Notes: Stacked with VE 601.

VE 395 Practicum in Vocational Education 3.0 CR
Prerequisite: Faculty permission.
The pedagogy of basic physics in the work place. Students observe, evaluate, and present in actual classrooms. Course provides comprehensive introduction to teaching. Students will observe and assess teaching; present actual lessons; plan, evaluate, and revise lessons; participate in development of specific individual objectives; and meet with teachers for further insight into classroom management, methods and strategies, grading practices, discipline, style, activities, professional organizations, etc.

VE 400 Program Planning: PBTE (Topics Vary) .5-10.0 CR
Prerequisite: Permission of resource person; see module for prerequisites.
Competency based, individualized format. These modules deal with the duties and responsibilities of the vocational teacher in planning, developing and evaluating vocational programs. See module for specific description.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 401 Career Education Practices for Vocational Education 3.0 CR
Review of the concept of total career education with a focus on implementing appropriate practices within vocational education. Special emphasis on occupational guidance, employment opportunities, employer-employee relationships, plans for continuing education and occupational versatility.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 410 Instructional Planning: PBTE (Topics Vary) .5-3.0 CR
Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. These modules cover the competencies needed by the vocational teacher in planning for classroom and laboratory instruction. Topics include student needs, performance objectives, developing a unit and lesson plans.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 411 Philosophical Foundations of Vocational Education 3.0 CR
A study of the theory, development, and philosophical foundations of vocational education and the relationship of vocational education to general education. An overview of secondary and postsecondary vocational education in Alaska; proprietary and applied programs; and concepts of career education. Economic and sociological foundations of vocational education; relevant federal legislation; the role of business and industry; and current issues and trends in vocational education are covered. The major objective of the course is greater understanding of the various factors influencing vocational education.
Special Notes: Stacked with VE 611.

VE 412 Advanced Technical Experiences: Discipline Area 1.0-9.0 CR
Prerequisite: Junior standing or admission into the VTE graduate program.
Cross-Listed TECH 412.
Designed to offer students an opportunity to participate in activities to increase mastery of their specific vocational discipline. These may include participation in classes offered by industry, proprietary schools or other agencies. Each will be evaluated on an individual basis and must support the student's professional objectives. The National Guide to Education Credit for Training Programs will be used whenever appropriate.

VE 415 Implementing Competency-Based Education: PBTE (Topics Vary) .5-3.0 CR
Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. Modules in this category are designed to assist vocational educators in implementing competency-based curricula within their subject areas. Emphasis on organizing content, facilities and instructional materials.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 420 Instructional Execution: PBTE (Topics Vary) .5-16.0 CR
Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. Modules focus on advanced competencies for classroom and laboratory instruction. Topics include effective presentations, demonstrations, oral questioning, demonstrating a manipulative skill, audiovisual materials, conducting field trips and panel discussions. See module for specific description.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 425 Assisting Students in Improving Basic Skills: PBTE (Topics Vary) .5-4.0 CR
Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. Modules in this category are designed to assist vocational teachers in improving students' basic skills in the areas of reading, writing, oral communications and math.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 430 Instructional Evaluation: PBTE (Topics Vary) .5-3.0 CR
Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. Modules in this category are designed to aid the vocational teacher in evaluating student performance and the quality of instruction provided. Topics include establishing criteria, assessment of knowledge, skills and attitudes and instructional effectiveness. See module for specific description.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 435 Teaching Adults: PBTE (Topics Vary) .5-3.0 CR
Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. These modules are designed to aid the vocational teacher and/or administrator in preparing to work with adult learners, marketing adult education programs, determining individual training needs and planning instruction for adults, and managing and evaluating the instructional process and performance of adults. See modules for specific descriptions.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 440 Instructional Management: PBTE (Topics Vary) .5-4.5 CR
Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. Modules deal with the responsibilities of the vocational teacher in the management of instruction. Topics include instructional resources, budgets, student safety and organizing and managing

vocational laboratories. See module for specific description.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 443 Methods of Instruction in Vocational Education 3.0 CR

Prerequisite: ED 332.
An introduction to fundamental processes of instruction. Students develop competencies in various methodologies pertinent to vocational education including developing lesson plans, job sheets, and assignment sheets; lecture; simulation; demonstrations; illustrated talks; individualized instruction; laboratory learning; field trips; exhibits; bulletin boards; competency-based education; etc. Students identify, develop and critique appropriate teaching methods for a given teaching area.
Special Notes: Stacked with VE 643.

VE 450 Guidance: PBTE (Topics Vary) .5-3.5 CR

Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. Modules address the responsibilities of the vocational teacher in advising, counseling and assisting student with career planning and preparation. See module for specific description.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 452 Student Teaching: Vocational Education 12.0 CR

Prerequisite: Faculty permission. 3.0 GPA in education courses and a 2.5 GPA overall. Recommendation of VTE faculty; current medical exam and tine test.
Grading Policy: Pass/No Pass.
Provides the capstone experience in the vocational teacher training program. Students will learn from successful teachers in actual classrooms; review, observe, evaluate, and practice the art of teaching. Hands-on apprenticeship in teaching is provided. Requires full-time supervised teaching in an approved vocational education program for the entire semester at the level for which certification is sought. Periodic seminars with university faculty are required. Conducted primarily as a lab course.

VE 455 Serving Special Needs Students: PBTE (Topics Vary) .5-8.0 CR

Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. Modules in this category are designed to aid the vocational teacher in accommodating special needs students in the normal vocational classroom and laboratory environment.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 460 School/Community Relations: PBTE (Topics Vary) .5-5.0 CR

Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. These modules are designed to aid the vocational teacher and/or administrator in planning and maintaining effective school/community relations for the vocational program. See module for specific description.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 470 Student Vocational Organization: PBTE (Topics Vary) .5-4.0 CR

Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. Modules cover the competencies involved in establishing and supervising student vocational organizations, as an integral part of the vocational curriculum. Topics include developing a philosophy concerning student organizations, preparing students for leadership, handling finances and supervising activities. See module for specific description.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 480 Professional Role and Development: PBTE (Topics Vary) .5-5.0 CR

Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. Modules focus on the responsibilities of vocational teachers in serving their profession and advancing professionally. Topics include keeping up-to-date, developing a philosophy, obtaining a position and planning for student teaching. See module for specific description.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 490 Coordination of Cooperative Education: PBTE (Topics Vary) .5-6.0 CR

Prerequisite: Permission of resource person; see module for prerequisites.
Competency-based, individualized format. These modules are designed to assist the prospective or present teacher-coordinator in establishing, managing and coordinating a cooperative vocational program. Topics include establishing guidelines, securing training stations, placing students and evaluation. See module for specific description.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 495 Technical Internship 3.0 CR

Prerequisite: Formal admission into the BST/VTE Program.
Cross-Listed: TECH 495.
Provides work experience as well as familiarization with supervisory and management practices used by various individuals in business operations, e.g., general manager, production manager, director of quality control, floor supervisor, etc. Requires at least 160 hours work experience and 30 hours of instructor contact time.
Special Notes: May be repeated twice for credit.

VE 601 Principles of Technology 1.0-3.0 CR

Prerequisite: Graduate standing or faculty permission.
Fees.
Application of basic physics to the work place. Emphasis on principles of applied physics in areas such as force and force transformers, energy and power, waves and vibrations, radiation and light, and their application in technology. Students taking this course for graduate credit will emphasize pedagogy involved in presenting this curriculum.
Special Notes: Stacked with VE 301.

VE 611 Philosophical Foundations of Vocational Education 3.0 CR

Prerequisite: Graduate standing or faculty permission.
Study of theory, development and philosophical foundations of vocational education. Relationship of vocational education to general education. Overview of vocational education in Alaska, including secondary, postsecondary, proprietary and applied programs along with concepts of career education.
Special Notes: Stacked with VE 411. Can be applied toward M.S. degree in Vocational Education.

VE 622 Organization and Administration of Vocational Education 3.0 CR

Prerequisite: Graduate standing or faculty permission.
The principles and practices of organizing and administering vocational programs. Topics will include classroom and laboratory organization, budgeting and operating programs on different levels and for different students.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 633 Current Issues in Vocational Education 3.0 CR

Prerequisite: Graduate standing or faculty permission.
The study and analysis of recent trends, research, and issues concerning vocational education. An examination of research in vocational education, with a focus on evaluation, interpretation and sources. Identification of national and state-wide problems, including legislation and special populations.
Special Notes: Can be applied toward M.S. degree in vocational education.

VE 643 Methods of Instruction in Vocational Education 3.0 CR

Prerequisite: Graduate standing or faculty permission.
Introduction to fundamental processes of instruction. Students develop competencies in various methodologies pertinent to vocational education including developing lesson plans, job sheets, and assignment sheets; lecture; simulation; demonstrations; illustrated talks; individualized instruction; laboratory learning; field trips; exhibits; bulletin boards; competency-based education; etc. Students identify, develop and evaluate appropriate teaching methods for a given teaching area. Students will do graduate level research and write papers describing instructional methodologies pertinent to their vocational/technical program area(s).
Special Notes: Stacked with VE 443.

VE 644 Improving Instruction in Vocational Education 3.0 CR

Prerequisite: Graduate standing or faculty permission.
Designed to give practicing teachers advanced instructional techniques. Analysis and evaluation of styles of teaching and learning. Includes conducting group discussions, brainstorming and problem solving techniques, reinforcement, individualizing instruction, competency-based instruction, and self- and peer evaluation.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 655 Curriculum Development in Vocational Education 3.0 CR

Prerequisite: Graduate standing or faculty permission.
Designed to prepare students to access and/or develop vocational curriculum. Students identify curriculum development terminology and become familiar with competency-based vocational education (CBVE). Develop, adapt and/or adopt curriculum that addresses problem solving, social/economic impacts and accountability in their vocational education arena. Emphasizes those areas unique to vocational education: task analysis, vocational advisory committees, vocational student organizations, CBVE, and vocational curriculum consortiums.
Special Notes: Can be applied toward M.S. degree in Vocational Education.

VE 695 Advanced Professional Experiences: Discipline Area 1.0-6.0 CR

Prerequisite: Graduate standing or faculty permission.
Formalized advanced professional experiences in vocational education. Designed to provide academic rigor and a structured environment to the professional development process.
Special Notes: Credit varies and enrollees are required to seek advisement and faculty approval prior to registration.

VE 698 Individual Research 1.0-6.0 CR

Prerequisite: Graduate standing and advisor permission.
A research paper/project jointly approved by the student's graduate committee

and the student. The research paper/project should coincide with the student's professional objectives. When taken in lieu of written comprehensive exam, an oral defense of project will be required.
Special Notes: Required course for M.S. degree in Vocational Education.

VS: VOCATIONAL SKILLS

Offered through Kodiak College, Carol Hagel, Director, 117 Benny Benson Dr., Kodiak, 99615, 486-4161

VS 100 Beginning Woodworking 2.0 CR
Fees.
Basics of sound wood design, stock selection, hand and machine tools, cutting and shaping, fastening, surface preparation, stains and finishes.

VS 125 Woodworking I 3.0 CR
Fees.
Basic course designed to familiarize the student with the safe use of a variety of modern hand and power tools. Completion of the course may result in the construction of items of personal choice.
Offered at Kenai Peninsula College Kachemak Bay Branch only.

VS 126 Woodworking II 3.0 CR
Prerequisite: VS 125.
Fees.
Continuation of VS 125 with emphasis on more advanced projects and greater individual initiative.
Offered at Kenai Peninsula College Kachemak Bay Branch only.

VS 131 Construction for the Owner/Builder I 3.0 CR
Familiarizes students with standard practice construction and alternatives to that practice. Includes the terms/systems involved in construction. Concepts and systems covered are foundations, floors, walls, roof, alternative energy in structures, and alternative structures.

VS 150 Intermediate Woodworking 2.0 CR
Prerequisite: VS 100.
Advanced use of hand and power tools including the wood lathe. Students will build a variety of assigned projects.
Offered at Kodiak College only.

VS 152 Machine Woodworking 3.0 CR
Grading Policy: Pass/No Pass.
Designed to gain skills and knowledge in the use of woodworking machinery. Emphasis is placed on the safe operation of power equipment. Instruction in relating to the technology of woods, cabinet and furniture construction techniques, wood finishing, purchasing materials and maintenance of tools and equipment.
Special Notes: Each student will design and construct a project that is approved by the instructor.
Offered at Matanuska-Susitna College only.

VS 200 Advanced Woodworking 2.0 CR
Prerequisite: VS 100 or experience in the field.
Fees.
Advanced version of VS 100 with emphasis on complex assembly techniques. Covers care and use of machines in building items made from wood.

VS 201 Traditional Kayak Construction 3.0 CR
Prerequisite: VS 100 or equivalent.
Build your own traditional Kodiak or Greenland style kayak. Instruction includes Koniag kayak history and lore. Each class member will build their own sea kayak frame.
Offered at Kodiak College only.

WELD: WELDING TECHNOLOGY

Offered through the College of Career and Vocational Education, Gordon Hartlieb Building (GHB), Room 111, 786-1184

WELD 101 Gas and Arc Welding 4.0 CR
Fees.
Introduces beginning students to welding. First half of course covers oxyacetylene welding, brazing, silver solder, and cast iron welding. Second half covers arc welding. Designed for home and shop welders.

WELD 102 Gas Welding 2.0 CR
Fees.
Covers oxyacetylene welding, brazing, silver solder, and cast iron welding.
Offered at Kenai Peninsula College only.

WELD 103 Arc Welding 4.0 CR
Fees.
Emphasizes welder certification on open root welding of plate. Open to beginner as well as experienced welder. Students certify on .375 inch plate, open root or with backing, to ASME or AWS code standards.
Offered at Kenai Peninsula College only.

WELD 104 Arc Welding: Low-Hydrogen Electrodes 4.0 CR
Prerequisite: WELD 101 or WELD 103 or arc welding experience.
Fees.
Emphasis on welder certification with low-hydrogen electrodes. Students certify on .500 inch plate with backing to AWS code standards.
Offered at Kenai Peninsula College only.

WELD 105 Pipe Welding 4.0 CR
Prerequisite: Current certification of plate, open root, vertically upward, or pre-test given during registration.
Fees.
Covers welding of pipe in all positions, open root, uphill and downhill. Pipe sizes of 4-6 inch schedule 40.
Offered at Kenai Peninsula College only.

WELD 106 Pipe Certification 4.0 CR
Prerequisite: WELD 105 or faculty permission.
Fees.
Involves welding of pipe in all positions, open root, uphill and downhill. Pipe size: 6 inch schedule 80. Students certify on 6 inch schedule 80 uphill procedure to ANSI B31.3 code standard.
Offered at Kenai Peninsula College only.

WELD 108 Wire Welding 4.0 CR
Fees.
Basic welding of mild steel, stainless steel and aluminum with wire processes. Students use all wires on the current market in class.
Offered at Kenai Peninsula College only.

WELD 109 TIG Welding 4.0 CR
Prerequisite: WELD 101 or 102 or faculty permission.
Fees.
Covers welding of aluminum, zinc alloys, copper, magnesium, mild steel and stainless steel.
Offered at Kenai Peninsula College only.

WELD 110 Blueprint Reading for Pipe Welders 3.0 CR
Basic course covering structural, piping, and fabricated components to be welded. Stresses sketching, material lists, welding symbols, and piping isometrics.
Offered at Kenai Peninsula College only.

WELD 111 Gas Welding and Cutting 4.0 CR
Fees.
Introduction to the welding and cutting of mild steels with the oxyacetylene process. Covers welding and cutting safety, types of fuel gases and their combustion characteristics, and manual and automatic equipment.
Special Notes: Includes supervised instruction in both welding and cutting and is recommended for entry level students, or anyone who desires to improve their knowledge and skills in this important process.

WELD 112 Shielded Metal Arc Welding (SMAW) 4.0 CR
Fees.
Introduction to the welding of mild steels with covered electrodes. Includes welding safety, electric welding equipment, electrode identification and selection, basic joint design, and welding practice on low carbon steel with mild steel electrodes.

WELD 114 Welding of High Strength Steels 4.0 CR
Prerequisite: WELD 112 or faculty permission.
Fees.
Study of metals and their weldability, and establishing preheat and interpass temperatures. All position welding using low hydrogen-type electrodes to AWS Structural Welding Code. Investigates welding characteristics of a variety of electrodes: E6010, E7010, E7018, E8018, E7014, E7024, and others.

WELD 115 Basic Shielded Metal Arc Welding 2.0 CR
Fees.
Beginning course designed to teach basics in welding steel, using the shielded metal arc welding (SMAW) process. TV-tape lessons and demonstrations consist of a series of intensive, highly structured skill building exercises in stick welding. Covers four basic joints in all four positions. Also includes brief exposure to cutting techniques with stick, shear, arc/air and oxyacetylene torch.
Offered at Kodiak College only.

WELD 116 Intermediate Shielded Metal Arc Welding 2.0 CR
Prerequisite: WELD 115 or equivalent and faculty permission.
Fees.
Reviews basic joints in all positions and emphasizes those skills needed to pass practical examination for structural welding in all positions. Covers typical fabrication

techniques, electrode selection, fit-up, joint design, hard-facing of steel, cast-iron welding, and cutting techniques.
Offered at Kodiak College only.

WELD 121 Pipe Welding Vertical-Down Techniques 4.0 CR
Prerequisite: WELD 112 or faculty permission.
Fees.
Vertical-down welding techniques on carbon steel pipe with high-cellulose electrodes. Includes electrode selection, pipe classifications, fabricated pipe fittings, and interpretation of the API 1104 code.

WELD 122 Advanced Pipe Welding 4.0 CR
Prerequisite: WELD 121 or faculty permission.
Fees.
Continuation of vertical down welding to ASME standards. Choice of vertical up welding with low hydrogen electrodes or the fast-freeze type.

WELD 157 Technical Blueprints for Welders 3.0 CR
Designed for those in welding and welding related fields who desire a practical working knowledge of blueprint reading. Oriented to help technical students, apprentices, and journeymen become proficient in reading and interpreting blueprints and welding symbols.

WELD 161 Gas Metal Arc Welding (GMAW) 4.0 CR
Fees.
Introduction to welding of mild steels with semi-automatic GMAW process, using carbon dioxide shielding gas and continuously fed wire. Covers arc characteristics, metal transfer modes, electrical characteristics of power supplies, wire feeders, filler metal selection, equipment maintenance, welding defects (their causes and corrections), welding variables, and welding practices to ASME code.

WELD 162 Flux Cored Welding (FCAW) 4.0 CR
Prerequisite: WELD 112 or WELD 161.
Fees.
Theory and practice of cored wire welding using self-shielded flux core process. Covers physics of arc, metal transfer, electrical characteristics of power supplies, wire feeders, and filler metal selection. Welding performance to American Welding Society Structural Welding Code.

WELD 172 Physics for Welding 4.0 CR
Introduction to basic concepts of science as applied to welding and nondestructive testing. Mechanics, electricity, magnetism, atomic structure, and thermodynamics as used by technicians.

WELD 174 Basic TIG Welding 4.0 CR
Prerequisite: WELD 111 or faculty permission.
Fees.
Introduction to basic tungsten-inert gas welding (TIG). Topics include TIG power supplies, torches, inert gases, filler metal selection, and electrical characteristics of the arc. Students weld both aluminum and stainless steels in laboratory.

WELD 175 Welding Processes and Equipment 4.0 CR
Survey of current welding processes used by welding industry in fabrication and repair. Study of selected electric welding equipment with emphasis on maintenance, installation, and troubleshooting.

WELD 207 Industrial Welding Qualification 2.0 CR
Prerequisite: Pre-qualification test.
Grading Policy: Pass/No Pass.
Fees.
Inform, upgrade and qualify current welders in the field. New processes and testing methods will be demonstrated and then used by the student.
Offered at Kenai Peninsula College only.

WELD 261 Ultrasonic Testing 4.0 CR
Prerequisite: MATH 105 recommended.
Fees.
Theory and application of ultrasonic inspection as applied to welding inspection, corrosion detection, and material thickness evaluation. Training in accordance with ASNT TC-1A, Level 1, requirements.

WELD 262 General Nondestructive Testing 3.0 CR
Fees.
Principles and application of dye penetrant, magnetic particle, eddy current and chemical testing. Nondestructive testing methods studied provide technician with knowledge and skills to perform tests, conduct inspection, and evaluate results. Testing methods studied are used by welding industry to detect weld defects, locate corrosion, sort materials, identify structural change, and many other uses.

WELD 263 X-ray and Radioisotope Radiography 4.0 CR
Prerequisite: WELD 112 or faculty permission; WELD 172 recommended.
Fees.
In-depth study of theory and application of industrial radiography with emphasis on structural X-ray techniques. General subject matter includes radiation safety, use of survey instruments, exposure techniques, development of radiographic procedures, interpretation of radiographs, equipment design, federal regulations, and other areas of interest.

WELD 273 Gas Metal Arc Welding (Aluminum) 3.0 CR
Prerequisite: WELD 161 or faculty permission.
Fees.
Introduction to the welding of aluminum and its alloys using the semi-automatic gas metal arc welding process (GMAW). Classification of aluminum alloys with emphasis on correct selection of filler metals. An in-depth study of the physical components of the GMAW process.

WELD 281 Welding Inspection and Code Review 4.0 CR
Prerequisite: Knowledge of welding and inspection methods and techniques.
Designed for fourth semester welding technology students, and also for welders and inspectors preparing for AWS CW1 test. Review of numerous welding and inspection techniques employed in construction and fabrication industries in Alaska. Survey of welding codes applying to welding pipelines, pressure vessels, bridges, and buildings.

WELD 287 Welding Metallurgy Applications 5.0 CR
Prerequisite: Advanced standing or faculty permission.
Fees.
Provides basic metallurgy theory and hands-on experience of preparing samples for examination, conducting metallurgical tests, and evaluating test results.

WELD 288 Automatic Welding Systems 4.0 CR
Prerequisite: Advanced standing or faculty permission.
Fees.
Principles of automatic welding systems, using any one or a combination of the following processes: gas metal arc, gas tungsten arc, submerged arc, flux cored arc, plasma arc, and electroslag. Welding jigs and fixtures used with linear or rotary holding equipment and manipulators. Development of automatic systems with emphasis on procedure development and certification to national codes or standards.

WELD 299 Problems in Material Technology 3.0 CR
Prerequisite: Advanced standing and faculty permission.
Advanced work in small groups on specific welding problems involving research, procedure development, and application. Independent work combined with staff conducted seminars. Student responsible for actual welding and testing of welding procedures during certification.

WELD 310 Applied Evaluation of Components and Materials 3.0 CR
Prerequisite: MATH 107 and acceptance into the B.S. in Technology or faculty permission.
Non-calculus based study of force analysis of structures by externally applied loads using formulas and mathematical relationships derived using only algebra and trigonometry. Material is based on commonly understood physical concepts and principles.

WELD 410 Advanced Nondestructive Testing 3.0 CR
Prerequisite: WELD 261, 262 and MATH 105 or comparable experience as approved by faculty member.
Fees.
Advanced principles of nondestructive testing as related to acoustic emission ultrasonic and eddy current/flux leakage testing. Manual and automatic testing procedures and equipment as related to different materials and testing situations.

WS: WOMEN'S STUDIES

Offered through the College of Arts and Sciences, CAS Building, Room 378, 786-1551

WS 200 Introduction to Women's Studies 3.0 CR
An interdisciplinary, team-taught course which aims to increase awareness of the experience of women in contemporary society. Issues analyzed include women's work (paid and unpaid), biological definitions of woman, stereotypes of femininity, women and political power, and media images of women.

WS 401 Seminar in Women's Studies 1.0-3.0 CR
Prerequisite: WS 200 or faculty permission.
Fees.
Discusses issues related to women's studies. Content varies every semester.
Special Notes: May be repeated once for credit with change of subtitle.

WS 460 Women's Writing Workshop 3.0 CR
Prerequisite: ENGL 211.
Fees.
Participants explore their identities as women writers through both the study of appropriate contemporary role models and the practice of writing. Each participant contracts with the teacher towards a project goal of turning out professional quality poetry or prose.

WWT: WASTEWATER TREATMENT

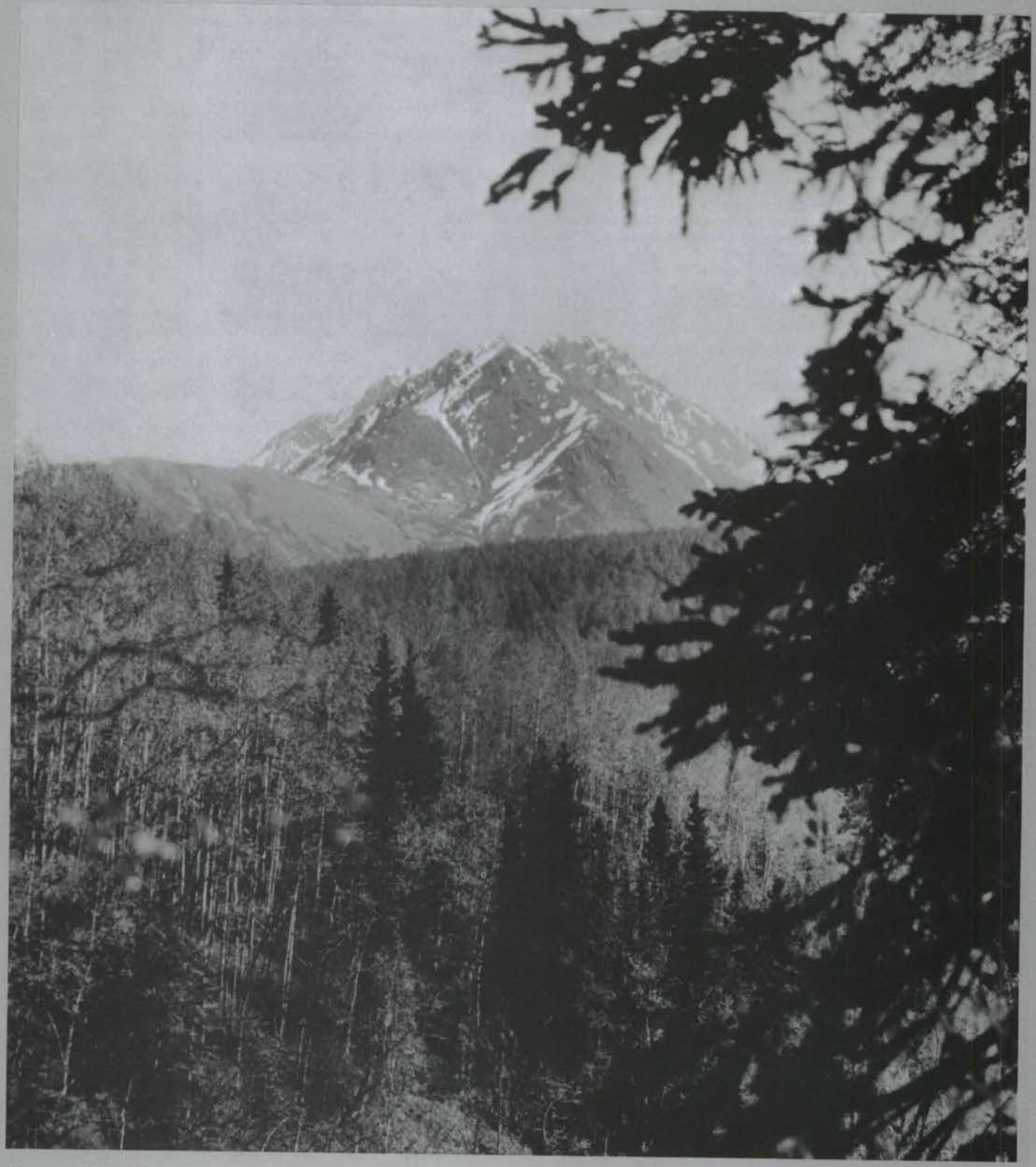
Offered through the College of Career and Vocational Education, Gordon Hartlieb Building (GHB), Room 111, 786-1184

WWT 105 **Introduction to Water and Wastewater Treatment** **3.0 CR**

Basics of water and wastewater industry. Reviews cycle of water use, methods of treating water, and technological occupations associated with water and wastewater systems. Designed for students planning to enter job market and for those with general interest.

WWT 110 **Hydraulics/Pneumatics/Pumps** **3.0 CR**

Designed to give the student a basic understanding of the theory of hydraulics and how it is applied to pneumatic and pumping systems. Instruction in different types of pumps.



CHAPTER 12

DIRECTORY

Board of Regents
Principal Administrative Officers
Faculty and Administration

BOARD OF REGENTS

The Regents of the University of Alaska are appointed by the Governor and are approved by the Legislature.

	Term Expires
Virginia W. Breeze, Vice President, Anchorage	1997
Mary Jane Fate, Fairbanks	2001
Eric Forrer, Juneau	1997
Sharon D. Gagnon, President, Anchorage	1999
Mark H. Helmericks, Treasurer, Prudhoe Bay	1995
Joseph R. Henri, Anchorage	1999
Michael P. Kelly, Fairbanks	1999
R. Danforth Ogg, Kodiak	2001
Scott A. Otterbacher, Student Regent, Palmer	1995
Susan A. Stitham, Secretary, Fairbanks	1995
Lew M. Williams, Jr. Ketchikan	1999

Dr. Jerome B. Komisar, University of Alaska President

PRINCIPAL ADMINISTRATIVE OFFICERS

Dr. Donald F. Behrend, Chancellor
Dr. Beverly Beeton, Provost and Vice Chancellor for Academic Affairs
Janet Hillyer, Interim Vice Chancellor for Administrative Services
Dr. Larry Kingry, Vice Chancellor for Student Services

FACULTY AND ADMINISTRATION

ALEXANDER, PAUL
Instructor, Electronics, College of Career and Vocational Education. University of Alaska Anchorage, A.A.S. (1992).

ALLEN, VARA D.
Director of Minority Student Services; Assistant Professor, Counseling, Student Services. Savannah State College, B.A. (1983); Georgia Southern University, M. Ed. (1988).

ANDES, NANCY
Associate Professor, Sociology, College of Arts and Sciences. Kent State University, B.A. (1976); Cornell University, M.A. (1983), Ph.D. (1984).

ANDRESS, LORETTA M.
Health Sciences Librarian; Instructor, Library Science, College of Arts and Sciences. Alaska Methodist University, B.A. (1970); University of Hawaii, M.L.S. (1978).

ANGELL, JOHN E.
Professor, Justice; Director, Justice Center, School of Public Affairs. Michigan State University, B.S. (1965), M.S. (1967), Ph.D. (1975.

APPEL, FRANK
C.P.A., Associate Vice Chancellor for Business Services. Central Washington State College, B.A. (1964); Seattle University, M.B.A. (1978).

ARAJI, SHARON K.
Professor, Sociology, College of Arts and Sciences. University of Idaho, B.S.Ed. (1969), M.Ed. (1971); Washington State University, M.A. (1974), Ph.D (1978).

ARD, SARADELL A.
Professor Emeritus, Art, College of Arts and Sciences. Asbury College, B.A. (1942); University of Michigan, M.A. (1943); columbia University, B.Ed. (1970).

ATCHISON, BRADLEY T.
Assistant Professor, Speech, College of Arts and Sciences. Kansas State University, B.S. (1988), M.A. (1990).

AUFRECHT, STEVEN E.
Associate Professor, Public Administration, School of Public Affairs. University of California at Los Angeles, A.B. (1967); University of Southern California, M.P.A. (1973), Ph.D (1978).

AVERY, JAMES
Professor, Journalism and Public Communications, College of Arts and Sciences. Brigham Young University, B.A. (1971); University of Utah, M.B.A. (1972).

BACHAND, BOB
Director, University Police Department, Administrative Services.

BAILEY, RAYMOND
Professor, Biology, College of Arts and Sciences (Bio-Medical Program). University of California at Riverside, B.A. (1966); California State College at Long Beach, M.A. (1969); John Hopkins University School of Medicine, Ph.D. (1973).

BANE, GILBERT
Professor, Biology, Fisheries, Kodiak College. California State University, B.S. (1954); Cornell University, M.S. (1961), Ph.D. (1963).

BARKER, MARILYN
Associate Professor, Biological Sciences, College of Arts and Sciences. Miami University, A.B. (1964); Washington State University, Ph.D. (1970).

BARNES, ALLAN R.
Director, Alaska Statistical Analysis Unit; Associate Professor, Justice, School of Public Affairs. University of Missouri-St. Louis, B.A. (1969); University of Missouri-Columbia, M.A. (1975); Florida State University, Ph.D. (1983).

BARRETT, HELEN
Visiting Assistant Professor, Education, School of Education. The Fielding Institute, M.A. (1988), Ph.D. (1990).

BARRY, DOUGLAS
Deputy Director, Alaska Center for International Business. San Francisco State University, B.A. (1975); New York University, M.A. (1985); Columbia University, Ed.D. (1989).

BARTIMUS, TAD
Professor, Atwood Chair of Journalism. Special Correspondent, Associated Press.

BAUER, LIN W.
Associate Professor, Architectural and Engineering Technology, College of Career and Vocational Education. Fullerton Community College, A.A.S. (1967); California State Polytechnic University, Bachelor of Architecture (1972).

BEBEY, FRANK
Associate Professor, Theatre and Dance, College of Arts and Sciences. King's College, B.A. (1964); Pennsylvania State University, M.A. (1966).

BEEBEE, JOHN
Assistant Professor, Mathematical Sciences, College of Arts and Sciences, Pomona College, B.A. (1963); University of California, Riverside, M.A., California Secondary Teaching Credential (1966); University of Washington, Seattle, Ph.D. (1971).

BEIRNARD, CHARLES
Associate Professor, English, College of Arts and Sciences. University of Wisconsin, B.S. (1965), M.S. (1966); Ohio State University, Ph.D. (1979).

BELDEN, GEORGE R.
Associate Professor, Music, College of Arts and Sciences. Bethany College, B.M. (1961); University of Northern Colorado, M.A. (1972); University of North Texas, D.M.A. (1976).

BENIBO, BILAYE
Visiting Assistant Professor, Sociology, College of Arts and Sciences. University of Lagos, Nigeria, B.S. (1978), M.S. (1980); Washington University, Ph.D. (1990).

BENNETT, CLARENCE W.
Visiting Professor, Education, School of Education. American International University, B.A. (1953); University of Massachussettes, M.S. (1956); Bowdoin College (1963); Boston University, Ed.D. (1978).

BERG SMITH, LINDA
Associate Vice Chancellor for Student Services. University of Washington, B.A. (1971).

BERMAN, MATTHEW D.
Associate Professor, School of Public Affairs; Associate Professor, Institute of Social and Economic Research. Harvard University, B.A. (1972); Yale University, M.A. (1974), Ph.D. (1977).

BERRY, TED L.
Professor, Agriculture, College of Career and Vocational Education, Matanuska-Susitna College. Michigan State University, B.S. (1967), M.A.(1978).

BERSCH, GRETCHEN T.
Professor, Education, School of Education/College of Community and Continuing Education. University of Alaska Fairbanks, B.S. (1967); University of Alaska Anchorage, M.Ed. (1973); Florida State University, Ph.D. (1990).

BEVANS, RICHARD
Assistant Professor, Business Administration, Kodiak College. Pacific Lutheran University, B.A. (1980); Indiana University, M.S. (1982).

BILLAUD, JEAN-PAUL
Professor Emeritus, Music, College of Arts and Sciences. Ecole Normale de Musique de Paris, Diplome Superieur do Virtuosite, (1955), License de Concert (1956), International Competitions Laureate: "Viotti" (Italy) (1956), Paris (1957).

BISH, NANCY
Assistant Professor, Dental Programs (Coordinator), College of Career and Vocational Education. Dental Assisting Certificate (1971); C.D.A. (1973); University of Alaska, A.A.S. (1975), B.S. (1984); COA, CDPMA (1989); Infection Control Certification (1991).

BLACHMAN, WILLIAM
Dean, School of Business; Professor, Economics. University of Wisconsin, B.S. (1955), M.S. (1959), Ph.D. (1963).

BOHNER, DONNA
C.P.S., Certified P.L.S., CLA, Associate Professor, Office Management and Technology, Computer Information and Office Systems, School of Business. University of Denver, A.A.S. (1963); University of Alaska, B.A. (1975); Alaska Pacific University, M.A. (1989).

BOLDON, BRIAN
Assistant Professor, Art, College of Arts and Sciences. University of Wisconsin-Madison, B.S. (1982); Rhode Island School of Design, M.F.A. (1988).

BOOKER, JOHN M.
Professor, Health Sciences, School of Nursing and Health Sciences. University of Southern Alabama, B.A. (1970); Florida State University, M.S. (1975), Ph.D. (1979).

BORAAS, ALAN
Associate Professor, Anthropology, College of Arts and Sciences, Kenai Peninsula College. University of Minnesota, B.A. (1969); University of Toronto, M.A. (1971); Oregon State University, Ph.D. (1983).

BOZE, BETSY VOGEL
Associate Professor, Business Administration, School of Business. Southern Methodist University, B.S. (1974); M.B.A. (1975); University of Arkansas, Ph.D. (1984).

BOZE, KEN M.
Associate Professor, Accounting, School of Business. University of Florida, B.S. (1974); University of Florida, M.B.A. (1975); University of Arkansas, Ph.D. (1984); C.P.A. (1977).

BRANDON, DON
Coordinator, ADA, Affirmative Action Office.

BRADLEY, CATHERINE (KAY)
Professor, Office Management and Technology, Computer Information and Office Systems, School of Business. University of Wyoming, B.S. (1971); Alaska Pacific University, M.A.T. (1985).

BRAZIER, LYNDA
Associate Professor, Business Computer Information Systems, Computer Information and Office Systems, School of Business, Kenai Peninsula College. University of Texas, Permian Basin, B.S. (1976).

BREMS, CHRISTIANE
Associate Professor, Psychology, College of Arts and Sciences. Oklahoma State University, B.A. (1982), M.S. (1984), Ph.D. (1987).

BROADY, SYLVIA C.
Professor, Journalism and Public Communications (Chair), College of Arts and Sciences. Michigan State University, B.A. (1948); Wayne State University, M.E. (1956); Michigan State University, Ph.D. (1962).

BROCKMAN, SUSAN
Professor, Mathematics, Music, Kodiak College. Colorado State University, B.S. (1964); University of Alaska, M.S. (1968); Pacific Lutheran University, M.A. (1976).

BROSAMER, JAMES J.
Associate Professor, English, College of Arts and Sciences. Seattle University, B.A. (1963); University of California at Berkeley, M.A. (1966); University of Oregon, D.A. (1970), Ph.D. (1976).

BRUCE, LAUREN K.
Assistant Professor, Speech (Chair), College of Arts and Sciences. Southern Illinois University, B.A. (1970), M.A. (1973).

BRUCE, RICHARD L.
Professor, Psychology, College of Arts and Sciences. Whitman College, B.A. (1960); Claremont Graduate School, M.A. (1963), Ph.D. (1967).

BUCKLEY, MARILYN HANF
Associate Professor, Education, School of Education. San Jose State University, B.A. (1957); University of California at Berkeley, M.A. (1968), Ph.D. (1971).

BUESSELER, MICHAEL
Assistant Professor, Electronics, College of Career and Vocational Education. Anchorage Community College, A.A.S. (1977); Certified Electronics Technician (1984).

BUKOWSKI, ARTHUR E.
Professor, Mathematical Sciences, College of Arts and Sciences. Ohio University, B.S. (1966), M.S. (1968); University of New Mexico, Ph.D. (1972).

BURGESS, DONNA
Visiting Assistant Professor, Education, School of Education. University of Utah, B.S. (1976); Washington State University, M.A. (1980); University of Washington, Ph.D. (1987).

CAREY, OMER L.
Professor Emeritus, Business Administration, School of Business. Wesleyan University, B.A. (1954); Indiana University, M.B.A. (1960), D.B.A. (1962); Harold T. Caven Professor in Business and Finance.

CARMON, BERNICE W.
Associate Professor, Nursing, School of Nursing and Health Sciences. Bennett College, B.S. (1971); University of North Carolina-Chapel Hill, M.P.H. (1972); Case Western Reserve University, Frances P. Bolton School of Nursing, B.S.N. (1977).

CARR, GREGORY
Visiting Instructor, Business Administration, School of Business. Long Island University, B.S. (1971); Wharton School of the University of Pennsylvania, MBA (1983).

CARTER-CHAPMAN, RENEE
Acting Associate Vice Chancellor, College of Community and Continuing Education. University of Alaska, B.A. (1975); University of Michigan, M.A. (1977).

CASTEEL, J. KEENAN
Assistant Professor, Nursing, School of Nursing and Health Sciences. Villanova University, B.S.N. (1975); Boston University, M.S. (1972); University of Pittsburgh, Ph.D. (1986).

CHANG, PING-TUNG
Professor, Mathematics, College of Arts and Sciences, Matanuska-Susitna College. National Taiwan Normal University, Taipei, Taiwan B.E. (1960); Indiana State University, M.S. (1966); Georgia State University, Ph.D. (1977).

CHANG, TOHSOOK P.
Associate Professor, Library Science, College of Arts and Sciences. Ewha Woman's University, Seoul, B.A. (1959); State University of New York in Albany, M.L.S. (1963).

CHITTENDEN, JON C.
Assistant Professor, Welding, College of Career and Vocational Education. Anchorage Community College, A.A.S. (1976).

CHOUDHURY, ASKAR H.
Assistant Professor, Business Administration, School of Business. Jahangirnagar University, B.S. (1976); M.S. (1978); Simon Fraser University, Canada, M.S. (1985); Arizona State University, Ph.D. (1990).

CHRISTENSEN, DONALD R.
Visiting instructor, Aviation Maintenance Technology, College of Career and Vocational Education. Southern Illinois University, A.A.S. (1989), B.S. (1989).

CHRISTIAN, BARBARA
Assistant Professor, English, Communication, Kenai Peninsula College. St. Cloud State College, B.S. (1970), M.A. (1984).

CLARK, DAYNE
Associate Professor, Business Administration, School of Business, Kenai Peninsula College. The College of Idaho, B.A. (1969); Boise State University, M.B.A. (1973).

CLARK, WILLIAM L.
Associate Professor, Mathematical Sciences, College of Arts and Sciences. University of Washington, B.S. (1961), M.S. (1966).

CLAUSEN, MARY ETHEL
Librarian, Associate Professor, Kenai Peninsula College. Baldwin-Wallace College, B.A. (1945); Roosevelt University, M.A. (1969); University of Washington, M.L.S. (1974).

CLAYDON, VINCENT
Instructor, Electronics, College of Career and Vocational Education.

CLEARY, BRIAN
Assistant Professor, Business Computer Information Systems, Kodiak College. Cal Poly, San Luis Obispo, B.A. (1979), M.A. (1981); University of Oregon, Eugene, M.S. (1986).

CONGDON, ROBERT E.
Professor, Justice, School of Public Affairs. Seattle Pacific College, B.A. (1972); Washington State University, M.A. (1973); Willamette University College of Law, J.D. (1982).

CONNORS, JOSEPH F.
Professor, Speech, College of Arts and Sciences. Montana State University, B.A. (1965); University of Montana, M.A. (1970).

COOSE, CAROL
Associate Professor, Nursing, School of Nursing and Health Sciences. University of Oklahoma, B.S.N. (1970), M.S. (1978).

COURTNEY, LELAND
Assistant Professor, Management Information Systems, Computer Information and Office Systems, School of Business. Southwest Missouri State University, B.S. (1989).

CRAWFORD, RONALD M.
Professor, History/Geography (Chair), College of Arts and Sciences. University of California at Los Angeles, B.A. (1971), M.A. (1972).

CROFT, TONI W.
Assistant Professor, Adult Education, College of Community and Continuing Education. Stanford University, B.A. (1963).

CROSMAN, GENIE BABB
Assistant Professor, English, College of Arts and Sciences. Baylor University, B.F.A. (1977); Brown University, M.A. (1989), Ph.D. (1992).

CROSMAN, ROBERT
Associate Professor, English, College of Arts and Sciences. University of California at Berkeley, B.A. (1963); Columbia University, M.A. (1965), Ph.D. (1971).

CROSSEN, KRISTINE
Associate Professor, Geology (Chair), College of Arts and Sciences. University of Southern Main, B.A. (1979); University of Maine, M.S. (1985).

CROSSLAND, R. BERT
Visiting Assistant Professor, Education, School of Education. Baylor University, B.S. (1980), M.Ed. (1986); University of North Texas, Ph.D. (1994).

CUNNINGHAM, PATRICK M.
Assistant Professor, Social Work, College of Arts and Sciences. University of Utah, B.S. (1960); Fordham University, M.S.W. (1964), University of Utah, D.S.W. (1989).

DAU, DAVE L.
Professor, Psychology, College of Arts and Sciences. Eastern Washington State University, B.A. (1971), M.S. (1973).

DAVIES, GARRY
Visiting Instructor, Biology, College of Arts and Sciences. Stephen F. Austin University, B.F. (1967), M.S.F. (1973); Texas A&M University, Ph.D. (1981).

DAVIES, M. HILARY
Associate Professor, Mathematical Sciences, College of Arts and Sciences. University College of Wales, B.Sc. (1963), Ph.D. (1966).

DAVIS, DEBBY C.
Professor, Counseling, Student Services. The College of Idaho, B.S. (1973); The College of Idaho, M.Ed. (1977).

DAVIS, DON
Assistant Professor, Surveying and Mapping, College of Career and Vocational Education. Ferris State University, A.S. (1981), B.S. (1981); Purdue University, M.S. (1983).

DECKER, CYNTHIA
Visiting Instructor, Nursing, School of Nursing and Health Science. College of St. Teresa, B.S. (1982).

DELAPP, TINA
Professor, Nursing. Associate Dean, School of Nursing and Health Sciences. Arizona State University, B.S.N. (1969); University of Colorado, M.S. (1972); University of Southern California, Ed.D. (1986).

DENNISON, ELIZABETH
Assistant Professor, History, College of Arts and Sciences. University of Colorado, B.A. (1982), M.A. (1986).

DEVENNEY, JEAN
Assistant Professor, Counseling, Kenai Peninsula College. Southern Oregon State College, B.S. (1973); Portland State University, M.S. (1989).

DILLON, TIMOTHY J.
Director of Athletics. Slippery Rock State College, B.S. (1980); Eastern Kentucky University, M.S. (1981).

DIMINO, MICHAEL
Director, Biomedical Program (WAMI) Associate Dean, Professor of Biology and Health Sciences, School of Nursing and Health Sciences. Villanova University, B.S. (1964); Rutgers University, Ph.D. (1971).

DOEBLER, TIMOTHY W.
Director, Food Service/Dietetics and Nutrition Program, College of Career and Vocational Education. Culinary Institute of America, A.A. (1986); American Culinary Federation, Certified Cook (1987); Certified Working Chef (1990); University of the State of New York, B.S. (1992).

DOUTHAT, DARYL A.
Professor, Chemistry, College of Arts and Sciences. Pennsylvania State University, B.S. (1965); University of Chicago, M.S. (1972), Ph.D. (1974).

DOYLE, MARIE E.
Professor Emeritus, Psychology, College of Arts and Sciences. University of Utah, B.A. (1950), Ph.D. (1961).

DURAND, JAMES
Visiting Instructor, Philosophy, College of Arts and Sciences. University of Notre Dame, B.S. (1969), M.A. (1973).

DYBDAHL, CLAUDIA S.
Associate Professor, Education, School of Education. University of Connecticut, B.A. (1966); College of New Rochelle, M.S. (1978); University of Arizona, Ph.D. (1982).

EASLEY, ALICE
Assistant Professor, Mathematical Sciences, College of Arts and Sciences. University of Virginia, M.Ed. (1969).

EDGECOMBE, DAVID P.
Associate Professor, Theatre, College of Arts and Sciences. California Western University, (USIU), B.A. (1973); San Diego State University, M.A. (1975); Kent State University, Ph.D. (1986).

EDWARDS, DENNIS
Director, Summer Sessions; Associate Professor. Gannon University, B.A. (1963); Rhode Island College, Ed.M. (1967); University of Illinois, Ed.D. (1971).

EGENOLF, JOHN
Associate Professor, Mathematical Sciences, College of Arts and Sciences. University of Santa Clara, M.B.A. (1966); University of California, Riverside, Ph.D. (1988).

ELLIS, CARL
Associate Dean, Military Education and Extension Programs, College of Community and Continuing Education. Tacoma Community College, A.A. (1970); University of Puget Sound, B.A. (1972); Pacific Lutheran University, M.A. (1974); Nova University, Ed.D. (1984).

ENDER, RICHARD L.
Professor, Management Information Systems, Computer Information and Office Systems (Chair), School of Business. Kearney State, B.A. (1967); Syracuse University, Ph.D. (1977).

ENGEL, MARGRITT A.
Associate Professor, Foreign Languages, College of Arts and Sciences. McKendree College, B.A. (1959); Southern Illinois University, M.A. (1960); University of Texas, Austin, Ph.D. (1975).

ERICKSON, CHRISTINE
Assistant Professor, Art (Interior Design), College of Arts and Sciences. Southern Illinois University, B.A. (1977); Bank Street/Parsons School of Design, M.S. (1989).

ESCHENBACH, TED G.
Professor, Engineering Management, School of Engineering. Purdue University, B.S. (1971); Stanford University, M.S. (1973), Ph.D. (1975).

ESSAYYAD, MUSA
Professor, Business Administration/Finance, School of Business; William H. Seward Professor of International Finance. Beirut Arab University, B. Comm. (1973); Southeastern Oklahoma University, M.Admin. Studies (1975); University of Alabama, M.A. (1984), Ph.D. (1985).

FALLON, ELIZABETH J.
Professor, English, Speech, Matanuska-Susitna College. State University of New York, B.A. (1961); University of Alaska, M.A. (1966).

FELDMAN, KERRY D.
Professor, Anthropology, College of Arts and Sciences. St. Thomas College, B.A. (1962); University of Colorado, M.A. (1970), Ph.D (1973).

FENAUGHTY, ANDREA
Post-doctoral Fellow, School of Nursing and Health Sciences, Center for Alcohol and Addiction Studies.

FERNANDEZ, RUDOLPH F.
Associate Professor, Accounting, School of Business. University of Southern Colorado, B.S. (1974); C.P.A. (1977); University of Colorado, M.B.A. (1987).

FISHBURN, TOL
Assistant Professor, Auto-Diesel Technology, College of Career and Vocational Education. University of Utah, B.S. (1984).

FISHER, DENNIS
Director of Center for Alcohol and Addiction Studies, Associate Professor, Health Sciences, School of Nursing and Health Sciences. University of California at Riverside, B.A. (1971); University of Alaska Anchorage, M.S. (1973); University of Illinois, Ph.D. (1984).

FLANDERS-CROSBY, JILL
Assistant Professor, Dance, Coordinator, Dance Program, College of Arts and Sciences. Western Kentucky University, B.A. (1974); New York University, M.A. (1981).

FLOURNOY, RUTH
Professor, Mathematical Sciences (Chair), College of Arts and Sciences. Queens College, B.S. (1949); Kean College, M.A. (1973).

FORBES, DAVID W.
Associate Professor, English, Humanities, College of Arts and Sciences, Kenai Peninsula College. Alaska Methodist University, B.A. (1969); University of Alaska Anchorage, M.Ed. (1978).

FORSTER, SUZANNE
Visiting Assistant Professor, English, College of Arts and Sciences. Wayne State University, B.A. (1972); University of Alaska Anchorage, M.F.A. (1989).

FORT, CHARLES
Visiting Assistant Professor, Accounting, School of Business. University of Illinois, B.A. (1976); University of Colorado, M.S. (1988), Ph.D. (1993).

FRADLEY, PATRICIA
Visiting Instructor, Nursing, School of Nursing and Health Sciences. George Mason University, B.S.N. (1982); M.S.N. (1986).

FRASURE, CARL C.
Professor, History, College of Arts and Sciences. Eastern Washington State College, B.A. (1968), M.A. (1974); Gonzaga University School of Law, J.D. (1987).

FREEBURG, GARY L.
Associate Professor, Art, Kenai Peninsula College. Mankato State University, B.F.A. (1974), M.A.; University of Iowa, M.F.A. (1978).

FROELICH, GREGORY
Visiting Assistant Professor, Philosophy, College of Arts and Sciences. Thomas Aquinas college, B.A. (1983); University of Notre Dame, Ph.D. (1988).

FUNK, DALE
Visiting Assistant Professor, Biological Sciences, College of Arts and Sciences. University of Denver, B.A. (1979); University of Colorado, M.A. (1983), Ph.D. (1987).

GAGNON, CLAUDE
Visiting Assistant Professor, Mathematical Sciences, College of Arts and Sciences. Kansas State University, B.S. (1958); Trinity College, M.S. (1965).

GEHLER, JAN L.
Assistant Professor, Home Economics, College of Career and Vocational Education. Ohio State University, B.S. (1968); California State University Long Beach, M.A. (1974).

GEISTAUTS, GEORGE A.
Professor, Business Administration (MBA Director), School of Business. Rensselaer Polytechnic, B.E.E. (1963), M.S. (1966), Ph.D. (1970).

GIER, THOMAS R.
Professor, English, College of Arts and Sciences. University of Missouri, B.A. (1968); Webster College, M.A. (1974); University of Missouri, Ed.S. (1975); University of Alaska, Administrative Certificate (1981); The Kellogg Institute, Appalachian State University, Developmental Education Specialist (1988); Pacific Western University, Ph.D. (1989).

GIFFORD, TED L.
Associate Professor, Mathematical Sciences, College of Arts and Sciences. University of California at Santa Barbara, B.A. (1971); University of California at Berkeley, M.S. (1972); Georgia Institute of Technology, M.S.O.R. (1981).

GOLDSMITH, O. SCOTT
Professor, Economics, School of Public Affairs; Professor, Institute of Social and Economic Research. Princeton University, B.A. (1967); University of Wisconsin, M.S. (1972), Ph.D. (1976).

GONSKI, JAMES T.
C.P.A., Assistant Professor, Accounting, Business Administration, School of Business, Matanuska-Susitna College. University of Colorado, Boulder, B.S. (1977).

GONZALES, MARIANO
Associate Professor, Art, College of Arts and Sciences. University of Alaska Anchorage, B.A. (1975); Rhode Island School of Design, M.F.A. (1979).

GORDON, WILLIAM L.
Associate Professor, Mathematical Sciences, College of Arts and Sciences. University of Hawaii, B.A. (1964), M.B.A. (1972).

GORSUCH, EDWARD LEE
Dean, School of Public Affairs; Associate Professor, Director, Institute of Social and Economic Research. University of Missouri, B.A. (1964), M.S. (1969).

GRABER, ELIZABETH
Assistant Professor, English, Communication, Kenai Peninsula College. Oregon State, B.A. (1972), in Secondary English Education; Oregon College of Education, Fifth Year Teach Program, (1981); Alaska Pacific University, M.A.T. (1989), in Adult and Community Education.

GRAY, KEN
Professor, Art, College of Arts and Sciences. Brighton Polytechnic, B.A. (1973); Royal College of Art, London, M.A. (R.C.A.) (1976); Memphis State University, M.A. (1981).

GREEN, G. HAYDEN
Acting Dean, School of Business; Professor, Business Administration. Northern Arizona University, B.A. (1963); Pepperdine University, M.B.A. (1969); University of Arkansas, Ph.D. (1974).

GUETSCHOW, PAULA
Associate Professor, English, College of Arts and Sciences. University of British Columbia, B.A. (1967); University of Oregon, M.A. (1968).

HAGEL, CAROL
Director, Kodiak College. Northern State University, B.S. (1959); Alaska Pacific University, M.A.T. (1980).

HAIG, JOAN
Associate Professor of Mathematical Sciences, College of Arts and Sciences. State University of New York, B.S. (1968); Kansas State University, M.S. (1970).

HAINES, LEWIS E.
Professor Emeritus, Education, School of Education. Middlebury College, B.A. (1943); Columbia Teachers College, M.A. (1950); Washington State University, Ph.D. (1960).

HALEY, MICHAEL C.
Professor, English, College of Arts and Sciences. University of Alabama, B.A. (1969), M.A. (1969); Florida State University, Ph.D. (1975).

HAMMER, DOUGLAS
Interim Associate Vice Chancellor for Research and Graduate Studies; Professor, Vocational Teacher Education (Coordinator), College of Career and Vocational Education. Utah State University, B.S. (1968); M.Ed. (1974); University of Idaho, Ed.D. (1984).

HANEY, RONALD W.
Professor, Aviation Programs, College of Career and Vocational Education. Auburn University, B.A.A. (1968); University of Tennessee, M.S. (1988).

HANSON, CHRISTINE
Associate Professor, Anthropology, College of Arts and Sciences. University of California at Berkeley, B.A. (1969); Case Western Reserve University, M.A. (1973); Arizona State University, Ph.D. (1986).

HARRISON, VIOLA
Assistant Professor, English, Matanuska-Susitna College. Lewis and Clark College, B.A. (1959); University of Alaska Anchorage, M.A.T. (1975); Fielding Institute, Ph.D. (1991).

HARVILLE, BARBARA
Assistant Professor, Speech Communications, College of Arts and Sciences. California State University, B.A. (1987), M.A. (1989); University of Oklahoma, Ph.D. (1993).

HATCH, MARTHA
Assistant Professor, Biological Sciences, College of Arts and Sciences. Western Washington University, B.A. (1973); University of Alaska Fairbanks, B.S. (1978), M.S. (1983).

HATFIELD, CHARLOTTE
Associate Professor, Librarian, Kodiak College. Oregon College, B.S. (1969), M.S. (1974).

HAUCK, VERN
Professor, Business Administration, School of Business. University of Washington, B.A. (1967); Seattle University, M.B.A. (1971); University of Iowa, Ph.D. (1974).

HAYCOX, STEPHEN W.
Professor, History, College of Arts and Sciences. Seattle University, B.A. (1966); University of Oregon, M.A. (1967), Ph.D. (1971).

HAYNES, HELEN
Director, Native Student Services, Student Services.

HAYS, MARJORIE
Professor, Psychology, College of Arts and Sciences, Kenai Peninsula College. Sterling College, B.A. (1955); Miami University, M.A. (1970); Walden University, Ph.D. (1982).

HEASLEY, LESLIE W.
Professor, Chemistry (Chair), College of Arts and Sciences. University of Idaho, B.S. (1965); Oregon State University, Ph.D. (1970).

HENDRICKSON, PAUL
Visiting Assisting Professor, Counseling, Bemidji State University, M.S. (1980); B.S. (1975.

HENNESSY, STEPHEN S.
Assistant Professor, Auto-Diesel Technology, Ford ASSET Program, College of Career and Vocational Education. Northern Arizona University, B.S. (1975); San Jose State University, M.A. (1989).

HENRY, ROBYN
Visiting Assistant Professor, Psychology, College of Arts and Sciences. Hood College, B.A. (1985); Boston University, M.A. (1991).

HENSEL, GLORIA
Instructor, Office Management Technology, Matanuska-Susitna College. Columbia Union College, B.S. (1969).

HESTER, DONALD N.
Professor, Accounting, School of Business. Arizona State University, B.S. (1968); Utah State University, M.S. (1970).

HILL, PERSHING J., JR.
Associate Professor, Economics, School of Public Affairs. Idaho State University, B.S. (1967); Washington State University, Ph.D. (1976).

HILPERT, JOHN M.
Professor Emeritus, Engineering Management, School of Engineering. Oregon State University, B.S. (1938); George Washington University, M.A. (1947); University of Iowa, Ph.D. (1956).

HINTERBERGER, TIMOTHY
Assistant Professor, Biological Sciences, College of Arts and Sciences. University of Illinois, B.S. (1976), M.S. (1981), Ph.D. (1987).

HITCHINS, DIDDY R. M.
Director, Canadian Studies; Professor, Political Science, College of Arts and Sciences. University of Southampton, U.K., B.Sc. (1967); University of Essex, U.K., M.A. (1969), Ph.D. (1975).

HOLMBERG, ERIC
Assistant Professor, Chemistry, College of Arts and Sciences. Niagra Falls University, B.S. (1983); SUNY at Binghamton, Ph.D. (1987).

HONEYCHURCH, JOYCE C.
Associate Professor, Education, School of Education. University of California at Berkeley, B.A. (1960); Stanford University, M.A. (1976), Ph.D. (1980).

HONG, PATRICIA A.
Associate Professor, Nursing, School of Nursing and Health Sciences. University of Maryland, Baltimore, B.S.N. (1972); University of Washington, Seattle, M.A. (1976).

HOOD, MICHAEL J.
Professor, Theatre (Chair), College of Arts and Sciences. Arizona State University, B.A. (1972); University of New Orleans, M.A. (1975), M.F.A. (1975).

HOPKINS, MARYVONNE
Visiting Instructor, Foreign Languages, College of Arts and Sciences. Baccalaureate, Lycee de Vanne, France (1968); Universite de Bretagne Occidentale, Brest, France, D.U.E.L. I (1969).

HOUTZ, ALLEN
Professor, Petroleum Technology, College of Career and Vocational Education, Kenai Peninsula College. Washington State University, B.S. (1968); University of Connecticut, M.S. (1991).

HUGHES, EILEEN
Visiting Assistant Professor, Education, School of Education. Whittier College, B.S. (1973); University of Madison, Wisconsin, M.S. (1981); University of Oregon, Ph.D. (1992).

HUSKEY, TERRY LEE
Professor, Economics (Chair), School of Public Affairs. University of Missouri, B.A. (1969); Washington University, M.A. (1972), Ph.D. (1977).

ILIFF, CHARLES H.
Professor, Business Computer Information Systems, Computer Information and Office Systems, School of Business. Lake Forrest College, B.S. (1967); Babson College, M.B.A. (1974).

INGRAM, FORNEY H., III
Visiting Instructor, Food Service Technology, College of Career and Vocational Education. California Culinary Academy, Certificate of Completion, (1987); University of Alaska Anchorage, A.A.S. (1990).

INNES-TAYLOR, CATHERINE E.
Collection Development Officer; Associate Professor, Library Science, College of Arts and Sciences. Western Washington University, B.Ed. (1967); University of Oregon, M.L.S. (1971).

JACKSTADT, STEPHEN L.
Professor, Economics, School of Public Affairs. Director, Center for Economic Education. University of California at Los Angeles, B.A. (1965), M.A. (1967); University of Hawaii, M.Ed. (1973); Indiana University, Ed.D. (1981).

JACOBS, SCOTT R.
Associate Professor, Business Administration, School of Business, Kenai Peninsula College. University of Illinois, B.A. (1968); University of Minnesota, B.S. (1972); University of Minnesota, M.A. (1974).

JACOBS, WILLIAMS A.
Professor, Political Science (Chair), College of Arts and Sciences. Wisconsin State University, Eau Claire, B.S. (1966); University of Oregon, M.A. (1968), Ph.D. (1972).

JAMIN, CHRISTINE
Instructor, Counselor, Kodiak College. College of St. Rose, B.A. (1968); Oregon State University, M.E. (1981).

JANIS, MARY KAY SCHMITT
Professor, Biological Sciences, College of Arts and Sciences. University of Nebraska, B.S. (1964), M.A. (1965); University of Utah, B.S. (1978), Ph.D. (1982).

JANKE, JILL R.
Associate Professor, Nursing, School of Nursing and Health Sciences. University of Utah, B.S.N. (1973); Montana State University, M.N. (1981); Rush University, D.N.Sc., (1991).

JANVRIN, FRED
Director, Physical Plant, Administrative Services.

JOHNSON, MARK E.
Associate Professor, Psychology (Chair), College of Arts and Sciences. University of California, Santa Barbara, B.A. (1977), M.A. (1982), Ph.D. (1985).

JOHNSON, PAUL R.
Assistant Professor, Business Administration, School of Business, ACIB. MacQuarie University Australia, B.A. (1978); University of Rochester, M.A. (1982); Ph.D. (1985).

JOHNSON, STANLEY W.
Dean Emeritus, College of Arts and Sciences. Graceland College, A.A. (1948); Whitworth College, B.A. (1950); University of Missouri, M.Ed. (1956); University of Nebraska, Ed.D. (1962).

JOHNSON, VIRGINIA R.
Professor, Education, School of Education. Colorado College of Education, B.A. (1957); University of Northern Colorado, M.A. (1974), Ed.D (1976).

JONES, GARTH N.
Professor Emeritus, Public Policy and Administration, School of Public Affairs; Organizational Theory and Behavior and Management, School of Business. Utah State University, B.S. (1947); University of Utah, M.A. (1948), Ph.D. (1954).

JORDON, PAUL C.
Professor, Business Administration (Chair), School of Business. City College of New York, B.A. (1963); University of Iowa, M.S. (1965); North Carolina State University, Ph.D. (1981).

JUNGE, DAVID C.
Professor, Mechanical Engineering, School of Engineering. Stanford University, B.S. (1962); Oregon State University, Ph.D. (1971); P.E.

KAHKLEN-JONES, TONI
Associate Professor, Psychology, Counselor, Matanuska-Susitna College. Northern Arizona University, B.S. (1970), M.A. (1971).

KALKOWSKI, MEL
Director, University Relations. University of Alaska, Anchorage, B.A. (1991).

KAPPES, BRUNO MAURICE
Professor, Psychology and Health Sciences, College of Arts and Sciences. University of Missouri, B.A. (1973), M.A. (1975); Kansas State University, Ph.D. (1978).

KASSIER, THEODORE
Professor, Spanish, Department of Languages (Chair), College of Arts and Sciences. Columbia College, B.A. (1966); Princeton University, M.A. (1968), Ph.D (1972).

KATASSE, CONSTANCE C.
Associate Professor, English and ESL, College of Arts and Sciences (Coordinator, ESL/ASL). Eckerd College, B.A. (1972); University of Alaska, M.A.T. (1976); Studies in American Sign Language (1980-1988) and Cross-Cultural Linguistics (1985-1988).

KAULITZ, GARRY
Assistant Professor, Art, College of Arts and Sciences. Rochester Institute of Technology, B.F.A. (1963), M.F.A. (1965).

KAZOR, ELLEN D.
Associate Professor, Dental Hygiene, College of Career and Vocational Education. Temple University, Dental Hygiene Certificate (1970); East Stroudsburg State College, B.S. (1972); University of Alaska Anchorage, M.Ed. (1983).

KEIL, CAROLYN P.
Associate Professor, Nursing, School of Nursing and Health Sciences. University of North Carolina, B.S. (1964); University of Kansas, M.N. (1974), Ph.D. (1990).

KELLEY, LAURA W.
Associate Professor, Human Services, College of Career and Vocational Education. Roanoke College, B.A. (1968); North Carolina University, M.A. (1974).

KEMPER, JOAN
Visiting Instructor, Nursing, School of Nursing and Health Sciences. St. Louis University, B.S. (1973); University of Oklahoma, M.S. (1989).

KENNISH, JOHN M.
Professor, Chemistry, College of Arts and Sciences. Rutgers University, A.B. (1967); Shippensburg State College, M.S. (1973); Portland State University, Ph.D. (1978).

KETCHUM, KERMIT L.
Associate Professor, Computer Science, College of Arts and Sciences, Matanuska-Susitna College, Park College, B.B.A. (1976).

KIM, JOHN CHOON
Executive Director, Alaska Center for International Business; Professor, Business Administration, School of Business. Kyung Hee University, B.A. (1963); University of Southern California, M.A. (1971), Ph.D. (1978).

KLEINKE, CHRIS L.
Professor, Psychology, College of Arts and Sciences. Occidental College, A.B. (1965); Claremont Graduate School, M.A. (1967), Ph.D. (1972); Licensed Clinical Psychologist, Alaska, Massachusetts.

KNAPP, GUNNAR P.
Professor, Economics, Institute of Social and Economic Research, School of Public Affairs. Yale University, B.A. (1975), Ph.D. (1981).

KNISLEY, EDWARD R.
Professor, Sociology, College of Arts and Sciences. Shepherd College, B.A. (1965); West Virginia University, M.S.W. (1970); United States International University, Ph.D. (1992).

KOKAUROVA, NATALIA
Visiting Instructor, Russian, College of Arts and Sciences. Magadan Teachers' Training Institute, B.Ed. (1980).

KOSHIYAMA, LYNN K.
Associate Professor, Accounting, School of Business. C.P.A., University of Alaska Fairbanks, B.B.A. (1975); Alaska Pacific University, M.B.A. (1991).

KOSTYRKO, JACEK
Associate Professor, Physics, Kenai Peninsula College. University of Warsaw, M.S. (1982).

KRAXBERGER, SCOTT L.
Instructor, Business Computer Information Systems, School of Business, Kenai Peninsula College. Northern Arizona University, B.S. (1988), M.B.A. (1992).

KRONQUEST, GARY
Assistant Professor, Refrigeration and Heating, Matanuska-Susitna College. Matanuska-Susitna Community College, A.A.S. (1981).

KRUSE, JOHN A.
Professor, Public Policy, Institute of Social and Economic Research, School of Public Affairs. Williams College, B.A. (1972); University of Michigan, M.R.P. (1975), Ph.D. (1975).

KUDENOV, JERRY D.
Professor, Biological Sciences, College of Arts and Sciences. Foothill College, A.A. (1966); University of California, B.A. (1968); University of the Pacific, M.S. (1970); University of Arizona, Ph.D. (1974).

KUHNER, ARLENE E.
Associate Dean, College of Arts and Sciences, Professor, English, College of Arts and Sciences; Chair, Women's Studies, College of Community and Continuing Education. Seattle University, B.A. (1960); University of Washington, M.A. (1966), Ph.D. (1978).

KUHNER, ROBERT H.
Professor, Philosophy, College of Arts and Sciences. Seattle University, B.S. (1963); Case-Western Reserve University, M.A. (1968).

KULLBERG, RICHARD W.
Professor, Biological Sciences, College of Arts and Sciences. University of Oregon, B.S. (1967); McGill University, M.S. (1968), Ph.D. (1974).

KURTZ, MATTHEW
Visiting Assistant Professor, Geography, College of Arts and Sciences. State University of New York, Buffallo, B.A. (1986); University of Wisconsin, M.S. (1990).

KYLE, PATRICIA B.
Assistant Professor, Education, Administration Foundations (Chair), School of Education. Arizona State University, B.A. (1975); Idaho State University, M.Ed. (1986), Ed. Spec. (1988); University of Idaho, Ph.D. (1991).

LALLY, EILEEN M.
Associate Professor, Social Work, College of Arts and Sciences. Marian College, B.A. (1965); Indiana University, M.S.W. (1970); University of the Pacific, Ed.D. (1986).

LAMPMAN, CLAUDIA
Assistant Professor, Psychology, College of Arts and Sciences. Boston University, B.A. (1984); Loyola University, M.A. (1987), Ph.D. (1990).

LANGDON, STEPHEN J.
Professor, Anthropology, College of Arts and Sciences. Stanford University, B.A. (1970), M.A. (1972), Ph.D. (1977).

LAUTENBERGER, FRANCES E.
Associate Professor, Theatre, College of Arts and Sciences. Rutgers University, B.A. (1979); University of Connecticut, M.F.A. (1984).

LAWRENCE, WELTON L.
Professor, Aviation Programs, College of Career and Vocational Education. Wayne State University, B.S. (1970), M.Ed (1971); University of Southern California, Ed.D. (1988).

LAWTON, J. KEITH
Associate Professor, Adult Basic Education, College of Community and Continuing Education. Hobart College, B.A. (1953); Episcopal Divinity School, STB (1956), M.Div. (1967).

LEE, LINDA L.
Assistant Professor, Developmental Education, College of Community and Continuing Education. Arizona State University, B.S. (1971); University of Oregon, M.S. (1976).

LESH, NANCY L.
Distance Delivery and Alaskana Librarian. Associate Professor, Library Science, College of Arts and Sciences. Willamette University, B.S. (1966); Simmons College, M.L.S. (1967).

LESTER, ELSIE E.
Professor, Chemistry, College of Arts and Sciences. Livingstone College, B.S. (1956); New York University, M.A. (1959).

LIBURD, CAEDMON A.
Assistant Professor, History, College of Arts and Sciences. College of the Virgin Islands, St. Thomas, USVI, A.A. (1967); Bowdoin College, B.A. (1969); Yale University, M.Phil./History, (1972).

LICKA, CHARLES (SEAN)
Associate Professor, Art, College of Arts and Sciences. University of Colorado, B.A. (1966), M.A. (1969)

LINTON, PATRICIA
Assistant Professor, English, College of Arts and Sciences. College of Notre Dame of Maryland, B.A. (1966); Johns Hopkins University, M.L.A. (1970), M.A. (1973).

LISZKA, JAMES J.
Professor, Philosophy (Chair), College of Arts and Sciences. Indiana University at Pennsylvania, B.S. (1972); University of South Carolina, M.A. (1974); New School for Social Research, Ph.D. (1978).

LONERGAN, DEETA
Professor, Counseling, Student Services. University of Portland, B.A. (1970); Western Washington University, M.Ed. (1971).

LUETHGE, SUSAN E.
Assistant Professor, Dental Hygiene, College of Career and Vocational Education. Marquette University, Certificate/Dental Hygiene (1960); Ferris State University, B.S. (1985), M.S. (1987).

MAAS, DAVID D.
Associate Professor, Political Science, College of Arts and Sciences. State University of New York at Buffalo, B.A. (1967); San Francisco State College, M.A. (1971); University of Colorado, Ph.D. (1986).

MACKEY, BILL E.
Professor, History, College of Arts and Sciences. University of California, B.A. (1962); Berlin, Advanced Study (1965); San Francisco State, M.A. (1966); Northern Arizona University, (1988).

MACLACHLAN, LAURA W.
Dean, School of Nursing and Health Sciences; Professor, Nursing. Niagara University, B.S.N. (1956); State University of New York, Buffalo, Ed.M. (1971), Ph.D. (1978).

MADIGAN, ROBERT J.
Professor, Psychology, College of Arts and Sciences. Seattle University, B.S. (1966); University of California at Los Angeles, M.A. (1968), Ph.D. (1970).

MADSEN, ELIZABETH K.
Professor, Library Science, Matanuska-Susitna College. Western Washington State University, B.A. (1966); University of Hawaii, M.L.S. (1972); Stanford University, M.A. (1985).

MAGUIRE, PAUL
Assistant Professor, Education, School of Education. Bridgewater State College, B.S. (1978); University of Wisconsin, M.S. (1980); Oregon State University, Ph.D. (1985).

MALONEY, ROBERT C.
Associate Professor, Accounting (Chair), School of Business. Eastern Kentucky University, B.B.A. (1971); Miami University, M.B.A. (1972).

MANN, CHERYL M.
Assistant Professor, Human Services (Coordinator); College of Career and Vocational Education. University of Alaska Anchorage, B.S.W. (1981); Arizona State University, M.S.W., M.A. (1982).

MANN, KRISTINE E.
Professor, Biological Sciences, College of Arts and Sciences. McGill University, B.S. (1964), M.S. (1967), Ph.D. (1973).

MARTINS, DONALD H.
Professor, Chemistry (Chair), College of Arts and Sciences. University of Missouri, B.S. (1967), M.S. (1969); University of Florida, Ph.D. (1974).

MARTINS, JOYCE A.
Visiting Instructor, Engineering, School of Engineering. University of Florida, B.A. (1972); University of Georgia, M.A.M.S. (1983).

MARX, DONALD L.
Professor, Business Administration, School of Business. St Benedict's College, A.B. (1960); Kansas State University, B.S. (1961): University of Houston, M.B.A. (1971), Ph.D. (1974).

MASCHMEYER, RICHARD A.
Professor, Accounting, School of Business. Utah State University, B.S. (1966); Master of Accounting (1974); University of Kentucky, D.B.A. (1981).

MASELKO, JERZY
Associate Professor, Chemistry, College of Arts and Sciences. Technical University of Wroclaw, Poland, M.S. (1968), Ph.D. (1974).

MASSAY, GLENN F.
Director, Matanuska-Susitna College. California State College, B.S. (1959); West Virginia University, M.A. (1962), Ph.D. (1970).

MASTROYANIS, GEORGE
Associate Professor, Education, School of Education. University of Natal, South Africa, B.A. (1965), B.Ed. (1971); University of Lancaster, United Kingdom, M.A. (1974); University of Georgia, Athens, Ph.D. (1983).

MCCAULEY, ROBERT D.
Associate Professor, Welding, College of Career and Vocational Education. Northern Arizona University, B.S. (1975).

MCCOY, ROBERT O.
Professor, Mathematical Sciences, College of Arts and Sciences. University of California at Santa Barbara, B.A. (1969); University of Idaho, M.S. (1972).

MCGRATH, RALPH J.
Professor, History, College of Arts and Sciences. St. Ambrose College, B.A. (1962); University of Iowa, M.A. History (1967), M.A. Higher Education (1969).

MCKAY, J. ELLEN
Assistant Professor, Architectural and Engineering Technology, College of Career and Vocational Education. Anchorage Community College, Civil Engineering and Survey Drafting Certificate (1978); University of Alaska Anchorage, B.A. (1977).

MCKEOWN, MICHAEL P.
Associate Professor, Human Services, College of Career and Vocational Education. University of Alaska Anchorage, B.A. (1974), M.S. (1975).

MEARS, JOHN
Assistant Professor, Electronics, College of Career and Vocational Education. California State Polytechnic University, B.S. (1962).

MEEKS, RODNEY
Visiting Instructor, Aviation Maintenance Technology, College of Career and Vocational Education. Portland State University, B.S. (1984); University of Alaska Anchorage, AMT Certificate (1988).

METZLER, CURVIN
Visiting Assistant Professor, Mathematical Sciences, College of Arts and Sciences. University of Alaska Fairbanks, B.S. (1979); Uppsala University, Sweden, M.S. (1986).

MICKS, JOHN
Visiting Assistant Professor, Psychology, College of Arts and Sciences. California State University, B.A. (1974), M.A. (1976); San Diego State University, Ph.D. (1989).

MILLER, BARBARA
Assistant Professor, Electronics, College of Career and Vocational Education. McGill University, B.S. (1978); Heald Technical College, A.S. (1983); Colorado Technical College, B.S. (1989).

MILLER, DONALD J.
Associate Professor, Justice, School of Public Affairs. Marquette University, B.A. (1953); Marquette University Law School, L.L.B. (1958), J.D. (1968); George Washington University, M.F.S. (1979).

MILLER, FRITZ
Assistant Professor, Welding Technology, College of Career and Vocational Education, Kenai Peninsula College. Oregon State University, B.S. (1974); Journeyman Welder; Certified Welding Inspector, AWS.

MILLER, ROBERT E.
Professor, Civil Engineering, School of Engineering. University of Pennsylvania, B.S. (1961); Lehigh University, M.S. (1967); University of Colorado, Ph.D. (1972); P.E.

MILLER, ROGER
Visiting Instructor, Justice, School of Public Affairs. University of Alaska Anchorage, B.A. (1986); Michigan State University, M.S. (1990).

MILLER, THOMAS P.
Professor, Aviation Maintenance (Coordinator), College of Career and Vocational Education. University of Maryland, B.S. (1972); University of Virginia, M.E. (1987).

MILLER, WAYNE C.
Dean, College of Arts and Sciences; Professor, English. St. John's University, New York, B.A. (1960); Columbia University, M.A. (1961); New York University, Ph.D. (1968).

MILLIGAN, E. DEAN
Professor, Biological Sciences, College of Arts and Sciences. Colorado State University, B.S. (1966); University of Northern Colorado, D.A. (1976).

MINER, TODD
Assistant Professor, Education, School of Education; Coordinator, Alaska Wilderness Studies, College of Community and Continuing Education. University of Alaska Anchorage, B.S. (1979); Alaska Pacific University, M.A. (1985); Boston University, Ed.D. (1993).

MISCHLER, JANET K.
Professor, Nursing, School of Nursing and Health Sciences. Boston City Hospital, R.N. (1960); Boston University, B.S. (1969); University of California at San Francisco, M.S. (1970); University of Southern California, Ed.D. (1982).

MISHLER, BARBARA
Associate Professor, Speech, English, College of Arts and Sciences. Matanuska-Susitna College. Gettysburg College, B.A. (1959); University of Colorado, M.A. (1967); University of Oregon, Ph.D. (1992).

MITCHELL, JOHN H.
Associate Professor, Mathematical Sciences, College of Arts and Sciences. Cornell University, B.S. (1969); University of Washington, M.S. (1977).

MITCHELL, TOM C.
Assistant Professor, Aviation Maintenance Technology, College of Career and Vocational Education. FAA Certified Mechanic with Airframe and Powerplant ratings.

MOHR, DON E.
Professor, History, College of Arts and Sciences. University of Alaska, B.A. (1973); University of Oregon, M.A. (1974).

MOORE, JUDITH K.
Professor, English, College of Arts and Sciences, University of Oklahoma, B.A. (1965), M.A. (1967); Cornell University, Ph.D. (1970).

MOREHOUSE, THOMAS A.
Professor, Institute of Social and Economic Research, School of Public Affairs. Harvard College, B.A. (1960); University of Minnesota, M.A.P.A. (1961), Ph.D. (1968).

MORGAN, ROBERTA H.
Associate Vice Chancellor, Academic Affairs; Professor, Psychology, College of Arts and Sciences. University of Alaska, B.A. (1966); Arizona State University, M.A. (1972), Ph.D. (1976).

MORLEY, MAX J.
Professor, Auto-Diesel Technology (Chair), College of Career and Vocational Education. Oregon Technical Institute, A.A.S. (1966), B.T. (1969); University of Alaska Juneau, M.S. (1987).

MORRIS, KATE H.
Associate Professor, Nursing, School of Nursing and Health Sciences. State University of New York, R.N. (1957); Loretto Heights College, B.S. (1972); University of Alaska Anchorage, M.S. (1983).

MORRISON, DIANN
Assistant Professor, Sociology, College of Arts and Sciences. University of Alaska Southeast, B.L.A. (1983), M.P.A. (1984); University of Minnesota, Ph.D. (1989).

MORRISON, JAMES H.
Associate Professor, Counselor, Kenai Peninsula College. Mt. Angel Seminary College, B.A. (1968); Alaska Methodist University, M.A. (1975).

MORSE, THOMAS H.
Visiting Instructor, Physics, College of Arts and Sciences. University of Alaska Fairbanks, B.S. (1979), M.S. (1984).

MORSE, THOMAS M.
Visiting Assistant Professor, Physics, College of Arts and Sciences. Oberlin College, B.S. (1985); University of Colorado, M.S. (1989), Ph.D. (1990).

MOSSEFIN, CATHERINE
Visiting Instructor, Nursing, School of Nursing and Health Sciences. University of North Dakota, B.S.N. (1987); University of Minnesota, M.S. (1981).

MULCAHY, RENA S.
Professor, Counseling, Student Services. Seattle University, B.Ed. (1962); University of Alaska, M.Ed. (1976).

MULLER, JAMES W.
Professor, Political Science, College of Arts and Sciences. Harvard College, A.B. (1973); Harvard University, A.M. and Ph.D. (1982).

MUMMA, CHRISTINA
Associate Professor (Chair, Graduate), Nursing, School of Nursing and Health Sciences. San Jose State College, B.S. (1969); University of Washington, Seattle, M.N. (1977); University of Washington, Ph.D. (1984).

MUSSER, RICHARD W.
Assistant Professor, Coordinator, Refrigeration and Heating Technology, Matanuska-Susitna College. Purdue University, A.A.S. (1964), B.S. (1967), M.S. (1968).

NAMIAS, JUNE
Associate Professor, History, College of Arts and Sciences. University of Michigan, B.A. (1962); Harvard Graduate School of Education, M.A.T. (1963); Brandeis University, Ph.D. (1989).

NELSON, WILLIAM G.
Dean, School of Engineering; Professor, Engineering. Oregon State University, B.S. (1966), M.S. (1970), Ph.D. (1972).

NOBLE, PATRICIA A.
Instructor, Office Management and Technology, Kenai Peninsula College. Long Beach City College, A.A.; California State College, B.A.

NOBLE, RAY
Professor, Electronics (Chair), College of Career and Vocational Education. Anchorage Community College, A.A.S. (1984); Alaska Pacific University, B.A. (1988).

NOREEN, RAYLENE E.
Assistant Professor, Business Administration, Kenai Peninsula College, School of Business. University of Maryland, B.S. (1975); Central Michigan University, M.A. (1978).

NORRELL, STEPHEN A.
Assistant to Chancellor; Professor, Biological Sciences, College of Arts and Sciences. Manhattan College, B.S. (1959); University of Detroit, M.S. (1961); University of Arizona, Ph.D. (1965).

NOSEK, JANET
Assistant Professor, English, College of Arts and Sciences. University of Idaho, B.A. (1963); University of Alaska, M.A. (1973).

NUNNALLY, JOSEPH C.
Professor, English, College of Arts and Sciences. Texas Tech University, B.A. (1965), M.A. (1966), Ph.D. (1968).

NYGARD, BONNIE
Visiting Instructor, Education, School of Education; Coordinator of Physical Education and Recreation, College of Community and Continuing Education. University of Alaska Anchorage, B.Ed. (1991).

O'BRIEN, DREW
Instructor, Mechanical Technology, College of Career and Vocational Education, Kenai Peninsula College. Nashville Auto-Diesel-Welding, A.A.S.; Boise Junior College, A.A.S.; Journeyman Machinist.

O'DELL, KATHLEEN
Associate Professor, Education, Teacher Education (Chair), School of Education. Southern Illinois University, B.S. (1966), M.S. (1973); University of Oregon, Ph.D. (1980).

O'MEARA, SHARON A.
Professor, Medical Laboratory Technology (Chair), College of Career and Vocational Education. Montana State University, B.S. (1967); Central Michigan University, M.A. (1982).

O'REILLY, KENNETH
Professor, History, College of Arts and Sciences. University of Detroit, B.A. (1973); Central Michigan University, M.A. (1975); Marquette University, Ph.D. (1981).

OLIVARES, WALTER G.
Assistant Professor, Music, College of Arts and Sciences. Texas Tech University, B.M. (1975), M.M. (1975).

OLMSTEAD, AMY
Visiting Instructor, Foodservice Technology, College of Career and Vocational Education. Culinary Institute of America (1988).

OLOFSSON, JOHN A.
Associate Professor, Civil/Environmental Engineering, School of Engineering. Clarkson College of Technology, B.S. (1968); Syracuse University, M.S. (1972); University of Maine, Ph.D. (1977).

OREMUS, VERN
Dean, College of Career and Vocational Education; Professor, Vocational Education. Oregon State University, B.S. (1968), M.Ed. (1971); Arizona State University, Ed.D. (1973).

ORR, SYLVIA M.
Professor, Medical Laboratory Technology, College of Career and Vocational Education. University of Washington, B.S. (1972), M.S. (1974), Ph.D. (1982).

OSWALD, JOHN
Assistant Professor, Surveying and Mapping, College of Career and Vocational Education. Ohio State University, B.S. (1970), M.S. (1971).

OVERPARK, NANCY
Assistant Professor, Food Service Technology/Dietetics & Nutrition, College of Career and Vocational Education. University of Miami, B.A. (1960); University of Illinois, M.A. (1963); American Dietary Association, Registered Dietician (1989).

OWENS, DIANE K.
Associate Professor, Adult Basic Education, College of Community and Continuing Education. Memphis State University, B.S. (1965); University of Alaska, M.Ed. (1973).

OWENS, JESSE L.
Assistant Professor, Biology, College of Arts and Sciences. University of Alaska Anchorage, B.S. (1983); University of Alaska Fairbanks, Ph.D. (1987).

PAJOT, MICHAEL E.
Professor, Sociology (Chair), College of Arts and Sciences. Mt. Angel Seminary College, B.A. (1959); University of Oregon, M.A. (1970).

PANNONE, MICHAEL L.
Associate Professor, Air Traffic Control (Chair-ATC Program), College of Career and Vocational Education. Anchorage Community College, A.A.S. (1973), A.A. (1978); University of Alaska Anchorage, B.T. (1985); Embry Riddle Aeronautical University, M.A.S. (1992).

PAPPAS-ROGICH, MARIA
Assistant Professor, Nursing, School of Nursing and Health Sciences. Boston University, B.S.N. (1977); Emory University, M.N. (1979).

PARK, GERALD H.
Professor, Welding; Technology (Coordinator), College of Career and Vocational Education. Montana State University, B.S. (1969); University of Alaska Juneau, M.S. (1985).

PARRISH, MORRIS G.
Professor, Physics, College of Arts and Sciences. Murray State University, B.A. (1968), M.S. (1969).

PARRY, DOUG
Associate Professor, Speech, College of Arts and Sciences. Moorpark College, California, A.A. (1977); University of the Pacific, Stockton, California, B.A. (1979); West Virginia University, M.A. (1980); Ohio University, Ph.D. (1990).

PASCH, ANNE D.
Professor, Geology (Coordinator), College of Arts and Sciences. University of Wisconsin, B.S. (1958); Alaska Methodist University, M.A.T. (1971); University of California, Berkeley, Studies in Paleontology (1988-1989).

PATTERSON-TURNER, REBECCA H.
Professor, English (Chair), College of Arts and Sciences. University of Colorado, B.A. (1967); Colorado State University, M.A. (1971); Fielding Institute, Ph.D. (1987).

PEARCE, FREDERICK W.
Assistant Professor, Journalism and Public Communications, College of Arts and Sciences. Iona College, B.A. (1973); University of Pittsburgh, M.A. (1976), Ph.D. (1990).

PEARSON, LARRY L.
Associate Professor, Journalism and Public Communications, College of Arts and Sciences. University of Minnesota, B.A. (1964); University of Wisconsin, Madison, M.A. (1971); University of Minnesota, Ph.D. (1990).

PEARSON, ROBERT E.
Associate Professor, Aviation Programs (Chair-Av. Adm./Prof. Pilot Program), College of Career and Vocational Education. University of Illinois, B.S. (1966); University of Alaska Juneau, M.S. (1984).

PETERS, GERARD J. JR.
C.P.A., Assistant Professor, Accounting, School of Business. St. Joseph's University, B.S. (1966).

PETERSEN, JUDITH D.
Associate Professor, Nursing (Chair, ADN), School of Nursing and Health Sciences. Mount Marty College, B.S.N. (1966); University of Nebraska, M.S.N. (1976).

PETERSON, KIM
Associate Professor, Biological Sciences, College of Arts and Sciences. Eastern Montana College, B.S. (1972); Duke University, Ph.D. (1978).

PETERSON, W. JACK
Associate Professor, Sociology, College of Arts and Sciences. Washington State University, B.A. (1953), M.A. (1955).

PETRAITIS, JOHN
Assistant Professor, Psychology, College of Arts and Sciences. University of Minnesota, B.A. (1983); Loyola University, M.A. (1987), Ph.D. (1990).

PFLAUM, JACQUELINE S.
Associate Professor, Nursing, Baccalaureate Program Chair, School of Nursing and Health Sciences. St. Olaf College, B.S.N. (1969); University of Hawaii, M.S. (1979), M.P.H. (1979).

PHUKAN, ARVIND
Professor, Civil Engineering, School of Engineering. Banaras Hindu University, B.S. (1960); Imperial College of Science and Technology, U.K., D.I.C. (1968), Ph.D. (1968); P.E.

POND, ROBERTA L.
Associate Professor, Psychology, College of Arts and Sciences. Pepperdine University, M.A. (1961).

POOLE, ROY R.
Associate Professor, Counseling, Student Services. Sacramento City College, A.A. (1965); San Francisco State College, B.A. (1967); University of Oregon, M.A. (1970), Ph.D. (1973).

PORTER, BRUCE
Instructor, Electronics Technology, College of Career and Vocational Education. Kenai Peninsula College. University of Akron, A.A.; University of Akron, B.S. (1975).

PORTER, PAMELA
Visiting Instructor, Biological Sciences, College of Arts and Sciences. Oregon State University, B.S. (1977); University of Alaska Anchorage, M.S. (1989).

PREDEGER, ELIZABETH
Assistant Professor, Nursing, School of Nursing and Health Sciences. University of Alaska Anchorage, B.S.N. (1980), M.S. (1986).

PROTASEL, GREG J.
Professor, Public Administration (Chair), School of Public Affairs. University of Redlands, B.A. (1969); University of Michigan, Ph.D. (1977).

PUTNAM, JOANNE
Associate Professor, Education (Chair, Special Ed.), School of Education. Colorado State University, B.A. (1969); West Virginia University, M.A. (1974); University of Minnesota, Ph.D. (1983).

PYRAH, FREDRICK
Associate Professor, Food Service Technology (Chair), College of Career and Vocational Education. University of Alaska, A.A. (1977); Brigham Young University, B.S. (1957).

QUIMBY, T. BARTLETT
Assistant Professor, Civil Engineering, School of Engineering. Brigham Young University, B.S. (1981), M.S. (1982), Ph.D. (1988).

RA, JANG W.
Assistant Professor, Engineering Management and Science Management, School of Engineering. Han-Yang University, Seoul, Korea, B.S. (1981); English Language School, Bridgeport, Connecticut, Certificate (1982); University of Bridgeport, M.S. (1983); University of Pittsburgh, M.S. (1987), Ph.D. (1988).

REIDER, BARBARA POWELL
Assistant Professor, Accounting, School of Business. Kent State, B.B.A. (1983); Ohio State, M.A. (1986); Kent State, Ph.D. (1991). CPA and CMA.

REILLY, FAY
Assistant Professor, Nursing, School of Nursing and Health Sciences. University of Connecticut, B.S. (1976); University of Southern Mississippi, M.S. (1982); University of Kentucky, Ph.D. (1991).

REINART, SARA
Assistant Professor, Mathematical Sciences, College of Arts and Sciences, Kenai Peninsula College. Washburn University, B.A. (1976), A.A. (1978), B.S. (1986); Alaska Pacific University, M.A.T. (1991).

REISS, J. BARRY
Visiting Assistant Professor, Physics, College of Arts and Sciences. University of Maryland, B.S. (1967); The American University, Washington, D.C., Ph.D. (1976).

REMUS, EMIL H.
Professor, Auto-Diesel Technology (Coordinator), College of Career and Vocational Education. University of Wisconsin, B.S. (1974); University of Wisconsin-Stout, M.S. (1980).

REUER, QUENTIN B.
Visiting Assistant Professor, Biology, College of Arts and Sciences. South Dakota State University, B.S. (1981); Montana State University, Ph.D. (1987).

REY, ARSENIO
Professor, Foreign Languages, College of Arts and Sciences. Escolasticado El Pilar, Madrid, B.A. (1960); Universidad Maria Cristina, Madrid, M.A. (1962); New York University, Ph.D. (1974).

REY, MARIANNE
Visiting Assistant Professor, Mathematical Sciences, College of Arts and Sciences. Georgetown University, B.S. (1965); State University of New York, M.A. (1981).

REYNOLDS, ANN
Visiting Assistant Professor, Psychology, College of Arts and Sciences. University of Washington, B.S.W. (1975); Antioch University, M.A. (1981).

RIEGER, LISA
Assistant Professor, Justice (Coordinator, Paralegal Studies), School of Public Affairs. Yale University, B.A. (1979), Cambridge University, M.A. (1989); Hastings Law School, University of California, J.D. (1983).

RISLEY, TODD R.
Professor, Psychology, College of Arts and Sciences. San Diego State University, A.B. (1960); University of Washington, M.S. (1963), Ph.D. (1966).

ROBINSON, MYRNA I.
Associate Professor, Social Work (Chair), College of Arts and Sciences. Pacific Lutheran University, B.A. (1966); University of Washington, M.S.W. (1970).

RODDA, TOM
Director, Budget Development and Maintenance, Administrative Services. University of Wyoming, B.S. (1964); Washington State University, M.B.A. (1979).

ROGERS, JOHN
Assistant Professor, Electronics Technology, College of Career and Vocational Education, Matanuska-Susitna College. University of Washington, B.A. (1973).

ROHACEK, JERRY K.
Professor, Economics, School of Public Affairs. University of California at Santa Barbara, B.S. (1967), M.S. (1969).

ROLLINS, ALDEN M.
Government Documents Librarian; Professor, Library Science, College of Arts and Sciences. The American University, B.A. (1968); University of Rhode Island, M.L.S. (1973).

ROLSTON, JOHN S.
Associate Professor, Philosophy, College of Arts and Sciences. University of California at Riverside, B.A. (1962); University of Washington, M.A. (1968).

ROSICH, ROSELLEN M.
Assistant Professor, Psychology, College of Arts and Sciences. Ohio State University, B.A. (1974); University of Nebraska at Omaha, M.A. (1980); West Virginia University, Ph.D. (1988).

ROSS, LARRY L.
Professor, Economics, School of Public Affairs. University of Oregon, B.S. (1968), M.S. (1971); Advanced Graduate Studies, Princeton University (1976-77).

ROWE, ROY
Associate Professor, Education, School of Education; Public School Administrations, Foundations, Counseling (Chair). University of North Carolina, B.A. (1968); Florida State University, M .A. (1973); Duke University, Ed.D. (1975).

RUBIN, JERILYN G.
Associate Professor, Business Administration, School of Business. Ithaca College, New York, B.A. (1968); State University of New York, M.A.T. (1974); Alaska Pacific University, M.B.A. (1991).

RYAN-VINCEK, SUSAN
Assistant Professor, Education, School of Education. Mount State Mary College, B.A. (1976); University of Vermont, M.Ed. (1980); University of Alaska Anchorage, Public School Administration Certificate (1988); University of Oregon, Ph.D. (1991).

SABO, WILLIAM
Assistant Professor, Art, College of Arts and Sciences. San Francisco Art Institute, B.F.A. (1974); John F. Kennedy University, M.A. (1988).

SALERNO, ANGELA
Visiting Assistant Professor, Social Work, College of Arts and Sciences. University of Alaska Anchorage, B.S.W. (1987); Boston University, M.S.W. (1989).

SANDBERG, KATE
Associate Professor, English, College of Arts and Sciences. University of Colorado, B.S. (1973); University of Alaska, M.Ed. (1976).

SANDERS, NANCY L.
Associate Professor, Nursing, School of Nursing and Health Sciences. University of Oregon, B.S. (1969); University of Washington, M.N. (1981).

SATHER, CURTIS E.
Associate Professor, Welding, College of Career and Vocational Education. Northern Arizona University, B.S. (1978).

SCHAFER, NANCY E.
Professor, Justice, School of Public Affairs. University of Rochester, B.A. (1961); University of Michigan, M.A. (1972), Ph.D. (1977).

SCHNEIDER, ART
Assistant Professor, Office Management Technology, Computer Information and Office Systems, School of Business. California State University, Chico, B.S. (1976), B.A. (1980); California State University, Hayward, M.S. (1990).

SCHNORR, JANICE
Professor, Education, School of Education. University of Wisconsin, B.S. (1967), M.S. (1970); University of Arizona, Ph.D. (1976).

SCHOTT, HANNA
Associate Professor, Mathematics, College of Arts and Sciences, Kenai Peninsula College. Central Washington State College, B.A. (1963); Central Washington University, M.A.T. (1983).

SCHROEDER, HERBERT
Visiting Assistant Professor, Engineering, School of Engineering. University of Alaska Fairbanks, B.S. (1981); Oregon State University, M.S. (1988); University of Colorado, Ph.D. (1991).

SCOTT, NETTIE
Assistant Professor, Field Work Coordinator, Social Work, College of Arts and Sciences. University of Southwestern Louisiana, B.A. (1965); Louisiana State University, M.S.W. (1970).

SEARS, ALICE L.
Professor, English, College of Arts and Sciences. Grays Harbor College, A.A. (1960); Oregon College of Education, B.S. (1962), M.S. (1970).

SEARS, STANLEY E.
Associate Professor, Surveying and Mapping (Chair), College of Career and Vocational Education. Oregon Technical Institute, Associate of Engineering Highway Technology (1964), Associate of Engineering Survey Technology (1964); University of Alaska, B.Ed. (1969); Registered Land Surveyor, Alaska (1970).

SEGAL, BERNARD
Professor, Health Sciences, School of Nursing and Health Sciences. The City University of New York, B.B.A. (1960), M.S.E. (1963); University of Oklahoma, Ph.D. (1967).

SEGAR, DOUGLAS A.
Director, Environment and Natural Resources Institute, Visiting Professor, Public Policy, School of Public Affairs. University of Liverpool, England, B.S. (1965), Ph.D (1969).

SELK, GARY L.
Associate Professor, Business Administration, School of Business. University of Hawaii, B.B.A. (1974); University of Alaska, M.B.A. (1977).

SELKREGG, LIDIA L.
Professor Emeritus, Public Administration/Planning, School of Public Affairs. Doctor of Natural Science, University of Florence, Italy (1943).

SEXTON, THOMAS F.
Professor, English, College of Arts and Sciences. Salem State College, B.A. (1968); University of Alaska, M.F.A. (1970).

SHAFFER, BOYD
Instructor, Art, Biology, College of Arts and Sciences, Kenai Peninsula College. The Sorbonne.

SHAW, DONNA GAIL
Associate Professor, Education, School of Education. Tyler Jr. College, A.A. (1976); Stephen F. Austin State University, B.S. (1978), M.Ed. (1979); North Texas State University, Ph.D. (1984).

SHEPRO, CARL E.
Assistant Professor, Political Science, College of Arts and Sciences. Seattle University, B.A. (1965); University of Washington, M.A. (1974), Ph.D. (1985).

SHRADER, CHERIE
Assistant Professor, Office Management and Technology, School of Business. University of Alaska Fairbanks, A.A. (1967); University of Alaska Anchorage, B.A. (1974), M.E. (1980).

SIEMENS, WILLIAM P.
Associate Professor, Library Science, College of Arts and Sciences. Reference Librarian. Biola College, B.A. (1967); University of Southern California, M.L.S. (1968).

SITTER, CLARA L.
Associate Professor, Library Science, College of Arts and Sciences. Curriculum/Reference Librarian. University of Oklahoma, Norman, B.A. (1962); The University of Texas at Austin, M.L.S. (1966); University of Denver, C.A.S. (1981); University of Colorado at Boulder, Ph.D. (1982).

SKORE, TOM TAYLOR
Assistant Professor, Theatre, College of Arts and Sciences. University of Wisconsin, B.A. (1972); University of Illinois, M.A. (1975); Florida State University, M.F.A. (1977).

SMELCER, JOHN
Visiting Assistant Professor, Developmental Education/English, College of Arts and Sciences. University of Alaska Fairbanks, B.A. (1986), (1987), B.Ed. (1989); Alaska Pacific University, M.L.A. (1991); Greenwich University, Ph.D. (1993).

SMELCER, PAMELA
Visiting Assistant Professor, Mathematical Sciences, College of Arts and Sciences. Slippery Rock University, B.A. (1988); University of Alaska Fairbanks, M.S. (1990).

SMILEY, LEONARD M.
Associate Professor, Mathematical Sciences, College of Arts and Sciences. Boston College, B.A. (1967); University of Notre Dame, M.A. (1970), Ph.D. (1979).

SMITH, CHERYL
Assistant Professor, Counseling, Student Services (College of Community and Continuing Education). Gonzaga University, B.A. (1968); University of LaVerne, M.S. (1987).

SMITH, STEVE
Visiting Instructor, Psychology, College of Arts and Sciences. University of California, B.A. (1978); Chapman College, M.A. (1980).

SMITH, TERRENCE
Visiting Associate Professor, Economics, School of Public Affairs. University of Rhode Island, B.S. (1973), M.S. (1978); University of Maryland, Ph.D. (1990).

SMITH, TIMOTHY C.
Associate Professor, Music (Chair), College of Arts and Sciences. University of Washington, B.A., B.M. (1978); Juilliard, M.M. (1980); State University of New York at Stony Brook, D.M.A. (1985).

SNYDER, CYNDI
Director of Residence Life. University of Maryland, B.S. (1985); University of Rochester, M.S. (1991).

SOKOLOV, BARBARA
Director, Library. University of Washington, B.A. (1957); Rosary College, M.A.L.S. (1973); University of Connecticut, M.B.A. (1978).

SOKOLOV, PETER
Visiting Assistant Professor, Business Administration, School of Business. Northwestern University, B.S. (1960), M .S. (1963), University of Connecticut, M.B.A. (1975).

SPAHR, DONALD
Professor, Welding (Chair), College of Career and Vocational Education. Ohio State, B.W.E. (1971).

SPARKS, NED A.
Professor, Food Service Technology, College of Career and Vocational Education. Thaddeous Stevens Trade, Associate of Baking (1967); Anchorage Community College, A.A. (1978); University of Alaska, B.A. (1979), M.Voc.Ed. (1981), M.Ed. Counseling and Guidance (1987).

SPATZ, RONALD M.
Professor, English, Director, Creative Writing Program, College of Arts and Sciences. University of Iowa, B.A. (1971), M.F.A. (1973).

SPURR, ROBERT L.
Associate Dean, College of Arts and Sciences. Drew University, A.B. (1959); Northeastern University, M.S. (1962).

SRINIVASAN, RAM
Professor, Chemistry, College of Arts and Sciences. University of Madras, India, B.S. (1964), M.S. (1966); University of Saskatchewan, Ph.D. (1971).

SRIVASTAVA, SURESH C.
Associate Professor, Business Administration, School of Business. University of Calgary, M.Sc. (1974), M.B.A. (1979); University of Maryland, Ph.D. (1987).

STANFILL, SILVER
Professor, English, College of Arts and Sciences. Vassar, A.B. (1960); University of Alaska Fairbanks, M.A. (1970); University of Colorado, Ed.S. (1977); University of Sheffield, England, Studies in Greek and Latin (1981-1982); Fulbright Lektor, Fakultet Elektrotehnike Strojarstva I Brodogradnje, Split, Yugoslavia (1988-1989).

STARLINGS, CABLE
Assistant Professor, Education, School of Education. California State University, B.A. (1977); University of Alaska, M.A. (1982); Northern Colorado University, Ph.D. (1987).

STAUFFER, DEBORAH W.
Associate Dean, College of Career and Vocational Education, Professor, Dental Hygiene. Temple University, Dental Hygiene Certificate (1970); University of Alaska, B.S. (1976), M.S. (1982); University of Southern California, Ed.D. (1987).

STEFFY, DENNIS
Director, Mining and Petroleum Technology Services. Indiana University of Pennsylvania, B.S. (1968), M.S. (1969).

STEFFY, GINGER
Director, Kenai Peninsula College, Instructor, Physics. Indiana University of Pennsylvania, B.S. (1968); M.S. (1969).

STEVENS, GARY L.
Professor, Theatre, Kodiak College. Linfield College, B.A. (1963); University of Oregon, M.F.A. (1970), Ph.D. (1984).

STOLLER, LYN
Manager, Disability Support Services, Student Services.

STRATTON, MARCIA
Assistant Professor, Speech Communications, College of Arts and Sciences. Wilkes University, B.S. (1978); University of North Carolina, M.Ed. (1979); Sothern Illinois University, Ph.D. (1991).

STRID-CHADWICK, KAREN
Assistant Professor, Music, College of Arts and Sciences. Washington State University, B.M. (1978); University of Alaska Fairbanks, M.A. (1991).

STROTHER, BOB
Instructor, Technology, College of Career and Vocational Education, Kenai Peninsula College.

SUBRAMANIAN, RAMESH
Assistant Professor, Management Information Systems, Computer Information and Office Systems, School of Business. Madras University, India, B.S.(1980); XLRI, Center for Management Studies, India, M.B.A. (1984); Rutgers University, M.B.A. (1990), Ph.D. (1992).

SVEINBJORNSSON, BJARTMAR
Professor, Biological Sciences, College of Arts and Sciences. University of Iceland, B.Sc. (1972); McGill University, Ph.D. (1979).

SWARTZ, CAROL
Kachemak Bay Branch Director, Kenai Peninsula College.

THIRUGNANASAMBANTHAN, KANAPATHIPILLAI
Associate Professor, Applied Statistics, Mathematical Sciences, College of Arts and Sciences. University of Ceylon, Sri Lanka, B.S. (1974); University of California at Riverside, M.S. (1979), Ph.D. (1980).

THOMPSON, DIANE
Visiting Instructor, Developmental Education/Math, School of Education, College of Community and Continuing Education. South Dakota School of Mines and Technology, B.S. (1980); University of Alaska Anchorage, M.A.T. (1993).

THRALL, ANNE
Assistant Professor, Nursing, School of Nursing and Health Sciences. College of St. Teresa, B.S. (1963); Rush University, M.S. (1988), N.D. (1990).

TILGHMAN, JOAN
Assistant Professor, Nursing, School of Nursing and Health Sciences. North Carolina A&T State University, B.S.N. (1974); School of Health Care Science, Shepherd A.F.B., O.G.N.P. (1979); Northwestern State University of Louisiana, M.S.N. (1985).

TOEBE, DIANE
Assistant Professor, Nursing, School of Nursing and Health Sciences. Central Michigan University, B.A. (1970); New York Medical College, M.S. (1972); United States International University, Ph.D. (1982); University of Alaska Anchorage, M.P.A. (1984).

TROSTLE, LAWRENCE C.
Assistant Professor, Justice, School of Public Affairs. California State University at Los Angeles, B.A. (1967); University of Redlands, M.A. (1983); Claremont Graduate School, Ph.D. (1986).

TUCK, BRADFORD H.
Professor, Economics, School of Public Affairs. Boston University, A.B. (1963), A.M. (1964), Ph.D. (1973).

TUPPER, ROBERT
Assistant Professor, Petroleum Technology, Kenai Peninsula College. Kenai Peninsula College, A.A.S. (1985); University of Alaska Fairbanks, B.S. (1990).

TURNER, A. ALLAN
Associate Professor, Health Sciences, School of Nursing and Health Sciences. Lakehead University, B.P.H.E. (1974), B.Ed. (1975), M.Sc. (1977); University of Alberta, Ph.D. (1982).

TURNER, MICHAEL T.
Associate Professor, Counseling, Student Services. Williamette University, B.A. (1969).

UHL-BIEN, MARY
Assistant Professor, Business Administration, School of Business. University of Cincinnati, B.B.A. (1986), M.B.A. (1988); Ph.D. (1991).

UPCHURCH, JAMES
Director, Financial Aid, Student Services. Whitworth College, B.A. (1960), M.Ed. (1962).

VAN DEN TOP, JERALDINE
Health Sciences Librarian, Assistant Professor, Library Sciences, Consortium Library, College of Arts and Sciences. Oregon State University, B.S. (1962); University of Hawaii, M.L.S. (1981).

VAN LOON, WESTON O.
Associate Professor, Business Administration, Accounting, School of Business, Matanuska-Susitna College. University of Minnesota, A.L.A. (1956); University of Texas, B.B.A. (1972), University of Missouri, M.B.A. (1974).

VELTRE, DOUGLAS W.
Professor, Anthropology (Chair), College of Arts and Sciences. Brown University, B.A. (1970); University of Connecticut, M.A. (1973), Ph.D. (1980).

VERCELLA, KIT J.
Professor, Economics, School of Public Affairs. University of California at Los Angeles, B.A. (1970); San Diego State University, M.A. (1972).

VINSON, FLORY
Assistant Professor, Vocational Teacher Education, College of Career and Vocational Education. George Washington University, B.A. (1959); University of Alaska, M.Ed. (1987).

WAHTO, ROBIN J.
Assistant Professor, Medical Assisting (Chair), College of Career and Vocational Education. University of New Hampshire, B.S. (1975).

WALLE, DENNIS F.
Archivist and Manuscripts Curator; Assistant Professor, Library Science, College of Arts and Sciences. DePaul University, B.A. (1960), M.A. (1968).

WALLSTROM, TIMOTHY
Visiting Assistant Professor, Education, School of Education. California State University, B.S. (1983), M.S. (1987); Ohio State University, Ph.D. (1993).

WALSH, BRIAN
Visiting Instructor, Welding Technology, College of Career and Vocational Education. University of Alaska, Anchorage, B.S. (1993).

WARNER, IRVING
Assistant Professor, English, Kodiak College. University of Alaska Fairbanks, B.A. (1972); University of Maine, Orono, M.F.A. (1983).

WARREN, GARLYN R.
Professor, Business Computer Information Systems, Computer Information and Office Systems, School of Business. University of California, B.S. (1964); University of Alaska, M.S. (1978); Certified Data Processor (1967).

WATSJOLD, KATHY
Associate Professor, Dental Programs, College of Career and Vocational Education. City College of San Francisco, Dental Assisting Certificate (1969), A.A. (1969); California State University, B.A. (1975); San Francisco State University, M.S. (1981).

WEBBER, LINDA
Visiting Assistant Professor, Psychology, College of Arts and Sciences. Vassar College, B.A. (1968); University of Chicago, Ph.D. (1975).

WEBER, ROBERTA
Academic Advising Coordinator, Advising and Counseling Center. Minot State College, B.A. (1971); University of North Dakota, M.A. (1986).

WEISS, LAWRENCE D.
Associate Professor, Sociology, College of Arts and Sciences. University of California at Santa Cruz, B.A. (1968); University of New Mexico, M.A. (1972); State University of New York at Binghamton, Ph.D. (1979); Harvard School of Public Health, M.S. (1982).

WEKEZER, JERRY W.
Professor, Civil Engineering (Chair), School of Engineering. Gdansk Technical University, B.S. (1968), M.S. (1969), Ph.D. (1974).

WELTER, COLE H.
Associate Professor, Art (Chair), College of Arts and Sciences. University of Texas at Austin, B.F.A. (1974), M.F.A. (1976); Texas Tech University, Ph.D. (1989).

WEYAND, KENNETH B.
Associate Professor, Aviation Programs, College of Career and Vocational Education. University of Illinois, B.S. (1969), M.Ed. (1971); Airframe and Powerplant License (1968); Inspection Authorization (1986).

WHEELER, N. JILL
Assistant Professor, Education, School of Education. Ball State University, B.S. (1975); Michigan State University, M.A. (1981); Ball State University, Ed.D. (1988).

WICK, BRIAN D.
Professor, Mathematical Sciences, College of Arts and Sciences. San Diego State University, B.S. (1966), M.S. (1968); University of Washington, Ph.D. (1972).

WIDDICOMBE, RICHARD (TOBY)
Assistant Professor, English, College of Arts and Sciences. Cambridge University, England, B.A. (1977); University of California, Irvine, M.A. (1979), Ph.D. (1984).

WILCOX, DAVID A.
Visiting Instructor, Psychology, College of Arts and Sciences. Southern Oregon College, B.S. (1971); University of Alaska Anchorage, M.S. (1990).

WILDE, PAMELA A.
Assistant Professor, Nursing, School of Nursing and Health Sciences. University of Oregon, B.S.N. (1978); University of Utah, M.S. (1985).

WILLIAMS, BRIAN
Instructor, Electronics, College of Career and Vocational Education. Anchorage Community College, A.A.S. (1978).

WILLIAMS, KANDACE
Assistant Professor, Biological Sciences, Biomedical Program, College of Arts and Sciences. University of Alaska Anchorage, B.S. (1980); Dartmouth Medical School, Ph.D. (1987).

WILSON, BARBARA J.
Acting Director, Personnel; Director, Affirmative Action. Alaska Pacific University, B.S. (1991).

WILSON, JAMES R.
Professor Emeritus, English, College of Arts and Sciences. University of Tulsa, B.A. (1947), M.A. (1949); University of Oklahoma, Ph.D. (1953).

WILSON-MARSH, ROZANNE M.
Associate Professor, Music, College of Arts and Sciences. Morris Harvey College, B.A. (1964); University of Alaska Fairbanks, M.A. (1992).

WISCHER, KATHLEEN
Instructor, Office Management and Technology, Kodiak College. Western Michigan University, B.S. (1968).

WOLBERS, MARK
Assistant Professor, Music, College of Arts and Sciences. Michigan State University, B.M. (1981); University of Michigan, M.M. (1985), D.M.A. (1990).

WOLFE, WENDELL
Professor Emeritus, Education, School of Education. North Texas University, B.S. (1948); Texas College of Arts and Sciences, M.S. (1952); University of Texas, Ph.D. (1965).

WOOD, DWIGHT
Assistant Professor, Petroleum Technology, College of Career and Vocational Education, Kenai Peninsula College. Incarnate Word College, B.A.

WOODRING, MARY
Visiting Instructor, Nursing, School of Nursing and Health Sciences. Beloit College, B.A. (1979); Rush University, B.S. (1981); University of Washington, M. Nursing (1986).

WORKMAN, WILLIAM B.
Professor, Anthropology, College of Arts and Sciences. University of Wisconsin, B.A. (1962), M.A. (1969), Ph.D. (1974).

YEN, YI-MIIN (MINNIE)
Assistant Professor, Business Computer Information Systems, Computer Information and Office Systems, School of Business. National Cheng-Chi University, B.S. (1978); University of Houston, M.S. (1980), M.B.A. (1983), Ph.D. (1989).

YESNER, DAVID R.
Professor, Anthropology, College of Arts and Sciences. Cornell University, B.A. (1971); University of Connecticut, M.A. (1974), Ph.D. (1977).

YOUNG, DARYL A.
Student Health Center Manager. Certified Family Nurse Practitioner. Alaska Methodist University, B.S. (1976); University of Alaska Anchorage, M.S. (1983).

ZAGORSKI, RAYMOND
Assistant Professor, Business Administration, Kenai Peninsula College. Wayne State University, B.S. (1969), M.B.A. (1970).

ZIMMERMAN, CYNTHIA
Visiting Instructor, Dental Assisting, College of Career and Vocational Education. University of Alaska Anchorage, A.A.S. (1976).

CHAPTER 13

INDEX

1994-1995 Academic Calendar 9
Academic Affairs 13
Academic Appeals 54, 162
Academic Dishonesty 39
Academic Petition 54
Academic Probation 162
Academic Rights of Students 36
Academic Standing 54
Access to Student Records 36, 54
Accounting 102
  Associate of Applied Science 102
  Bachelor of Business Administration 102
  Course Descriptions 186
  Minor 103
Accreditation 15
Accredited Colleges/Universities 55
ACT (English Component) 61
ACT-PEP Examinations 61
Additional Master's Degrees 163
Administrative Organization 13
  Academic Affairs 13
  Administrative Services 13
  Student Services 13
Admission to Graduate Programs 160
  Transfer Credits 160
Adult Basic Education 46
Adult Learning Center 32
Advanced Placement in a Language 59
Advanced Placement Program 60
Advising 32
Advising and Counseling Center 32
Affirmative Action 14
Age Limit of Credits 55
Agriculture 113
  Associate of Applied Science 113
  Course Descriptions 190
Air Traffic Control 114
  Associate of Applied Science 114
  Course Descriptions 198
Alaska Center for International Business 50
Alaska Native Studies 75
  Course Descriptions 191
  Minor 75
Alaska State Student Loan Program (ASSL) 29
Alaska Wilderness Studies
  Course Descriptions 202
Alcohol Policy 40
  Alcoholics Anonymous 40
  Campus Policy 40
  Residential Policy 40
Alternative Learning Options 184
  Directed Study 184
  Flexible Time Courses 184
  Independent Study 184
  Interdisciplinary/Multidisciplinary Courses 184
  Telecourses 184
Anchorage Campus 12
  Chugiak-Eagle River Campus 12
  DownTown Center 12
  Military Education Services 12
Anthropology 75
  Bachelor of Arts 75
  Bachelor of Science 76
  Course Descriptions 192
  Minor 76
Application for Graduation 161
Applied Statistics 76
  Course Descriptions 197
  Minor 76
Architectural and Engineering Technology 114
  Associate of Applied Science 115
  Certificates 115
  Course Descriptions 189
Arctic Engineering 176
  Master of Science 176
Art 77
  Bachelor of Arts 77
  Bachelor of Fine Arts 78
  Course Descriptions 193
  Minor 80
Arts Building 42
Assessment 32
Assessment and Advisement 18
Associate Degree Course Classifications 68
AA and BA Degree General Education
    Requirements Link 67
Astronomy
  Course Descriptions 198
Athletic Programs 40
Auditing Classes 19
Auto-Diesel Technology 116
  Associate of Applied Science
    Automotive Technology 117
    Diesel Technology 118
  Certificates 116
  Ford ASSET Program 118
  Course Descriptions 187
Aviation Administration 118
  Associate of Applied Science 119
  Course Descriptions 198
Aviation Maintenance Technology 119
  Associate of Applied Science 120
  Certificate 120
  Course Descriptions 198
Baccalaureate Degree Programs
    Admission Requirements 65
Bio/Demo Information 19
Biological Sciences 80, 165
  Bachelor of Arts 80
  Bachelor of Science 81
    Natural Sciences 82, 94
  Course Descriptions 208
  Doctoral Program 165
  Master of Science 165
  Minor 82
Board of Regents 300
Bookstore 41
Bureau of Indian Affairs (BIA) 29
Business Administration 104, 169
  Associate of Applied Science
    General Business 104
    Small Business Administration 104
  Bachelor of Business Administration 105
  Certificate
    Small Business Management 104
  Course Descriptions 204
  Master of Business Administration 169
  Minor 107
Campus Parking 42
Canadian Studies 82
  Minor 82
Cancellation of Classes 19
Career Resources 32
Center for Alcohol and Addiction Studies 51
Center for Economic Education 50
Center for Human Development 50
Certificate and Associate Degree Programs
    Admission Requirements 65
Certificates and Degrees 8
Certified Experience Credit 59
Change of Address 21
Change of Name 19
Changing Degree Programs,
    Majors , or Certificates 160
Changing Majors and Degree Programs 65
Cheating 55
Chemistry 83
  Bachelor of Science 83
  Course Descriptions 214
  Minor 84
Chinese
  Course Descriptions 244
Chugiak-Eagle River Campus 12, 46
Civil Engineering 147, 176
  Bachelor of Science 147
  Course Descriptions 212
  Master of Science 177
  Master of Civil Engineering 177
Class Attendance 55
Class Standing 55
Clinical Psychology 167
  Master of Science 167
Club Council 43
Code of Conduct 37
  Academic Dishonesty 39
  Disciplinary Procedures 37
  Sex Offenses on Campus 39
College of Arts and Sciences 73, 165
  Associate of Arts Degree 73
  Baccalaureate Degrees 74
  Minor 74
  Requirements 74
College of Career and Vocational Education 113, 171
College Work Study Program 30
College-Level Examination Program (CLEP) 60
Commencement 55
Community and Continuing Education 46
  Adult Basic Education 46
  Chugiak-Eagle River Campus 46
  Conferences and Institutes 46
  Continuing and Professional Education 46
  Cooperative Education 47
  Corrections Education Services 47
  Developmental Education 47
  Distance Education Services 47
  Learning Resources Center 47
  Military Education Services 47
  North Pacific Fisheries
    Observer Training Center 48
  Registration 46
  Summer Sessions 48
Community Education
  Course Descriptions 213

Computer Electronics 121
Associate of Applied Science 121
Computer Information and Office Systems 107
Associate of Applied Science
Business Computer Information Systems 109
Office Management and Technology 110
Bachelor of Business Administration
Management Information Systems 111
Certificates 108
Course Descriptions 216
Computer Science 84
Bachelor of Arts 85
Bachelor of Science '85
Course Descriptions 221
Minor 86
Computing and Technology Services 41
Computer Networks 41
Labs 41
Other Services 41
VAX Resources 41
Conferences and Institutes 46
Consortium Library 33
Consumer and Home Economics
Course Descriptions 252
Contact Hours 184
Contents 2
Continuing and Professional Education 46
Cooperative Education 47
Corequisites 55
Corrections Education Services 47
Correspondence Study 32, 55
Counseling 32
Course Descriptions 220
Course Level Expectations 184
Course Numbering System 185
Credit 55
Resident Credit 55
Transfer Credit 55
Accredited Colleges/Universities 55
G.E.R. Credits within the University of Alaska System 56
Unaccredited Institutions 56
Credit for Prior Learning 59
Credit/No Credit 57
Dance
Course Descriptions 224
DANTES/USAFI Examinations 61
Declaring Majors 65
Deferred Grade 57
Della Keats Summer Enrichment Program 34
Dental Assisting 121
Associate of Applied Science 123
Certificate 122
Course Descriptions 222
Dental Hygiene 123
Associate of Applied Science 124
Course Descriptions 223
Developmental Education 33, 47
Dietetics and Nutrition
Course Descriptions 224
Directed Study 56, 184
Disability Support Services 33
Disciplinary Procedures 37
Distance Education Services 47
DownTown Center 12
Drug and Alcohol Counseling Resources 40
Early Childhood Development 142
Associate of Applied Science 142
Certificate 142
Course Descriptions 226
Economics 155
Bachelor of Arts 155
Bachelor of Business Administration 156
Course Descriptions 227
Minor 156
Education 143
Bachelor of Education
With Teacher Certification 143
Without Teacher Certification 146
Certification Program 143
Course Descriptions 228
Master of Arts in Teaching 175
Master of Education 172
Minor 146
Educational Opportunity Center 33
Educational Talent Search Program 34
Electronics Technology 125
Associate of Applied Science 125
Certificates 125
Course Descriptions 242
Emergencies and First Aid 42
Emergency Loan Fund (ELF) 29
Emergency Medical Technology
Course Descriptions 235
Emergency Trauma Technician
Course Descriptions 244
Engineering 147, 176
Bachelor of Science
Civil Engineering 147
Master of Science
Arctic Engineering 176
Civil Engineering 176
Engineering Management 177
Environmental Quality Engineering 178
Environmental Quality Science 178
Science Management 177
Master of Civil Engineering 177
Course Descriptions
Civil Engineering 212
Engineering Science 240
Engineering and Science Management 241
Engineering Design and Drafting 235
Environmental Quality Engineering 240
Mechanical Engineering 265
Engineering Design and Drafting
Course Descriptions 235
English 86, 165
Bachelor of Arts 86
Course Descriptions 235
Master of Arts 165
Master of Arts in Teaching 166
Master of Fine Arts, Creative Writing 166
Minor 87
English-As-A-Second Language
Course Descriptions 241
Environment and Natural Resources Institute 50
Exchange Programs 21
Student Exchange Program 21
Study Abroad Opportunities 21
Extended Registration 161
Facsimile (FAX) Transmission 21
Faculty and Administration 300
Faculty Signature 21
Faculty-Initiated Withdrawals 56
Fashion Merchandising
Course Descriptions 252
Fee Explanations 25
Fees, Typical 25
Fee Explanations 25
Add/Drop Fee 25
Administrative Fee 25
Audit Fee 25
Continuing Education Unit Fee 25
Course Reservation Fee 25
Credit for Prior Learning Evaluation Fee 25
Credit for Prior Learning Fee 25
Credit-by-Exam Fee 25
Graduate Extended Registration Fee 25
Laboratory, Material, and Other Fees 25
Music Lesson Fee 25
Non-Credit Course Fee 25
Parking Fee 25
Placement Fee 25
Royalty Fee 25
Special Course and Laboratory Fees 26
Student Activity Fee 25
Student Health Center Fee 25
Financial Aid
Policies of Satisfactory Academic Progress 27
Refund and Repayment Policy 29
Student 26
Application Procedures 26
Eligibility 26
Federal Verification 27
Satisfactory Academic Progress 27
Financial Obligations 26
Fine and Performing Arts Facilities 42
Arts Building 42
Wendy Williamson 42
Fire Service Administration 126
Associate of Applied Science 126
Course Descriptions 248
Fisheries Technology
Course Descriptions 250
Flexible Time Courses 184
Food Service 42
Foods and Nutrition
Course Descriptions 252
Foodservice Technology 126
Associate of Applied Science 127
Nontranscripted Departmental Certificate
Dietary Manager 127
Course Descriptions 249
Forestry Technology 128
Associate of Applied Science 128
Course Descriptions 248
Formal Acceptance to Graduate Programs 160

Formal Admission to Undergraduate Programs 64
Baccalaureate Degree Programs 65
Admission on Probation 66
Certificate and Associate Degree Programs 65
Changing Majors and Degree Programs 65
Declaring Majors 65
Exceptions for Associate Degree and Certificate Seeking Students 64
Freshmen 64
International Students 64
Pre-Major Status 65
Returning Students 64
Sophomores, Juniors, and Seniors 64
Transcripts and Test Scores 64
Transfer Students 64
Freedom from Unreasonable Search/Seizure 36
Freedom of Access 36
Freedom of Association 36
Freedom of Expression 36
French
Course Descriptions 245
Full-Time/Part-Time Status 56
General Education Requirements
Baccalaureate Degrees 70
General University Requirements
Additional Master's Degrees 163
Graduate Programs 162
Interdisciplinary Graduate Degrees 163
Ph.D. Degrees 163
School or Program Requirements 163
Undergraduate Programs 66
Associate Degrees 66
Concurrent Programs of Study 66
Degree Requirements
Associate of Applied Science 67
Associate of Arts 67
Second Associate Degree 67
AA and BA Degree General Education Requirements Link 67
Baccalaureate Degrees 69
Concurrent Programs of Study 69
Minors 69
Second Baccalaureate Degree 69
Certificates 66
University Requirements for Certificates 163
University Requirements for Master's Degrees 163
General University Requirements—Graduate 162
Geography
Course Descriptions 250
Geology 88
Course Descriptions 251
Minor 88
German
Course Descriptions 245
GPA and Student Activities 56
Grade Changes 57
Grade Point Average Computation 57
Grade Reports 58
Grading 56
Graduate Advisor 161
Graduate Assistantships 30
Graduate Degrees, Interdisciplinary 163
Graduate Extended Registration 19
Graduate Programs
Academic Appeals 162
Academic Probation 162
Advancement to Candidacy 161
Application for Graduation 161
Applying for Admission 160
Changing Degree Programs, Majors, Certificates 160
Changing Emphasis 160
Conditional Admission 160
Determining Program Requirements 162
Extended Registration 161
Formal Acceptance 160
Full-Time/Part-Time Status 162
Graduate Advisor 161
Graduate Studies Committee 161
Leave of Absence 162
Non-Degree-Seeking Students 160
Official Graduate Studies Plan 161
Reinstatement to Graduate Degree-Seeking Status 162
Removal from Graduate Degree-Seeking Status 162
Responsibilities of Graduate Advisor and/or Committee 161
Test Scores and Transcripts 160
Western Regional Graduate Program 164
Graduate Studies Committee 161
Graduate Tuition for Non-Resident Students 24
Graduate Tuition for Resident Students 24
Graduation Application 58
Graduation with Honors 58
Grants 29
Bureau of Indian Affairs (BIA) 29
PELL Grant 29
Supplemental Educational Opportunity Grant (SEOG) 29
Guidance
Course Descriptions 252
Handicap Parking 42
Health
Course Descriptions 255
Health Sciences 150
Bachelor of Science 150
Course Descriptions 256
Minor 151
History 88
Bachelor of Arts 88
Course Descriptions 253
Minor 88
Home Economics 128
Associate of Applied Science 129
Certificates 129
Course Descriptions 252
Honors List 58
The Chancellor's List 58
The Dean's List 58
Housing and Home Interior Design
Course Descriptions 252
Human Services 130
Associate of Applied Science 130
Course Descriptions 258
Humanities
Course Descriptions 257
Incomplete Grade 58
Independent Study 58, 184
Industrial Process Instrumentation 131
Associate of Applied Science 131
Institute for Circumpolar Health Studies 50
Institute of Social and Economic Research 50
Interdisciplinary Degrees, Baccalaureate 72
Interdisciplinary Graduate Degrees 163
Interdisciplinary/Multidisciplinary Courses 184
Interior Design
Course Descriptions 259
International Students 18, 64
International Studies 14
Course Descriptions 259
Japanese
Course Descriptions 246
Journalism and Public Communications 89
Bachelor of Arts 89
Course Descriptions 259
Minor 90
Justice 156
Bachelor of Arts 156
Course Descriptions 261
Minor 157
Justice Center 50
Kenai Peninsula College 13
Kodiak College 13
Korean
Course Descriptions 246
Labs 41
Languages 90
Course Descriptions
Foreign Languages Self Study 244
Minor 90
Latin
Course Descriptions 246
Leadership Honors 43
Learning Resources Center 33, 47
Library 33
Library Science
Course Descriptions 263
Linguistics
Course Descriptions 263
Loans 29
Alaska Student Loan Program 29
Emergency Loan Fund (EIF) 29
Perkins Student Loans 29
Stafford Student Loan 29
Local Credit by Examination 59
Loss of Baccalaureate Degree-Seeking Status 59
Lost and Found 42
Marine Technology
Course Descriptions 267
Matanuska-Susitna College 13
Mathematics 91
Bachelor of Arts 91
Bachelor of Science 91
Course Descriptions 263
Minor 92
Mechanical Technology
Certificate 131
Course Descriptions 266
Medical Assisting 132
Associate of Applied Science 132
Course Descriptions 263

Medical Laboratory Technology 132
Associate of Applied Science 133
Course Descriptions 266
Military Credit 60
Military Education Services 12, 47
Minority Student Services 33
Educational Talent Search Program 34
Program Development 34
Tutorial Assistance Program 34
Mission 14
Music 92
Bachelor of Arts 92
Bachelor of Music
Elementary Education 92
Performance 92
Secondary Education 92
Course Descriptions 267
Minor 93
National Credit By Examination 60
National Occupational Competency Testing Institute (NOCTI) Examination 61
Native Student Services 34
Della Keats Summer Enrichment Program 34
Natural Sciences 94
Bachelor of Science 94
Non-Degree-Seeking Students 18
Non-Traditional Credit 59
Advanced Placement in a Foreign Language 59
Certified Experience Credit 59
Credit for Prior Learning 59
Local Credit by Examination 59
Military Credit 60
National Credit By Examination 60
ACT (English Component) 61
ACT-PEP Examinations 61
Advanced Placement Program 60
College-Level Examination Program (CLEP) 60
DANTES/USAFI Examinations 61
National Occupational Competency Testing Institute (NOCTI) Examination 61
SAT (Verbal Component) 61
Test of Standard Written English 61
North Pacific Fisheries Observer Training Center 48
Northern Region Military Education Services 48
Nursing 151
Associate of Applied Science 151
Course Descriptions 274
Nursing Science 152, 179
Bachelor of Science 152
Master of Science 179
Course Descriptions 271
Official Graduate Studies Plan 161
Open Enrollment 18
Assessment and Advisement 18
International Students 18
Non-Degree-Seeking Students 18
Orientation 18
Other Services 41
Paralegal Studies 157
Certificate 157
Course Descriptions 275
Paramedic Technology 133
Course Descriptions 281
Pass/No Pass 58
Payment Procedure 26
PELL Grant 29
Perkins Student Loans 29
Petroleum Engineering
Course Descriptions 279
Petroleum Engineering Aide 134
Associate of Applied Science 134
Petroleum Technology 134
Associate of Applied Science 135
Certificate 134
Course Descriptions 279
Ph.D. Degrees 163
Philosophy 95
Course Descriptions 280
Minor 95
Physical Education
Course Descriptions 276
Physical Education and Recreation
Course Descriptions 277
Physical, Outdoor and Health Education 48
Physics
Course Descriptions 280
Placement 34
Political Science 95
Bachelor of Arts 95
Course Descriptions 281
Minor 96
Pre-Major Status 65
Prerequisites 61
Principal Administrative Officers 300
Professional Piloting 135
Associate of Applied Science 136
Course Descriptions 198
Program Development 34
Psychological Services Center 32
Psychology 97
Bachelor of Arts 97
Bachelor of Science 97
Course Descriptions 283
Master of Science
Clinical Psychology 167
Minor 97
Public Administration
Course Descriptions 275
Master of Public Administration 181
Reading/Writing Center 34
Recommendations 61
Refrigeration and Heating Technology 136
Associate of Applied Science 137
Certificate 137
Course Descriptions 287
Refund Policy 26
Cancelled Classes 26
Non-Credit, CEU, and Self-Support Classes 26
Regular Tuition, Credit Courses 26
Registration 18, 46
Registration by Proxy 19
Registration Changes 19
Reinstatement 61
Removal from a Major Program 61
Repeating Courses 61
Residence Life 43
Residency for Tuition Purposes 24
Resident Credit 55
Returning Students 64
Rights, Freedoms, and Responsibilities
Academic Rights of Students 36
Access to Student Records 36
Code of Conduct 37
Disciplinary Procedures 37
Freedom from Unreasonable Search/Seizure 36
Freedom of Access 36
Freedom of Association 36
Freedom of Expression 36
Student Participation in Institutional Government 36
Russian
Course Descriptions 246
Safety 15
SAT (Verbal Component) 61
Satisfactory Academic Standing 162
Scholarships 30
School of Business 102, 169
School of Education 142, 172
School of Engineering 147, 176
School of Nursing and Health Sciences 150, 179
School of Public Affairs 155, 181
School or Program Requirements 163
Science Management 177
Master of Science 177
Second Baccalaureate Degree 69
Senior Citizen Tuition Waiver 26
Sex Offenses on Campus 39
Sexual Harassment 15
Smoke-Free Environment 42
Social Security Number 21
Social Work 98, 168
Bachelor of Social Work 98
Course Descriptions 291
Master's of Social Work 168
Minor 99
Sociology 99
Bachelor of Arts 99
Bachelor of Science 99
Course Descriptions 289
Minor 100
Sources of Information 4-7
Southcentral Region Military Education Services 47
Spanish
Course Descriptions 247
Special Services
Fine and Performing Arts Facilities 42
Speech
Course Descriptions 291
Speech and Debate 44
Speed Limits 43
Stafford Student Loan 29
Student Accident and Illness Insurance 43
Student Complaint Procedures 40
Student Employment 30
College Work Study Program 30
Student Exchange Program 21
Student Financial Aid 26
Application Procedures 26
Eligibility 26
Federal Verification 27
Satisfactory Academic Progress 27
Student Government 43
Student Health Center 43

Student Leadership Office 43
Club Council 43
Leadership Honors 43
Student Government 43
Student Participation in Institutional Government 36
Student Services 13
Student Showcase 44
Student Union Programs and Services Office
Speech and Debate 44
Student Showcase 44
Study Abroad Opportunities 21
Study Load 21
Summer Sessions 48
Supplemental Educational Opportunity Grant (SEOG) 29
Surveying and Mapping 137
Associate of Applied Science 138
Bachelor of Science 138
Course Descriptions 288
Technology 139
Bachelor of Science 139
Course Descriptions 292
Telecourses 184
Test of Standard Written English 61
Textiles and Clothing
Course Descriptions 252
The Chancellor's List 58
The Dean's List 58
Theatre 100
Bachelor of Arts 100
Course Descriptions 293
Minor 101
Transcripts 21
Transcripts and Test Scores 64
Transfer Credit 55
Transfer of G.E.R. Credits within the University of Alaska System 56
Transfer Students 64
Tuition Summary
Non-Resident
Graduate 24
Undergraduate 24
Resident
Graduate 24
Undergraduate 24
Special Courses 24
Tutorial Assistance Program 34
Typical Fees 25
UAA Campus Map 3
Unaccredited Institutions 56
Under-Age Students 18
Undergraduate Tuition for Non-Resident Students 24
Undergraduate Tuition for Resident Students 24
University of Alaska Center for Economic Development 51
University of Alaska Small Business Development Center 51
University Police Department 42
University Requirements For Certificates 163
University Requirements For Master's Degrees 163
VAX Resources 41
Veteran's Assistance 30
Adds, Drops, and Other Changes 30
Admission to UAA 30
Satisfactory Academic Progress 30
Transcripts 30
Vocational Education 171
Course Descriptions 294
Master of Science 171
Vocational Skills
Course Descriptions 296
Wastewater Treatment
Course Descriptions 298
Welding Technology 141
Associate of Applied Science 141
Certificate 141
Course Descriptions 296
Wendy Williamson Memorial Auditorium and Lecture Hall 42
Western Aleutian Region Military Education Services 48
Western Regional Graduate Program 164
Women's Studies 101
Course Descriptions 297
Minor 101
World Trade Center Alaska 50





This University of Alaska Anchorage publication was produced by the division of Enrollment Services at a cost of $2.31 per copy.

Vice Chancellor for Student Services:	Dr. L. K. Kingry
Associate Vice Chancellor:	Linda Berg Smith
Photographer:	Laurie Marchesani
Graphic Designer:	Stephanie LaFleur
Curriculum Manager:	Bec Smith
Desktop Publishers:	Rob Lecrone
	Tylan Schrock
	Lillian Erickson
	Patty Itchoak
Proof Readers:	Jean Stanley
	Dr. Hilary Davies
	Dr. Arlene Kuhner
	Dr. Roberta Morgan

Cover photography: Mt. Foraker: ©1994 Ken Graham/Ken Graham Agency
Inset photos: Laurie Marchesani

UNIVERSITY OF ALASKA ANCHORAGE

DIVISION OF ENROLLMENT SERVICES

3211 Providence Drive Anchorage, Alaska 99508-8044 (907) 786-1480

UNDERGRADUATE APPLICATION FOR ADMISSION

DIRECTIONS: Complete both sides. Please print legibly in ink or type. Be sure you have signed and dated the application and enclosed the correct fee ($35). Admission is for a specific term. If you do not attend the term for which you apply, please contact Enrollment Services.

PERSONAL

Full Legal Name _____ Social Security Number _____ - _____ - _____
(Last) (First) (M.I.)

Previous Names _____ Sex ☐ Male ☐ Female

Current Mailing Address _____
(Street) (City) (State) (Zip)

Address Current Until ____ / ____ / ____ Date of Birth ____ / ____ / ____
(Month) (Day) (Year) (Month) (Day) (Year)

Local Phone Number _____ Permanent Phone Number _____

Permanent Mailing Address (If different from current) _____
(Street) (City) (State) (Zip)

ETHNIC ORIGIN: Requested for compliance with Title IV of the Civil Rights Act of 1964. Optional. Used for statistical purposes only. *Circle One.*

A. American Indian
B. Black, non-Hispanic
H. Hispanic
P. Asian, Pacific Islander
W. White, non-Hispanic
L. Alaskan Aleut
K. Alaskan Eskimo, Inupiat
Y. Alaskan Eskimo, Yupik
E. Alaskan Eskimo, Other
S. Alaskan Indian, Southeast
T. Alaskan Indian, Athabascan
I. Alaskan Indian, Other
N. Alaskan Native, Other
O. Other

RESIDENCY

In what state do you claim official residency? _____ Are you ☐ Active Duty Military ☐ Military Dependent

If you claim Alaska residency, how long have you lived in Alaska? _____ Branch of Service _____

CITIZENSHIP

Are you a U.S. citizen? ☐ Yes ☐ No

If no, list country of citizenship _____ Visa type _____

If resident alien, list card # _____ Country of Birth _____

Do you require an F-1 student Visa? ☐ Yes ☐ No TOEFL taken ☐ Yes ☐ No

TERM

Please check the term for which you are applying:

☐ Fall 19____
☐ Spring 19____
☐ Summer 19____

UNDERGRADUATE MAJORS OFFERED AT UAA

— ASSOCIATE AND CERTIFICATE PROGRAMS

☐ Associate of Arts (AA)
☐ Accounting (AAS)
☐ Architectural & Engineering Tech (AAS)
☐ Architectural Drafting (CERT)
☐ Air Traffic Control (AAS)
☐ Automotive Technology (AAS)
☐ Automotive Technology (CERT)
☐ Aviation Administration (AAS)
☐ Aviation Maintenance Tech (AAS)
☐ Aviation Maintenance Tech (CERT)
☐ Business Communications (CERT)
☐ Business Computer Info Systems (AAS)
☐ Civil Engineering Drafting (CERT)
☐ Dental Assisting (AAS)
☐ Dental Assisting (CERT)
☐ Dental Hygiene (AAS)
☐ Diesel Technology (AAS)
☐ Diesel Technology (CERT)
☐ Early Childhood Development (AAS)
☐ Early Childhood Development (CERT)
☐ Electronics Technology (AAS)
☐ Electronics Technology (CERT)
☐ Fashion Merchandising (CERT)
☐ Fire Service Administration (AAS)
☐ Food Service Technology (AAS)
☐ General Clerical (CERT)
☐ Home Economics (AAS)
☐ Human Services (AAS)
☐ Legal Secretary(CERT)
☐ Mechanical/Electrical Draft (CERT)
☐ Medical Assisting (AAS)
☐ Medical Lab Technology (AAS)
☐ Nursing (AAS)
☐ Office Management Technology (AAS)
☐ Paralegal Studies (CERT)
☐ Professional Piloting (AAS)
☐ Small Business Administration (AAS)
☐ Structural Drafting (CERT)
☐ Surveying and Mapping (AAS)
☐ Welding Technology (AAS)
☐ Word Processing (CERT)

– BACCALAUREATE PROGRAMS

☐ Accounting (BBA)
☐ Anthropology (BA)
☐ Anthropology (BS)
☐ Art (BA)
☐ Art (BFA)
☐ Biological Sciences (BA)
☐ Biological Sciences (BS)
☐ Chemistry (BS)
☐ Computer Science (BA)
☐ Computer Science (BS)
☐ Economics (BA)
☐ Economics (BBA)
☐ Education, Elementary (BED)
Teaching Minor _____
☐ Education, Secondary (BED)
with a teaching major in (circle one):
Art Biology Chemistry
Computer Science English
General Science Geology History
Mathematics Music Social Science
☐ Engineering, Civil (BS)
☐ English (BA)
☐ Finance (BBA)
☐ Health Science (BS)
☐ History (BA)
☐ Interdisciplinary Studies (BA)
☐ Interdisciplinary Studies (BS)
☐ Journalism and Public Commun. (BA)
☐ Justice (BA)
☐ Management (BBA)
☐ Management Information Systems (BBA)
☐ Marketing (BBA)
☐ Mathematics (BA)
☐ Mathematics (BS)
☐ Music, Performance (BM)
Instrument _____
☐ Music, Elementary Ed. (BM)
☐ Music, Secondary Ed. (BM)
☐ Music, (BA)
☐ Natural Science (BS)
☐ Nursing Sciences (BS)
☐ Physical Education (BED)
☐ Political Science (BA)
☐ Psychology (BA)
☐ Psychology (BS)
☐ Social Work (BSW)
☐ Sociology (BA)
☐ Sociology (BS)
☐ Surveying and Mapping (BS)
☐ Technology (BS)
☐ Theatre (BA)
☐ Undeclared (BA)

STATUS

Are you ☐ Freshman ☐ Transfer ☐ Returning to UAA Is this application for a concurrent or second degree program? ☐ Yes ☐ No

If returning, have you attended other schools since your last enrollment at UAA? ☐ Yes ☐ No

EDUCATIONAL BACKGROUND

Do you have or expect to have (check one) ☐ High School Diploma ☐ GED ☐ Foreign Equivalent ☐ No Diploma

Name of high school from which you graduated or will graduate: _____

City _____ State _____

High School Graduation Date _____ or Date GED Earned _____

If you have earned fewer than 30 college semester credits, you must take either the ACT or SAT examination. Your acceptance cannot be finalized until official scores are received. Associate degree and Certificate students may substitute the ASSET assessment.

ACT TAKEN_____ (Date) SAT TAKEN_____ (Date)

LIST ALL UNIVERSITIES AND COLLEGES ATTENDED: (INCLUDING UAA)

Previously earned credits may be transferred toward UAA degrees or programs only from those regionally accredited schools listed below at the time of application for admission. It is your responsibility to forward official transcripts from each school below (except UAA) to the office of Admissions and Student Relations.

SCHOOL	CITY/STATE	DATES ATTENDED		CREDITS EARNED		DEGREES/ DATES
		MO/YR	MO/YR	SEMESTER	QUARTER	

Are you currently enrolled in college or university? ☐ Yes ☐ No. If yes, state name of school _____

If yes, state number of credits in which you are enrolled _____ and ending date of enrollment _____

SPECIAL CONSIDERATIONS

Are you an honorably discharged veteran? ☐ Yes ☐ No Are you eligible for VA Educational Benefits? ☐ Yes ☐ No

AGREEMENT

ALL APPLICANTS PLEASE READ AND SIGN THE FOLLOWING

I understand that withholding information requested on this application or giving false information may make me ineligible for admission to the University or subject to dismissal. With this in mind, I certify that the above statements are correct and complete and if admitted, I agree to abide by the published policies, rules and regulations of the University of Alaska Anchorage. I further understand that from the time I file my application with the University, it is my responsibility to know all the rules, requirements and exemptions from my intended degree program.

_____ (Signature) _____ (Date)

In order to be reviewed, this application must be signed, dated and accompanied by a non-refundable application fee. ($35)

FOR EMERGENCIES

Next of Kin (Person to notify in case of emergency)_____ Relationship _____

Mailing Address _____ (City) (State) (Zip)

Phone Number_____

AFFIRMATIVE ACTION

Applications from all persons are welcomed, and women, members of minority groups, handicapped persons and Vietnam era veterans are especially encouraged to apply. The University of Alaska does not discriminate on the basis of race, color, national origin, religion, sex, age, disability or status as a Vietnam era veteran in employment or in admission to or the operation of its educational programs and activities, as prescribed by Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Executive Order 11246 as amended, the Rehabilitation Act of 1973, the Vietnam Era Readjustment Act of 1974, the Age Discrimination Acts of 1974-75, and 18.80.220 of the Alaska State Code. Inquiries concerning the application of these regulations to the University may be directed to the University's Affirmative Action Office or to the Director, Office of Federal Contract Compliance Programs, Department of Labor.

61-14474

UNIVERSITY OF ALASKA ANCHORAGE

DIVISION OF ENROLLMENT SERVICES
3211 Providence Drive Anchorage, Alaska 99508-8046 (907) 786-1480

GRADUATE APPLICATION FOR ADMISSION

DIRECTIONS: Complete both sides. Please print legibly in ink or type. Be sure you have signed and dated the application and enclosed the correct fee ($45.00). Admission is for a specific term. If you do not attend the term for which you apply, please contact Enrollment Services.

PERSONAL

Full Legal Name _____ (Last) _____ (First) _____ (M.I.) Social Security Number _____ - _____ - _____

Previous Names _____ Sex ☐ Male ☐ Female

Current Mailing Address _____ (Street) _____ (City) _____ (State) _____ (Zip)

Address Current Until _____ (Month) / _____ (Day) / _____ (Year) Date of Birth _____ (Month) / _____ (Day) / _____ (Year)

Local Phone Number _____ Permanent Phone Number _____

Permanent Mailing Address (If different from current) _____ (Street) _____ (City) _____ (State) _____ (Zip)

ETHNIC ORIGIN: Requested for compliance with Title IV of the Civil Rights Act of 1964. Optional. Used for statistical purposes only. *Circle one.*

A. American Indian
B. Black, non-Hispanic
H. Hispanic
P. Asian, Pacific Islander
W. White, non-Hispanic
L. Alaskan Aleut
K. Alaskan Eskimo, Inupiat
Y. Alaskan Eskimo, Yupik
E. Alaskan Eskimo, Other
S. Alaskan Indian, Southeast
T. Alaskan Indian, Athabascan
I. Alaskan Indian, Other
N. Alaskan Native, Other
O. Other

RESIDENCY

In what state do you claim official residency? _____ Are you ☐ Active Duty Military ☐ Military Dependent

If you claim Alaska residency, how long have you lived in Alaska? _____ Branch or Service _____

CITIZENSHIP

Are you a U.S. citizen? ☐ Yes ☐ No

If no, list country of citizenship _____ Visa type _____

If resident alien, list card # _____ Country of birth _____

Do you require an F-1 student Visa? ☐ Yes ☐ No TOEFL taken ☐ Yes ☐ No

Important: Non-Immigrant (F-1) students must attend full time (12 credits).

TERM

Please check the term for which you are applying:

☐ Fall 19 _____
☐ Spring 19 _____
☐ Summer 19 _____

GRADUATE AND CERTIFICATION PROGRAMS OFFERED AT UAA

(Please check one)

MASTER OF ARTS
☐ English
☐ Interdisciplinary Studies

MASTER OF FINE ARTS
☐ Creative Writing

☐ **MASTER OF ARTS IN TEACHING – ENGLISH**

☐ **MASTER OF ARTS IN TEACHING – EDUCATION**
Specify Major _____

☐ **MASTER OF BUSINESS ADMINISTRATION**

☐ **MASTER OF CIVIL ENGINEERING**

MASTER OF EDUCATION
☐ Adult Education
☐ Counseling & Guidance
☐ Public School Administration
☐ Special Education

☐ **MASTER TEACHER SPECIALTY OPTIONS:**
☐ Elementary Education
☐ Secondary Education
☐ Reading
☐ Classroom Literacy
☐ Curriculum and Instruction

MASTER OF SCIENCE
☐ Arctic Engineering
☐ Biological Science
☐ Civil Engineering
☐ Clinical Psychology
☐ Environmental Quality Engineering
☐ Environmental Quality Science
☐ Engineering Management
☐ Interdisciplinary Studies
☐ Nursing Science
☐ Science Management
☐ Vocational Education

☐ **MASTER OF PUBLIC ADMINISTRATION**

CERTIFICATION
☐ Counseling & Guidance
☐ Reading Specialist
☐ Special Education
☐ Public School Administration
_____ Principal
_____ Superintendent

EDUCATIONAL BACKGROUND

Name of high school from which you graduated: _____

City _____ State _____ High School Graduation Date _____ (Month) (Year)

GED Completed? ☐ Yes ☐ No Date completed _____ In what state? _____

LIST ALL UNIVERSITIES AND COLLEGES ATTENDED: (INCLUDING UAA, UAF & UAS)

You must submit official transcripts from every regionally accredited college or university listed below. It is your responsibility to include every school you have attended.

SCHOOL	CITY/STATE	DATES ATTENDED		CREDITS EARNED		DEGREES EARNED & GRADUATION DATES
		MO/YR	MO/YR	SEMESTER	QUARTER	

Test scores are required by certain schools and programs. Indicate dates you have taken or plan to take exam(s).

GRE Date Taken _____ Anticipated Date of Examination _____

GMAT Date Taken _____ Anticipated Date of Examination _____

SPECIAL CONSIDERATIONS

Are you an honorably discharged veteran? ☐ Yes ☐ No Are you eligible for VA Educational Benefits? ☐ Yes ☐ No

AGREEMENT

ALL APPLICANTS PLEASE READ AND SIGN THE FOLLOWING

I understand that withholding information requested on this application or giving false information may make me ineligible for admission to the University or subject to dismissal. With this in mind, I certify that the above statements are correct and complete and if admitted, I agree to abide by the published policies, rules and regulations of the University of Alaska Anchorage. I further understand that from the time I file my application with the University, it is my responsibility to know all the rules, requirements and exemptions from my intended degree program.

_____ _____

(Signature) (Date)

In order to be reviewed, this application must be signed, dated and accompanied by a non-refundable application fee ($45).

FOR EMERGENCIES

Next of Kin (Person to notify in case of emergency) _____ Relationship _____

Mailing Address _____

(City) (State) (Zip)

Phone Number _____

AFFIRMATIVE ACTION

Applications from all persons are welcomed, and women, members of minority groups, handicapped persons and Vietnam era veterans are especially encouraged to apply. The University of Alaska does not discriminate on the basis of race, color, national origin, religion, sex, age, disability or status as a Vietnam era veteran in employment or in admission to or the operation of its educational programs and activities, as prescribed by Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Executive Order 11246 as amended, the Rehabilitation Act of 1973, the Vietnam Era Readjustment Act of 1974, the Age Discrimination Acts of 1974-75, and 18.80.220 of the Alaska State Code. Inquiries concerning the application of these regulations to the University may be directed to the University's Affirmative Action Office or to the director, Office of Federal contract Compliance Programs, Department of Labor.