University of Alaska, Anchorage
1984-85 Catalog

The University of Alaska, Anchorage, is a major unit of the University of Alaska statewide system of higher education. Under the direction of the Board of Regents, the University of Alaska serves the people of America's largest state through urban centers at Fairbanks, Kenai-Soldotna, Ketchikan, Kodiak, Nome, Palmer, Sitka, Valdez and 12 Rural Education Centers. Information about the programs of each unit in the system may be obtained from that unit.

It is the policy of the University of Alaska to provide equal educational 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 Veteran's Readjustment Assistance Act of 1974, the Vocational Rehabilitation Act of 1973, the Age Discrimination Acts of 1974-75, and Alaska Statue 18.80.220. Inquiries regarding application of these and other regulations should be directed either to the Statewide Affirmative Action Officer of the University of Alaska; the Office of Civil Rights, Department of Education, Washington, D.C.; or to the Office of Federal Contract Compliance Programs, Department of Labor, Washington, D.C.

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Judith Cummings, Public Affairs

University of Alaska, Anchorage

1984-85 Catalog

Catalogs are available from the Office of Admissions and Records, University of Alaska, Anchorage, 3211 Providence Drive, Anchorage, Alaska 99508. Telephone: (907) 786-1481.

The University of Alaska, Anchorage is fully accredited by the Commission on Colleges of the Northwest Association of Schools and Colleges.
The School of Nursing is accredited by the National League of Nursing and the American Nurses Association.
The Bachelor of Social Work Program is accredited by the Council on Social Work Education.

It is the responsibility of the individual student to become familiar with the announcements and regulations of UAA printed in this catalog.
While every effort is made to ensure the accuracy of the information contained in this catalog; 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.


EXI

Academic Calendar University of Alaska, Anchorage

Fall Semester 1984

Fall 1984 Early Registration	April 10-11-12
Fall 1984 Applications for Admission Due	May 1
Early Registration Fees Due	Aug 16
Fall 1984 Regular Registration	Aug 27-28-29
Instruction Begins	Aug 30
Labor Day Holiday	Sept 3
Late Registration Begins	Sept 4
Late Registration Fee Begins	Sept 4
Add/Drop Begins	Sept 4
Add/Drop Fee Begins	Sept 4
100% Refund Deadline	Sept 5
Late Registration Ends	Sept 21
Add Deadline	Sept 21
Drop Deadline	Sept 21
Credit/No Credit Deadline	Sept 21
Applications for Diploma Due	Sept 21
Graduate Extended Registration Deadline	Sept. 21
Last Day for Any Refund	Sept 25
Applications for Graduate Admissions Due	*
Spring 1985 Applications for Admission Due	Oct 1
Withdrawal Deadline	Oct 19
Credit To Audit (Vice Versa)	Oct 19
Spring 1985 Early Registration	Nov 27-28-29
Thanksgiving Holiday	Nov 22-23
Final Examination Week Begins	Dec 10
Last Day of Instruction	Dec 15

*Deadline for Application to Graduate Programs Vary from School to School; Consult Specific Graduate Program for Admission Deadline.

Spring Semester 1985

Spring 1985 Applications for Admission Due	Oct 1
Spring 1985 Early Registration	Nov 27-28-29
Spring 1985 Regular Registration	Jan 8-9-10
Instruction Begins	Jan 14
Late Registration Begins	Jan 14
Late Registration Fee Begins	Jan 14
Add/Drop Begins	Jan 14
Add/Drop Fee Begins	Jan 14
100% Refund Deadline	Jan 15
Late Registration Ends	Feb 1
Add Deadline	Feb 1
Drop Deadline	Feb 1
Credit/No Credit Deadline	Feb 1
Applications for Diploma Due	Feb 1
Graduate Extended Registration Deadline	Feb 1
Last Day for Any Refund	Feb 4
Withdrawal Deadline	Mar 1
Credit to Audit (Vice Versa)	Mar 1
Spring Vacation	Mar 4-8
Summer 1985 Applications for Admission Due	Apr 1
Applications for Graduate Admission Due	*
Fall 1985 Early Registration	Apr 9-10-11
Final Examination Week Begins	Apr 29
Fall 1985 Applications for Admission Due	May 1
Last Day of Instruction	May 4
Commencement	May 10

*Deadlines for Application to Graduate Programs Vary from School to School; Consult Specific Graduate Program for Admission Deadline.

Summer Semester 1985

The Summer Semester Calendar will be published in the Summer 1985 Class Schedule.

DEGREE PROGRAMS

BACHELOR OF ARTS:

- Anthropology
- Art
- Biological Sciences
- Computer Science
- Economics
- English
- History
- Journalism & Public Communications
- Justice
- Mathematics
- Music
- Political Science
- Psychology
- Sociology
- Theater

BACHELOR OF BUSINESS ADMINISTRATION

- Accounting
- Economics
- Finance
- Management
- Marketing
- Real Estate

BACHELOR OF EDUCATION

- Elementary Education
- Secondary Education
- Physical Education

BACHELOR OF FINE ARTS

- Art

BACHELOR OF MUSIC

- Elementary Education
- Secondary Education
- Performance

BACHELOR OF SOCIAL WORK

- Social Work

BACHELOR OF SCIENCE:

- Anthropology
- Biological Sciences
- Chemistry
- Civil Engineering
- Computer Science
- Mathematics
- Medical Technology
- Natural Sciences
- Nursing Science
- Psychology
- Sociology

MASTER OF ARTS

- English

MASTER OF ARTS IN TEACHING

- English

MASTER OF FINE ARTS

- Creative Writing

MASTER OF BUSINESS ADMINISTRATION

- Business Administration

MASTER OF EDUCATION

- Adult Education
- Counseling and Guidance
- Elementary Education
- Public School Administration
- Reading
- Special Education
- Secondary Education

MASTER OF PUBLIC ADMINISTRATION

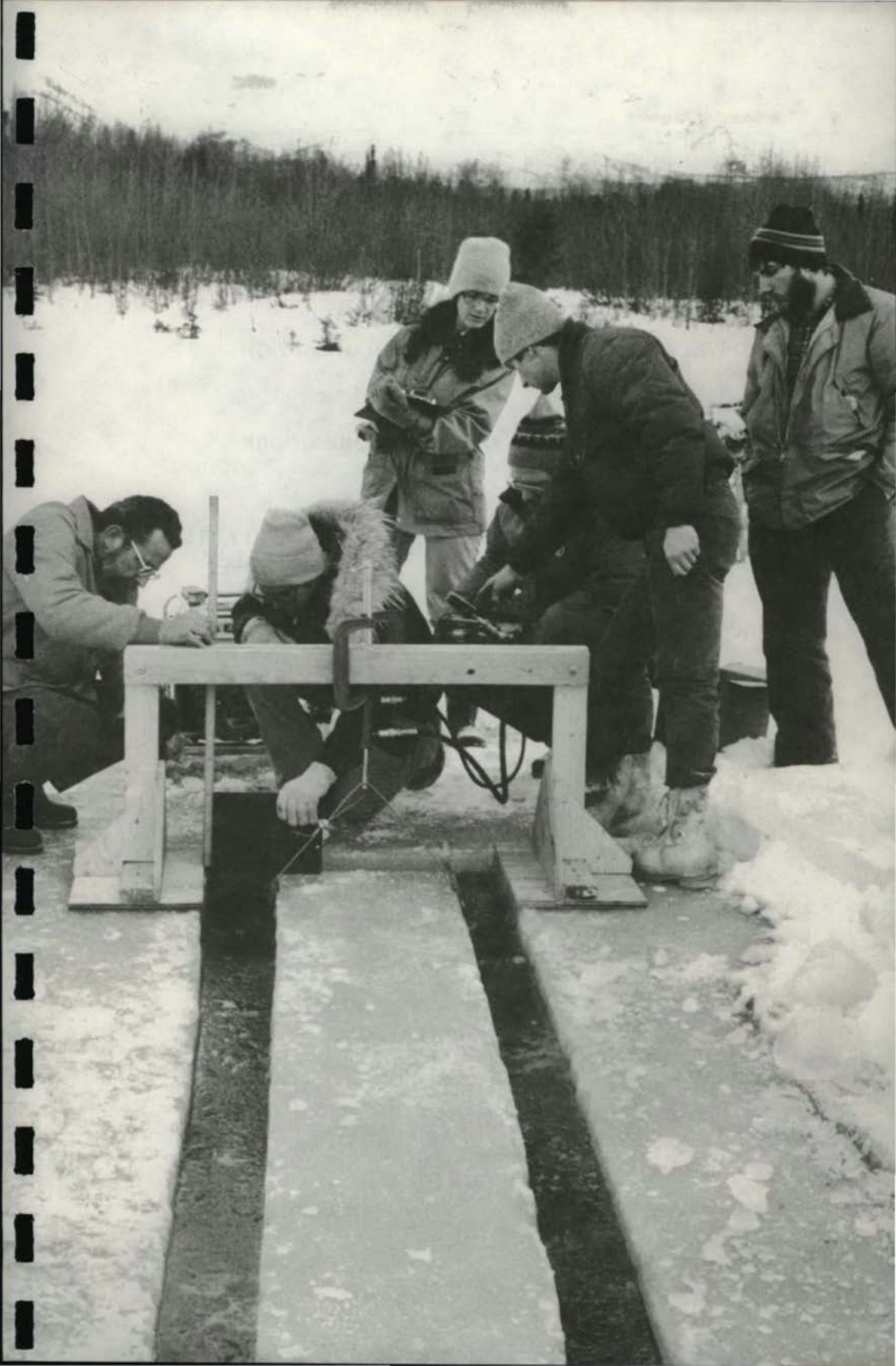
Public Administration

MASTER OF SCIENCE

Arctic Engineering
Biological Sciences
Civil Engineering
Counseling Psychology
Environmental Quality Engineering
Environmental Quality Science
Engineering Management
Nursing
Planning
Science Management

MASTER OF CIVIL ENGINEERING

Civil Engineering



THE BOARD OF REGENTS

The Regents of the University of Alaska are appointed by the Governor and confirmed by the Legislature.

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Juneau, 1975-1989

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Dr. John A. Brownell

Vice Chancellor for Business Affairs
Mr. F. S. Vaughn

Vice Chancellor for Campus Affairs
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Dr. Phillip D. Thomas

Dean of the School of Engineering
Dr. Oscar E. Dickason

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Dr. John E. Angell

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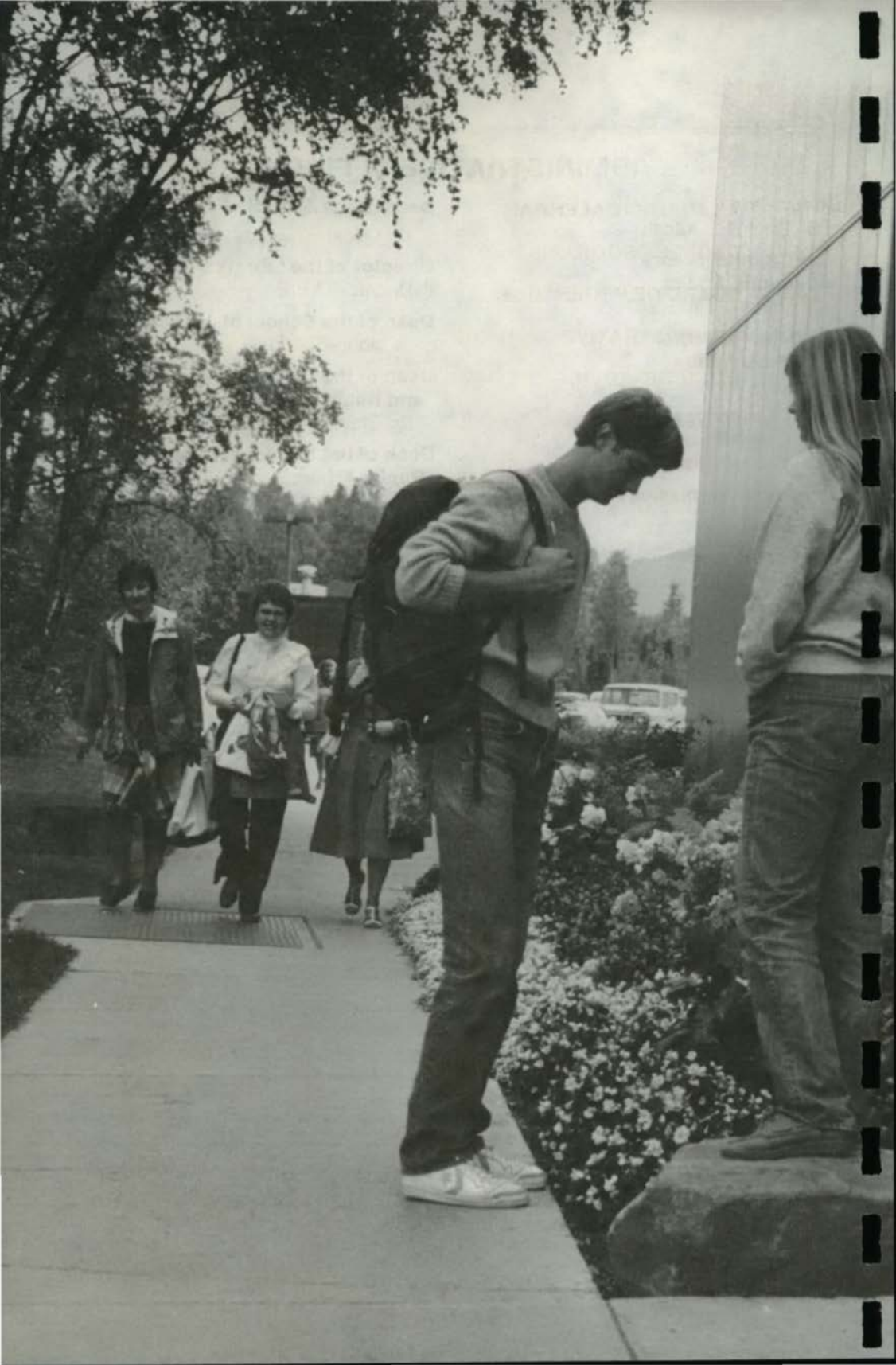

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GENERAL INFORMATION

Introduction

The University of Alaska, Anchorage is a four-year and graduate institution accredited by the Commission on Colleges of the Northwest Association of Schools and Colleges. Since its creation in 1969, UAA has established a record of continuing growth and development in both its academic and public service activities.

The student population currently numbers around 4,000 full- and part-time students. There are six schools or Colleges which form the basis of the University. These include the College of Arts and Sciences; School of Business and Public Affairs; School of Education; School of Engineering; College of Nursing and Health Sciences; and School of Justice.

Classes are taught almost exclusively by faculty members with doctoral degrees, insuring the student close contact with top quality faculty members.

Located on an attractive wooded campus, UAA is convenient to shopping, housing and entertainment. The university is served by a public transportation system and many facilities are within walking distance of the school.

Surrounded by the spectacular scenery of snow-capped Alaskan peaks, UAA is only minutes away from fishing, hunting and wilderness recreation.

Although located in Alaska, UAA is centered in the so-called banana belt of the state. Summertime temperatures range between 60 and 70 degrees. Summer days are filled with sunshine and long days when the sun sets only briefly. Winters are less severe in Anchorage than in many other U.S. cities. Normal lows range from 5 degrees below zero to 25 degrees above.

Anchorge is "The Air Cross Roads of the World" and is the chief business and entertainment center for the state. The greater Anchorage Area contains about half the state's population with some 236,000 people calling the city home.

Residence Facilities

Students must arrange to take care of their own housing within the community. There are apartment complexes in proximity to the UAA campus. The cost of living is generally higher in Alaska than in other states, and this is reflected by the fact that many nationally based employers provide a cost-of-living allowance of an average of 20 percent to their employees in the Anchorage area.

Medical Facilities

The Anchorage campus is only a block away from a major hospital, complete with physician's offices. Students are advised to carry their own medical insurance.

Continuing Education

The Office of Conferences and Continuing Education, working with the Colleges and Schools, responds to community interests by presenting workshops, seminars and television courses which go beyond the University's regular curriculum.

Facilities

Student Center

Visitors will get a good introduction to campus life at the newly constructed Student Center. Beyond the fountain and arboretum in the entrance area, a general information, message and scheduling desk is linked by computer terminal to other buildings on campus. The Center provides modern office facilities for student

government and organizations and for the student newspaper. Less formal activities are conducted in meeting rooms and a variety of lounge areas, some with provision for taped music. A number of conference rooms are available for community use.

The Center is equipped with a full-food service and can cater banquets for over 400 people. The popular auxiliary dining room serves hofbrau foods and has provisions for lighting and sound systems for small musical groups and productions.

Student artists have an opportunity to show their works in the Center's gallery, which also displays traveling exhibits.

University Library System

The University Library is a part of the complex which also houses the administrative and support functions of the University of Alaska, Anchorage and the College of Arts and Sciences. The front of the complex opens on the east side of Providence Drive. The Library is open seven days each week for a total of 91 hours when classes are in session.

Library collections comprise more than 393,000 bound volumes and government documents. Special collections include materials on Alaska and the Arctic region, 62,600 pieces of choral music and 50,640 pieces of symphonic music. The Library has collections of unpublished archives and manuscripts for the reference and research needs of library clientele. Non-print materials, except for video tapes and 16mm films, are housed in the Library. The latter are available from Media Services at the Anchorage Community College. The Library offers to its patrons at cost a computer searching service involves access to a wide number of data bases in a variety of subjects.

While service to academic clientele on campus is the first priority, under certain conditions the Library extends loan privileges to residents of Anchorage and to other residents of the state in fulfilling its function as the Southcentral Regional Research Library in the statewide network of Alaska libraries. *Users are expected to abide by the Library's regulations.*

The traditional services, including reference service, are provided during most of the hours the Library is open. The circulation policy provides for one-month book charges to faculty and students, with the privilege of renewing unless the material is in demand.

Several credit courses are offered to students seeking to expand their skills in use of the Library.

The University Library also serves as an exhibition facility for traveling museum exhibits and art shows.

Physical Education Building

The physical education building provides educational and recreational opportunities for students in each of its three principal areas.

Activities in the Court Area include basketball (on three courts, one designed for intercollegiate competition), handball, paddle ball, badminton, volleyball, gymnastics, dance, ballet and martial arts.

The Water Area features a 25 meter by 25 yard Olympic pool for competitive and recreational swimming and instruction as well as scuba, kayaking, diving, water safety and other activities. Saunas are to be available in the future.

The Ice Area is designed around an Olympic AAU hockey rink for competitive, instructional and recreational use, as well as for productions such as ice shows. A ski room offers instructional, repair and storage facilities.

Science Building

The Science building was completed in time for 1978 Fall classes. The first floor of the building is essentially for the science departments of the College of Arts and Sciences and include chemistry, biology, microbiology, anthropology and medical technology laboratories. A cold temperature room, special preparation rooms, as well as related instructional offices and spaces are also located on the first floor.

The second floor is the location of the School of Justice. An arcade/lounge which expands across Providence Drive as part of the megastructure (which includes the physical education building) is also located on the second floor.

University Bookstore

In addition to the textbooks needed for course work, the University Bookstore carries general interest books, popular magazines, miscellaneous school supplies and UAA memorabilia such as school rings and sweatshirts.

The College of Arts and Sciences Building

This building is home to the largest of the University's schools and centers. The College includes liberal arts, natural sciences and social sciences. Linked to the University's library building, the College of Arts and Sciences structure houses classrooms and office facilities.

Engineering Building

The structure houses the School of Engineering, the School of Business and the Art Department.

The building provides classroom and office space. Located along the megastructure of the campus, this building contains laboratories, classrooms and specialized seminar rooms to the University.

Administration Building

This newest edition to UAA's campus houses Admissions and Records Office, Student Services, Financial Aid, Accounting, and Personnel. The Chancellor's Office and other administrative offices are located in this building. In addition, the College of Nursing and Health Sciences is housed on the second floor along with two classrooms.

STUDENT LIFE

Student Conduct

The rights of free speech and peaceable assembly being fundamental to the democratic process, the University supports the rights of students and other members 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 as organized groups, members of the University community are expected to conduct themselves responsibly and to respect the basic educational goals of the University.

Accordingly, the University insists that free expression be such that the rights of others are not violated. Deliberate disruption of educational processes and functions of the University would constitute such a violation. The University subscribes to the principles of due process and a fair hearing on student grievances. See Student Handbook for specific regulations and processes.

Student Services

The University provides services which help students make their educational careers more profitable and meaningful. While the principal aim of the University is to foster the intellectual growth of the student, it is recognized that the social, moral, physical and spiritual development of the individual also is of prime importance. Mindful of its obligation to assist the total development of the student, the University continues to encourage individualization in the educational process.

The Office of Student Services provides 1) job placement for graduating students and graduates of UAA; 2) testing; 3) counseling with students relative to their personal problems; 4) financial assistance through scholarships, loans and part-time jobs; 5) support of student organizations, activities and interest groups; 6) special services and advising 7) the promotion of high standards of academic and social conduct, and 8) intramural and recreation programs.

Advising

Academic advising to help students select courses and programs is available from the faculty and administrators of each academic unit by contacting the office of the unit's dean or director. Advisors will assist students in planning their program of classes and in planning for the achievement of long-range educational goals. However, the student is expected to assume final responsibility for meeting all degree requirements.

Career Planning and Placement Services

The purpose of the career service center is to provide career employment services to UAA students and alumni. Undergraduate students are provided current job and labor market information, assistance in making realistic career choices and career informational materials. Degree candidates are provided credential services, on-campus recruitment and interviewing opportunities, career and job resources, guides for preparing resumes, interviews with potential employers, access to government announcements and job vacancy bulletins. There is no charge to students or employees for this service.

Counseling

The University provides counseling for UAA students. Counseling services provided include personal, academic, educational, and career. There is no charge to students for this service.

Orientation

All Freshmen and transfer students attending UAA for the first time may participate in Fall Orientation. The program is offered to help new students adjust to University life. During Orientation, students meet with an academic advisor, and receive registration information and assistance.

Affirmative Action

The University of Alaska, Anchorage recognizes its responsibilities through the Affirmative Action Plan to provide education and employment opportunities for qualified individuals. UAA is firmly committed to 1) increasing the number of qualified female and minority faculty, staff and students; 2) assuring that female and minority students are treated equitably in admissions, financial support, use of facilities and all other areas of education; and 3) assuring that qualified handicapped students are assisted in every reasonable manner possible to acquire an education equal to that acquired by non-handicapped students.

Any student who feels that he or she is being discriminated against because of race, color, creed, national origin, age, sex, handicap, religion or veteran status has the right to contact the appropriate supervisory or academic official for informal resolution. The student may also contact the UAA Affirmative Action Officer, the University Statewide EEO/AA Officer, or the Office of Federal Compliance Programs, Federal Building, Anchorage, Alaska for advice and direction.

Financial Aids

The Financial Aid Office assists students and prospective students in securing the funds needed to begin or to continue studies at the University. The state and federal governments, the University and many private organizations make available financial assistance in the forms of grants, scholarships, loans and employment opportunities to students who demonstrate the need for such assistance to attend school. Eligibility is determined by a careful assessment of each student's financial situation taking into account the family's assets, income, debts, family members and the estimated cost of attending college. Amount and type of award may vary depending upon State and Federal guidelines, student needs, and availability of funds.

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 continued attendance at UAA; 3) demonstrate financial need by submitting the Financial Aid Form to the College Scholarship Service; 4) apply for financial aid by completing the Financial Aid Application and submitting it to the Financial Aid Office, and 5) maintain satisfactory academic progress during the payment period.

Application Procedures

Students seeking financial assistance to attend the University of Alaska, Anchorage should contact the Financial Aid Office for information and applications. Aid applications should be submitted at least six months prior to the beginning of the semester for which the student is applying. For first priority of aid, completed applications should be received in the Financial Aid Office by June 1. Applications completed after this date will be given full consideration to the extent funds are available.

1) Complete the FINANCIAL AID FORM and mail it with the processing fee to the College Scholarship Service, Box 380, Berkeley, California, 94701. Be sure to apply for the PELL Grant by checking the appropriate block. The University of Alaska, Anchorage code number is 4896.
2) Complete the University of Alaska Financial Aid application and return it to the Financial Aid Office.
3) Submit the Student Eligibility Report (SAR) from the Basic Opportunity Grant to the Financial Aid Office.
4) Students who wish to apply for additional aid, such as the Alaska State Student Loan, the Bureau of Indian Affairs Grant or specific scholarships, must submit special applications available from the Financial Aid Office.

5) Students who have previously attended another postsecondary institution must submit a Financial Aid Transcript.

Types of Financial Aid

The three kinds of financial aid are loans, grants or scholarships and part-time employment.

Loans must be repaid. Student loans generally have low interest rates, between three and seven per cent. In most cases repayment does not begin until nine or twelve months after study has concluded.

Grants and scholarships are not repaid. Scholarships are usually awarded for academic achievement or talent; grants, on the basis of financial need.

Part-time employment may be either on or off campus. The hours are usually flexible and can fit into a student's class schedule.

Loans

1) NDSL — National Direct Student Loan. The National Direct Student Loan program is available to students enrolled at least half-time and who need a loan to meet their educational expenses. An undergraduate may borrow up to $5,000 for study toward a bachelor's degree; a graduate student may borrow up to $10,000 (including any amount borrowed under NDSL as an undergraduate).
2) ASSL — Alaska State Student Loan. Any full-time student who is a two-year resident of the State of Alaska and has a high school diploma or the equivalent is eligible to apply for an Alaska Student Loan. Undergraduate students may borrow up to $6,000 a year to pay for educational expenses. Graduate students may borrow up to $7,000 per year. Applications are available at the Financial Aid Office and are submitted to the Postsecondary Commission, Financial Aid Office in Juneau.
3) GSL — Guaranteee Student Loan. The Guaranteed Student Loan program enables students to borrow directly from lenders in order to finance educational expenses. These loans are made by local lending institutions and insured by the United Student Aid Funds, Inc. An undergraduate or graduate student enrolled at least half-time may apply for a USA Fund loan. Undergraduates may borrow a maximum of $2,500 per academic year; graduate students may borrow up to $5,000 per academic year. The maximum to be borrowed for undergraduate study is $7,500; the maximum for graduate study is $15,000, including any amount borrowed for undergraduate study.
4) ELF — Emergency Loan Fund. Short term loans are available to students whose financial need is modest and temporary. A full-time student may borrow a maximum of $100 for up to 30 days.

Grants

1) Pell — BEOG — Basic Educational Opportunity Grant. The Pell Grant program makes funds available to eligible students attending postsecondary institutions.
2) SEOG — Supplemental Educational Opportunity Grant. The Supplemental Educational Opportunity Grant program is similar to the Pell Grant and can provide additional assistance to students. Only undergraduates are eligible. SEOG awards range between $200 and $2,000 per year. Normally an SEOG may be received for up to four years.
3) BIA — Bureau of Indian Affairs. The Bureau of Indian Affairs makes grants available to eligible full-time students. Applicants must be at least one-fourth Alaskan Native or American Indian. For further information, contact the local BIA area office or regional corporation.

Scholarships

Students interested in applying for scholarships should contact the Financial Aid Office for information and applications. Below is a list of scholarships available; the Office posts deadlines for applications, details concerning eligibility and information about new scholarships.

Bristol Bay Native Corp.
Ak. State Retired Teachers Assn.
Professional Secretaries

Amer. Society of Women Accountants
Duty Free
Anch. Amatuer Radio Club
Ak. Press Club
Anaconda Copper Co./Ak. Natives Schp.
UAA Alumni Assn.
U of Ak, Alumni Assn — Talent Grant
UAA General Schp.
Sohio
Ft. Richardson Civilian Club
Muriel Hannah — Fine Art
Epsilon Sigma Alpha
Pedro Bay Schp.
Anch. Business & Professional Women's Club
Jerry Goode Memorial Schp.
Alaska Magazine
Alaskan of the Year Schp.
Endowment Fund Schp.
Soroptimists
National Society of Public Accountants
Cook Inlet Chapter, Phi Delta Kappa
Alaska State Medical Auxilary
Alaska Peace Officers Assn.
CONTACT THE FINANCIAL AID OFFICE FOR ADDITIONAL INFORMATION ABOUT SCHOLARSHIPS.

Employment

1) CWSP — College Work-Study Program. The College Work-Study Program provides jobs for eligible students who have need and who wish to earn a part of their educational expenses. The Program arranges for jobs on or off campus with public or private non-profit agencies. Students accepted by CWSP may be employed for as many as twenty hours per week during the semester. Maximum wages depend on the job and the student's qualifications. Most salaries are comparable with off-campus part-time employment.
2) Other Employment. Students not eligible for the College Work-Study Program who desire assistance in securing part-time employment should contact the Placement Office. The Personnel Office has a listing of other part-time and full-time positions on campus.

Student Government

The Student Association of the University of Alaksa, Anchorage (SAUAA) is a student congress of elected representatives empowered to act according to a recognized constitution and bylaws. All students who are registered for three or more credits are assessed a student activity fee and are members of SAUAA.

The student activity fee, as administered by student government, provides funding for various student activity programs such as films, lectures, concerts, dances and special events. The student newspaper and recognized student organizations also receive funding from student government. All SAUAA members are entitled to participate in these activities at little or no charge.

SAUAA encourages students to participate in its programs and services. SAUAA offices in the Campus Center and Administration Building can provide additional information.

Athletics and Recreation

The University Sports Center provides facilities for participation in badminton, basketball, volleyball, calisthenics, weight training, dance, gymnastics, swimming, diving, handball, racquetball, squash and ice

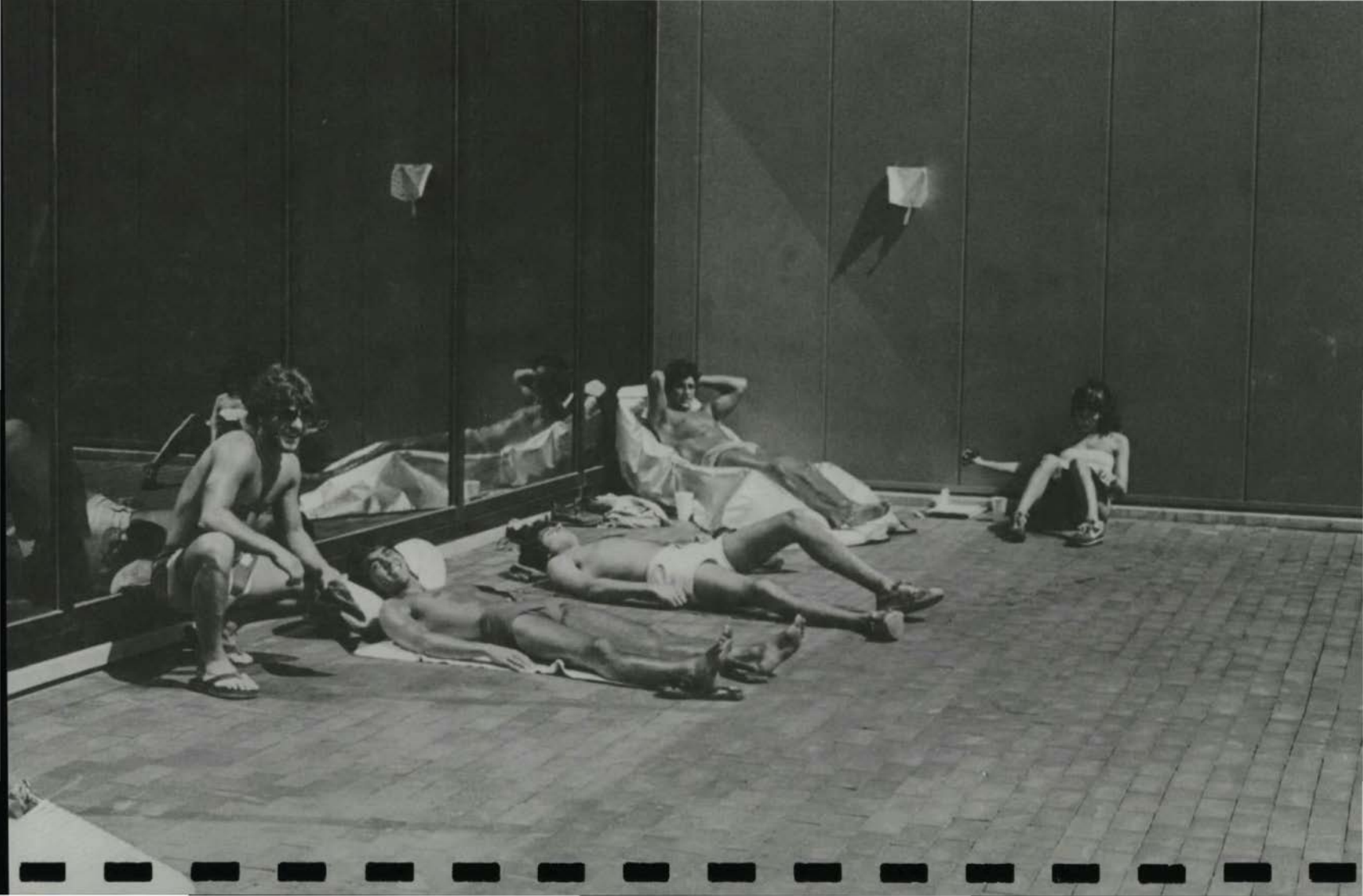
skating. Running, skiing and bike trails are located immediately adjacent. This building has been designed specifically for individual, classroom, intramural and intercollegiate usage.

All members of the campus community are encouraged to participate in an intramural program of over twenty different team and individual sports.

The University sponsors intercollegiate athletics for men and women in cross-country running, cross-country and alpine skiing, rifle and basketball. Teams compete primarily in the northwest and are sanctioned through the National Collegiate Athletic Association (NCAA). All full-time students may try out for these teams by contacting the appropriate coach. In addition the University supports various club sport teams when there is sufficient interest.

University Community Ministry

University Community Ministry is a means by which segments of the Christian community of Anchorage seek to relate to the city's major postsecondary educational institutions. Through a variety of means, including programs, student activities, faculty discussion groups, courses, and counseling, UCM seeks to be a religious presence within the institutions and to meet wide ranging needs and interests of students, faculty and staff. UCM also seeks to facilitate cooperation and understanding between participating churches and the educational institutions so that both might function more effectively.



ADMISSIONS

Students are responsible for familiarity with University regulations and requirements.

Students must apply for admission to the University of Alaska, Anchorage as an UNDERGRADUATE, GRADUATE, or as a SPECIAL student in order to be eligible to enroll in coursework, unless the course is offered in a period of three weeks or less.

UNDERGRADUATE ADMISSION

REGULAR

A Regular student is one who is seeking a baccalareate degree from the University of Alaska, Anchorage or who has completed more than 30 semester hours of college credit, including transfer credit.

FRESHMAN REGULAR STUDENTS

To qualify for admission as a freshman in a baccalaureate program a person must have graduated from an accredited high school with a grade-point average of 2.5 (C+) or higher and have submitted scores on the American College Testing Program (ACT) or Scholastic Aptitude Test (SAT). The grade-point average, high school class standing and test scores are combined to determine the applicant's admissibility.

A student who has been awarded a high school diploma on the basis of the General Educational Development Test or other tests, and who has not completed any previous college level work, may be admitted on probation. After completion of not fewer than 30 semester hours of credit at UAA with at least a 2.0 (C) grade-point average, probationary status will be removed.

TRANSFER REGULAR STUDENTS

Generally, transfer applicants who have attended other accredited institutions are eligible for admission provided they have a 2.0 (C) grade-point average in their previous college work and an honorable dismissal from the schools previously attended. Applicants desiring to enter some majors may be required to present higher grade-point averages and evidence of completion of background courses before admission can be granted.

A transfer student with fewer than 30 semester credits is required to take the American College Testing Program (ACT) or the Scholastic Aptitude Test (SAT).

RETURNING REGULAR STUDENTS

Former students who have not been in attendance for one fall or one spring semester or longer must reapply for admission. The application fee is required from those returning students who 1) have been dismissed from the University and are applying for readmission; 2) have attended another college or university since last attending the University of Alaska, Anchorage; 3) are applying for admission to a different degree program.

HOW TO APPLY FOR UNDERGRADUATE ADMISSION

APPLICATION FOR ADMISSION FORM

Complete all portions of the application for admission form and return it to the Office of Admissions and Records, University of Alaska, Anchorage 3211 Providence Dr-Anchorage, Alaska, 99508. Unanswered questions may delay or disqualify the application. Applications for admission and all supporting documents

must be submitted not later than 1 May for Fall Semester, 1 October for Spring Semester and 1 April for Summer Semester. Applications received after these dates will be processed if time permits and if space is available.

APPLICATION FEE

A check or money order for $25.00 must be sent with the application form at the time it is submitted (please do not send cash). The application fee is nonrefundable. An application form submitted without an application fee will not be processed until the fee is received. An additional fee of $25.00 will be charged for applications received after the deadline.

TRANSCRIPTS

Applicants who have never previously enrolled in any college or university must provide high school transcripts. The high school should forward the completed Secondary School Record to the Office of Admissions and Records. This transcript is not acceptable if submitted directly to the University by the applicant.

Applicants who have attended other colleges and/or universities are responsible for requesting that official transcripts from each college or university attended be sent directly to the Office of Admissions and Records. Returning students who have attended another college or university since last attending the University of Alaska must have official transcripts sent directly to the Office of Admissions and Records.

Transfer applicants with less than 30 semester hours of credit are required to submit high school transcripts as well as college transcripts. Such applicants should follow the instructions given above for having official transcripts from high school or other colleges and/or universities sent to the University of Alaska.

OFFICIAL TRANSCRIPTS OF CREDIT EARNED AT OTHER INSTITUTIONS, HIGH SCHOOL TRANSCRIPTS AND OTHER SUPPORTING DOCUMENTS WHICH HAVE BEEN PRESENTED FOR ADMISSION OR EVALUATION OF CREDIT BECOME THE PROPERTY OF THE UNIVERSITY AND ARE NOT REISSUED OR COPIED FOR DISTRIBUTION.

TRANSCRIPTS CANNOT BE ACCEPTED IF SUBMITTED DIRECTLY BY THE APPLICANTS.

SOCIAL SECURITY NUMBER

The social security number is used as a permanent identification number for a student's record at the University of Alaska. If you do not have a social security number you should apply for one as soon as possible and include your number on the application for admission form.

ACT OR SAT TESTS

Results from the tests prepared by the American College Testing Program or the Scholastic Aptitude Test are required for all entering Freshman and Transfer Students with less that 30 semester hours of credit. Test results must be on file with the Office of Admissions and Records before final acceptance can be granted. **Prerequisite for English 111, Methods of Written Communication: a score of 35 or above on the SAT Test of Standard Written English; 14 or above on the ACT English Usage Test; or a grade of P in English 090, Basic Writing.**

CONDITIONAL AND FINAL ACCEPTANCE — Qualified applicants can be accepted for admission while currently enrolled in their last semester of high school or at another college. However, the acceptance is conditional upon receipt of ACT or SAT scores and official transcripts indicating the satisfactory completion of work in progress at the time of acceptance and, in the case of high school seniors, the completion graduation requirements.

Final acceptance to the University for the purpose of earning scholastic credit becomes complete only when all credentials have been received and accepted by the Office of Admissions and Records.

If the applicant qualifies for admission, a notice of acceptance will be issued by the Office of Admissions and Records.

TRANSFER OF CREDIT

Credit accepted for transfer to the University of Alaska, Anchorage which has been earned at other accredited institutions, through military educational experiences, or other units of the University of Alaska statewide system shall be considered as transfer credit. Where possible, transfer credit will be equated with University of Alaska, Anchorage courses. Transfer students must fulfill the graduation and residency requirements of the University of Alaska, Anchorage, including those that may be required for a particular program.

The following regulations apply to transfer credit:

1. An evaluation of transfer credit is completed only after a student has been officially admitted and enrolls during the semester for which he/she has applied.
2. Only credits earned with grades of C or higher at other accredited institutions will be considered for transfer.
3. Acceptance of transfer credit towards degree programs is based upon departmental approval.
4. A maximum of 72 semester hours of credit will be accepted from junior and community colleges, cumulative from within and outside the University of Alaska system.
5. A student in good standing may transfer his/her credits from other UA units to UAA under the following conditions:
   a. Course credit at the 100 and 200 levels from the UA Community College Rural Education Extension Centers shall be accepted for full credit up to a maximum of 72 semester hours. The evaluation of UA community college credit will follow the recommendations which appear in the Alaska Transfer Guide as prepared by the Alaska Commission on Postsecondary Education. Copies of the Guide are available at all UA and community college units.
   b. Course credit from the University of Alaska-Fairbanks, the University of Alaska-Juneau, and 300, 400, and graduate level credit from CCREE centers shall be accepted at full credit.
6. Eight elective credits may be awarded by transfer to students having completed at least one calendar year of military service. In addition, credit also may be transferred from formal service schools as recommended in the Guide to the Evaluation of Educational Experiences in the Armed Services, as prepared by ACE. Credit is transferred for the successful completion of Defense Activity Non-Traditional Education Support (DANTES) tests as recommended by the American Council on Education provided the score received is 50% or higher. A maximum 30 credits awarded for military service and/or formal service schooling can be applied toward a bachelor's degree. The completion of course work through the Community College of the Air Force is considered military credit and is subject to the same restrictions.
7. Transfer credit is not included in University of Alaska, Anchorage grade point computation (except in determination of a student's eligibility for graduation with honors).
8. Life/work experience will not be accepted as academic credit since the student has the option of credit by exam.

The University of Alaska, Anchorage reserves the right to reject work of doubtful quality or to require an examination before credit is allowed.

PROBATIONARY UNDERGRADUATE ADMISSION

Probationary admission to UAA may be granted to 1) high-school graduates with a high-school grade-point average of at least 2.0; or 2) college transfer students with a college grade-point average of at least 1.75, provided that, for a student admitted on probation, a full-time program of study, which specifies the courses the student must complete in his first semester, approved by the dean of his college or school, must accompany the departmental admission recommendation. Probationary status will be removed after one semester if the student earns a cumulative grade-point average of 2.0. If he does not earn a 2.0 average, he will be dismissed from the University. (see Probation and Dismissal).

GRADUATE ADMISSION

Graduate programs at the University of Alaska, Anchorage are shaped to the needs of the individual student and are developed in terms of the student's experience, academic background, and aspirations.

The overall responsibility for the administration of graduate study rests with the Office of the Vice Chancellor for Academic Affairs.

The student's Graduate Advisor and/or Advisory Committee formulates and supervises the individual's graduate study program in accordance with the guidelines established by the unit which offers the degree.

In general, students may be admitted to graduate study if they have a bachelor's degree from an accredited institution with at least a B average in their major. Work equivalent to the bachelor's degree which has been accomplished at a foreign university may be substituted for the bachelor's degree requirement.

Unit heads in a student's field of interest will determine the adequacy of the student's preparation for graduate work and whether or not departmental facilities are sufficient for the student's aims.

Admission to graduate study does not imply admission to candidacy for a degree. Students must not assume that they will be admitted to graduate study merely because they have been permitted to take graduate courses. The faculty has the option of refusing to recommend a student for candidacy for a degree in any program area.

Students who do not meet the requirements for admission to graduate study may be granted conditional admission to graduate study. Conditional admission is granted when, in the judgment of the faculty and the dean, the student shows good potential for advanced academic work.

Courses taken prior to official admission as a graduate student at the University of Alaska, Anchorage may be used as part of the graduate program only upon the recommendation of a student's Advisory Committee.

Final acceptance to the University as a graduate student becomes complete only when all credentials have been received and accepted.

If the applicant qualifies for admission, a notice of acceptance will be issued by the Office of Admissions and Records.

HOW TO APPLY FOR GRADUATE ADMISSION

Applications for admission to graduate study will be accepted on a continuous basis in the School of Education, the School of Business and Public Affairs, the School of Engineering, the Department of English, and the Department of Biology. Applications for admission to graduate study for the Master of Science degree in Counseling Psychology will be accepted until 15 March for the next academic year. Applications for the Master of Science degree in Nursing is 15 March for Fall semester and 15 October for Spring Semester.

Applications for admission to graduate study will be considered only when the following credentials have been received by the Office of Admissions and Records:

APPLICATIONS FOR ADMISSION

A completed Application for Admission and a $35.00 application fee must be submitted to the Office of Admissions and Records.

TRANSCRIPTS

An applicant is required to have complete official transcripts of all college credits sent to the University of Alaska, Anchorage in support of his/her application. The applicant is responsible for requesting that these transcripts be sent directly to the Office of Admissions and Records.

TEST SCORES

Results of Graduate Admission Examinations, when required, must be forwarded to the Office of Admissions and Records. Please refer to the admission requirements of the specific program.

LETTERS OF RECOMMENDATION

Letters of recommendation or intent are required for some programs. Please refer to the admission requirements of the specific program.

ADVANCEMENT TO CANDIDACY

Students may apply for Advancement to Candidacy for specific master's degrees if they are in good standing and have satisfied the following requirements:

1) Completed at least eight credits of graduate study at the University of Alaska, Anchorage
2) Demonstrated competence in tools of research and a reading ability of a foreign language (if required);
3) Met specific prerequisites for the particular degree being sought;
4) Received approval of the provisional title of his or her thesis (if a thesis is required);

5) Received approval of the final Graduate Program Plan.

Advancement to Candidacy formally establishes each student's specific degree requirements, and thus it is in the interest of both the student and the advising faculty that the student apply for candidacy as soon as he/she is qualified.

SPECIAL ADMISSION

A Special Student is one not seeking a degree or a certificate from UAA. Such a student must apply for admission to the University as a Special Student but need not meet the admission requirements for Regular Students. Special Students will be admitted without class standing and may not enroll for more than 8 semester hours of credit in a semester. Special Students are subject to the academic regulations of the University. Permission to enroll as a Special Student is granted for one semester at a time and implies no commitment on the part of the University regarding later admission to a degree program. Unless the student has already earned a baccalaureate degree, or is classified as Temporary, a Special Student may not have earned more than 30 semester hours of credit.

TEMPORARY SPECIAL STUDENTS

A Temporary Special Student is a candidate for a baccalaureate or advanced degree at another university and wishes to earn credits at UAA for transfer. Students classified as Temporary Special Students are not charged the application fee. Temporary status is approved for only one semester.

POST-BACCALAUREATE SPECIAL STUDENTS

A Post-Baccalaureate Special Student has earned a baccalaureate degree and is not seeking an advanced graduate degree. A student who wishes to enroll in courses as a Post-Baccalaureate Student must apply for Special admission and pay the application fee. A Post-Baccalaureate Student may not enroll for more than 8 hours of credit in a semester.

HIGH-SCHOOL SPECIAL STUDENTS

A qualified high-school student of advanced standing and ability may be permitted to enroll in University courses while attending high school. To register, the student must apply for admission to the University as a Special Student with high-school status and must present the written recommendation of the high-school principal or counselor, written parental approval and an official transcript indicating a minimum grade-point average of 3.0 for seniors and 3.5 for juniors. Seniors may enroll for a maximum of 8 credits, juniors for a maximum of 3 credits per semester. Special High-School Students are not charged the application fee.

HOW TO APPLY FOR SPECIAL ADMISSION

APPLICATION FOR SPECIAL ADMISSION

Complete all portions of the application for special admission form, and return it to the Office of Admissions and Records, University of Alaska, Anchorage, 3211 Porvidence Dr. Anchorage Alaska 99508. Unanswered questions may delay or disqualify the application.

Special Student applications will be accepted on a continuous basis. Special Students are scheduled to register on the final day of Regular Registration. Special Students are not eligible to participate in Early Registration.

APPLICATION FEE

A check or money order for $10.00 must be sent with the special application form at the time it is submitted (please do not send cash). The application fee is nonrefundable. Except as indicated above for Temporary and High School Students, a special application form submitted without an application fee will not be processed until the fee is received.

FOREIGN STUDENT ADMISSION

The University of Alaska, Anchorage welcomes qualified students from other countries. To be eligible for admission such students must meet all general university admission requirements for Undergraduate, Graduate or Special Students. They must give evidence of ability to succeed in university study, and demonstrate competence in use of the English language.

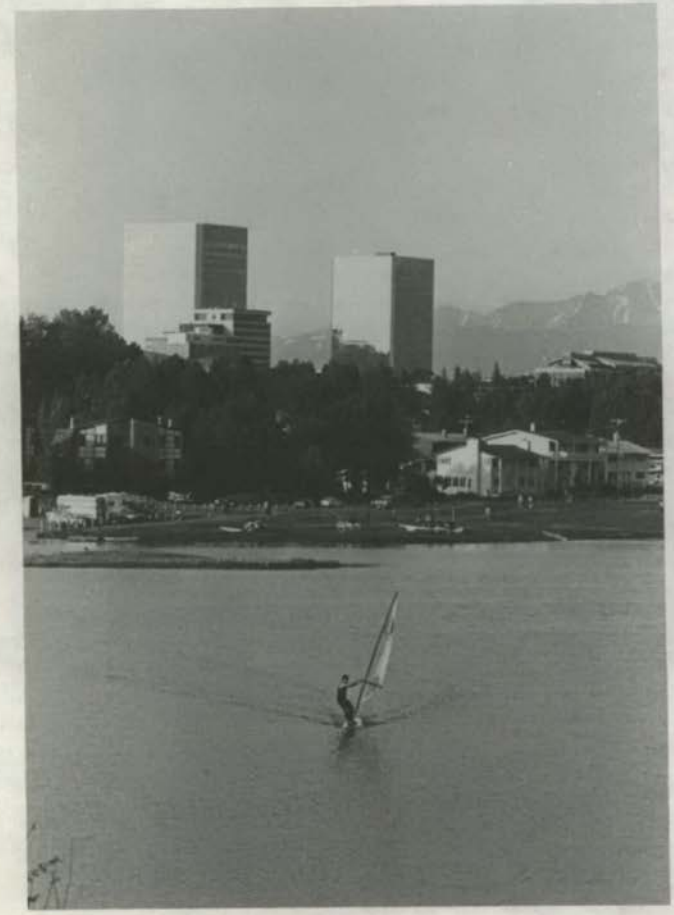
The Test of English as a Foreign Language (TOEFL) is required of candidates from countries in which English is not the language in general use.

Foreign student applications are evaluated on an individual basis. Admission or denial will be based on the total evidence indicating the student's potential for success in an academic program at UAA.

NON-IMMIGRANT STUDENT STATUS (F-1)

Foreign students who wish to be issued the United States Department of Justice Immigration and Naturalization Service Cretificate of Eligibility for Non-Immigrant Students (Form I-20A) must be officially accepted by the University of Alaska, Anchorage as **Undergraduate** or **Graduate** students. They must present evidence of proficiency in the English language (TOEFL scores) and documentation of financial status that they are able to pay all expenses incurred while in the United States.

Non-Immigrant students must meet all admission requirements and maintain full-time student status.



REGISTRATION POLICIES & PROCEDURES

Persons eligible for enrollment at the University of Alaska, Anchorage must be admitted and complete registration according to the prescribed procedures and pay fees as determined by the University fee schedule in order to be eligible to attend classes and to earn credit. The Early-Registration system permits continuing students to develop and plan their course schedules months before the beginning of a semester.

The University is unable to guarantee that a particular course listed in this catalog will be offered during a given semester. The class schedule published and distributed prior to each semester gives the time and place of registration and lists the courses available in the semester. Registration for special programs, short courses, seminars and other classes that are not part of the regular academic calendar will be arranged prior to the beginning of such sessions.

Whether or not a student has been attending class from the beginning of the semester, registration will not be accepted after the deadline for late registration

Auditors

An auditor is a student who enrolls for informational instruction only; no credit is granted for audited courses. Submission of papers for correction and grading and participation in laboratory experiences are at the discretion of the instructor. The instructor may request that the audit designation be removed from the transcript if the student fails to comply with the terms agreed to.

Auditors are required to register and pay appropriate fees. The signature of the instructor is required for registration as an auditor.

Cancellation of Classes

The University of Alaska, Anchorage reserves the right to cancel or combine classes, to change the time, date, or place of meeting, or to make other revisions in class offerings which may become necessary without incurring obligation. The University may discontinue a class at any time if attendance falls below expected levels.

Catalog Course Numbering System

Each course offered by the University is identified by an alphabetic designator and a three-digit course number. The designator commonly abbreviates the name of a discipline or department (Engl for English, etc.). The first numeral of the three-digit course number indicates the year in which the course is ordinarily taken. For example, Engl 111 is given for first-year students and Engl 342 is given for third-year students.

Course numbers:

Below 100 — intended for pre-college or remedial coursework; such as courses with numbers below 100 are not applicable to graduation requirements for any degree.

100-199 — freshman level courses; these course may be applied to graduation requirements for the baccalaureate degree.

200-299 — sophomore level courses; these courses may be applied to graduation requirements for the baccalaureate degree.

300-399 — junior level courses; these courses may be applied to graduation requirements for the baccalaureate degree. These courses may also be applied to the graduation requirements for some graduate (Master's) degrees, **with prior approval of the department.** (See General University Requirements) No one course may be applied to both a Master's and a baccalaureate degree by the same student.

400-499 — senior level courses; these course may be applied to graduation requirements for the baccalaureate degree. These courses may also be applied to the graduation requirements for some graduate (Master's) degrees, **with the prior approval of the department.** (See General University Requirements) No one course may be applied to both a baccalaureate and a graduate degree by the same student.

500-599 — 500 level courses are intended to be professional development courses. They may not be applied to any degree requirements (even by petition). These courses are restricted to the Pass-No Pass grading designation. 500 Level Courses also designate Continuing Education Units (CEU), and may not be applied to any degree program.

600-699 — graduate level courses; these courses may be used to meet graduation requirements for the graduate (Master's) degree with the approval of the department. They may also be used to meet graduation requirements for the baccalaureate degree with an approved, before-the-fact petition. No one course may be used to meet requirements for both the baccalaureate and the graduate degree by the same student.

The following numbers are reserved for specific types of courses:

— 92 — seminar courses
— 93 — special topics courses
— 96 — unspecified directed study
— 97 — independent study
— 98 — individual research
— 99 — thesis

CONTACT HOURS

The minimum of contact minutes per semester is 750 minutes (including the final examination period). One contact hour is equal to 50 minutes. One academic credit represents satisfactory completion of 12.5 contact hours of lecture periods or 25 contact hours of seminar recitation periods of 37.5 contact hours of clinical or laboratory periods. Students are expected to complete 45-60 hours of work outside the classroom over the length of the semester. Courses scheduled for less than a full semester may not be offered for more than one credit per week.

The figures in parentheses following the course title indicate the number of lecture and laboratory hours the class must meet each week for one semester. For example, (2+3) indicates that a class has two contact hours of lecture and three contact hours of laboratory work each week.

The total amount of student time required to earn one credit of Independent Study, or Specified or Unspecified Directed Study should conform to the standard for total time applied to traditional courses.

One Continuing Education Unit (CEU) is granted for satisfactory completion of 10 contact hours of classroom instruction or 20 contact hours of laboratory or clinical instruction.

Overload

Undergraduate students normally may register for 19 semester hours of credit. Those wishing to enroll for a greater number must have a grade-point average of 2.75 for the previous two full semesters and must submit an overload petition, to Admissions and Records signed by the dean, prior to registration. For study loads including noncredit courses, the computation is based on equivalent credits.

Extended Registration

A graduate student must be registered for each semester in which he or she is actively working toward a degree. If no courses are being taken in the semester the student must initiate extended registration that semester and pay required fees.

All students must be registered at the University of Alaska, Anchorage the semester in which they plan to graduate. Registration must be prior to the close of late registration.

Required Signatures

For some courses, including all courses with instructor approval as a prerequisite, students may be required to obtain signatures from instructors or department representatives before completing registration.

Students who seek to register for a graduate level course but who have not been accepted into a graduate program will need to obtain a signature from a representative of the department offering the course. (This requirement may be waived for individual courses by the department offering the course.)

Registration Changes, Add/Drop And Withdrawal

(see calendar in front of catalog for dates)

Students are expected to complete courses for which they register and to register only for the sections they intend to attend. If a change in a student's class schedule becomes necessary, courses may be changed according to the provisions below:

ADD/DROP POLICY:

DESIRED CHANGE	FIRST THREE WEEKS OF SEMESTER	FOURTH THROUGH SEVENTH WEEK OF SEM.	AFTER SEVENTH WEEK
ADD COURSE	instructor's signature required. add form filed in Admissions and Records $3.00 fee charged per course	Not permitted	Not permitted
DROP COURSE	No signature required drop form filed in Admissions and Records will not appear on student's permanent record $3.00 fee charged per course	Not permitted	Not permitted

WITHDRAWAL POLICY:

Prior to the deadline for dropping (see Add/Drop Policy), withdrawals will be processed as drops. After the deadline students may, on their own initiative, withdraw from a course or from the University through the seventh week of the semester for semester-length courses. All withdrawals must be officially processed by the student in the Office of Admission and Records and will appear on the student's permanent record as "W." **Unless a student has officially withdrawn a final grade of "F" will appear on his permanent record.**

The withdrawal deadline for courses less than a semester in length is at the midpoint of the course.

DESIRED CHANGE	FIRST THREE WEEKS OF SEMESTER	FOURTH THROUGH SEVENTH WEEK OF SEM.	AFTER SEVENTH WEEK
WITHDRAW FROM COURSE	Not permitted	no signature required will appear on student's permanent record as W $3.00 fee charged per course form filed with A & R	not permitted
TOTAL WITHDRAWAL FROM UNIVERSITY	no signature required no fee charged will not appear on student's permanent record form filed in A & R	no signature required no fee charged will appear on student's permanent record as W form filed in A & R	signature of Instructor and Dean required no fee charged will appear on student's permanent record as W form filed in A & R

CHANGES IN REGISTRATION

DESIRED CHANGE	FIRST THREE WEEKS OF SEMESTER	FOURTH THROUGH SEVENTH WEEK OF SEM.	AFTER SEVENTH WEEK
CREDIT/NO CREDIT OPTION	no signature required form filed in Admissions & Records no fee charged	Not permitted	Not permitted
CREDIT TO AUDIT (VICE VERSA)	Instructor's signature form filed in Admissions & Records $6.00 fee charged	Instructor and Dean's signature required form filed in Admissions & Records $6.00 fee charged	Not permitted

Any student making an adjustment to his registration must show a copy of his registration receipt a the time of the transaction.

FEES, CHARGES, TUITION

Residency for Purposes of Tuition

For purposes of nonresident tuition, a resident is any person who has been physically present in Alaska for one year (excepting only vacations or other absences for temporary purposes with **intent** to return) and who declares intention to remain in Alaska indefinitely. However, any person who, within one year, has declared himself or herself to be a resident of another state, voted in another state or done any other act inconsistent with Alaska residence shall be deemed a nonresident for purposes of nonresident tuition.

An unemancipated person under the age of 18 who has a parent or guardian who qualifies as an Alaska resident, as defined above, shall be deemed a resident. Otherwise, such unemancipated person under the age of 18 shall be deemed a nonresident for purposes of nonresident tuition.

A foreign student on an F-1 (non-immigrant student status) visa cannot become a resident because possession of a student visa is inconsistent with Alaska residence and is inconsistent with any declared intention to remain in Alaska indefinitely.

A foreign student on a permanent visa (permitting an indefinite stay in the United States) can qualify as a resident for purposes of tuition if the other elements of the conditions for residence are met.

Military personnel on active duty in the state of Alaska and their dependents will be considered residents of the state of Alaska for the purposes of determining tuition charges.

Summary of Semester Charges

RESIDENT

Resident students enrolling in 12 or fewer UNDERGRADUATE credits: $25 per credit.

Resident students enrolling in 9 or fewer GRADUATE credits: $50 per credit.

Resident students enrolling in 12 or more UNDERGRADUATE credits: the basic fee, $300.

Resident students enrolling in 9 or more GRADUATE credits: the basic fee, $450.

NON-RESIDENT

Non-resident students enrolling in 12 or fewer UNDERGRADUATE credits: $65 per credit.

Non-resident students enrolling in 9 or fewer GRADUATE credits: $100 per credit.

Non-resident students enrolling in 12 or more UNDERGRADUATE credits: the basic fee, $780.

Non-resident students enrolling in 9 or more GRADUATE credits: the basic, $900.

Total Credit Hours	Resident Undergraduate	Non-Resident Undergraduate	Resident Graduate*	Non-Resident Graduate*
1	$ 25	$ 65	$ 50	$100
2	50	130	100	200
3	75	195	150	300
4	100	260	200	400
5	125	325	250	500
6	150	390	300	600
7	175	455	350	700
8	200	520	400	800
9	225	585	450	900
10	250	650	450	900
11	275	715	450	900
12 or more	300	780	450	900

*For purposes of tuition, any course numbered above 499 is considered graduate.

NOTE: Courses which require the use of special materials, supplies or services may have a special fee in addition to the normal credit-hour charge. Other special fees may be charged for administrative and/or instructional services. These special fees are subject to approval by the Chancellor. The University reserves the right to change or add to its fees at any time.

Other Fees

Admission Fee (remit with application) Non-refundable — Undergraduate	$25
Admission Fee — Graduate Non-Refundable	35
Student Activity Fees (per semester up to)	24
Drop/Add Fee (per transaction)	3
Late Registration Fee:	
First day	5
Each succeeding day	1
Graduate Extended Registration Fee	50
Continuing Education Unit (per unit)	25
Transcripts	2
Duplicate of Registration Receipt	1
Late Application Fee	25
Change of Major Fee	2
Certification of Enrollment Fee	2

Fee Explanations

All Resident and Non-Resident Credit Hour Fees and Student Activity Fees are approved by the Board of Regents of the University of Alaska.

Audit Fee Fees shall apply to students auditing any course in the same manner as for those enrolled for credit.

Credit-by-Examination Fee A non-refundable $15 fee is charged for each examination. For more than three credits, an additional charge of $1 per credit hour shall be charged.

Add/Drop Fee An add/drop fee of $3 shall be charged for each course dropped or added. The fee will not be levied when changes are necessitated by University cancellation of courses or University rescheduling of classes.

Graduate Extended Registration Fee A graduate student must be registered for each semester in which he or she is actively working toward a degree. If no courses are being taken in the semester, the student must initiate an Extended Registration that semester. A fee of $50 must be paid at the Office of Admissions and Records when registering.

Laboratory, Material, Special Fees In addition the standard course fees, laboratory, materials, or special fees are charged for some courses. These charges are listed in the class schedules.

Late Registration Fee There is a specified cut-off date for registration each semester. Students who are allowed to register after that date shall pay a late registration fee of $5 for the first day, plus $2 for each succeeding business day to a maximum of $25. This fee is refundable only in the event all classes for which the student registered are cancelled.

Music Course Fees Certain studio courses have special fees. Music fees are listed in the class schedules. Entry to applied music lessons requires the signature of the chairman of the Music Department on the student's registration receipt.

Placement Fee If a student's credentials are not filed with the University's Placement Office before graduation, a $10 charge is made for one year of placement service. Thereafter, $5 is charged for each year the file is used. Students may use the Placement Office services free of charge prior to graduation.

Student Activity Fee An activity fee up to $24 per semester will be assessed to support student-related activities.

PE Class Fee All students enrolling in PE classes for credit or noncredit, who do not pay the PE Facility Use Fee will be charged a $10.00 fee. If, after enrolling, the student adds courses that require paying the Use Fee, no refund will be granted.

Payment of Fees

All charges, deposits and fees for the semester are due at the time of registration. Students should be prepared to pay the full amount of charges for the semester when they register. Tuition and fee charges are subject to review and audit. Any University adjustment to an individual student's fee and tuition totals must be made within thirty days following the close of late registration or after any change in the student's schedule. The student will be notified of any such adjustment by mail. No refunds will be given for $1.00 or less. The University reserves the right to change or add to its fees at any time.

Senior Citizen Waiver of Tuition

Alaska residents 60 years of age or older may enroll in any course offered by the University of Alaska, Anchorage for which they are properly qualified and for which space is available without course credit hour charges. Lab fees, other special fees and noncredit fees are not included in the waiver.

All applicants for Senior Citizen Waiver must complete a "Tuition Waiver Request" form available at the Office of Admissions and Records.

Financial Obligations

The Office of Admissions and Records withholds transcripts and grades until debts to the University have been paid. Students incurring University indebtedness are in a position to have their registration suspended for succeeding semesters.

Withdrawals and Cancellations of Enrollment

Students withdrawing from courses or students who are cancelling their enrollment altogether must process a drop or a withdrawal at the Office of Admissions and Records. Refunds will be made by the Accounting Office according to the policies outlined below. Students must *officially* drop or withdraw from classes (including those cancelled by the University) in order to qualify for a tuition refund.

Refund Policy

1) Complete refund of both tuition and fees will be given when a withdrawal is made prior to the third day of the semester or in the event courses registered for are cancelled by the University.
2) Ninety percent refund of tuition only will be given for withdrawals made on the third day of the semester and prior to the tenth day of the semester.
3) Fifty percent refund of tuition only will be given for withdrawals made on the tenth day of the semester and prior to the seventeenth day of the semester.
4) No refund will be given for withdrawals made on or after the seventeenth day of the semester.
5) Claim for a refund is processed automatically by the Accounting Office once the appropriate paperwork is completed by the student at the Office of Admissions and Records. The date of withdrawal, as indicated on the official withdrawal receipt, will determine the student's eligibility for a refund. Applications for refund may be refused unless they are made during the semester or term to which they apply. Refunds will not normally be processed until after late registration.
6) Students withdrawing as a result of disciplinary action forfeit all rights to a refund of any portion of their tuition and fees.
7) Campus activity, laboratory, materials and special fees are not subject to refund.
8) Personal hardship is not construed by the University as adequate justification for a refund not otherwise provided for in refund policies.
9) No refunds will be given for $1.00 or less.

ACADEMIC REGULATIONS

Students are responsible for familiarity with University regulations and requirements.

ACADEMIC ADVISING

The University recognizes that academic success is promoted by close personal relationships between students and faculty. The student is encouraged to seek out information that will enable him or her to become well acquainted with the available options. Assignment of faculty advisors is made through the department of the student's major. All students who have specified a major degree program will be assigned a faculty advisor from the program. All students who are uncertain of a choice for a major will be assigned an interim faculty advisor by the College of Arts and Sciences.

ACADEMIC PETITION

Any deviation from academic requirements and regulations must be approved by academic petition. A petition form, which requires the signatures of the student's advisor, unit head, and dean, may be obtained from the Office of Admissions and Records or from the school or college offices. Petitions to waive general University requirements must be processed through the appropriate dean, and the final decision rests with the Admissions and Standard Committee.

ACADEMIC GOOD STANDING

UNDERGRADUATE:

A student is in good academic standing when he has a cumulative grade-point average of 2.0 or higher and a grade-point average of 2.0 or higher for the most recently completed semester. The grade point average is computed on credits earned at the University of Alaska, Anchorage only. Individual departments may establish additional criteria for good academic standing for students seeking degrees in these departments. First-semester students are presumed to be in good academic standing during the first semester unless the student has been admitted on probationary status.

GRADUATE:

A student will be permitted to continue graduate study from semester to semester only if his/her performance is satisfactory as judged by the student's advisory committee and dean; but, minimally, a cumulative grade-point average of 3.00 in the courses identified on his/her advancement to candidacy form is required for good standing. For those students who have not been advanced to candidacy, a minimum of a 3.00 cumulative grade-point average is required in all courses taken since admission to graduate study.

A grade of B is the minimum passing grade in courses not primarily for graduate students (300 or 400), C will be accepted in graduate courses (600), provided the student maintains a B average.

FULL-TIME/PART-TIME STATUS

An undergraduate student who registers for 12 or more semester hours of credit will be classified as full-time. A graduate student enrolled in 9 or more semester hours or its equivalent will be classified as full-time.

SATISFACTORY PROGRESS FOR FULL-TIME STUDENTS

Full-Time Students: Undergraduate (graduate) students (1) must have earned 12 (9) or more semester credits at UAA for the most recently completed semester, or (2) must have earned 24 (18) or more semester credits during the 12 months previous to the semester in which the student is enrolled.

Students new to the University must be enrolled in no fewer than 12 (9) semester credits in their first semester, and no fewer than 20 (15) credits in their first two semesters.

Part-Time Students: A part-time student is considered to be making satisfactory progress when he earns at least fifty percent (50%) of all UAA credits attempted during the most recently completed semester.

Part-time students in their second or subsequent semester must also have cumulatively earned at least sixty-five percent (65%) of all UAA credits attempted.

ACCESS TO RECORDS

Under the Family Educational Rights and Privacy Act of 1974, students are entitled to review their records. Except for directory information, no personally identifiable information will be disclosed to agencies off-campus without the written permission of the student. Records are made available for legitimate on-campus professional use on a need-to know basis.

Public information or directory information is disclosed on a routine basis unless the student requests, in writing, to the Director of Admissions and Records that such information not be released. Forms to request that directory information not be released are available in the Office of Admissions and Records. These forms must be completed each semester. No directory information will be released during the first ten working days of each semester. After that time, such information will be released when appropriate, unless requested in writing not to do so. The following is considered directory information.

1. Name.
2. Address, telephone.
3. Home address (permanent).
4. Weight and height of athletic teams.
5. Date of birth.
6. Dates of attendance and current class standing.
7. Major field (s) of study.
8. Degrees and awards received, including dates.
9. Participation in officially recognized activities.

NOTE: If a request not to disclose directory information has been received, your name will **not** be released to national Dean's Lists or other honor societies.

CLASS STANDING

Class standing is determined on the basis of total credits earned. Students are classified based on the following credits:

	Credits
Freshman	0-29
Sophomore	30-59
Junior	60-94
Senior	95

Transfer students will be given standing on the basis of the number of credits accepted by the University, following their first semester of enrollment. Special students are registered without class standing.

CREDIT/NO-CREDIT OPTION

The credit/no-credit option encourages students to explore areas of interest not related to their academic major. One "free" elective may be taken under this option each semester. The instructor will not be informed of the student's status in the course. A student will be given credit toward graduation if he performs at a level of C or above. If performance falls below that level, the course will not be recorded on the student's transcript. In either case, the course will not be included in any grade point calculations. If the student later changes his major and the course becomes a requirement, the course will be accepted by his new major department. The student may change from credit/no-credit to regular enrollment status or from regular to credit/no-credit status during the first three weeks of the of the semester by informing the Office of Admissions and Records.

The credit/no-credit option is not available for graduate courses.

PASS/NO PASS

A course may be offered for pass/no pass grade or for letter grade. This determination is made at the time the course is approved, and must apply to the class as a whole. If a class is to be offered under pass/no pass the fact must be clearly explained by the instructor to the students at the beginning of the semester. Pass/no pass is not at the discretion of the student. Grades in courses under the pass/no pass system carry no grade points used in calculating a student's grade point average. Performance in such a course, however, is included in determining the student's satisfactory progress.

CHEATING

Cheating is not tolerated at the University of Alaska, Anchorage and constitutes grounds for dismissal. Cheating as applied to all academic work consists of all those means by which unauthorized assistance is used by a student in the preparation of materials he submits as his own. Detailed policies and procedures for adjudicating cases of cheating are available from the Office of Admissions and Records.

INDEPENDENT/DIRECTED STUDY

Three options for individual study are available:

A. Independent Study
B. Specified Directed Study
C. Unspecified Directed Study

Definitions:

A. **Independent Study** courses are those courses in which the course content, learning activities and evaluative criteria are developed primarily by the student with input from the instructor and final approval by the instructor and the Dean of the College or School. Independent research is included as independent study. Independent Study courses shall bear a course number ending in "97" and shall be offered at the 300, 400, and 600 levels only.
B. **Specified Directed Study** courses are courses identical with regard to title, course objectives, course content and evaluative criteria to courses regularly offered by the School, College, or Department, but that are not offered during the current semester. Such courses shall bear the regular title and number of the course for which they are intended to substitute in the student's program of study followed by the designation of "Directed Study."
Specified Directed Study courses shall bear the number and title entered in the catalog. They shall be identified by the phrase "Directed Study" to be entered after the regular title.
C. **Unspecified Directed Study** courses are those courses in which the objectives, content, learning activities and evaluative criteria are developed jointly by the student and the instructor with final approval by the instructor and the Dean.
Unspecified Directed Study courses shall bear a course number ending in "96" and shall be offered at a level that reflects the prerequisite knowledge and courses.

Limits:

A. No more than 12 credits earned in independent study, specified directed study and unspecified directed study courses may be applied to an undergraduate or graduate degree.
B. No more than 4 credits each semester of independent study, specified directed study or unspecified directed study may be taken during Fall and Spring semesters. No more than 6 credits may be taken during the Summer semester.
C. No specified directed study courses can be taken by on-campus students during the semester in which the course, for which the specified directed study is intended to substitute, is offered. Students are strongly encouraged to take required courses when they are scheduled to be offered via traditional methods of instruction.

D. Course credit for independent study and unspecified directed study courses is based on the amount of work required for achievement of course objectives. This should be similar to the work required by the instructor in traditional courses.
E. Registration for independent study and specified/unspecified directed study shall conform to the rules and calendar governing enrollment in regularly scheduled courses. THAT IS, STUDENTS AND INSTRUCTORS WILL BE REQUIRED TO ADHERE TO THE ADMISSIONS RULES, LATE REGISTRATION RULES, THE ADD/DROP DEADLINE, AND THE WITHDRAWAL DEADLINE IN FORCE FOR EACH SEMESTER.

ATTENDANCE

Regular attendance is expected in all classes. Unexcused absences may result in a student receiving a failing grade. It is the responsibility of the student to establish to the instructor's satisfaction the validity of an excuse for absence and to work out with the instructor acceptable arrangements for making up missed work.

VETERAN'S TRAINING

UAA is approved for Veteran's Training by the Veterans Administration. Veterans interested in information about educational benefits should contact the Office of Admissions and Records. In compliance with VA requirements, Veterans receiving educational benefits must verify their enrollment in writing, each month. Failure to verify enrollment by the 15th of each month will result in the termination of VA benefits.

UAA will report to the VA any Veteran receiving educational benefits who is not maintaining a semester or cumulative GPA of 2.00 or above (3.00 for a veteran in graduate studies). Failure to maintain the required GPA will result in the termination of VA benefits.

GRADING SYSTEM

Only letter grades appear on the student's permanent academic record. They are as follows:

A — an honor grade; indicates comprehensive mastery of the required work.

B — indicates demonstration of a high level of performance in meeting the course requirements.

C — Indicates a satisfactory level of performance.

D — the lowest passing grade; may not be acceptable to satisfy requirements in certain majors and in graduate programs.

F — indicates failure.

P — indicates passing work in a course taken under pass/no pass but, carries no grade points to be used in calculating a student's grade point average. Performance in such a course (satisfactory completion or failure) is included in determining the student's satisfactory progress status.

NP — indicates work that is not passing in a course taken under pass/no pass but carries no grade points.

For performance comparison only, a grade of P may be considered to be equivalent to a grade of C or higher in both graduate and undergraduate courses. NP in a course taken under Pass/no Pass indicates that the student has not achieved a level of performance that would warrant awarding of credit hours on the student's transcript.

I — incomplete; indicates additional work must be performed for satisfactory completion of the course. May be given for unavoidable absence or other conditions beyond the control of the student where work already completed is grade C or better. Coursework must be completed by a specified date not to exceed one year or the I becomes F or an NP, depending on the grading basis of the class.

DF — deferred; indicates that the course requirements cannot be completed by the end of the semester, that credit may be withheld without penalty until the requirements of the course are met within an approved time. This designation will be used for courses such as thesis, special projects, etc., that require more than one semester to complete. It is usually reserved for graduate level courses. A deferred grade will become permanent after two years.

AU — audit; indicates student has enrolled for informational instruction only. No academic credit is awarded.

W — indicates withdrawal from the course.

CR — indicates credit earned at or above a level of C in a course taken under the Credit/No Credit option.

CEU — indicates completion of Continuing Education Units, carries no grade points.

GRADE POINT AVERAGE COMPUTATION

The grade-point average (GPA) for graduation is computed by dividing the total cumulative grade points by the total credits attempted. Letter grades are weighted as follows in compiling a grade-point average: A-4.00, B-3.00, C-2.00, D-1.00 and F-0.00. The number of credits is multiplied by the letter value of the grade to give the grade points for each course. The sum of the grade points is then divided by the total credits attempted.

Courses graded P (Pass), CR (Credit Given) and grades earned by credit-by-examination carry no grade points and are not included in computing the grade-point average.

All grades (original and any repeated courses) will be shown on the transcript, but only the last grade achieved for a course will be computed in the grade-point average. All college work attempted including that at other institutions is considered in the determination of a student's eligibility for graduation with honors. Grades earned from all repeated courses are also included in the computation.

CHANGE OF GRADE POLICY

Grades, other than Incomplete and Deferred, submitted by the instructor upon completion of a course, are assumed to be the student's final grades, and they become part of the student's permanent records. A grade may not be changed unless a legitimate error has been made on the part of the instructor in calculating the grade, and such changes must be approved by the unit head and the dean. Corrections of grading errors must be made by the end of the following fall or spring semester.

CREDITS BY EXAMINATION

ADVANCED PLACEMENT

The University of Alaska, Anchorage grants advanced credit, with waiver of fees, for satisfactory performance (a score of 3 or higher) on the College Board Advanced Placement Tests. These tests are normally completed by students during their senior year in high school.

A student desiring advanced placement credit must request that an official report of his or her scores on the examination be sent to the Office of Admissions and Records and upon his or her acceptance and enrollment appropriate credit will be awarded. Students may receive credit for more than one advanced placement examination.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

General Examinations

1) Credit for the CLEP General Examination will be awarded only to admitted, enrolled students or to those students who have previously taken courses at the University of Alaska which resulted in the establishment of an official record at the Office of Admissions and Records.
2) Credits earned through CLEP general exams are counted as free electives.
3) Credit for CLEP General Examinations shall be awarded according to the following schedule:

English	No credit for any score
Math	3 Credits for 500 score
Natural Science	6 Credits for 500 score
Humanities	6 Credits for 500 score
Social Sciences/History	6 Credits for 500 score

21 Maximum possible credits.

4) If as many as 6 semester credits have been earned in an area covered by a CLEP General Examination, no credit will be awarded for the successful completion of that examination.

CLEP Subject Examinations

1) Only admitted enrolled students or those students who have previously taken courses at the University of Alaska Anchorage which resulted in the establishment of an official file at the Office of Admissions and Records will be awarded credit.
2) A course challenged for credit must not duplicate a course for which credit has already been granted.
3) Minimum passing scores of CLEP Subject Examinations shall be those minimums recommended by current "CLEP Scores Interpretation and Use" manual, which are based on national norms. *Depending on subject,* these norms vary from 46-51. In the case of essay usage, the appropriate department shall determine a passing grade based on the CLEP score plus the essay.
4) Examinations may not be repeated earlier than one year.

DANTES (USAFI) EXAMINATIONS

Credit may be awarded for Defense Activity for Non-Traditional Education Support examinations with appropriate departmental approval. These were formerly known as examinations of the United States Armed Forces Institute (USAFI).

LOCAL CREDIT BY EXAMINATION (CHALLENGE EXAMINATIONS)

1) Only admitted and currently enrolled students are eligible to request credit-by-examination. When the request is approved by the department, the student must pay the fees for the examination in the office of Admissions and Records and present the receipt before taking the examination.
2) Determination as to what courses are challengeable rests with the appropriate department.
3) Construction of the challenge examination is the responsibility of the appropriate department.
4) Credit may not be granted by examination for a course that substantially duplicates a course for which credit has been granted.
5) A person who has audited a class may not request credit via departmental examinations for that class until the subsequent academic year.
6) Departmental examinations will be graded pass/fail.
7) Credits earned by examination are not awarded grade points.

PROBATION AND DISMISSAL

Academic Warning is the University's expression of concern to a student whose semester grade-point average is below 2.0. A warning is issued to a student whose semester grade point average is below 2.0, but whose cumulative grade point average is 2.0 or higher.

Academic Probation is the status assigned to a student whose cumulative grade-point average is below 2.0.

Continuing Probation is the status assigned to a student who begins a semester on academic probation (but not probationary admission) and, during that semester, earns a grade-point average of 2.0 or higher without raising his cumulative grade-point average to at least 2.0.

Academic Dismissal will result if a student 1) begins a semester on probationary admission and fails to raise his cumulative grade point average to at least 2.0, or 2) begins a semester on academic probation and, fails to earn a semester grade point average of at least 2.0, or 3) begins a semester on continuing probation and, regardless of the semester grade point average, fails to raise his cumulative grade point average to at least 2.0 at the end of the semester.

Probation/Dismissal Appeals: A student placed on academic probation, continuing probation, or dismissed from the University for academic cause has the right of appeal. Appeal of this decision must be presented in writing to the Vice Chancellor for Academic Affairs within ten working days from the date of notice. Appeals shall be heard by an administrative committee convened and chaired by the Vice Chancellor for Academic Affairs. The committee shall render a decision on the appeal within thirty working days following filing of the appeal. Grounds for appeal shall include only the following:

1. error in application of the standard,
2. extreme extenuating circumstances.

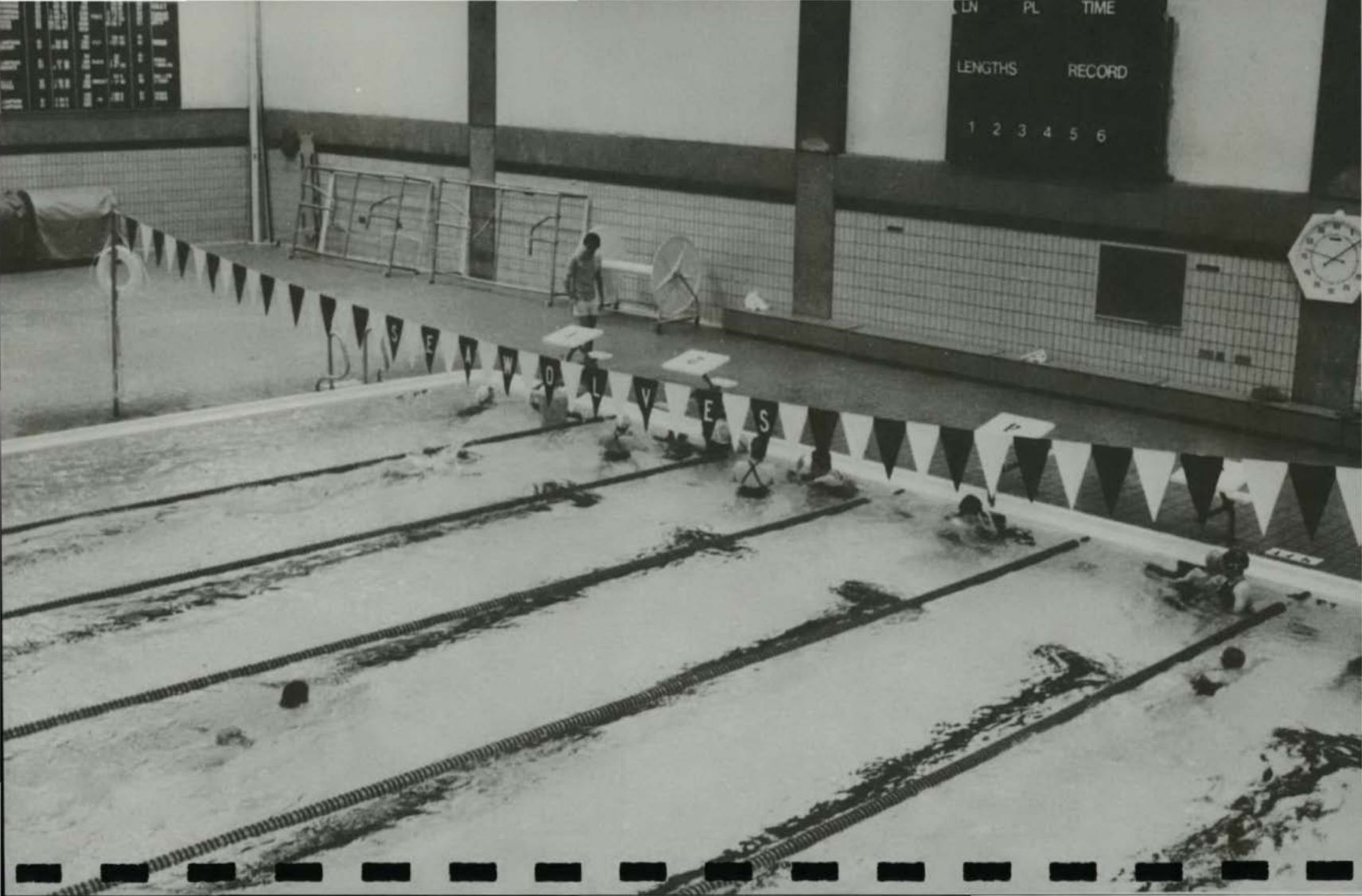
A specific set of procedures and deadlines for the appeal process is a matter of public record and is available in the Office of Admissions and Records. These deadlines are conveyed to the student at the time of notification of probation or dismissal.

PROBATION AND STUDENT ACTIVITIES

Full-time students in good academic standing are eligible for participation in inter-collegiate competition or in extracurricular activities (including, for example, student body offices, cheerleading, debate squads, etc.). Students on academic warning, academic probation or admitted to the University on probationary status may participate in these activities but those on continuing probation may not. Students on probation are advised to keep their participation in activities within limits that will allow them to achieve good academic standing.

PROBATIONARY ADMISSION

Probationary Admission to UAA may be granted to 1) high school graduates with a high school grade-point average of at least 2.0; or 2) college transfer students with a college grade-point average of at least 1.75, provided that, for a student admitted on probation, a full-time program of study, which specifies the courses the student must complete in his first semester, approved by the dean of his college or school, must accompany the departmental admission recommendation. Probationary admission status will be removed after one semester if the student earns a cumulative grade-point average of 2.0. If he does not earn a 2.0 average, he will be dismissed from the University.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DEGREE REQUIREMENTS

To receive a degree from the University of Alaska, Anchorage, a student must satisfy three sets of requirements: 1) General University Requirements, 2) General Education Degree Requirements, 3) and Major Program Requirements. General University Requirements and General Education Degree Requirements are described in this section of the catalog; Requirements of the Major are given in the School or College section of the catalog.

1) GENERAL UNIVERSITY REQUIREMENTS

UNDERGRADUATE

The minimum number of credits which must be earned, including those accepted by transfer is 130 for a baccalaureate degree.

At least 24 credits in upper division courses and at least 30 of the last 36 credits for a baccalaureate degree must be earned in residence at the University of Alaska, Anchorage. In addition, transfer students will be required to earn in residence at the University of Alaska, Anchorage a minimum of 12 semester credits in each major field and a minimum of 3 semester credits in each minor field.

A grade-point average of at least 2.0 (C) must be attained in all work as well as in the major and minor fields.

A student in an undergraduate degree program may elect to graduate under the requirements of the catalog or any of its supplements in effect during the year of graduation or the catalog in effect at the time he or she was accepted in the major, providing there has not been a time lapse of more than seven years. If more than seven years have elapsed, the student must graduate under the requirements in effect during the academic year of graduation. Requirements for both the major and the minor must be taken from the same catalog.

A maximum of 32 semester hours of credit toward a baccalaureate degree may be completed by correspondence.

A maximum of 72 total credits required for a baccalaureate degree may be transferred from a junior or community college.

GRADUATE

A graduate student must apply and be admitted to a specific degree program and, in addition, must later be admitted to candidacy for that degree and discipline major.

A graduate student must be registered for each semester in which he/she is actively working toward his/her degree. (SEE EXTENDED REGISTRATION)

Credit by correspondence or examination or courses taken under the "credit/no credit" option may not be used in fulfilling the basic course requirements of the degree program.

For those courses specified on the student's Advancement to Candidacy, an A or B must be earned in courses not primarily for graduate students (300 and 400-level courses). A grade of C may be accepted in graduate-level courses (600), provided the student maintains a B average.

The minimum number of credits which must be earned for a master's degree is 30 semester hours. A maximum of 12 credits may be devoted to thesis. At least 9 credits in addition to thesis must be at the 600 level. A maximum of 9 semester hours of credit from outside the University of Alaska, Anchorage may be transferred toward a master's degree, but must be approved by the student's advisory committee and the dean of the school or college in which the student is enrolled.

A graduate student must satisfactorily pass whatever final examinations may be required for the degree.

Because graduate programs are individually tailored, only courses included in the graduate degree program will be applied toward the degree. Any change in the program plan must be approved by the candidate's committee and forwarded to the Office of Admissions and Records.

A course taken at the 500 level will not apply toward a master's degree program. A course accepted toward the requirements for a baccalaureate degree will not apply toward the requirements for a graduate degree. A course taken more than seven years before graduation will not apply to an advanced degree.

Residence credit is defined as UAA credit that is earned by a student in formal classroom instruction or in individual study or research through the University of Alaska, Anchorage. Transfer credit, formal service school credit, military service credit, credit granted through nationally prepared examinations, credit by examinations earned through locally prepared tests and correspondence study are not considered residence credit.

2) General Education Degree Requirements

All students who earn a baccalaureate degree from UAA must have completed the University's General Education Requirements. The categories of the General Education Requirements are given below. Also listed are courses from which individual major programs have selected more specific requirements. *Not every course is applicable to the General Education requirements of every major. Students must consult the program description for the major to determine that major's specific General Education requirements.*

1. Oral Communication Skills — 3 credits
   Spch 111, 241
2. Written Communication Skills — 6 credits
   Engl 111, 211, 213, 311
3. Reasoning Skills — 3 credits
   BA 110
   CS 105, 106, 107, 108
   ES 201
   Ling 110
   Phil 101
4. Quantitative Skills — 3 credits
   AS 300, 307
   Math 106, 107, 108, 200, 201, 202, 270, 272
5. Arts Area — 3 credits
   Art 160, 261, 262, 367
   JPC 367
   Mus 122, 221, 222
   Thr 111, 311, 312, 411, 412
6. Humanities Area — 6 credits
   (at least two disciplines outside the major
   Engl 121, 201, 202, 306, 307
   Fren 101, 202
   Hist 101, 102, 131, 132, 341
   JPC 215
   Phil 201, 211, 212, 301
   Span 101, 102
   Note: The courses listed in the Arts Area, except Art 160, Mus 122, and Thr 111, may be taken to fulfill the Humanities Area requirements; however, no course may be double-counted.
7. Natural Science Area — 7 credits
   (including one laboratory course)
   Astr 103, 104
   Biol 107, 108, 111, 112, 215, 239, 252, 271
   Chem 105, 106, 120, 121
   Phys 211, 212
   Also, approved introductory courses in geology or physics
8. Social Science Area — 6 credits
   (at least two disciplines outside the major)
   Anth 101, 200, 202, 250
   Econ 201, 202
   Hist 201
   JPC 101
   Just 110, 250, 330
   Ling 101
   PS 101, 102, 311, 312
   Psy 111, 150
   Soc 101, 106, 201, 202, 222, 242
   SWK 106

3) MAJOR PROGRAM REQUIREMENTS

(Listed in the School or College section of catalog)

PROCEDURE FOR ESTABLISHMENT OF INTERDISCIPLINARY DEGREE PROGRAMS

Upon completion of 15 credits at UAA, a student may develop an interdisciplinary curriculum in interdisciplinary studies. The proposed curriculum must differ significantly from established degree programs and must not be a substitute for a regular program, the requirements for which the student is unable to meet. All General University requirements for the appropriate degree must be met. The proposal must nominate a

Program Director and two or more faculty members to serve as an advisory committee. The Program Director shall be the Chairman.

To receive a degree in Interdisciplinary Studies from the University of Alaska, Anchorage a student must satisfy General University Requirements and General Education Degree and Major Program Requirements. The program plan for a degree is determined by the individual student in consultation with his or her committee.

In the case of an interdisciplinary degree involving more than one school or college, the committee must include a faculty member from each discipline.

The degree title and program content will be chosen by the student with the consent of the advisory committee. Changes within the approved curriculum may be made only with the approval of the advisory committee. The curriculum will not be transferable to other campuses.

The final proposal shall be presented for approval to the relevant academic Dean. In the case of interdisciplinary degrees involving more than one school or college, it shall be presented for approval to each relevant academic Dean.

PROCEDURE:

1. The student develops a proposal, organizes an advisory committee of three faculty members from the relevant academic disciplines, secures agreement of one of them to serve as Chairman and Program Director, and presents the proposal for committee approval.
2. If the committee supports the proposal, it is forwarded to the relevant academic Dean or Deans. If the proposal, Director and committee are approved by the Dean or Deans, a letter of notification is issued to the student with copies to committee members and the office of Admissions & Records.
3. The letter of notification includes the decision regarding the proposal, the name of the committee Chair-Program Director and members of the committee.
4. A copy of an approved proposal is then forwarded to the Office of Admissions & Records for establishment of a student file.
5. The student works with the advisory committee and the Director of Admissions & Records until they certify that all requirements for the interdisciplinary degree are met.

SECOND BACCALAUREATE DEGREE

A student wishing to earn a second baccalaureate degree from the University of Alaska, Anchorage (regardless of where the first degree was earned) must complete 24 credits beyond the first baccalaureate degree. All General University Requirements, General Education Degree Requirements and Major Program Requirements must be met for the second degree.

SECOND MASTER'S DEGREE

The program requirements for a second master's degree in an analogous discipline will be determined by the student's graduate committee and will consist of at least 21 credits in addition to those completed for the first master's degree. This requirement applies only to students who have completed their first master's degree at the University of Alaska, Anchorage.

GRADUATION, COMMENCEMENT & HONORS

The University of Alaska, Anchorage issues diplomas three times a year; in September following the summer semester, in January following the fall semester, and in June following the spring semester. **All students must be registered at the University of Alaska, Anchorage in the semester they plan to graduate.**

All students who complete degree requirements during the summer, fall, and spring semesters are invited to participate in the annual commencement ceremony which follows the spring semester.

Request for Degree Check

The student who has accumulated 85 or more semester hours of credit must fill out and submit a Request for Degree Check form obtained from the Office of Admissions and Records. The purpose of the Request is to inform the student of progress made toward the degree. Upon receipt of the Request, the Office records all University of Alaska credits and all applicable transfer credits on the checklist designed for the major. The credits in the major discipline are checked and approved by the major department. Verification of credits toward the degree is filed in the Office of Admissions and Records. Should a discrepancy exist, the Office will contact the student for consultation.

Application for Diploma

The student is responsible for meeting all requirements for graduation. The student must submit an Application for Diploma by the deadline prior to the expected date of graduation. The Application for Diploma deadline is announced in the University's academic calendar. Applications for Diploma filed after the deadline will be processed for graduation the following semester. The form is available in the Office of Admissions and Records.

Certification for Graduation

Upon receipt of the Application for Diploma, the Graduation Certification Officer compares the Degree Check verification with the credits earned and, if all requirements have been met, the degree is certified.

Graduation With Honors

Undergraduate students who obtain a grade point average of 3.5 will be graduated cum laude; 3.8 magna cum laude; and 4.0 summa cum laude, provided they meet the honors as well as the general residence requirements and have been in attendance at the University of Alaska, Anchorage for at least 48 credit hours for a baccalaureate degree. All college work attempted including that attempted at other institutions is considered in the determination of a student's eligibility for graduation with honors. Grades earned from all repeated courses are also included in the computation.

THE COLLEGE OF ARTS AND SCIENCES

Faculty

Phillip D. Thomas, *Dean*

Department of Anthropology

Professors: Kerry D. Feldman, *(Chairman)*, Marvin D. Loflin, William B. Workman
Associate Professor: Steve J. Langdon

Department of Art

Professor: Saradell Ard, *(Chairperson)*
Associate Professors: Josephine H. Cooke, Sam Kimura
Assistant Professor: Ken Gray

Department of Biological Sciences

Professor: Stephen A. Norrell
Associate Professors: Jerry D. Kudenov, Richard W. Kullberg, Kristine E. Mann
Assistant Professor: Bjartmar Sveinbjornsson, *(Chairman)*

Department of Chemistry/ Physics

Associate Professors: Daryl Douthat, John Harrington, John Kennish, *(Chairman)*
Assistant Professors: John French, Donald Martins

Department of English

Professor: Thomas F. Sexton
Associate Professors: James J. Brosamer, *(Chairman)* L. Brian Byrd, Ronald Spatz
Assistant Professor: Charles Beirnard

Department of Foreign Language

Associate Professor: Arsenio Rey

Department of History/ Philosophy

Professor: Stephen W. Haycox
Associate Professor: William A. Jacobs, *(Chairman)*
Assistant Professors: James J. Liszka, Kenneth O'Reilly

Department of Journalism And Public Communications

Associate Professor: Sylvia Broady, *(Chairperson)*
Assistant Professor: Sam Kimura, Jack R. Stanley

Distinguished Professor: Atwood Chair of Journalism *(Annual Appointment)*: B. Dale Davis

Department of Mathematical Sciences

(including the disciplines of Applied Statistics and Computer Science)
Associate Professors: Fred Cromer, *(Associate Dean)*, Arthur Bukowski, *(Chairman)*, William Larry Gordon, Brian D. Wick
Assistant Professors: Leonard Smiley, Charles Bare
Instructor: Chris Williams

Department of Music

Professor: Jean-Paul Billaud *(Chairman)*
Associate Professor: William T. Whitener
Assistant Professor: George R. Belden

Department of Political Science

Professor: Diddy R. Hitchins *(Chairperson)*
Associate Professor: Steve Johnson
Assistant Professors: Barbara Pate Glacel, James W. Muller

Department of Psychology

Professors: Richard L. Bruce, Marie C. Doyle, Stanley W. Johnson, Robert J. Madigan *(Chairman)*, Todd Risley
Associate Professors: Peter Dowrick, Bruno Kappes, Roberta H. Morgan
Assistant Professor: Linda E. Olsen

Department of Social Work

Associate Professors: Mary Carroll, Cecilia Kleinkauf *(Chairperson)*
Assistant Professor: Myrna I. Wagoner

Department of Sociology

Associate Professors: Michael D. Baring-Gould, W. Jack Peterson *(Chairman)*

Department of Theater and Speech

Associate Professors: Lois Aden, Leroy Clark, Michael J. Hood *(Chairman)*
Assistant Professor: Frank Bebey

Degrees

The College of Arts and Sciences is dedicated to the principle that an enlightened understanding of the world is fostered by study of man's physical environment, his cultural values and processes, his creative expressions, and his systems of thought and discovery. In fulfillment of this educational commitment, the fields of study offered by the College serve two ends: they are valuable in themselves, and they are an essential complement to other fields of study. Although the faculty is relatively small, these highly trained and energetic men and women impart the knowledge and skills of their disciplines both to majors within the College and to students in the various professional schools. The formal means of communicating this knowledge and these skills are the courses and degree programs of the College.

The **Bachelor of Arts** (BA) degree is offered in anthropology, art, biological sciences, computer science, English, history, journalism and public communications, mathematics, music, political science, psychology, sociology, and theater.

The **Bachelor of Fine Arts** (BFA) degree is offered in art.

The **Bachelor of Music** (BM) degree is offered in performance, elementary education, and secondary education.

The **Bachelor of Science** (BS) degree is offered in anthropology, biological sciences, chemistry, computer science, mathematics, medical technology, natural sciences, psychology, and sociology.

The **Bachelor of Social Work** (BSW) degree is offered in social work.

The **Baccalaureate Minor** is offered in anthropology, art, biological sciences, chemistry, computer science, English, history, journalism and public communications, mathematics, music, political science, psychology, public administration, sociology, theater.

The **Master of Arts** (MA) degree is offered in English.

The **Master of Arts in Teaching** (MAT) degree is offered in English.

The **Master of Fine Arts** (MFA) degree is offered in Creative Writing.

The **Master of Science** (MS) degree is offered in biological sciences, counseling psychology.

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 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 and degree requirements of the University and the requirements of the particular program in which they are interested.

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 the BA and BS degrees. The transcripts of accepted, enrolled transfer students will be evaluated by the Office of Admissions and Records, and credits accepted for transfer will, where possible, be equated with credits in University of Alaska courses. Community or junior college credits accepted for transfer will apply toward the BA or BS degrees in the College of Arts and Sciences on an equal footing with credits earned at the University of Alaska, Anchorage, subject to the transfer of credit regulations.

Applications for Admission to graduate study will be accepted on a continuous basis in the Department of English and Biological Science.

Applications for Admission to graduate study for the Master of Science degree in Counseling Psychology for each academic year will be accepted until March 15.

The College of Arts and Sciences BA and BS Degree Requirements

To earn a Bachelor of Arts or Bachelor of Science degree in the College of Arts and Sciences, students must complete the requirements shown below. Fulfillment of these will automatically satisfy the University's General Education requirements; however, some major programs have restricted the course options applicable within the major. Students should examine the program descriptions for the major and consult with an advisor before making final course selections.

Bachelor of Arts

Communication Skills

Spch 111 3
Engl 111 3
Engl 211, 213, or 311 3

Reasoning Skills

CS 105, 106, 107, 108, Ling 110, or Phil 101 3

Quantitative Skills

AS 300, Math 107, or 108 3

Comparative Civilizations

Hist 101 and 102 6
Anth 250 or Hist 201 3

Human Sciences

Any five of the following courses not in the major: Anth 101, Econ 201, 202, JPC 101, Just 110, PS 101, 102, Psy 111, Soc 101, SWK 106 15

Natural Sciences

At least seven credits from the following including at least two sciences and including at least one credit in lab: Astr 103, 104, Biol 107, 108, Chem 105, 106, 120, 121, a general introductory course in geology or physics, subject to approval 7

Arts and Letters

(disciplines other than the one chosen for the humanities sequence)

Art 160, Mus 122, or Thr 111 3
Engl 121 or Phil 201 3

Humanities Sequence

(any sequence not in the major)
Art 261-262, Engl 201-202, Mus 221-222, or Phil 211-212 6

Major ..... variable
Electives ..... balance of 130 credits
At least 48 credits must be at the 300 level or higher.

Bachelor of Science

Communication Skills

Spch 111 3
Engl 111 3
Engl 211, 213, or 311 3

Reasoning Skills

CS 105, 106, 107, 108, Ling 110, or Phil 101 3

Quantitative Skills

AS 300 or 307 3
Math 200 or 272 3-4

Comparative Civilizations

Hist 101 and 102 6
Anth 250 or Hist 201 3

Human Sciences

Any three of the following courses not in the major: Anth 101, Econ 201, 202, JPC 101, Just 110, PS 101, 102, Psy 111, Soc 101, SWK 106 9

Arts and Letters

Art 160, Mus 122, or Thr 111 3
Engl 121 or Phil 201 3

Natural Sciences

Sixteen credits from the following including at least six credits in each of two disciplines and including at least two credits in lab: Astr 103, 104, Biol 107, 108, 215, 239, 252, 271, Chem 105, 106, 120, 121, a general introductory course in geology or physics, subject to approval 16

Major ..... variable
Electives ..... balance of 130 credits
At least 48 credits must be at the 300 level or higher.

Electives

Electives which may be applied toward the BA or BS degrees in the College of Arts and Sciences include all courses (or their evaluated equivalents) which are:

1) listed among the course offerings of the College in the catalog; or
2) listed in the catalog and designated BA-H, BA-M, BA-N, or BA-S; or
3) applicable to the requirements of majors in the College or approved minors.

If the major department approves, up to 18 credits of electives may be applied to the BA or BS degrees, provided that no more than 6 of the credits are in lower-division vocational/technical courses not offered by the College and that no more than 6 of the credits are in physical education or recreation courses. Courses in addition to the above may, with the written approval of the major department and the Dean, be applied to subject requirements but not to credit requirements. Questions concerning the acceptability of transfer credits for meeting these requirements should be directed to the Office of the Dean of the College.

A minor in a degree program of the College of Arts and Sciences will consist of a minimum of 18 credits, at least 6 of which will be upper division.

Anthropology

Anthropology is the study of human diversity on a cross-cultural basis, aimed at achieving both scientific and humanistic educational goals. Anthropology is comprised of four sub-fields: socio-cultural anthropology, biological anthropology, archaeology, and linguistics.

Archaeology looks into the past in an attempt to understand the systematic relationship between people, environment and cultural behavior.

Socio-cultural anthropology examines cultural systems to discover not only the rich diversity of human adaptation to environments and ways of being human, but also regularities of adaptive strategies and social structures.

Biological anthropology looks at the physical evolution of mankind.

Anthropological linguistics provides an overview of the development of language families, the relationship between culture and language, and methods of recording unwritten languages. This holistic approach to the study of man makes anthropology unique among the behavioral sciences.

BACHELOR OF ARTS

BACHELOR OF SCIENCE

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.
2. Complete 36 credits of Anthropology, half of which must be in upper division courses.
3. Complete one statistics course (to be selected by the student from an approved list).
4. Complete courses for major speciality:

Required courses for the major (15 credits): **Credits**

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
SELECT 4 OF THE ABOVE COURSES
Anth 410 — History of Anthropology (Required) 3

Select three **ethnographic area** courses from the following (9 credits):

Credits

Anth 200 — Natives of Alaska 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

Two of the above course requirements can be selected from the following archaeology courses which have a geographical focus:

Anth 312 — North American Archaeology.....3
Anth 316 — Arctic Archaeology 3

Select two courses from the following **topical/theoretical** courses (6 credits):

Credits

Anth 324 — Culture and Personality.....3
Anth 340 — Urban Anthropology 3
Anth 351 — Culture Dynamics.....3
Anth 354 — Culture and Ecology.....3
Anth 361 — Language and Culture.....3
Anth 400 — Anthropology of Religion.....3
Anth 420 — Economic Anthropology 3
Anth 423 — Social Structure 3
Anth 440 — Structures of an (Alaskan) Native Language 3
Anth 456 — Anthropology and the Law.....3
Anth 480 — Analytical Techniques in Archaeology.....3

Other courses may be petitioned to apply toward the ethnographic area or topical/theory area requirements depending upon the subject matter of the course.

5. A total of six credits in elective Anthropology courses is required. Any course in Anthropology, including Anth 101, and Anth 250, may be applied toward the elective requirement.
6. A total of 130 credits is required for the BA or BS degree.

SENIOR THESIS OPTION

Anthropology majors may apply at the end of their junior year to the department to undertake independent research resulting in a substantial, thesis-quality paper. A maximum of 6 credits will be given for the two-semester project. Prior arrangements with the department are required.

MINOR IN ANTHROPOLOGY

A total of 18 credits in Anthropology is required, with at least six credits being at the upper-division level. Two courses (six credits) must be selected from the following:

Credits

Anth 101 — Introduction to Anthropology.....3
Anth 202 — Cultural Anthropology 3
Anth 205 — Biological Anthropology 3
Anth 210 — Intro. To Anthropological Linguistics 3
Anth 211 — Fundamentals of Archaeology.....3
Anth 260 — Old World Archaeology 3

At least one course must be from either the **ethnographic area** or the **topical/theoretical** area, as specified above for majors in anthropology.

Courses in Anthropology

Anth 101 **3 Credits**
INTRODUCTION TO ANTHROPOLOGY (3+0)
The fundamentals of the four sub-fields of Anthropology, archaeology, cultural anthropology, biological anthropology and linguistics. Recommended for non-majors (BA-S)

Anth 200 **3 Credits**
NATIVES OF ALASKA (3+0))
Ethnohistory of Alaska Natives including environmental setting, linguistic subdivisions, cultural variations and contact with other groups. (BA-S)

Anth 202 **3 Credits**
CULTURAL ANTHROPOLOGY (3+0)
Introduction to the methods, theories and fundamental concepts of the study of cultural systems. Serves as a foundation for upper-division courses in cultural anthropology (BA-S)

Anth 205 **3 Credits**
BIOLOGICAL ANTHROPOLOGY (3+0)
An introductory course including the behavior, genetics, classification, and evolution of man and the other primates as well as the distribution, morphological and physiological adaptations of human populations (BA-S)

Anth 210 **3 Credits**
INTRODUCTION TO ANTHROPOLOGICAL LINGUISTICS (3+0)
Introduction to concepts in anthropological linguistics. This course examines approaches to representing structures of the languages 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. (BA-S)

Anth 211 **3 Credits**
FUNDAMENTALS OF ARCHAEOLOGY (3+0)
Basic concepts, theories and methods of archaeology and an overview of its historical development. This course will prepare the student for summer field schools and upper-division courses in archaeology. (BA-S)

Anth 250 **3 Credits**
THE RISE OF CIVILIZATION (3+0)
A survey of the emergence of civilization in human cultural development. Covers development of domestication, urbanization, trade, and state formation in a comparative framework. Emphasis is on non-Western civilizations: China, India, Southeast Asia, Mesoamerica, South America, and Africa.

Anth 260 **3 Credits**
OLD WORLD ARCHAEOLOGY (3+0)
Tracing human developments in Asia, Africa and Eruope up to the Neolithic period. Anth 211 recommended as prerequisite. (BA-S)

Anth 312 **3 Credits**
NORTH AMERICAN ARCHAEOLOGY (3+0)
Tracing human developments in the New World north of Mexico up to European contact. Anth 214 recommended as prerequisite. (BA-S)

Anth 316 **3 Credits**
ARCTIC ARCHAEOLOGY (3+0)
Origins and later phases of prehistoric Eskimo and Indian cultures Anth 211 recommended as prerequisite (BA-S)

Anth 324/Soc 324 **3 Credits**
CULTURE AND PERSONALITY (3+0)
Examination of the relationship between culture, social institutions and psychological variables on a cross-cultural basis. Anth 202 or Soc 101 recommended as prerequisite. (BA-S)

Anth 326 **3 Credits**
ARCTIC ETHNOLOGY (3+0)
Ethnic groups and cultures of the circumpolar area. (BA-S)

Anth 333 **3 Credits**
PEOPLES AND CULTURES OF SOUTHEAST ASIA (3+0)
Cultural variation and unifying traditions of Southeast Asian peoples including their pre-history, early cultural influences, effects of European contact, major cultural traditions and selected current issues. Anth 202 recommended as prerequisite. (BA-S)

Anth 335 **3 Credits**
NATIVE NORTH AMERICANS (3+0)
Traditional cultures of native North Americans, effects of contact with Europeans and contemporary adaptations Anth 202 recommended as prerequisite. (BA-S)

Anth 340 **3 Credits**
URBAN ANTHROPOLOGY (3+0)
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. Prerequisite: Anth 202 recommended. (BA-S)

Anth 351 **3 Credits**
CULTURE DYNAMICS (3+0)
Processes of cultural change with selected case studies, including cultural evolution, diffusion, acculturation, innovation, revitalization movements, modernization and planned change. Anth 202 recommended as prerequisite (BA-S)

Anth 354 **3 Credits**
CULTURE AND ECOLOGY (3+0)
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. Prerequisite: Anth 202 (BA-S)

Anth 361 **3 Credits**
LANGUAGE AND CULTURE (3+0)
Study of the relationship between language and cultrue with coverage of such topics as language variation, meaning in culture, taxonomies, and phonemic principles. (BA-S)

Anth 371 **3 Credits**
SELECTED TOPICS IN ANTHROPOLOGY (BA-S)

Anth 400 **3 Credits**
ANTHROPOLOGY OF RELIGION (3+0)
Descriptive and comparative study of religious phenomena in traditional societies including myth, ritual, magic, witchcraft, shamarism. Anth 202 recommended as prerequisite. (BA-S)

Anth 403 **3 Credits**
ANTHROPOLOGICAL PERSPECTIVES ON EDUCATION (3+0)
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 202 recommended as prerequisite. (BA-S)

Anth 410 **3 Credits**
HISTORY OF ANTHROPOLOGY (3+0)
Development of the Science of Anthropology, stressing the leaders in the field and the theories developed. Prerequisite: Anth 202 or permission of instructor. (BA-S)

Anth 420 **3 Credits**
ECONOMIC ANTHROPOLOGY (3+0)
Anthropological approaches to the production, distribution, and consumption of resources in human cultural systems. The organizatio

and operation of pre-industrial economics in relation to other cultural subsystems. Internal and external models of economic development. Anth 202 recommended as prerequisite. (BA-S)

Anth 423 **3 Credits**
SOCIAL STRUCTURE (3+0)
Kinship, marriage, the family and patterns of social organization considered cross-culturally. Anth 202 recommended as prerequisite. (BA-S)

Anth 427 **3 Credits**
CONTEMPORARY ALASKAN ISSUES (3+0)
Analysis of contemporary issues among Alaskan populations and approaches taken in resolving them. (BA-S)

Anth 430 **3 Credits**
FIELD METHODS IN CULTURAL ANTHROPOLOGY (3+0)
Methods for field work in cultural anthropology, focusing on both quantitative and qualitative research strategies. Prerequisite: Anth 202. (BA-S)

Anth 431 **4 Credits**
FIELD METHODS IN ARCHAEOLOGY (1+9)
Introduction to the basic techniques of archaeological data recovery and recording, laboratory processing and preliminary analysis of archaeological material. Taught summers in a field situation. Prerequisite: permission of instructor (BA-S)

Anth 435 **3 Credits**
NORTHWEST COAST CULTURES (3+0)
An intensive appraisal of peoples of the Northwest Coast, emphasizing various interpretations of cultural history, cultural variation and cultural contact. Prerequisite: Anth 202 or permission of instructor. (BA-S)

Anth 440 **3 Credits**
STRUCTURES OF AN ALASKAN NATIVE LANGUAGE: (3+0)
Survey of the grammar of a native Alaskan language, to include phonology, syntax, and semantics. As feasible, work with a native speaker on selected grammatical problems. Language studies will vary each semester.

Anth 456/Just 456 **3 Credits**
ANTHROPOLOGY AND THE LAW (3+0)
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. (BA-S)

Anth 461 **3 Credits**
PHONETICS AND PHONOLOGY (3+0)
Study of the sounds and specific organizing principles underlying the phonetics and phonemics of human languages in both articulatory and distinctive feature frameworks. Consent of instructor. (BA-S)

Anth 463 **3 Credits**
SYNTAX AND SEMANTICS (3+0)
Study of the syntactic and semantic structures of natural languages and the ways form and meaning are represented in grammar in words, sentences, and discourse structures. Some exploration of the concept of a cultural grammar and the ways meanings and beliefs are acquired by people in communicating with each other.

Anth 480 **3 Credits**
ANALYTICAL TECHNIQUES IN ARCHAEOLOGY (1+6)
Methods and techniques concerning the treatment and study of archaeological remains. Preparation of remains, cataloging, preservation, lithic and fauna analysis, data storage and manipulation. Prerequisite: Anth 211. (BA-S)

Applied Statistics

AS 300 **3 Credits**
ELEMENTARY STATISTICS (3+0)
Measurement, sampling, measures of central tendency, dispersion, and position, frequency distributions, regression and correlation, probability, binomial and normal distributions, estimation, hypothesis testing, t-, chi-square-, and F-distributions.

AS 307 **3 Credits**
PROBABILITY AND STATISTICS (3+0)
Probability, counting, random variables, multivariate random variables, discrete distributions, continuous distribution, expectations, descriptive statistics, correlation and regression, estimation, hypothesis testing. Prerequisite: Math 200

AS 308 **3 Credits**
INTERMEDIATE STATISTICS (3+0)
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 non-parametric methods including sign test, runs test, Mann-Whitney U-test, etc. SPSS 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. Prerequisite: AS 300 or AS 307 or equilvalent. (BA-M)

AS 401 **3 Credits**
ANALYSIS OF LINEARIZED MODELS (3+0)
Analysis by methods of least squares of general linearizd models, including those appropriate to various designs, including completely random, randomized complete block, incomplete block and Latin square, and those for the analysis of variance and analysis of covariance. Matrix algebra appropriate to least squares. Prerequisite: AS 300 or AS 307. (BA-M)

AS 402 **3 Credits**
SCIENTIFIC SAMPLING (3+0)
Sampling methods, including simple random stratified and systematic estimation procedures, including ratio and regression method; special area and point sampling procedures; optimum allocation. Prerequisite: AS 300 or AS 307. (BA-M)

Art

Art gives form to human experience; it expresses the entire range of thought and feeling.

Affirming the belief that knowledge of the arts is an indispensable part of any broad education, the Art Department offers a wide range of experiences designed to encourage independent thinking and creativity and to develop an appreciation of man's artistic achievements from prehistory to the present.

The Art Department discerns three distinct functions for art offerings in Anchorage: training of would-be artists — painters, sculptors, printmakers, craftsmen and commercial designers; training of art teachers for public and private elementary and secondary schools; and supplying supplementary training in the arts and crafts for students who wish to enrich their

lives through the study of art but who do not wish a degree.

BACHELOR OF ARTS

1. Complete the General University Requirements and the General College of Arts and Sciences Degree Requirements on pp. 45-54.
2. Complete a minimum of 39 credits in art courses. A maximum of 54 credit hours in art courses may be credited toward the degree.
3. Complete the following required art courses.

	Credits
Lower Division	
Art 105 — Beginning Drawing	3
Art 205 — Intermediate Drawing	3
Art 161 — Two-Dimensional Design	3
Art 163 — Three-Dimensional Design	3
Art 261-262 — History of World Art	6
Art 211 — Beginning Sculpture	3
Art 213 — Beginning Painting	3
One Elective (Art) chosen from:	
Art 201 — Beginning Ceramics	3
Art 207 — Beginning Printmaking	3
Art 209 — Beginning Metalsmithing	3
Art 224 — Intro Photography	3
Total	27
Upper-Division (300 level and above)	
Complete a sequence of 3 courses in one of six areas:	9
Drawing	
Printmaking	
Sculpture	
Painting	
Ceramics	
Photography	
Upper-Division Art History	3
Total	12

Art majors with a concentration in Photography are required to have Introductory and Intermediate Photography but are not required to take Beginning Sculpture or the three (3) credit Lower Division Studio elective. The Upper Division sequence in studio will consist of 3 courses in Upper Division Photography. Art 367 — History of Photography will fulfill the Upper Division Art History requirement.

4. Transfer students who are candidates for the BA degree with a major in Art must complete a minimum of 18 credits in art courses while in residence.

MINOR IN ART

Although a minor is no longer required, the following is listed for students who desire it.

A minor in Art consists of 18 credits, at least 6 upper division, including the following:

	Credits
art history (Art 261 or 262)	3
design (Art 161, 163)	3
drawing (any course)	3
studio (any regular studio course)	6
art history or studio	3
	18

ART PROGRAM FOR TEACHERS

Students who are preparing to teach Art should consult the dean of the School of Education concerning requirements for an Education minor and attendant certification for teaching.

BACHELOR OF FINE ARTS

The BFA is a professionally oriented degree 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 strive for professional competence in their major area. As a complement to the students' involvement, the faculty of the Art Department strive to create an environment in which the students can develop to the fullest of their potential.

Students desiring to enter the BFA program must file an application for admission with the office of admissions and records and in addition must submit a letter to the BFA committee of the Art Department in which they state their qualifications and objectives. Admission to the program, termination from it, and granting of the degree are done at the discretion of the BFA committee in consultation with the Office of the Dean of the College.

A minimum of 24 upper-division credits in one art discipline including the thesis constitutes a major. A credit minor should be carried in a second art area. Transfer students must complete a minimum of 24 art credits in residence to be eligible for the degree. A minimum of 130 credits is required for graduation.

Students in the BFA program are expected to maintain a 3.00 GPA in their major and must also maintain satisfactory academic standing in all courses. However, grades shall not be the sole criteria for judging performance in the program.

Seniors must submit a thesis project to the Art Department's BFA committee for approval prior to graduation. Normally this project is exhibited as a one-person exhibition during the senior year.

DEGREE REQUIREMENTS

1. Complete the General University Requirements on page 45-47
2. Complete the General Education Requirements for the BFA:

	Credits
Bachelor of Fine Arts	
Oral Communication	3
Spch 111	

Written Communication 6
Engl 111 and Engl 211 or 213 or 311
Reasoning Skills.....3
CS 105, 106, 107, 108, Phil 101
Quantitative Skills 3
AS 300, Math 107, 108
Natural Science 8
Including one lab.
Astr 103, 104
Biol 107, 108, 111, 112, 239
Chem 105, 106
Social Science (2 Disciplines) 6
Anth 101, 200, 202
Econ 201, 202, Just 110, JPC 101
P.S. 101, 102, Psy 111
Soc 101, SWK 106
Arts 3
Mus 122, Thr 111
Humanities (2 Disciplines) 6
Engl 121, Phil 201
Hist 101, 102
Engl 201, 202
Mus 221, 222
Phil 211, 212

3. Major Requirements
Complete a minimum of 72 credits in art courses to include the following. (A maximum of 84 credits in art may be credited toward the degree)
   a. Required art courses at lower-division level as listed in Number 3 under BA in Art.....27
   b. Upper-division art history 6
   c. Upper-division major concentration.....21
   d. Upper-division minor concentration.....9
   e. Upper divison Art electives.....6
   f. Thesis project 3
4. Electives 21

At least 48 credits must be at the 300 level or higher.

Total 130

Courses in Art

Art 105 **3 Credits**
BEGINNING DRAWING (2+3)
Introduction to basic elements in drawing. Emphasis on a variety of techniques and media.

Art 160 **3 Credits**
ART APPRECIATION (3+0)
This is a course designed for the non-art major. It should stimulate thought and develop an appreciation of all the visual arts. Rather than chronological study, emphasis is on how art is useful in everyday life, how it speaks, and what it means. No prerequisites. (BA-H)

Art 161 **3 Credits**
TWO-DIMENSIONAL DESIGN (2+3)
Fundamentals of form, which includes principles of composition, organization, structure, and basic color theory.

Art 163 **3 Credits**
THREE-DIMENSIONAL DESIGN (2+3)
Employing such materials as paper, card, wood, sheet metal, plastic and wire, and using simple hand and machine techniques this course will explore design in three-dimensions. This exploration will be directed by projects that will develop the awareness and skills of the student. The course will seek to stimulate discussion and analysis of three-dimensional perception.

Art 201 **3 Credits**
BEGINNING CERAMICS (2+3)
Introduction to the making and firing of clay objects. Study of clay methods of forming decorations, glazing, and firing. Prerequisite: Art 163.

Art 205 **3 Credits**
INTERMEDIATE DRAWING (2+3)
Exploration of composition and creative interpretation of subjects. Prerequisite: Beginning Drawing.

Art 207 **3 Credits**
BEGINNING PRINTMAKING (2+3)
Introduction to the concepts and techniques of printmaking. Each semester concentrates on two of the following major processes: collagraphy, linocut, woodcut, wood engraving, intaglio (etching, engraving, despoint, aquatint) or serigraphy (silkscreen, stencil). Prerequisite: Art 105 or 161.

Art 209 **3 Credits**
BEGINNING METALSMITHING (2+3)
Introduction to the basic techniques of metalsmithing and jewelry. Prerequisite: Two Basic Design courses or permission of instructor.

Art 211 **3 Credits**
BEGINNING SCULPTURE (2+3)
The fundamental sculptural elements of form, mass, volume, scale, material and surface are explored through assigned projects. The course will acquaint the student artist with the tools, techniques and materials available to the sculptor. Prerequisite: at least one 100 level studio art course, or permission of instructor.

Art 213 **3 Credits**
BEGINNING PAINTING (2+3)
Investigation of basic materials and techniques in oil or acrylic painting. Prerequisite: Art 105 or permission of instructor.

Art 224/JPC 203 **3 Credits**
INTRODUCTORY PHOTOGRAPHY (2+3)
Basic principles of photography. How the camera functions and the utilization of these functions for artistic expression. Processing and printing of black and white film. Laboratory and classroom demonstrations.

Art 261 **3 Credits**
HISTORY OF WORLD ART (3+0)
Origins of art and its development through the Renaissance. Prerequisite: Sophomore standing.

Art 262 **3 Credits**
HISTORY OF WORLD ART (3+0)
The development of art from the post-Renaissance Periods to the present. Prerequisite: Sophomore standing.

Art 301 **3 Credits**
INTERMEDIATE CERAMICS (2+3)
A continuation of basic ceramics with an emphasis on the potter's wheel, Glaze calculations and plaster as it relates to pottery. Prerequi-

site: Art 201 or permission of instructor. May be repeated for credit once.

Art 305 **3 Credits**
ADVANCED DRAWING (2+3)
Development and refinement of individual problems in drawing. Prerequisites: Art 205 or permission of instructor. May be repeated for credit once.

Art 307 **3 Credits**
INTERMEDIATE PRINTMAKING (2+3)
Continued development of techniques and creative interpretation in selected graphic areas. Prerequisite: Art 207. May be repeated for credit once.

Art 309 **3 Credits**
INTERMEDIATE METALSMITHING AND JEWELRY (2+3)
Further investigation of material processes and techniques for metalsmithing and jewelry with some emphasis on design. Prerequisite: Art 209. May be repeated for credit once.

Art 311 **3 Credits**
INTERMEDIATE SCULPTURE (2+3)
Exploration of the sculptural idea will be directed through assigned projects, lectures, demonstrations, field trips, discussions and critiques. Hand and machine tool processes in wood and metal will be available to the student artist. The manifesto for the course is that sculpture is the realization of concepts through sculptural processes. Prerequisite: Art 211 or permission of instructor. May be repeated for credit once.

Art 313 **3 Credits**
INTERMEDIATE PAINTING (2+3)
Continued development of expressive skills in painting in any media. Emphasis on pictorial and conceptual problems. Prerequisites: Art 205 and Art 213. May be repeated for credit once.

Art 321 **3 Credits**
PHOTOGRAPHIC DESIGN (2+3)
A photographic study of the elements of design. Line, shape, value, texture and color are explored 2- and 3-dimensionally. Photographic solutions stress variations and exploration of concepts and ingenuity in use of materials. Prerequisite: Art 324/JPC 303.

Art 322/JPC 322 **3 Credits**
EXPERIMENTAL PHOTOGRAPHY (2+3)
Exploration of various special effects, techniques; free experimentation with the photographic image; emphasis on creativity. Prerequisite: Art 324/JPC 303 or permission of instructor.

Art 323/JPC 323 **3 Credits**
COLOR PHOTOGRAPHY (2+3)
Advanced techniques in color transparencies and color printing; creative use of color. Prerequisite: Art 224/JPC 203.

Art 324/JPC 303 **3 Credits**
INTERMEDIATE PHOTOGRAPHY (2+3)
Further development of skills learned in Introductory Photography. Photographic perception or awareness, ideas and concepts, the "fine print" are areas that will be stressed. Assignments with deadlines will be given to develop discipline. Special darkroom techniques will be introdiced as a tool for further investigation. Prerequisite: Art 224/JPC 203 or instructor approval.

Art 363 **3 Credits**
HISTORY OF MODERN ART (3+0)
A study of the development of 19th and 20th century art, aimed at developing understanding and appreciation in the student. Prerequisite: Art 262 or permission of instructor. (BA-H)

Art 364 **3 Credits**
ITALIAN RENAISSANCE ART (3+0)
The development of the Renaissance from early Florentine beginnings to the High Renaissance of Venice, study of the works of such artists as Massacio, Michelangelo, DaVinci, Titian, etc. Prerequisite: Art 261 or permission of instructor. (BA-H)

Art 365 **3 Credits**
NATIVE ART OF ALASKA (3+0)
A study of the art forms of the Eskimo, Indian, and Aleut ranging from pre-history to the present; emphasis upon the changes in forms through the centuries. (BA-H)

Art 366 **3 Credits**
HISTORY OF ASIAN ART (3+0)
An introduction to the visual arts of East Asiatic cultures from prehistoric to modern times; selected works of painting, sculpture, architecture and other arts studied in relation to the culture in which they were produced. Prerequisite: Art 261.

Art 367/JPC 367 **3 Credits**
HISTORY OF PHOTOGRAPHY (3+0)
This course will examine the evolution of photography from 1816 to the present time. This evolution will be considered in terms of style, approach, content and form and will examine the major trends which have dominated the evolution of photography in Europe and America.

Art 370 **3 Credits**
ARTISTS' VIEWS (3+0)
A series of lectures and presentations by local artists of their work and their philosophy. A serious, in-depth look at how to look at their work, how an art historian views arts, how the artists sees his work, difference between commercial and fine art, and photography as an art. (BA-H)

Art 401 **3 Credits**
ADVANCED CERAMICS (2+3)
Advanced wheel work, design of large scale ceramic murals for incorporation into architecture. Study of the practical application of ceramics in the commercial field. Advanced body and glaze calculation. Prerequisites: Art 301 or permission of instructor. May be repeated for credit once.

Art 405 **3 Credits**
EXPERIMENTAL DRAWING (2+3)
Further investigation, experimentation and development of ideas using contemporary materials and techniques in drawing. Prerequisites: Art 305 or permission of instructor. May be repeated for credit once.

Art 407 **3 credits**
ADVANCED PRINTMAKING (2+3)
Individual development of technical and creative processes in printmaking. Prerequisites: Art 307 or permission of instructor. May be repeated for credit once.

Art 409 **3 Credits**
ADVANCED METALSMITHING AND JEWELRY (2+3)
Continued investigation of materials and processes with an introduction to holloware skills and forging. Prerequisite: Art 309 or permission of instructor. May be repeated for credit once.

Art 411 **3 Credits**
ADVANCED SCULPTURE (2+3)
The course is designed to challenge the student artist's sculptural concepts and encourage research at the frontiers of today's sculptural concerns. Response to the assignments can be realized through performance, video and multimedia, as well as the traditional sculptural processes such as stone carving, plaster casting, welding and wood working. Large scale semester long projects will be encouraged. Prerequisite: Art 311 or permission of instructor. May be repeated for credit once.

Art 413 **3 Credits**

ADVANCED PAINTING (2+3)

Experimentation and development of individual ideas and techniques in painting. Prerequisite: Art 313 or permission of instructor. May be repeated for credit once.

Art 418/Ed 418 **3 Credits**

METHODS: ART IN THE ELEMENTARY SCHOOL (2+3)

Methods of teaching art principles, procedures and materials for the elementary school level. Students will explore a wide variety of art media basic to elementary art curricula. Throughout the semester, students will be responsible for developing, conducting and evaluating curriculum activities. In this area with elementary children in an actual classroom setting. Prerequisites: Ed 332, and Prerequisites thereto.

Art 424/JPC 402 **3 Credits**

ADVANCED PHOTOGRAPHY (2+3)

Designed for individual portfolio development. With instructor approval, students will establish goals and criteria for the development of images that will reflect their own individual expression. Prerequisite: Permission of instructor. May be repeated once for credit.

Art 442/Ed 442 **3 Credits**

CURRICULUM AND INSTRUCTION IN SECONDARY ART (3+0)

Introduction to the philosophies, organization, patters, tools, and techniques that aid teachers and guidance personnel in preparing students for responsible decision making in modern society. Prerequisites: Admission to Teacher Certification, Ed 332, and prerequisites thereto. Fall.

Art 492 **3 Credits**

ART SEMINAR (1+6)

A special course for students qualified for individual creative project-in various studio areas. Work is done independently of the regularlay scheduled classes. Class meets weekly for group discussion and critique of projects. Separate reading assignments in connection with chosen projects. Prerequisites: Students must have completed beginning and intermediate courses in studio area. Permission of instructor required.

Astronomy

ASTR 103 **3 Credits**

INTRODUCTORY ASTRONOMY I (3+0)

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, etc., solar system evolution. Prerequisites: High School or College Trig, 2 years High School Algebra or more.

ASTR 104 **3 Credits**

INTRODUCTORY ASTRONOMY II (3+0)

Introduction to stellar, galactic, extragalactic astronomy. Stars, clusters, galaxies, stellar evolution, the universe as a whole, cosmology. Prerequisite: same as ASTR 103; may be taken out of sequence, but not recommended.

Biological Sciences

Biology is traditionally thought of as the study of living things. Modern biology is certainly that, but perhaps more importantly, it is also the study of how these living things interact with the environment in which they live. The program has been designed to develop a sound understanding of the interrelationships that exist between all living things, without compromising the acquisition of a strong base of knowledge and an appreciation of scientific methods.

The Biology program has among its objectives the preparation of individuals for various professional careers in health sciences, environmental sciences and, of course, in the biologically-oriented basic sciences. Various courses of study are available to provide a basis for appropriate career development without compromising the study of biology for its own sake. All biology course sequences, therefore, are developed around a rigorous basic science core curriculum.

BACHELOR OF ARTS

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.
2. Complete a curriculum approved by the Chairman of the Biology program, including at least the following requirements:
   Biol. 107-108 or equivalent, Biol 492, and at least 27 additional credits in Biology, at least 15 of which must be upper-division credits, including at least one course each in Botany, Zoology, Microbiology, Physiology, Genetics, and Ecology.
   Total Credits 31
   Chem. 120-121 or 105-106 8

BACHELOR OF SCIENCE

1. Complete the General, University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.
2. Complete a curriculum approved by the Chairman of the Biology Program, including the following minimum requirements. (Unless noted otherwise, the program requirements may also be used to satisfy the general university degree requirements):

   Credits

   a. Biol. 107-108 or equivalent, Biol Seminar, and at least 36 additional credits in Biology, at least 18 of which must be upper-division credits and must include one course each in Botany, Ecology, Genetics, Microbiology, Physiology, and Zoology 40
   b. Chem. 105-106, and at least 8 credits in Organic Chemistry, including laboratory 16
   c. In addition to the general university requirements, complete one of the following three alternatives: (1) Math 200; (2) BA/JPC/PS 432; (3) either AS 300 or AS 307 3-4

Pre-professional students may substitute Chem. 441-442 for six Biology credits and should take eight credits of Physics.

MINOR IN BIOLOGICAL SCIENCES

Complete at least 20 credits in Biology, including Biol 107-108 or equivalent, a Genetics and an Ecology course, and at least six upper-division credits in Biological Sciences. Those students needing additional breadth in their minor may, in certain circumstances, petition to modify these requirements.

MASTER'S DEGREE

MASTER OF SCIENCE: BIOLOGICAL SCIENCES

A. Degree Requirements:

1. Submission of scores of the Graduate Record Examination and the GRE Specialty Examination in Biology or Chemistry prior to admission to the program.
2. Completion of General University Graduate Degree requirements.
3. Completion of Specific Program Degree requirements, as shown below.
4. Completion of Oral and Written Comprehensive Examinations.

B. Program Degree Requirements:

It should be understood by all students that the requirements specified herein are *minimum* requirements. These requirements, as well as any additional or remedial work that may be required, will be determined by the student's Graduate Studies Committee. Only rarely will a student be able to graduate with a minimum of 30 credit hours.

All students will be subject to written and oral examinations. Such examinations will be of a comprehensive nature, and when appropriate, will include a defense of research or thesis. The Graduate Studies Committee will be responsible for certifying that the student has satisfactorily completed these examinations.

1. MASTER OF SCIENCE — THESIS OPTION
   Thesis & Research ..... not more than 12 Crs.
   600 level credits ..... not less than 9
   Seminar (Biol 492) ..... 2 Crs
   Approved upper division credits to total ..... 30 Crs minimum
   Note: Teaching experience, equivalent to two laboratory sections, will be required for all M.S. graduates.
2. MASTER OF SCIENCE — NON-THESIS OPTION
   Research ..... 4-6 Crs
   600 level credits ..... not less than 9
   Seminar (Biol 492) ..... 2 Crs
   Approved upper division credits to total ..... 30 Crs minimum
   Note: Teaching experience, equivalent to two laboratory sections, will be required for all M.S. graduates.

C. Admission Requirements

Admission to graduate study shall require the approval of at least a majority of faculty in the Department or of a Graduate Admissions Committee appointed by the Department Chairperson.

Although graduating college seniors are invited to apply, and are expected to represent the majority of applicants, no student may be admitted to graduate study until the baccalaureate degree has been awarded by an accredited college or university.

Students shall apply through the Office of Admissions & Records, and provide any supporting material requested by the Admissions Committee. Graduate Record Examinations, including Specialty Area Examinations, will be required of all students prior to admission. Additional standards will be established on an individual basis by the Graduate Admissions Committee, and deficiencies in the applicant's undergraduate program, if any, will be removed before the end of the second semester at UAA.

D. Departmental Graduate Studies Committee

Each student will be assigned a Graduate Studies Committee approved by the Department Chairperson, the chairman of which will be the thesis or research advisor. The Committee will be appointed after consultation with the student and with the faculty member who is willing to direct his/her graduate studies will serve as the Committee Chairperson. In those instances where an adjunct faculty member is supervising the research, the committee will be co-chaired by a permanent UAA faculty member. It shall be the committee's responsibility to ensure that the degree requirements are met and that timely and appropriate progress toward the compeltion of the degree is maintained.

The committee shall consist of at least three faculty members from the concerned Departments.

Courses in Biology

Biol 107 **3 Credits**

FUNDAMENTALS OF BIOLOGY (3+0)

Basic principles of living systems chemical and structural bases; major metabolic mechanisms; reproduction and development; genetics; evolution and diversity; environmental relationships; and mechanisms for stability of cells, organisms, and populations. An introductory course open to students in all curricula. (BA-N)

Biol 108 **1 Credit**

FUNDAMENTALS OF BIOLOGY (0+3)

Laboratory part of Biology 107. Exercises are designed to illustrate principles and concepts developed in Biology 107. Prerequisites concurrent registration, or credit in Biol 107. (BA-N)

Biol 111 **4 Credits**

Biol 112 **4 Credits**

HUMAN ANATOMY AND PHYSIOLOGY I, II (3+3)

(3+3)

111. An introduction to human structure and function. The integumentary, skeletal, muscular, nervous, and endocrine systems are considered. Accepted for Biology major credit only by petition. (BA-N)

112. A continuation of Biol 111. The circulatory, respiratory, digestive, excretary, and reproductive systems are considered. Prerequisite: Biol 111 or permission. (BA-N)

Biol 215 **4 Credits**

FUNDAMENTALS OF ZOOLOGY (3+3)

General introductory zoology with an emphasis on the morphology, ecology, and evolution of major vertebrate and invertebrate phyla. Offered Spring Semesters. Prerequisites: Biol 107-108, Chem 105, or permission of instructor. (BA-N)

Biol 239 **4 Credits**

PLANT FORM AND FUNCTION (3+3)

Structure, function, ecology, and evolutionary patterns of the major groups of plants. Prerequisites: Biol 107-108. (BA-N)

Biol 240 **4 Credits**

INTRODUCTORY BACTERIOLOGY FOR HEALTH SCIENCES (3+3)

General introductory bacteriology and virology with emphasis on those areas relating to Health Sciences, including host parasite interac-

tions, host defense mechanisms, and epidemiology. Recommended for associate and baccalaureate health science programs. Accepted for Biology major credit only by petition. Prerequisites: concurrent enrollment in Chem 121 and Biol 112, or 8 hours in Biology AND Chemistry, or permission of the instructor.

Biol 252 **4 Credits**
PRINCIPLES OF GENETICS (3+3)
Principles of inheritance in prokaryotes and eukaryotes, and physiochemical properties of genetic systems. (Laboratory is included) Prerequisites: Biol 107-108. (BA-N)

Biol 271 **4 Credits**
PRINCIPLES OF ECOLOGY (3+3)
Relationships between organisms and their environments. Community and population dynamics will be stressed. Prerequisites: Biol 107, 108; Chem. 105. Offered Spring semester. (BA-N)

Biol 308 **3 Credits**
PRINCIPLES OF EVOLUTION (3+0)
An introduction to the mechanisms of, and evidence for, the evolution of living systems. The coding and transmission of genetic information in populations, population variability, change and stabilization. Prerequisites: Biol 107, 108, 252, 271 or permission of instructor. (BA-N)

Biol 309 **3 Credits**
BIOGEOGRAPHY (3+0)
Ecological basis and historical patterns of the distribution of plants and animals on a world-wide basis. Current theories regarding origins of these distributions are examined. Prerequisites: Biol 107-108, 215 and 239, or permission of instructor. (BA-N)

Biol 327 **3 Credits**
PARASITOLOGY (2+3)
The life history and ecology of parasites of medical significance and economic importance, including diagnosis and control. Emphasis on North American parasites. (BA-N)

Biol 340 **5 Credits**
GENERAL MICROBIOLOGY (3+6)
Biology of procaryotic organisms and viruses, their relationships to other organisms and to the ecosystem. Prerequisites: Concurrent registration in Chemistry 322. Usually offered during Fall semesters. (BA-N)

Biol 352 **3 Credits**
HUMAN GENETICS (3+0)
An introduction to human genetics with emphasis on medical and social aspects. Included will be the genetics of normal traits in man, biochemical and cytogenetic diagnosis of hereditary diseases, and genetic screening and counseling. Accepted for Biology major degree requirement in Genetics only by petition; may be used as elective credit for upper division Biology. Prerequisite: Biology 252 or permission of instructor. (BA-N)

Biol 361 **3 Credits**
CELL BIOLOGY (3+0)
Detailed structure, including ultrastructure, and function of the cell. Isolation, composition, and biochemical properties of cell organelles. Prerequisites: Biol 252 and Chem 321 and 322 or permission of instructor. (BA-N)

Biol 362 **3 Credits**
CELL BIOLOGY LABORATORY (1+6)
A laboratory course designed to give experience in cell and tissue culture, analysis of subcellular components, and techniques involving nucleic acids and proteins. Prerequisite: Biol 361 or permission of instructor. (BA-N)

Biol 378 **3 Credits**
MARINE BIOLOGY (3+0)
The marine environment; biology and distribution of marine plants and animals; fisheries, aquaculture and pollution. Prerequisites: Biol 107-108. (BA-N)

Biol 401 **30 Credits**
MEDICAL TECHNOLOGY
Twelve-months medical technology internship at an approved hospital school, including work in clinical chemistry, hematology, microbiology, serology, parasitology, and histologic techniques. Prerequisites: Senior standing in the Medical Technology Program and acceptance at an approved school of Medical Technology.

Biol 403 **4 Credits**
MICROTECHNIQUE (2+6)
Demonstration and use of tissue techniques including procurement, preservation, embedding, sectioning, staining, microscopy, photography and illustration. Prerequisites: Biol 107-108 plus 12 additional credits in Biology, or permission of instructor. Offered as demand warrants. (BA-N)

Biol 416 **4 Credits**
PLANT PHYSIOLOGY (3+3)
A broad survey of plant physiology with emphasis on the whole plant response to evnironmental conditions. Prerequisite: Biol 239, Chem 105, or graduate standing, or permission of instructor. Generally given during even year fall semester. (BA-N)

Biol 418 **3 Credits**
NEUROBIOLOGY (3+0)
A study of nervous system function at the cellular level; emphasis on physiology of excitable membranes and synapses. Prerequisites: Math 200, Chem 105-106, Biol 107-108, 1 year of physics, or permission of instructor. (BA-N)

Biol 425 **5 Credits**
INVERTEBRATE ZOOLOGY (3+6)
Functional anatomy and evolutionary adaptations of invertebrate animals. Prerequisites: At least 16 credits of Biology, including Biol 107, 108. (BA-N)

Biol 427 **5 Credits**
MARINE INTERTIDAL ZOOLOGY (3+4)
Morphology, ecology, behavoir, feeding and reproduction of living benthic organisms, with emphasis on local marine species. Includes co-operative student field research projects. Emphasis on application of field techniques to the solution of biological problems. Prerequisites: Biol 271, 378, 425, Chem 212, or permission of instructor. Offered summers. (BA-N)

Biol 439 **3 Credits**
PLANT ECOLOGY FIELD COURSE (1+6)
The interactions between plants and their environment. Theory and methodology for studying the responses of plants to various environmental conditions. Normally given during the summer. Prerequisites: Biol 239, Chem 105, or graduate standing or permission of instructor. (BA-N)

Biol 441 **4 Credits**
MEDICAL AND DIAGNOSTIC BACTERIOLOGY (2+6)
Basic medical bacteriology, including host-parasite relationships, responses of the host organism, and principles of diagnostic techniques. Laboratory includes rapid diagnostic systems, serology, and determinative bacteriology. Prerequisite: Biol 340. (BA-N)

Biol 442 **4 Credits**
QUANTITATIVE TECHNIQUES IN MICROBIOLOGY (1+9)
Quantitative techniques in Bacteriology and Virology. Cell and plaque counting, quantitative measurement of microbial activity and

bioassay. Advanced techniques in microscopy. Prerequisites: Biol 340, or graduate standing, or permission of instructor.

Biol 443 **4 Credits**
ENVIRONMENTAL AND ECOLOGICAL BACTERIOLOGY (2+6)
The role of microorganisms in the environment. Aquatic, marine, and soil microbiology and the microbiology of waste treatment, pollution, and natural decomposition and nutrient cycling processes. Prerequisites: Biol 340 and one course in Ecology. (BA-N)

Biol 461 **3 Credits**
MOLECULAR BIOLOGY (3+0)
A study of molecular biology, with emphasis on molecular genetics and the molecular biology of eucaryotic cells and cancer cells, including current developments in the field. Prerequisite: Biol 361 or permission of instructor. (BA-N)

Biol 471/Chem 471 **3 Credits**
IMMUNOCHEMISTRY (3+0)
A study of the immune response including the biochemistry of antibodies, cellular and molecular events triggered by antigenic stimulation, regulation, immunopathology, transplantion, cancer and immunochemical techniques. (BA-N).

Biol 475 **4 Credits**
ARCTIC ECOSYSTEMS (3+3)
Analysis of energy flow and nutrient cycling in Arctic ecosystems. Prerequisties: Biol 215, 239, 271, Chem 106, or graduate standing, or permission of instructor.

Biol 479 **4 Credits**
PLANTS AND THEIR ENVIRONMENT (3+3)
Morphological, anatomical, and physiological adaptations of plants to environmental conditions characteristically encountered in the various biomes on earth. Usually offered on alternate fall semesters.

Biol 487 **5 Credits**
COMPARATIVE ANATOMY OF VERTEBRATES (3+6)
Functional anatomy, ecology, and evolution of chordates. Prerequisites: Biol 215 or permission of instructor. Offered spring semesters. (BA-N)

Biol 488 **5 Credits**
VERTEBRATE DEVELOPMENTAL ANATOMY (3+6)
Analysis of vertebrate morphogenesis and introduction to the casual factors of development. Prerequisite: Biol 487. Offered alternate Fall semesters. (BA-N)

Biol 490 **1 Credit**
INSTRUCTIONAL PRACTICUM: LABORATORY (Hours Arr.)
Supervised practical experience in one Biology laboratory section. Planning, presentation of material, achievement testing, and correlation with lecture under the direct supervision of department faculty. Required of graduate students and open to others with instructor approval only.

Biol 602 **2 Credits**
SYSTEMATIC BIOLOGY (2+0)
Classification, systematic, and taxonomy of organisms. Prerequisites: Biol 308, 425, 487. Offered as demand warrants.

Biol 618 **3 Credits**
ADVANCED NEUROBIOLOGY (3+0)
Study of nervous system function at the cellular level with emphasis on quantitative description of electrical behavior of nerve membrane. Lectures concurrent with Biol 418. In addition to meeting the requirements of that course, students will study theory of electro-physiology instrumentation and will prepare a research paper detailing a current topic in excitable membrane function, including a review of recent literature and proposal for further experiments. Not available for credit to students who have completed Biol 418.

Biol 625 **4 Credits**
ADVANCED INVERTEBRATE ZOOLOGY I (2+6)
Functional morphology, evolutionary adaptations and phylogeny of the invertebrates with an emphasis on feeding, respiration, circulation, excretion and digestion. Prerequisites: Biol 425 or permission of instructor.

Biol 626 **4 Credits**
ADVANCED INVERTEBRATE ZOOLOGY II (2+6)
Functional morphology, evolutionary adaptations and phylogeny of the invertebrates with an emphasis on skeletal systems, locomotion, nervous systems and reproduction. Prerequisites: Biol 425, or Biol 625 or permission of instructor.

Biol 641 **3 Credits**
MICROBIAL PHYSIOLOGY (3+0)
The principal types of autotrophic and heterotrophic microbial metabolism. Photosynthesis, nitrogen fixation, metabolism of iron and sulfur bacteria. Fermentation, respiration, biosynthetic pathways. Prerequisites: Biol 442, or 642, or Chem 444, or permission of instructor.

Biol 642 **4 Credits**
ADVANCED QUANTITATIVE TECHNIQUES IN MICROBIOLOGY (1+9)
Lecture and laboratories concurrent with Biol 442. In addition to meeting all requirements for Biol 442, graduate students will be required to develop an experimental protocol using the techniques learned and to present seminars on the theoretical basis of those techniques. Not available for credit to students who complete Biol 442.

Biol 661 **3 Credits**
ADVANCED MOLECULAR BIOLOGY (3+0)
Lectures concurrent with Biology 461 (Molecular Biology). 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 complete Biol 461.

Biol 663 **3 Credits**
MOLECULAR BIOLOGY OF CANCER (3+0)
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 towards a study of the current literature, by means of research, term papers, discussions and seminars. Prerequisites: Biol 361 and 461, or permission of instructor.

Biol 676 **4 Credits**
ADVANCED PHYSIOLOGICAL PLANT ECOLOGY (3+3)
Lecture and Laboratories concurrent with Biol 479. In addition to meeting all requirements for Biol 479, graduate students will be required to carry out research using techniques learned in the course and to present seminars on the results as well as theoretical background. Not available for credit to students who complete Biol 479.

Biol 678 **4 Credits**
ADVANCED MARINE BIOLOGY (2+6)
Distribution, locomotion, feeding, reproduction and physiology of marine organisms with an emphasis on local marine invertebrate species. Prerequisites: Biol 378, 425, or permission of instructor.

Biol 679 **2 Credits**
CURRENT TOPICS IN MARINE BIOLOGY (2+0)
Current topics in Marine Biology to be presented by graduate students or faculty, may be repeated for credit.

Chemistry

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 of 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 would 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.

Bachelor of Science

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp.45-54.
2. Complete the following major specialty requirements:

	Credits
Chem 105-106 General Chemistry	8
Chem 212 Quantitative Analysis	5
Chem 321-322 Organic Chemistry	8
Chem 331-332 Physical Chemistry	6
Chem 334 Physical Chemistry Laboratory	3
Chem 434 Instrumental Methods	4
Chem 441-442 Biochemistry	6
Chem Seminar	2
Chem Individual Research	3
Math 200-201-202 Calculus	12
Physics 211-212 General Physics	8
Biol 107-108 Fundamentals of Biology	4
Electives to total 130 credits	

BIOCHEMISTRY OPTION:

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.

2. Complete the following major specialty requirements:

	Credits
Chem 105-106 General Chemistry	8
Chem 212 Quantitative Analysis	5
Chem 321-322 Organic Chemistry	8
Chem 434 Instrumental Methods	4
Chem 441-442 Principles of Biochemistry	6
Chem 444 Biochemistry Laboratory	3
Chem 461-462 Biophysical Chemistry	6
Chem Seminar	2
Chem Individual Research	3
Math 200-201-202 Calculus	12
Physics 103-104 or 211-212	8
Biology upper division courses	9
Electives to Total 130 Credits	

MINOR

A minor in chemistry requires completion of at least 20 credits in chemistry including: Chem 105, 106, 212, 321, 322.

Courses in Chemistry

Chem 105 **4 Credits**

Chem 106 **4 Credits**

GENERAL CHEMISTRY (3+3) (3+3)

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 and equilibrium, oxidation-reduction reactions, and thermodynamics. Chem 106 also includes the principles and methods of qualitative analysis of the elements. Prerequisite: High school chemistry or permission of instructor. (BA-N)

Chem 120 **4 Credits**

SURVEY OF CHEMISTRY (3+3)

A course designed to introduce health science students to the chemistry of biological systems. Covers units of measurement, atomic and molecular structure, chemical bonding, radioactivity, oxidation-reduction reactions, solutions, acids, bases, buffers, and an introduction to organic chemistry. Prerequisite: High school chemistry or permission of instructor. (BA-N)

Chem 121 **4 Credits**

ELEMENTARY BIOCHEMISTRY (4+0)

A survey of the fundamental principles of biochemistry, including structure and function of proteins, carbohydrates, lipids, and nucleic acids; the metabolic generation of energy, biosynthesis, expression of genetic information, and selected topics in molecular physiology. Prerequisite: Chem 120. (BA-N)

Chem 212 **5 Credits**

QUANTITATIVE ANALYSIS (3+6)

General principles of chemical analysis, including introduction to volumetric and gravimetric methods, theory, problems, and laboratory. Prerequisite: Chem 105-106. (BA-N)

Chem 321 **4 Credits**

Chem 322 **4 Credits**

ORGANIC CHEMISTRY (3+4) (3+4)

A theoretical and laboratory course designed to study the important classes of carbon compounds. Modern techniques of isolation, structural determination, and methods of synthesis will be emphasized. Prerequisite: Chem 105-106 or 120-121 (BA-N)

Chem 331 **3 Credits**

Chem 332 **3 Credits**

PHYSICAL CHEMISTRY (3+0) (3+0)

A quantitative study of the kinetic theory of gases and principles of chemical thermodynamics with application to solutions, phase equilibria and chemical equilibrium, atomic and molecular structure, electrochemistry, and chemical kinetics. Prerequisites: Chem 105-106, Math 200, and Physics 211-212. (BA-N)

Chem 334 **3 Credits**
PHYSICAL CHEMISTRY LABORATORY (1+6)
A laboratory designed to provide an opportunity to study by means of modern techniques several complex chemical systems and the organization and interpretation of experimental data. Prerequisite: Chem 331. (BA-N)

Chem 402 **3 Credits**
ADVANCED INORGANIC CHEMISTRY (3+0)
A study of the theoretical aspects of structure and bonding in inorganic compounds; coordination compounds of the transition elements as well as the principles of crystal field and ligand field theory. Prerequisite: Chem 331-332. (BA-N)

Chem 421 **3 Credits**
ADVANCED ORGANIC CHEMISTRY (3+0)
Theoretical interpretation of the physical and chemical properties of organic molecules; molecular orbital theory; spectroscopy of organic molecules; photochemical processes. Prerequisite: Chem 321-322. (BA-N)

Chem 431 **3 Credits**
ADVANCED PHYSICAL CHEMISTRY (3+0)
Topics in quantum chemistry, molecular structure, and chemical kinetics. Prerequisite: Chem 331-332. (BA-N)

Chem 434 **4 Credits**
Instrumental Methods (2+6)
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. Prerequisites: Chem 105-106, 212, or permission of instructor. (BA-N)

Chem 441 **3 Credits**

Chem 442 **3 Credits**
PRINCIPLES OF BIOCHEMISTRY (3+0) (3+0)
A study of the structure and function of proteins, carbohydrates, fats, vitamins, coenzymes, and nucleic acids, the degradative and biosynthetic metabolic pathways involving these biomolecules, replication of genetic information, regulation of gene expression, and protein biosynthesis. Other topics to be discussed include enzyme kinetics, photosynthesis, muscle biochemistry, active transport, and hormone action. Prerequisites: Chem 321-322 or permission of instructor. (BA-N)

Chem 444 **3 Credits**
BIOCHEMISTRY LABORATORY (1+6)
A laboratory course designed to illustrate modern techniques of isolation, purification, and qualitative and quantitative analysis of biomolecules. Prerequisite: Chem 441. (BA-N)

Chem 450 **3 Credits**
ENVIRONMENTAL CHEMISTRY (3+0) 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. The course is an introduction to Environmental Chemistry for all science majors. PREREQUISITE: Junior or Senior standing in Biology, Chemistry, or Engineering. (BA-N)

Chem 461 **3 Credits**

Chem 462 **3 Credits**
BIOPHYSICAL CHEMISTRY (3+0) (3+0)
Theoretical study of the hydrodynamic, thermodynamic, and optical properties and techniques used to elucidate structure, conformation, and function of biological macromolecules. (BA-N)

Chem 471/Biol 471 **3 Credits**
IMMUNOCHEMISTRY (3+0)
A study of the immune response including the biochemistry of antibodies, cellular and molecular events triggered by antigenic stimulation, regulation, immunopathology, transplantion, cancer and immunochemical techniques. (BA-N)

Chem 634 **4 Credits**
ADVANCED INSTRUMENTAL METHODS (2+6)
Lectures concurrent with CHEM 434 (Instrumental Methods). 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. Not available for credit to students who complete CHEM 434. Prerequisite: CHEM 105-6, 212, or permission of instructor.

Chem 641 **2 Credits**
METABOLISM AND FATE OF ANTHROPOGENIC COMPOUNDS (2+0)
An advanced topics course in biochemistry; oxidative and reductive metabolism of a variety of anthropogenic compounds, the roles of hydration and conjugation reactions, pharmacokinetics and chemical carcinogenesis will be covered in this course. Roles of enzyme and membrane structure in determining the fate of compounds will also be considered. Prerequisite: Permission of instructor.

Chem 642 **2 Credits**
ENZYME STRUCTURE AND MECHANISM (2+0)
An advanced topic course in biochemistry; multisubstrate reaction kinetics, King-Altman analysis and product inhibition patterns will be applied to the relationship of protein structure and catalytic mechanism. Prerequisite: CHEM 442 or permission of instructor.

Chem 643 **2 Credits**
STRUCTURE AND FUNCTION OF BIOLOGICAL MEMBRANES (2+0)
An advanced topics course in biochemistry; structural characterization of cellular membranes and the role in transport, bioenergetics, photosynthesis and modulation of enzyme activity. Prerequisites: CHEM 442 or permission of instructor.

Chem 650 **2 Credits**
TOXIC METALS AND ORGANIC CHEMICALS IN THE ENVIRONMENT (2+0)
An advanced topics course in environmental chemistry; distribution, environmental effects and current analytical techniques associated with trace metals and organics from natural and anthroprogenic sources. Role in both accute and long term toxic effects will be considered. Permission of Instructor.

Chem 661 **3 Credits**
ADVANCED BIOPHYSICAL CHEMISTRY (3+0)
Lectures concurrent with Chem 461 (Biophysical Chemistry). In addition to meeting all requirements for Chem 461, graduate students will be required to research the literature on a current topic in biophysical chemistry, to submit a research paper summarizing their findings including designs for future experiments on the subject, and to give a seminar on this topic. Not available for credit to students who complete Chem 461.

Chem 662 **3 Credits**
ADVANCED BIOPHYSICAL CHEMISTRY (3+0)
Lectures concurrent with Chem 462 (Biophysical Chemistry). In addition to meeting all requirements for Chem 462, graduate students will be required to research the literature on current topics in the area of biophysical techniques, to submit a research paper summarizing their findings including designs for future experiments on the subject, and to give a seminar on the topic. Not available for credit to students who complete Chem 462.

Chem 663 **2 Credits**

OXYGEN TRANSPORT PROTEINS (2+0)

An advanced course in Biophysical Chemistry; focus will be on the structure-function relationship of oxygen transport proteins including vertebrate and invertebrate hemoglobins, hemocyanins and hemerythrin. Prerequisite: permission of instructor.

Computer Science

The Mathematical Sciences Department 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 business option is the more broadly based and provides preparation for a wide range of careers in business and management information processing. This option requires a minor in either business management or accounting. The scientific option is more specifically oriented toward preparing a student for a career in scientific or engineering programming as well as for graduate training in computer science.

B.A. (Business Option) in Computer Science

B.S. (Business Option) in Computer Science

1. Complete the General University Requirments and the General College of Arts and Sciences Degree Requirements on pp. 45 and pp. 53 of the UAA catalog.

2. Complete the following courses: CS 101, CS 102, CS 108, CS 208, CS 210, CS 315, CS 316, CS 360, CS 414, CS 470, MATH 270, MATH 272, ACCT 201, ACCT 202, AS 300, AS 308, BA 325, BA 335, BA 343, BA 377.

3. Complete two (2) additional Computer Science electives (at least one (1) at the upper division level).

4. In addition to the major in Computer Science, students will obtain a minor in Accounting or Business within the School of Business and Public Affairs by completing the following additional courses:

Minor	Additional Coursework
Accounting:	Any nine (9) upper division credits in Accounting.
Business:	All of the following: 1) BA 462 Administrative Policy 2) BA 480 Organizational Theory 3) BA 489 Corp. Management & Planning

5. The program, including electives, for each student must be developed with the academic advisor from the College of Arts and Sciences and be approved by the Chairman of the Department of Mathematical Sciences.

B.S. (Scientific Option) in Computer Science

1. Complete the General University Requirements and the General College of Arts and Sciences Degree Requirments on pp. 45 and pp. 53 of the UAA catalog.

2. Complete the following courses: CS 101, CS 105, CS 201, CS 202, CS 210, CS 330, CS 310, CS 381, CS 430, CS 470, AS 307, AS 308, AS 402, MATH 200, MATH 201, MATH 202, MATH 302, MATH 314, MATH 321, BA 377.

3. Complete fifteen (15) additional upper division credits in CS/MATH as electives (at most six (6) credits in mathematics can be used to satisfy CS/MATH upper division electives).

4. The program, including electives, for each student must be developed with the academic advisor from the College of Arts and Sciences and be approved by the Chairman of the Department of Mathematical Sciences.

Computer Science Minors

A minor in Computer Science with the **Business Option** requires completion of CS 101, CS 102, ACCT 201, CS 108, CS 210, ACCT 202, CS 208, in addition to six (6) approved semester credits of Computer Science courses at the 300 level or higher *and* two (2) Business courses selected from the following: BA 325, BA 335, BA 343, and BA 377. CS 102 may be satisfied by the completion of *two* (2) courses in programming languages other than COBOL.

A minor in Computer Science with the **Scientific Option** requires completion of CS 101, CS 105 or ES 201, MATH 272 or MATH 200, AS 300 or AS 307, CS 201 and 202, CS 210, in addition to six (6) *approved* semester credits of Computer Science courses at the 300 level or higher *and* the completion of the Natural Sciences requirement for the BS degree within the College of Arts and Sciences at the University of Alaska, Anchorage.

Courses in Computer Science

CS 101 **3 Credits**

INTRODUCTION TO DATA PROCESSING (3+0)

A broad survey course intended to acquaint the student with the concepts and vocabulary associated with computers and their general use in business data processing, and to provide the student with the degree of computer literacy which is required to function effectively in today's technological society. While the fundamentals of computer problem solving and programming in a higher-level programming language (BASIC) are discussed and applied, the emphasis is on generally useful concepts and not on technical skill development. Prerequisite: None.

CS 102 **3 Credits**

SURVEY OF PROGRAMMING LANGUAGES (3+0)

An introduction to the significant features of popular programming languages (BASIC, FORTRAN, COBOL). Primary course objective is development of langauge skills to the extent the student can better

understand the problems, procedures, and techniques of software development and can identify existing computer programs and to be able to logically argue which language is most suitable for a particular application or organization. Includes an introduction to machine and assembler language concepts. Programming assignments in each language. Prerequisite: Two years of high school algebra or equivalent. Not to be taken for credit by students who have completed courses for credit in more than one of the three languages. (BASIC, FORTRAN, and COBOL.)

CS 105 **3 Credits**

FORTRAN PROGRAMMING (3+0)

Training and practice in writing programs in the FORTRAN language. Emphasis on problem solving with a computer analysis, flowcharting, testing and debugging, documentation. (BA-M)

CS 106 **3 Credits**

BASIC PROGRAMMING (3+0)

Training and practice in writing programs in the BASIC language. Recommended as first programming language. (BA-M)

CS 107 **3 Credits**

PASCAL PROGRAMMING (3+0)

Training and practice in writing programs in the PASCAL language. Emphasis on problem solving with a computer, analysis. Prerequisite: One introductory programming language course such as BASIC OR FORTRAN. (BA-M)

CS 108 **3 Credits**

INTRODUCTION TO COBOL (3+0)

Training and practice in writing programs in the COBOL language. Emphasis on problem solving with a computer, analysis, testing and debugging, and documentation. Prerequisite: CS 102 or equivalent. Corequisite, Acct 201.

CS 109 **3 Credits**

PL/1 PROGRAMMING (3+0)

Training and practice in writing programs in the PL/1 Language. Emphasis on problem solving with the computer: analysis, flowcharting, testing/debugging, and documentation. Prerequisites: Two years of high school algebra or equivalent and one introductory programming language course such as BASIC or FORTRAN.

CS 201 **3 Credits**

PROGRAMMING CONCEPTS I (3+0)

An introduction to programming and problem solving and to the programming language PASCAL. Prerequisites: CS 105 or CS 106 or permission of instructor.

CS 202 **3 Credits**

PROGRAMMING CONCEPTS II (3+0)

An introduction to data structures and algorithm development using PASCAL. Prerequisite: CS 201 or CS 107 with permission of the instructor.

CS 208 **3 Credits**

ADVANCED COBOL (3+0)

Review of basic COBOL. Advanced training and practice in writing programs in the COBOL Language using structured programming techniques. Emphasis on methods of analysis and programming techniques at a non-introductory level. Includes methods of storing, organizing, sorting, and merging of files not included in CS 108. Prerequisites: CS 108. Corequisite: ACCT 202.

CS 210 **3 Credits**

SOFTWARE AND HARDWARE CONCEPTS (3+0)

Basic concepts of computer systems and computer architecture. Includes discussion of memory, I/O units, CPU, machine assembler languages, and the components and structure of operating systems. Prerequisites: CS 101 and one programming language course.

CS 300 **3 Credits**

ASSEMBLER LANGUAGE PROGRAMMING (3+0)

Review of basic computer organization. An extensive treatment of a specific assembler language, including macros. Prerequisite: CS 210.

CS 310 **3 Credits**

NUMERICAL METHODS (3+0)

An 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. Prerequisites: CS 105, MATH 302, MATH 314.

CS 315 **3 Credits**

SYSTEMS ANALYSIS METHODS (3+0)

Overview of the system life development 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 applications programs. Prerequisites: CS 108, ACCT 202. Corequisite: CS 208.

CS 316 **3 Credits**

STRUCTURED SYSTEMS ANALYSIS AND DESIGN (3+0)

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. Prerequisites: CS 208 and CS 315.

CS 320 **3 Credits**

INTRODUCTION TO OPERATING SYSTEMS (3+0)

The use and implementation of assemblers, macro assemblers, linkers, loaders, and other systems programs. Exercises in designing and writing various systems programs. An introduction into process, memory, device, and file management in batch, multiprocessing, and timeshared operating systems. Prerequisites: CS 300 and Math 30[illegible] recommended. (BA-M)

CS 330 **3 Credits**

DATA STRUCTURES AND ALGORITHMS (3+0)

Data Structures and the algorithms for their manipulation. Arrays, tables, stacks, queues, trees, linked lists, sorting, searching, and hashing. Prerequisites: CS 202 and CS 210.

CS 331 **3 Credits**

PROGRAMMING LANGUAGE STRUCTURES (3+0)

A 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. Prerequisites: CS 202, CS 330 recommended.

CS 340 **3 Credits**

TOPICS IN COMPUTER SCIENCE FOR TEACHERS (3+0)

A consideration of topics in computer science useful in curriculum enrichment in elementary and secondary education. May be repeated as topics vary. Does not count toward a computer science major.

CS 341 **3 Credits**

TOPICS IN COMPUTER SCIENCE FOR EDUCATIONAL ADMINISTRATION (3+0)

A consideration of topics in computer science useful in education administration. Such topics as criteria for computer hardware and software selection in an educational environment, exposure to available software packages for class scheduling and space utilization, and other relevant topics of interest to school administrators. May be repeated as topics vary. Does not count towards a computer science major.

CS 350 **3 Credits**

APPLIED ALGEBRA (3+0)

Prepares students of computer science and computer engineering for the discrete mathematical aspects of the computer. Various mathematical systems and their applications to computer science are studied. Practical problems and applications relating to computer arithmetic, computer design, and switching theory. Topics include: groups, Polya theory of enumeration, applications of group theory to computer design, group codes, semigroups, finite-state machines, rings and fields, linear finite-state machines, and Boolean algebra with applications to computer design. Prerequisites: CS 202, CS 210, MATH 306.

CS 360 **3 Credits**

DATABASE PROGRAM DEVELOPMENT (3+0)

Introduction to application program development in a database environment with an emphasis on loading, modifying and querying with the database using a host language (COBOL). 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 and data analysis, design and implementation. Prerequisites: CS 208, CS 315. Corequisite: CS 316.

CS 381 **3 Credits**

OPTIMIZATION TECHNIQUES (3+0)

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, and transportation and assignment problems. Emphasis on problem recognition, formulation, solution, and interpretation using computer software packages. Prerequisites: Math 321 and AS 307. (BA-M)

CS 385 **3 Credits**

COMPUTER GRAPHICS (3+0)

Study of the devices and techniques for the use of computers in generating graphical displays. Includes display devices, display processing, transformation systems, interactive graphics, 3-dimensional graphics, graphics system design and configuration, low and high level graphics languages, and applications. Prerequisites: CS 202, CS 210.

CS 401 **3 Credits**

SOFTWARE ENGINEERING (3+0)

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, validation. Prerequisites: CS 202, CS 210 and senior standing.

CS 402 **3 Credits**

SOFTWARE ENGINEERING ECONOMICS (3+0)

An examination of the primary factors that influence software cost and of alternative methods of software development cost estimation useful in evaluating alternatives using various economic criteria. Prerequisite: CS 401 or Senior standing.

CS 405 **3 Credits**

ARTIFICIAL INTELLIGENCE (3+0)

Heuristic programming. Heuristic methods: state space, problem reduction, game playing, general problem solver, learning machines. Prerequisites: MATH 306, CS 330, CS 331.

CS 410 **3 Credits**

DECISION SUPPORT SYSTEMS (3+0)

An analysis of the highest level of information support systems which serve the manager user. Decision support systems (DDS) provide quantitative-based information derived from one or more data bases 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. Prerequisites: CS 101, BA 377, and permission of instructor.

CS 411 **3 Credits**

DESIGN AND ANALYSIS OF ALGORITHMS (3+0)

Introduction to analysis and complexity of algorithms. Searching/sorting algorithms, polynomial matrix algorithms, graph theoretic algorithms. Introduction to complexity theory. Prerequisites: MATH 306, CS 330, CS 350.

CS 413 **3 Credits**

EDP AUDIT AND CONTROLS (3+0)

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: flow-charting, internal control, transaction cycles, computer hardware and software, computer crime, basic auditing concepts, and systems studies. Prerequisites: CS 210, CS 315.

CS 414 **3 Credits**

INFORMATION SYSTEMS PLANNING AND MANAGEMENT (3+0)

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. Prerequisites: CS 210, BA 377, BA 325, and BA 335.

CS 430 **3 Credits**

COMPUTER MODELING AND SIMULATION TECHNIQUES (3+0)

Applications and rationale. Design and analysis of discrete simulation models. Generation of random sequences and stochastic variates. Simulation languages (GPSS-FORTRAN). Prerequisites: AS 402, MATH 321/ES 301, and CS 105/ES 201. CS 381 recommended or concurrent enrollment.

CS 448 **3 Credits**

SYSTEM ARCHITECTURE (3+0)

Hardware and operating systems and their interaction. I/O, interrupts, memory management, concurrent processing, deadlock, modularity, system balancing, scheduling, protection, introduction to communications and networks. Prerequisites: CS 320, CS 350.

CS 470 **3 Credits**

APPLIED SOFTWARE DEVELOPMENT PROJECT (3+0)

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 committee chairman. Independent study with grade determined by project which the student presents (and defends) to his committee. Course requirement may be waived if candidates have at least twelve months of full-time (or part-time equivalent) direct experience in computer-based information systems. This waiver requires the candidate to document this experience and to obtain the signature of a responsible person who can verify both the candidate's work experience and professional qualifications through personal knowledge or access to the necessary information. Holders of the CDP designations are automatically waived from this course requirement. Prerequisite: Permission of the CS faculty and Senior standing.

English

English offers a blend of the practical and the cultural. The study of composition emphasizes that effective writing comes from intellectual activity and imaginative discoveries, not from conformity to rules. The ability to express oneself with clarity and precision is of the highest importance in professional life.

English majors develop their skills in reading, writing, speaking, and using creative imagination.

The curriculum aims to build a respect for letters without idolizing them and a respect for education without placing a terminal value upon it. The total offerings of the Department are designed to enable the student to learn not only of his heritage but also of himself. It is truly liberal education — one that helps each student to find himself as an individual but more importantly helps him to lose himself in interests, causes, and ideas larger and more enduring than he.

BACHELOR OF ARTS

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on Pages 45-54.
2. Complete 39 credits (at least 33 at the upper division) in English, excluding the Communication Requirement and including (3-credit courses):

6 credits of INTRODUCTION:
- Engl 201, 202 — Masterpieces of World Literature

6 credits from the following PERIOD courses:
- Engl 310 — Ancient Literature
- Engl 315 — Medieval Literature
- Engl 320 — Renaissance Literature
- Engl 325 — Neoclassical Literature
- Engl 330 — Literature of Romanticism
- Engl 340 — Modern Literature: 1850-1890
- Engl 341 — Modern Literature: 1890-1920
- Engl 342 — Modern Literature: 1920-1950
- Engl 343 — Modern Literature: 1950-Present

6 credits from the following GENRE courses:
- Engl 351 — Poetry
- Engl 361 — The Novel
- Engl 363 — The Short Story
- Engl 371 — Prose: Non-Fiction
- Engl 381 — Drama
- Engl 383 — Film Interpretation

3 credits from the following COMPOSITION courses:
- Engl 352 — The Composition of Poetry
- Engl 362 — The Composition of Prose Fiction
- Engl 372 — The Composition of Prose: Non-Fiction
- Engl 414 — Research Writing

3 credits from the following MAJOR AUTHOR courses:
- Engl 421 — Chaucer
- Engl 424 — Shakespeare
- Engl 426 — Milton

3 credits of THEORY:
- Engl 435 — History of Criticism

3 credits from the following LANGUAGE courses:
- Engl 475 — Modern Grammar
- Engl 476 — History of the English Language

6 credits from the following courses, if the English major wants state certification to teach English
- Engl 485 — Methods of Teaching English for the High School (required)
- Engl 486 — Adolescent Literature
  or
- Engl 487 — Standard Written English

MINOR IN ENGLISH

A minor in English requires 18 credits in English, excluding the Communication Requirement and including:

6 credits of INTRODUCTION courses listed for a major;

3 credits from the PERIOD courses listed for a major;

3 credits from the MAJOR AUTHORS courses listed for a major;

3 credits from the GENRE courses listed for a major;

3 credits from the COMPOSITION courses listed for a major.

MASTER OF ARTS

Degree Requirements:

1. Submission of scores of the Graduate Record Examination and the GRE Specialty Examination in English prior to candidacy.
2. A minimum of 30 credits of approved courses including Engl 699 — Thesis, 6 credits. (At the discretion of the student's committee the thesis may be replaced by an extensive reading list and 6 credits of course work.)
3. Completion of the general graduate degree requirements. A minimum of 9 credits must be at the 600 level.
4. Reading knowledge of a foreign language.

MASTER OF ARTS IN TEACHING

Degree Requirements:

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. A minimum of 30 hours is required. An advisory committee, appointed by the Dean of the College, will require a minimum of 15 hours (nine of them on the graduate level) of English courses taken at the University. Candidates for the degree must submit scores of the Graduate Record Examination and the GRE Specialty Examination in English.

MASTER OF FINE ARTS — CREATIVE WRITING

Degree Requirements:

	Credits
1. Scores of Graduate Record Examination and GRE Specialty Examination in English prior to candidacy.	
2. Composition courses: Engl 652, 662, Studies in Writing Poetry, Fiction. (No more than six credits in any course.)	12
3. Approved English electives	12
4. Genre courses: Engl 351, 361, 363, 381 — Poetry, Novel, Short Story, Drama. (No more than 3 credits in any course.)	6
5. Interdisciplinary electives	9
6. Thesis	6
7. Reading list; comprehensive examination.	
8. Reading knowledge of a foreign language.	
	Total 45

Courses in English

Engl 090 **3 Credits**

BASIC WRITING (3+0)

Instruction in the fundamentals and conventions of Standard Written

English through intensive practice in sentence formation, paragraph development, and short-essay writing. A grade of P in this course is a prerequisite for enrollment in English 111 for those writing students who have scored 34 and below on the SAT Test of Standard Written English or 13 and below on the ACT English Usage Test. This course may not be applied toward satisfaction of any baccalaureate degree requirements.

Engl 111 **3 Credits**
METHODS OF WRITTEN COMMUNICATION (3+0)
Instruction in writing expository prose, including principles of order and clarity. Close analysis of appropriate texts. Library paper required. Prerequisite: a score of 35 or above on the SAT Test of Standard Written English; 14 or above on the ACT English Usage Test; or a grade of P in English 090: Basic Writing.

Engl 121 **3 Credits**
THE STUDY OF LITERATURE (3+0)
An introductory course for non-majors. Material includes selections from poetry, drama, and prose fiction. Focus is on literature as an art which expresses and gives form to human experience. Prerequisite: Engl 111. (BA-H)

Engl 201 **3 Credits**

Engl 202 **3 Credits**
MASTERPIECES OF WORLD LITERATURE I AND II (3+0)
An introductory course for majors and non-majors. Emphasis is on appreciation and understanding of literature, formation of critical vocabulary, and development of standards of literary judgment. Selected masterpieces from ancient times through the Renaissance (I) and from the Renaissance to the present (II). Prerequisite: Engl 111. (BA-H)

Engl 211* **3 Credits**
INTERMEDIATE EXPOSITION WITH MODES OF LITERATURE (3+0)
Instruction in writing through close analysis of literature. Research paper required. Prerequisites: Engl 111 and sophomore standing.

Engl 213* **3 Credits**
INTERMEDIATE EXPOSITION (3+0)
Instruction in writing through close analysis of expository prose from the social and natural sciences. Research paper required. Prerequisites: Engl 111 and sophomore standing.

*NOTE: Neither English 211 nor English 213 is to be considered or is to be used to the exclusion of the other as a prerequisite for any other course or for any particular course of study. A student who has taken one of these courses and who declares or changes a major will not be required to take the other course.

Engl 306 **3 Credits**
SURVEY OF AMERICAN LITERATURE: FROM THE COLONIAL PERIOD TO THE CIVIL WAR (3+0)
Comprehensive study of American thought as reflected in its major writers, including works representative of American Calvinism, Rationalism, Transcendentalism, and Romanticism. (BA-H)

Engl 307 **3 Credits**
SURVEY OF AMERICAN LITERATURE: FROM THE CIVIL WAR TO THE PRESENT (3+0)
Comprehensive study of American thought as reflected in its major writers, including works representative of Realism, Naturalism, Stream-of-Consciousness, and Surrealism. (BA-H)

Engl 310 **3 Credits**
ANCIENT LITERATURE (3+0)
Literature primarily of the Greeks and Romans in English translation. Prerequisites: Engl 201, 202, or permission of the instructor. (BA-H)

Engl 311 **3 Credits**
ADVANCED EXPOSITION (3+0)
Instruction in writing for students who wish to develop proficiency in organizing and composing essays on factual material in which they have genuine interest. Research paper required. Course will fulfill the second half of the requirement in written communication (i.e., it may replace Engl 211 or Engl 213). Prerequisite: Engl 111, junior standing, and permission of instructor.

Engl 312 **3 Credits**
TECHNICAL WRITING (3+0)
Instruction in the 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. Prerequisites: Engl 111 and junior standing.

Engl 315 **3 Credits**
MEDIEVAL LITERATURE (3+0)
A selective survey of primarily Western literature from the fifth century through the fifteenth. Representative authors and genres. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 320 **3 Credits**
RENAISSANCE LITERATURE (3+0)
A selective survey of primarily Western literature from the fifteenth century through about the middle of the seventeenth. Representative authors and genres. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 325 **3 Credits**
NEOCLASSICAL LITERATURE (3+0)
Poetry and prose of the seventeenth and eighteenth centuries in Europe and America. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 330 **3 Credits**
LITERATURE OF ROMANTICISM (3+0)
A study of the Romantic movements in Europe and the United States from the late 1700's to approximately 1865. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 340 **3 Credits**
MODERN LITERATURE: 1850-1890 (3+0)
The contributions of major writers such as Flaubert, De Maupassant, Zola, Dostoevski, Tolstoy, Tennyson, Browning, Dickens, Whitman, Dickinson, Twain, and James. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 341 **3 Credits**
MODERN LITERATURE: (1890-1920) (3+0)
The contributions of major writers such as Ibsen, Chekhov, Crane, Cather, Lowell, Sandburg, Frost, Hardy, Yeats, Galsworthy, Lawrence, Shaw, and Proust. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 342 **3 Credits**
MODERN LITERATURE: 1920-1950 (3+0)
The contributions of major writers such as Mann, Kafka, Gide, Sartre, Woolf, Eliot, Pound, Fitzgerald, Hemingway, O'Neil, and Williams. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 343 **3 Credits**
MODERN LITERATURE: 1950 TO PRESENT (3+0)
A study of major works written since 1950 including selections from American, European, Asian, and African writings. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 351 **3 Credits**
POETRY (3+0)
An intensive study of the forms and techniques used by poets. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 352 **3 Credits**
THE COMPOSITION OF POETRY (3+0)
Practice in the writing of various poetic structures and close analysis of each student's work. Prerequisites: Engl 201, 202 or permission of instructor.

Engl 361 **3 Credits**
THE NOVEL (3+0)
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. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 362 **3 Credits**
THE COMPOSITION OF PROSE FICTION (3+0)
Practice in the writing of various fictional structures and close analysis of each student's work. Prerequisites: Engl 201, 202 or permission of instructor.

Engl 363 **3 Credits**
THE SHORT STORY (3+0)
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. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 371 **3 Credits**
PROSE: NON-FICTION (3+0)
A study of the chief forms of prose non-fiction: formal and informal essay, biography, letter, journal, reviews. Prerequisites: Engl 201, 202 or permission of the instructor. (BA-H)

Engl 372 **3 Credits**
THE COMPOSITION OF PROSE: NON-FICTION (3+0)
Writing non-fiction formal and informal essay, biography, letter, journal, review. Critique of student productions. Prerequisites: Engl 201, 202 or permission of instructor.

Engl 381 **3 Credits**
DRAMA (3+0)
An intensive study of the forms and techniques used by dramatists, including significant criticism from Aristotle to the present. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 382 **3 Credits**
THE COMPOSITION OF DRAMA FOR STAGE AND SCREEN (3+0)
Study and practice of various dramatic structures for stage and screen and close analysis of each student's work. Prerequisites: Engl 201, 202 or permission of instructor.

Engl 383 **3 Credits**
FILM INTERPRETATION (3+0)
An analysis of the unique "language" and elements of the film medium. Historical and contemorary examples of documentary, short subject, and feature film will be studied.

Engl 414 **3 Credits**
RESEARCH WRITING (3+0)
Technical, specialized exposition, documentation and research. Concentration on language, style and audience in scholarly articles. Papers in students' field prepared for conference. Students should have a definite project in mind before enrolling. Prerequisites: Engl 211, 213, or 311.

Engl 421 **3 Credits**
CHAUCER (3+0)
Major poetry, with emphasis on "The Canterbury Tales," and survey of Chaucerian criticism. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 424 **3 Credits**
SHAKESPEARE (3+0)
Major works, including significant Shakespearean criticism. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 426 **3 Credits**
MILTON (3+0)
Major poetry and prose, and survey of Miltonian criticism. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 429 **3 Credits**
MAJOR 20TH-CENTURY AUTHORS (3+0)
One author, specified in the semester schedule when offered. Prerequisites: Engl 201, 202 or permission of the instructor. (BA-H)

Engl 435 **3 Credits**
HISTORY OF CRITICISM (3+0)
Critical theory from its classical origin to the present. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 436 **3 Credits**
TYPES OF MODERN CRITICISM (3+0)
A spectrum of the major types of criticism practiced in the twentieth century. Prerequisites: Engl 201, 202 or permission of instructor.

Engl 437 **3 Credits**
STYLE AND STYLISTICS (3+0)
A systematic study of the techniques which characterize good prose and poetry and of the theoretical principles underlying the techniques. Prerequisite: Engl 211 or 311.

Engl 475 **3 Credits**
MODERN GRAMMAR (3+0)
An inductive modern linguistic analysis of English emphasizing transformational grammar. Recommended for students in Education with a teaching major or minor in English. Prerequisite: Ling 101 or permission of instructor.

Engl 476 **3 Credits**
HISTORY OF ENGLISH LANGUAGE (3+0)
Origins and development of the English language from prehistoric times to the present. Ling 101 is desirable but not required.

Engl 477 **3 Credits**
LINGUISTICS AND LITERATURE (3+0)
An analysis of various forms of literature, using the techniques of modern linguistics. Prerequisites: Ling 101 and Engl 201, 202 or permission of the instructor. (BA-H)

Engl 485/Ed 406 **4 Credits**
METHODS OF TEACHING ENGLISH FOR THE HIGH SCHOOL (3+3)
A study to assist future English teachers to determine objectives and to prepare plans to implement these objectives in the teaching of language, composition, and literature. All students, in addition to attending class three hours per week, will spend one period three days each week, for eight consecutive weeks, in a high school English class to assist the classroom teacher. Prerequisites: Admission to teacher certification, Ed 313, 332.

Engl 486 **3 Credits**
ADOLESCENT LITERATURE (3+0)
Reading and evaluation of literature for middle and high school students. Prerequisites: Engl 201, 202 or permission of instructor. (BA-H)

Engl 487 **3 Credits**
STANDARD WRITTEN ENGLISH (3+0)
Subjects to be covered include the principles of traditional grammar, standard usage, and rhetoric. Prerequisites: Engl 211, 213, or 311.

Engl 606 **3 Credits**
OLD ENGLISH (3+0)
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 610 **3 Credits**
STUDIES IN ANCIENT LITERATURE (3+0)

Engl 615 **3 Credits**
STUDIES IN MEDIEVAL LITERATURE (3+0)

Engl 620 **3 Credits**
STUDIES IN RENAISSANCE LITERATURE (3+0)

Engl 625 **3 Credits**
STUDIES IN NEOCLASSICAL LITERATURE (3+0)

Engl 630 **3 Credits**
STUDIES IN LITERATURE OF ROMANTICISM (3+0)

Engl 640 **3 Credits**
STUDIES IN MODERN LITERATURE: 1850-1890 (3+0)

Engl 641 **3 Credits**
STUDIES IN MODERN LITERATURE: 1890-1920 (3+0)

Engl 642 **3 Credits**
STUDIES IN MODERN LITERATURE: 1920-1950 (3+0)

Engl 643 **3 Credits**
STUDIES IN MODERN LITERATURE: 1950 TO THE PRESENT(3+0)

Engl 651 **3 Credits**
STUDIES IN POETRY (3+0)

Engl 652 **3 Credits**
STUDIES IN WRITING POETRY (3+0)

Engl 661 **3 Credits**
STUDIES IN THE NOVEL (3+0)

Engl 662 **3 Credits**
STUDIES IN WRITING FICTION (3+0)

Engl 663 **3 Credits**
STUDIES IN THE SHORT STORY (3+0)

Engl 681 **3 Credits**
STUDIES IN DRAMA (3+0)

Engl 682 **3 Credits**
STUDIES IN WRITING DRAMA FOR STAGE AND SCREEN (3+0)

Advanced study and practice of various dramatic structures for stage and screen with close analysis of each student's work. Emphasis will be on the process of developing work for production.

Engl 685 **1 Credit**
ANCHORAGE WRITING PROJECT WORKSHOP (1+0)

A series of one-credit graduate courses focusing on specific aspects of teaching writing. Together with a Summer Institute, these courses constitute the Anchorage Writing Project Teacher Training Program. Enrollment is restricted to Anchorage Writing Project teachers.

French

Fren 101 **5 Credits**

Fren 102 **5 Credits**
ELEMENTARY FRENCH I AND II (5+0) (5+0)

Introduction to the French language. Vocabulary and grammar. Practice in understanding, speaking, reading and writing French. Oral practice is emphasized. Prerequisite for 102: Fren 101. (BA-H)

Fren 201 **3 Credits**

Fren 202 **3 Credits**
INTERMEDIATE FRENCH I AND II

This course reviews the fundamentals of the French language, including the four components essential to the acquisition of any language: grammar, vocabulary, fluency and accent. Because language is a reflection of culture, the course combines both and incorporates colloquial French expressions and behaviors. The focus is on preparing the student to communicate freely with a French speaker by strengtheing the student's ability to speak, listen, read and write. Prerequisite: Fren 101 and 102 or equivalent (BA-H). Besides Fren 101 and 102, Fren 201 is required for Fren 202.

Fren 344 **3 Credits**
CONTEMPORARY FRENCH LITERATURE (3+0)

Study of contemporary French Literature for intermediate level students, concentrating on short works and selections of plays written in the 1960's. Strong emphasis on French culture and society as portrayed in the readings. Prerequisite: Fren 100 and 200 levels or equivalent (BA-H).

History

History as a subject in its broadest sense is all that human beings have thought and done. Knowledge of history is the principal means by which humans discover and preserve their collective identity, for through such knowledge, we gain a 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.

BACHELOR OF ARTS

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pages 45-54.
2. Complete 12 hours of 100 level foundation courses:

	Credits
Hist 101 — Western Civilization I	3
Hist 102 — Western Civilization II	3
Hist 131 — History of the U.S. I	3
Hist 132 — History of the U.S. II	3

3. Upper-Division Courses:

   Eighteen (18) hours to include History 477: Senior Seminar.
4. Six Hours to be taken at any level.
5. Philosophy 421: Philosophy of the Social Sciences.

MINOR IN HISTORY

The history minor requires 18 hours of history credit including Hist 101-102 or Hist 131-132. Nine hours must be taken at the upper-division level.

Courses in History

Hist 101 **3 Credits**

WESTERN CIVILIZATION I (3+0)

The origins of western civilization in the ancient Near East and the subsequent development through 1650. The major political, social, economic and intellectual developments will be emphasized. (BA-H)

Hist 102 **3 Credits**

WESTERN CIVILIZATION II (3+0)

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 stressed. (BA-H)

Hist 131 **3 Credits**

HISTORY OF THE U.S. I (3+0)

Discovery and exploration, Colonial Period, American revolution. The Constitution, Federal Period, Jeffersonian-Jacksonian Democracy, The West, Sectionalism, Slavery and Abolitionism, American Culture, and the Civil War. (BA-H)

Hist 132 **3 Credits**

HISTORY OF THE U.S. II (3+0)

Reconstruction of the south, the far west, growth of industry and labor, "Gilded Age," Imperialism, Progressivism, World War I, "Roaring Twenties," The Great Depression, Isolationism and World War II, Cold War, modern American society, Vietnam and after. (BA-H)

Hist 201 **3 Credits**

HISTORY OF LOST CIVILIZATIONS (3+0)

Comparative examination of civilizations that were lost until their rediscovery by archaeologists and historians in the 19th and 20th centuries. Emphasis will be placed on the factors which led to the development, success and decline of the Sumerians, Minoans, Etruscans, Harappans, Khmers and Mayans. (BA-H).

Hist 310 **3 Credits**

EUROPE: 1500 to 1789 (3+0)

The Reformation and the War of Religion; The Thirty Years War; the rise of the European Nation-States; the Scientific Revolution and the Elightement. Prerequisite: History 102 or permission of instructor. (BA-H)

Hist 312 **3 Credits**

EUROPE: 1789-1870 (3+0)

French Revolution and Napoleonic Empire; the Concern of Europe; German and Italian Unification; Romanticism and the New Elightenment; the Industrial Revolution. Prerequisite: History 102 or permission of instructor. (BA-H)

Hist 314 **3 Credits**

EUROPE: 1870-1945 (3+0)

The Bismarckian system and its breakdown; the First World War; the Russian Revolution; Fascism and National Socialism; the Great Depression; the Second World War. Prerequisite: Hist 102 or permission of instructor. (BA-H)

Hist 316 **3 Credits**

EUROPE SINCE 1945 (3+0)

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. Prerequisites: History 102 or permission of instructor. (BA-H)

Hist 341 **3 Credits**

HISTORY OF ALASKA (3+0)

Introduction to background of Alaska and its relationship to America and the world, including anthropologic 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. Prerequisite: junior standing. (BA-H)

Hist 360/Econ 360 **3 Credits**

MODERN ECONOMIC HISTORY(3+0)

A survey of the economic history of the modern era (1600 to the 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. (BA-H). Prerequisites: Hist 102 and Econ 201 or consent of instructor.

Hist 401 **3 Credits**

THE HISTORY OF WARFARE (3+0)

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. Prerequisites: Hist 101, 102 or permission of instructor. (BA-H)

Hist 402 **3 Credits**

THE SECOND WORLD WAR (3+0)

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 post war settlements are also emphasized. Prerequisites: History 102 or permission of instructor. (BA-H)

Hist 412 **3 Credits**

SOCIAL AND INTELLECTUAL HISTORY OF THE MIDDLE AGES (3+0)

Survey of the Social and Intellectual History of Europe from the 5th to 15th centuries. (BA-H)

Hist 414 **3 Credits**

MEDIEVAL ENGLAND (3+0)

An examination of English history from the decline of Roman Britain until the end of the Middle Ages. Particular attention will be given to the Anglo-Saxon incursions, the Norman invasion, and the political, cultural, and economic developments of the twelfth-fourteenth centuries. (BA-H)

Hist 415 **3 Credits**

THE HISTORY OF CHRISTIANITY (3+0)

A survey of selected aspects of the history of Christianity. Special emphasis will be placed on topics in intellectual and institutional history. Treatment will be primarily limited to western Christianity. Prerequisites: History 101, 102, or permission of instructor. (BA-H)

Hist 418 **3 Credits**

TUDOR AND STUART ENGLAND (3+0)

The history of England from the 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. Prerequisites: History 101 or permission of instructor. (BA-H)

Hist 425 **3 Credits**

SOVIET UNION (3+0)

Russian history — from the origins of the Bolshevik revolution and concentrating on Lenin and his contribution to Marxism; the struggle between Trotsky and Stalin; Stalinization (purges and collectivization of agriculture); World War II and the Cold War; detente; and the arms race. Prerequisites: None.

Hist 431 **3 Credits**
COLONIES AND REVOLUTION (3+0)
Settlement of British America, social, political, economic and ideological development of the American colonies, prelude to revolution, the American Revolution, drafting of the Constitution, and the Federalist era. Prerequisite: Hst 131 and 132, or permission.

Hist 434 **3 Credits**
EARLY NATIONAL PERIOD 1800-1850 (3+0)
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; the Mexican War. Prerequisite: Hst 131 and 132 or permission. (BA-H)

Hist 445 **3 Credits**
TWENTIETH CENTURY U.S. SOCIAL AND LABOR HISTORY (3+0)
A survey of class, race, and ethnicity in modern America. Special attention will be given to labor and the problem of poverty. Prerequisites: Hist 132 or permission of instructor. (BA-H)

Hist 450 **3 Credits**
TWENTIETH CENTURY AMERICA (3+0)
United States from the progressive movement to the present day, with emphasis on domestic developments. Prerequisites: Hist 132 or permission of instructor.

Hist 451 **3 Credits**
POPULISTS AND PROGRESSIVES: AMERICA, 1877-1917 (3+0)
The development of the reform state, from the rise of the People's party to the Progressive Era presidencies of Roosevelt, Taft, and Wilson. Prerequisites: Hist 132 or permission of instructor. (BA-H)

Hist 452 **3 Credits**
AMERICA IN WAR AND PEACE, 1917-1945 (3+0)
An examination of Americans responding to the crises of war and depression. Prerequisites: Hist 132 or permission of instructor. (BA-H)

Hist 453 **3 Credits**
AMERICA SINCE 1945 (3+0)
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. Prerequisites: None. (BA-H)

Hist 455 **3 Credits**
THE NATIONAL SECURITY STATE: AMERICA AND THE WORLD IN THE 20TH CENTURY (3+0)
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. Prerequisites: None. (BA-H)

Hist 465 **3 Credits**
EARLY AMERICAN CULTURE (3+0)
Primary American ideas and values in their formative period, including Purtianism, democracy, equality, right of self-governance, education, free enterprise, self-criticism, and manifest destiny. (BA-H)

Hist 466 **3 Credits**
MODERN AMERICAN CULTURE (3+0)
Primary American ideas and values in their maturity, including free enterpirse, social gospel, evolution, individualism, ssuccess, freedom, criticism, and heroism. (BA-H)

Hist 477 **3 Credits**
SENIOR SEMINAR (3+0)
A course in research methodology intended for history majors and others, normally taken in the senior year of study. Students will prepare a major research paper, utilizing primary research material, under the direction of department faculty. (BA-H)

Hist 478 **3 Credits**
STUDIES IN EARLY AMERICAN HISTORY (3+0)
An examination of selected fundamental topics in early American history. Areas will be studied as student need and faculty expertise indicate. Prerequisites: Hist 131 or permission of instructor. (BA-H)

Hist 479 **3 Credits**
STUDIES IN MODERN AMERICAN HISTORY (3+0)
This course is intended to provide an intensive examination of selected fundamental topics in modern American history. Specific areas will be treated as student need and faculty expertise indicate. Prerequisites: Hist 131-132 or permission of instructor. (BA-H)

Hist 486 **3 Credits**
STUDIES IN MODERN EUROPE (3+0)
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. Prerequisites: Hist 102 or permission of instructor. (BA-H)

Humanities

Hum 350 **6 Credits**
AESTHETICS OF WESTERN MAN, 1500 TO THE PRESENT (6+0)
A study of the major movements in literature, with illustration from the auxiliary fine arts, music and art. Prerequisite: Engl 111, 211, or 213. (BA-H)

Journalism and Public Communications

The Department of Journalism and Public Communications offers undergraduate programs leading to the degree of Bachelor of Arts.

Because of the exacting requirements for the successful communicator, broad scholarship is emphasized. Besides professional courses, study in as many as possible of the fields of anthropology, economics, history, language, philosophy, political science, psychology, sociology, and science is required so that the student may attain the background which is indispensable to leadership in public communications.

To make this possible a public communications student is required to devote only about one-fourth of the time to communications studies. In hours of credit this is approximately 36 of the required 130 for graduation.

In the major area a student takes a core program of professional courses totaling 24 credits, and selects one of five areas of concentration for an additional 12 credits. These areas of concentration, or options, are in print journalism, telecommunications/broadcasting, public relations and advertising, photography, or a combination.

The core program and the various options are designed to provide students with basic knowledge about gathering information, assessing it, processing it, and presenting it. Graduates of the department are posed for rapid professional development and polish upon entering careers in public communications. It is recommended that a student planning to take public communications classes know how to type. Work prepared for most classes must be typed.

BACHELOR OF ARTS

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.
2. Complete core courses for the major.
3. Complete a minimum of 12 credits in one Area of Concentration.
4. Complete a minor in a discipline other than Journalism and Public Communications.

Core Courses **(Required of all Majors):**

JPC 101 — Introduction to Mass Communication....3
JPC 201 — News Writing....3
JPC 203 — Introductory Photography....3
JPC 212 — Editing....3
JPC 215 — History of Mass Communication....3
JPC 326 — Principles of Advertising....3
JPC 413 — Communications Law....3
JPC 432 — Research Methods....3

Total Required....24

AREAS OF CONCENTRATION

Print Journalism — Option I

JPC 300 — Photojournalism....3
JPC 301 — Reporting....3
JPC 303 — Intermediate Photography....3
JPC 311 — Magazine Journalism....3
JPC 324 — Typography and Publication Design....3
JPC 400 — Practicum in Print Journalism....3
JPC 401 — Specialized Writing....3
JPC 450 — Internship in Print Journalism....3

Public Relations and Advertising — Option II

JPC 303 — Intermediate Photography....3
JPC 320 — Introduction to Public Relations....3
JPC 324 — Typography and Publication Design....3
JPC 328 — Advertising Campaign....3
JPC 330 — Advanced Public Relations....3
JPC 405 — Advertising and Public Relations Photography....3
JPC 451 — Internship in Public Relations and Advertising....3

Telecommunications — Option III

JPC 216 — Television Production....3
JPC 341 — Radio/Television News....3
JPC 350 — The Television Documentary....3
JPC 452 — Internship in Broadcasting....3

Photography — Option IV

JPC 300 — Photojournalism....3
JPC 303 — Intermediate Photography....3
JPC 321 — Photographic Design....3
JPC 322 — Experimental Photography....3
JPC 323 — Color Photography....3
JPC 367 — History of Photography....3
JPC 402 — Advanced Photography....3
JPC 405 — Advertising and Public Relations Photography....3
JPC 453 — Internship in Photojournalism....3

General Communication — Option V

As a fifth option, students may take a cross section of the above courses upon justification to and approval of advisor.

Minor in Journalism and Public Communications

Complete JPC 101, 201 and at least 12 additional credits (6 or more at the upper division level) excluding internships.

Courses In Journalism and Public Communications

JPC 101 **3 Credits**
INTRODUCTION TO MASS COMMUNICATION (3+0)
A survey of the media of mass communication and their functions in modern society: newspapers, magazines, photography, motion pictures, radio and television, advertising, and public relations. (BA-H)

JPC 201 **3 Credits**
NEWS WRITING (3+0)
Structure of news stories, various news leads and feature stories; gathering and evaluating information for simple news stories; writing stories. Prerequisite: JPC 101, Engl 211 or 213 or 311, typing ability and permission of instructor.

JPC 203/Art 224 **3 Credits**
INTRODUCTORY PHOTOGRAPHY (2+3)
Basic principles of photography. How the camera functions and the utilization of these features for artistic expression. Processing and printing of black and white film. Laboratory and classroom demonstrations.

JPC 204 **3 Credits**
COMMUNICATION THROUGH MOTION PICTURES (2+2)
Study of motion pictures (film and video) as a communications form focusing on the development of the script into the finished product; emphasis on the individual elements of the script, camera angles, lighting, special effects costuming, make-up, music, acting and directing; following the process from creation to production to distribution. Lecture plus viewing lab.

JPC 212 **3 Credits**
EDITING (3+0)
Editing copy, writing headlines and captions, cropping and sizing pictures. Prerequisite: JPC 201.

JPC 215 **3 Credits**
HISTORY OF MASS COMMUNICATION (3+0)
Development of the print, film, and broadcast communication media from their beginnings to the present, and their roles as institusions in American society. (BA-H)

JPC 216 **3 Credits**
TELEVISION PRODUCTION (2+4)
Basic aspects of television production, floor directing, audio, camera, film chain, staging, lighting, switching. Permission of the instructor.

JPC 300 **3 Credits**
PHOTOJOURNALISM I (2+3)
Ways and techniques behind creating effective photos and photo essays for newspapers, magazines and television. Learning to recognize, develop and create photo stories; how to co-ordinate words and photos and to lay them out on a page . Exploration of photo editing

techniques. Presentation procedure for finished material to potential markets. Prerequisite: JPC 203/Art 224.

JPC 301 **3 Credits**
REPORTING (2+2)
News gathering and writing techniques with emphasis on the vocabularies of public affairs reporting including local, state and national governments, police and the courts, labor and political party organizations. Prerequisite: JPC 201.

JPC 303/Art 324 **3 Credits**
INTERMEDIATE PHOTOGRAPHY (2+3)
Further development of skills learned in Introductory Photography. Photographic perception or awareness. Ideas and concepts, the "line print" are areas that will be stressed. Assignments with deadlines will be given to develop discipline. Special darkroom techniques will be introduced as a tool for further investigation. Prerequisite: Art 224/JPC 203 or instructor approval.

JPC 311 **3 Credits**
MAGAZINE JOURNALISM (2+2)
Study and practice in writing articles for publication in national media. Prerequisite: JPC 201.

JPC 320 **3 Credits**
INTRODUCTION TO PUBLIC RELATIONS (3+0)
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 principals, media and public.

JPC 322/Art 322 **3 Credits**
EXPERIMENTAL PHOTOGRAPHY (2+3)
Exploration of various special effects, techniques; free experimentation with the photographic imnage; emphasis on creativity. Prerequisite: JPC 303/Art 324, or permission of the instructor.

JPC 323/Art 323 **3 Credits**
COLOR PHOTOGRAPHY (2+3)
Advanced techniques in color transparencies and color printing; creative use of color. Students will provide specified graphic arts tools. Prerequisite: JPC 203/Art 224.

JPC 324 **3 Credits**
TYPOGRAPHY AND PUBLICATION DESIGN (2+2)
Theory and practice of typography, layout and design, coupled with a study of the methods of printing production. Students will provide specified graphic arts tools. Permission of instructor required.

JPC 326 **3 Credits**
PRINCIPLES OF ADVERTISING (3+0)
Theory and practice of advertising; including strategy, media use, creation and production of advertisements and measurement of advertising effectiveness.

JPC 328 **3 Credits**
ADVERTISING CAMPAIGN (3+0)
Planning and execution of advertising campaign, marketing and consumer research, organization and function of advertising agencies, selection of media, etc. Prerequisite: JPC 326

JPC 330 **3 Credits**
ADVANCED PUBLIC RELATIONS (3+0)
Use of controlled and uncontrolled (public) media to achieve motivation of target audiences; case studies and typical problems; planning and preparation of communication materials; application of public relations and techniques. Prerequisite: JPC 320, and JPC 201, 212, or permission of the instructor.

JPC 341 **3 Credits**
RADIO-TELEVISION NEWS (2+2)
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: Prerequisite: JPC 201.

JPC 350 **3 Credits**
THE TELEVISION DOCUMENTARY (2+2)
History of the documentary film, problems inherent to cinema and TV production; advanced camera and sound techniques; editing. Prerequisite: JPC 216.

JPC 367/Art 367 **3 Credits**
HISTORY OF PHOTOGRAPHY (3+0)
This course will examine the evolution of photography from 1816 to the present time. This evolution will be considered in terms of style, approach, content and form and will examine the major trends which have dominated the evolution of photography in Europe and America.

JPC 400 **3 Credits**
PRACTICUM IN PRINT JOURNALISM (1+4)
Practical application of theory, principles, and practices of print journalism. Combines work experience, regular classroom instruction, and individual instructor contact. Prerequisite: Introductory journalism classes or equivalent experience. Signature required. No more than 6 credits of Practicum credit may be applied to the requirements for graduation.

JPC 401 **3 Credits**
SPECIALIZED WRITING (3+0)
Gathering information and writing extensively about a specialized topic or field of endeavor. Students will cover a geographic or topical beat, writing stories over time in a variety of writing projects about particular kinds of enterprise or products. Prerequisite: JPC 301 Reporting. Signature required.

JPC 402/Art 424 **3 Credits**
ADVANCED PHOTOGRAPHY (2+3)
Designed for individual portfolio development. With instructor approval, students will establish goals and criteria for the development of images that will reflect their own individual expression. Prerequisite: Permission of instructor. May be repeated once for credit.

JPC 405 **3 Credits**
ADVERTISING AND PUBLIC RELATIONS PHOTOGRAPHY (2+3)
Introduction to advertising, industrial and public relations photography. Development of concepts and their execution for advertising assignments. Exploration of industrial and public relations photography, their requirements and use. Prerequisite: JPC 303/Art 324

JPC 413/Just 413 **3 Credits**
COMMUNICATIONS LAW (3+0)
Legal rights, privileges, and regulations of press, radio, television, and films; libel, contempt, copyright, rights of privacy; decisions of regulatory bodies.

JPC 423 **3 Credits**
ADVANCED COLOR PHOTOGRAPHY (2+3)
Lectures explore the history and development of color photography and the work of the men and women who have led the way. Advanced color techniques and alternate methods of producing color images will be presented. Prequisite: JPC/Art 323.

JPC 432/BA 432/PS 432 **3 Credits**
RESEARCH METHODS (3+0)
Course will include developing competence as a consumer of research as well as methodology and techniques of empirical research scientific methods, design of research sampling, use of statistics, methods of data collection and analysis including the use of computer

data processing. Students will design and carry out a complete basic empirical study. Prerequisite: BA 373 or equivalent. (BA-S)

JPC 440 **3 Credits**
THE PRESS: ISSUES AND ANSWERS (3+0)
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 **3 Credits**
INTERNSHIP IN PRINT JOURNALISM (0+6)
Open only to superior students receiving faculty recommendation. Assigned work at local newspaper.

JPC 451 **3 Credits**
INTERNSHIP IN PUBLIC RELATIONS AND ADVERTISING (0+6)
Open only to superior students receiving faculty recommendation. Assigned work at advertising agency or public relations office.

JPC 452 **3 Credits**
INTERNSHIP IN BROADCASTING (0+6)
Open to superior students receiving faculty recommendation. Assigned work in radio or television studio.

JPC 453 **3 Credits**
INTERNSHIP IN PHOTOJOURNALISM (0+6)
Open only to superior students receiving faculty recommendation. Assigned work at local studio, newspaper or magazine.

Library Science

LS 101 **1 Credit**
LIBRARY SKILLS
An independent study course in college library skills and some resources and facilities common to academic libraries in general and to the University Library in particular. No class sessions are held; the student works at his individual rate and on his own time schedule.

LS 302 **1 Credit**
INFORMATION SOURCES IN THE HUMANITIES
Introduction of methods of library research requiring use of bibliographies, reference books, indexes and abstracts for the Humanities disciplines, including Philosophy, Religion, the Arts, Language and Literature.

LS 303 **1 Credit**
INTRODUCTION TO U.S. GOVERNMENT DOCUMENTS
This course introduces materials and methods of library research with the use of Federal publications.

LS 305 **1 Credit**
INFORMATION SOURCES IN THE SOCIAL SCIENCES
This course introduces methods of library research with the use of bibliographies, reference books, indexes and abstracts for the Social Sciences including history, geography, economics, business, sociology, anthropology, psychology, and education.

LS 410 **3 Credits**
INTRODUCTION TO ARCHIVES ADMINISTRATION
This course is an introduction to the basic principles of archives and manuscripts administration. Course includes discussions of principles and terminology, records appraisal and management, the arrangement of description of collections, conservation, security and outreach. Prerequisite: Graduate or upper level students with concentration of the Humanities or the Social Sciences.

Linguistics

Ling 101 **3 Credits**
THE NATURE OF LANGUAGE (3+0)
A beginning course in the study of langauge. An introduction to the systematic analysis of human language and the description of its grammatical structure, distribution, and diversity. (BA-H)

Ling 110 **3 Credits**
REASONING THROUGH GRAMMAR CONSTRUCTION (3+0)
A course in nonquantitative symbol manipulation which deals with the formal symbol system underlying natural languages. Problems representing the patterns in natural language data are solved in grammar construction exercises. (BA-H)

Mathematics

The well-trained mathematician is needed in many sectors of the community including business, government, and education. Depending upon the mathematics electives chosen, the Bachelor of Science degree in mathematics is a strong basis from which to seek employment upon graduation or to pursue postgraduate studies.

The first three years of the recommended mathematics program offered at UAA give students an excellent foundation for any career involving mathematics. In the fourth year of study, the student may choose mathematics electives depending upon his particular interest.

The University's students have taken and done well on the prestigious national William Lowell Putnam examination. A mathematics workroom is provided by the Mathematics Department and contains work tables, mathematics magazines, calculators, and a terminal connected to the University's computer.

BACHELOR OF ARTS
BACHELOR OF SCIENCE

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.
2. Complete the following courses: Math 200, 201, 202, 302, 303, 314, 321, 324, 410 or 422, and AS 307.
3. Complete three additional courses applying advanced mathematical techniques selected according to the student's interests. One of these courses must be a computer language course.
4. The program including electives for each student must be developed with the academic advisor from the College of Arts and Sciences and be approved by the head of Mathematics.

BA DEGREE REQUIREMENTS FOR A MAJOR IN MATHEMATICS WITH A TEACHING CERTIFICATE.

1. Complete the following courses: Math 200, 201, 202, 303, 305, 314, 420; AS 307.
2. Complete all requirements for the teaching certificate.

3.Complete three additional courses applying advanced mathematical techniques selected according to the student's interest. One of these course must be a computer language course.

4. The program including electives for each student must be developed with the academic advisor from the College of Arts and Sciences and be approved by the head of Mathematics.
5. Complete the General University Requirements and the General College of Arts and Sciences Degree Requirements on page 45-54.

MINOR

A minor in Mathematics requires completion of Math 200, 201, 202, in addition to 6 approved credits at the 300 level or above.

Courses in Mathematics

Math 106 **6 Credits**
COLLEGE ALGEBRA AND TRIGONOMETRY (6+0)
Review of high school algebra, determinants, matrices, topics in the theory of equations, systems of equations, inequalities, curve sketching, probability, and application, plane trigonometry with emphasis on the analytical and periodic properties of trigonometric functions. Covers logarithms, binomial theorem, and mathematical induction. Prerequisite: two years of high school algebra with a grade of C or better. (BA-M)

Math 107 **3 Credits**
COLLEGE ALGEBRA (3+0)
Review of high school algebra, determinants, matrices, topics in the theory of equations, systems of equations, inequalities, curve sketching, probability and applications. Logarithms, binominal theorem, and mathematical induction. Prerequisite: two years of high school algebra with a grade of C or better. (BA-M)

Math 108 **3 Credits**
TRIGONOMETRY (3+0)
Plane trigonmetric functions, negative angles, solving right triangles, solving oblique triangles, graphs of the trigonometric functions, and DeMoivre's Theorem. Prerequisite: two years of high school algebra with a grade of C or better, or Math 107. (BA-M)

NOTE: A student may apply no more than 6 credits from any combination of Math 106, 107 and 108 toward the graduation requirements, for a baccalaureate degree.

Math 200 **4 Credits**
CALCULUS (4+0)
Review of functions and analytic geometry, limits, derivatives of rational algebraic functions, curve sketching, basic integration of power functions, the definite integral, and applications of differentiation and integration. Prerequisites: either Math 106 or Math 107 and Math 108. (BA-M)

Math 201 **4 Credits**
CALCULUS (4+0)
Differentiation and integration of exponential, logarithmic and trigonometric functions. Parametric equations, arc length, polar coordinates, and techniques of integration. Applications of the above. Prerequisite: Math 200 or equivalent. (BA-M)

Math 202 **4 Credits**
CALCULUS (4+0)
Vectors, infinite series, partial differentiation and multiple integration. Prerequisite: Math 201 or equivalent. (BA-M)

Math 246 **3 Credits**
MODERN MATH CONCEPTS FOR ELEMENTARY SCHOOL (3+0)
Covers the following topics and their importance in the elementary classroom: Measurement (basic & metric), Computer Programming, Calculators, Problem Solving, Sequences, Geometry (Plane & Solid), Graphing, Probability & Statistics. Included are use of appropriate materials for teaching these topics. Prerequisite: Math Competency Test.

Math 270 **3 Credits**
APPLIED FINITE MATHEMATICS FOR THE MANAGERIAL SCIENCES (3+0)
Sets, counting, probability, linear equations and inequalities, algebra of matrices, introductory linear programming. Applications emphasizing the relationships of these mathematical concepts to quantitative decision making in managerial and social services Prerequisite: 2 years high school algebra or equivalent. (BA-M)

Math 272 **3 Credits**
CALCULUS FOR THE MANAGERIAL SCIENCES (3+0)
Functions and graphs, differentiation, exponential and logarithmic functions, antidifferentiation and integration, functions of several variables. Applications emphasizing the use of these mathematical concepts for construction of quantitative models and decision making in the managerial and social sciences, including market equilibrium, production curves, marginal analysis, growth and decay, density functions, and energy consumption. Prerequisite: Math 270 or Math 107 or equivalent. (BA-M)

Math 302 **3 Credits**
DIFFERENTIAL EQUATIONS (3+0)
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, applications. Prerequisite: Math 202. (BA-M)

Math 303 **3 Credits**
INTRODUCTION TO MODERN ALGEBRA (3+0)
Introduction to sets, groups, rings, fields, and Galois theory. Prerequisite: Math 202. (BA-M)

Math 305 **3 Credits**
GEOMETRY (3+0)
Topics selected from such fields as Euclidean and non-Euclidean plane geometry, affine geometry, projective geometry, topology. Prerequisite: Math 202 (BA-M)

Math 306 **3 Credits**
FINITE MATHEMATICAL STRUCTURES (3+0)
Introduction to graph theory and combinatorial analysis. Problem-solving techniques include generating functions, recurrence relations, and network flows. Develops the type of mathematical thinking used in computer science and operations research. Prerequisite: Math 201 or permission of instructor.

Math 310 **3 Credits**
NUMERICAL ANALYSIS (3+0)
Direct and iterative solutions of systems of equations, interpolation, numerical differentiation and integration, numerical solutions or ordinary differential equations, error analysis. Prerequisite: Math 202 (BA-M)

Math 314 **3 Credits**
LINEAR ALGEBRA (3+0)
Linear equations, finite dimensional vector spaces, matrices, determinants, linear transformations, characteristic values. Inner product spaces. Prerequisite: Math 201 (BA-M)

Math 321 **4 Credits**
INTERMEDIATE APPLIED MATHEMATICS (4+0)
Determinants and matrices, linear systems, eigenvalues and eigenvectors, vector calculus including Stoke's Theorem and divergence, gradient, and curl in orthogonal curvilinear coordinates, Fourier series and integrals. Prerequisite: Math 202. (BA-M)

Math 324 **3 Credits**
ADVANCED CALCULUS (3+0)
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. Prerequisite: Math 202 (BA-M)

Math 371 **3 Credits**
PROBABILITY (3+0)
Probability spaces, conditional probability, random variables, continuous and discrete distributions, expectation, moments, moment generating functions, and characteristic functions. Prerequisite: Math 202 (BA-M)

Math 403 **3 Credits**
INTRODUCTION TO REAL ANALYSIS (3+0)
Sets, real numbers, functions, topology of metric spaces mappings. Prerequisite: Math 324. (BA-M)

Math 407 **3 Credits**

Math 408 **3 Credits**
MATHEMATICAL STATISTICS (3+0) (3+0)
Distribution of random variables and functions of random variables, interval estimation, point estimation, sufficient statistics, order statistics, and tests of hypotheses. Prerequisite: Math 202 (BA-M)

Math 410 **3 Credits**
INTRODUCTION TO COMPLEX ANALYSIS (3+0)
Analytic Function, Cauchy's Theorem. Sequences and series. Prerequisite: Math 324. Prerequisite: Math 202 (BA-M)

Math 420 **3 Credits**
FOUNDATIONS OF MATHEMATICS (3+0)
This course is designed to acquaint prospective secondary teachers with the history of the development of mathematical concepts in algebra, geometry, number theory, analytical geometry and calculus from ancient times. Modern trends in secondary school mathematics and interrelationship with other disciplines and modern technology will be emphasized. Prerequisite: Math 202

Math 422 **4 Credits**
INTERMEDIATE APPLIED MATHEMATICS (4+0)
Topics in Multi-variate calculus, boundary value problems, solutions of partial differential equations of mathematical physics, complex functions. Prerequisites: Math 321 and Math 302 or concurrent enrollment in Math 302. (BA-M)

Math 425 **3 Credits**

Math 426 **3 Credits**
OPERATIONAL MATHEMATICS I AND II (3+0) (3+0)
Theory and applications of Laplace transforms, finite and exponential Fourier transforms, Fourier transforms on the half line, Hankel, Legendre, and other integral transforms, review of complex variables necessary for the study of these transforms. Prerequisite: Math 422. (BA-M)

Math 487 **1-3 Credits**
MATHEMATICS PRACTICUM (0+3)
Provides to upper division mathematics majors the experience of teaching mathematics. Student will be responsible for a 3-hour per week mathematics laboratory. No more than three credits can be applied to a degree. Prerequisite: Math 202 and permission of instructor.

Medical Technology

A bachelor of science degree program preparing students for admission to schools of Medical Technology is administered by the Department of Biological Sciences.

A special program enabling those professionals holding MLT certification to obtain Bachelor of Science degrees is also available through the Department of Biological Sciences.

Persons interested in either of these programs should contact the Department of Biological Sciences for further information.

Biol 401 **30 Credits**
MEDICAL TECHNOLOGY
Twelve-month medical technology internship at an approved hospital school, including work in clinical chemistry, hematology, microbiology, serology, parasitology, and histologic techniques. Prerequisites: Senior standing in the Medical Technology Program and acceptance at an approved school of Medical Technology

Music

Music majors will be required to participate in at least one ensemble each semester they are enrolled, whichever is most appropriate to the student's performance area. Piano majors will receive ensemble credit by enrolling in the Piano Chamber Music and Accompanying class.

Attendance at recitals and concerts provides students with a variety of musical experiences which expand their regular curriculum. Therefore, attendance is mandatory for all majors. Recital attendance is a serious consideration at the time of review for advancement to upper-division standing.

Furthermore, each Music Major's Recital Attendance record will affect by one letter grade the semester private lesson grade or that of the class most directly related to applied music, i.e., Master Class, Chamber Music, Ensembles.

BACCALAUREATE DEGREES IN MUSIC

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 in music. A student may elect to continue study at the 200 level in attempting to pass requirements for admission to upper-division study.

A piano proficiency (Mus 153 — Functional Piano) jury examination must be successfully completed by the end of the music major's second year in the program. This examination will consist of 1) performance of a work equivalent in difficulty to a Bach two-part invention, or Clementi or Kuhlau sonatina; 2) sight reading of a four-part Chorale by Bach; 3) harmonization and transposition of a simple melody.

Students who desire to enroll in music theory courses will complete a placement examination and be allowed to enter at their appropriate level.

All applied music students enrolled in Mus 161 who desire to advance to upper levels must take jury finals.

All applied music students enrolled in Mus 162 through Mus 462 are required to perform in jury finals at the end of each semester.

All music majors are required to perform in at least one student recital each semester of study.

BACHELOR OF ARTS

The Bachelor of Arts degree in Music is a curriculum planned for those desiring a broad liberal education with a concentration in music. The individual pursuing this degree samples courses of his choosing in each of the major academic areas while still having time to strengthen his understanding of and performance in his chosen areas of music.

1. Complete the General university requirements, and the general College of Arts and Sciences degree requirements on pp. 45-54.
2. Complete the following major specialty requirements.

	Credits
Mus 131, 132 — Basic Theory	6
Mus 133, 134 — Sightsinging and Ear Training	4
Mus 153 — Functional Piano (can be passed successfully within the first four semesters)	1
Mus 161-462 — Private Lessons (on major instrument)	8
Mus 221, 222 — History of Music	6
Mus 231, 232 — Advanced Theory	6
Mus 233, 234 — Sightsinging and Ear Training	4
Mus 251 — Basic Conducting	2
Mus 307 — Ensembles	10
Mus 331 — Form and Analysis	3
Mus 472 — Master Class	0-8
Electives to Total	130

BACHELOR OF MUSIC

General Degree Requirements

1. Oral Communication Spch 111	3
2. Written Communication: Engl 111	3
Engl 211, 213, 311	3
3. Reasoning Skills C.S. 105, 106, 107, 108, Ling 110, Phil 101	3
4. Quantitative Skills A.S. 300, Math 107, 108	3
5. Natural Sciences Astr 103, 104, Biol 107, 108, Chem 105, 106, 120, 121 General intro. geology, general intro. physics (2 disciplines; one lab.)	7
6. Social Sciences: Anth 250, or Hist 201	3
Anth 101, Econ 201, 202, JPC 101, Just 110, PS 101, 102, Psy 111, Soc 101, SWK 106	15
7. Arts Art 160, Thr 111	3
8. Humanities: Engl 121, Phil 201	3
Hist 101, 102	6
Art 261, 262, Engl 201, 202, Phil 211, 212	6

Major Requirements

See specific requirements for one of the three major programs below.

Approved electives to total 130

BACHELOR OF MUSIC-PERFORMANCE

The Bachelor of Music in Performance offers intense specialization for those desiring professional training in music — the vocal and instrumental major.

1. Complete the General College of Arts and Sciences Degree Requirements for the BM degree.
2. Complete the following major specialty requirements.

Required Music Courses:	Credits
Mus 131, 132 — Basic Theory	6
Mus 133, 134 — Sightsinging and Ear Training	4
Mus 153 — Functional Piano (can be passed successfully anytime within the first four semesters)	1
Mus 161-462 — Private Lessons (on major instrument)	24
Mus 221, 222 — History of Music	6
Mus 231, 232 — Advanced Theory	6
Mus 233, 234 — Sightsinging and Ear Training	4
Mus 251 — Basic Conducting	2
Mus 307 — Ensembles	16
Mus 472 — Master Class	0-16

Ten credits to be elected from the following courses:

Mus 331 — Form and Analysis	3
Mus 351 — Choral Conducting	2
OR	
Mus 352 — Instrumental Conducting	2
Mus 431 — Counterpoint	3
Mus 432 — Orchestration	3
Mus History or Literature Electives	5-8

A half recital is required in the junior year and a full recital in the senior year. The student, in both recitals, must demonstrate the ability to perform satisfactorily in public a program of artistic merit.

Performance majors may enroll for four credits per semester on their major instrument.

BACHELOR OF MUSIC-ELEMENTARY EDUCATION

The Bachelor of Music-Elementary Education degree offers through preparation in teacher training with sufficient time to develop excellence in performance areas.

1. Complete the General College of Arts and Sciences Degree Requirements for the BM degree.
2. Complete the following major specialty requirements (must include Psy 101).

Required Music Courses:	Credits
Mus 131, 132 — Basic Theory	6
Mus 133, 134 — Sightsinging and Ear Training	4
Mus 153 — Functional Piano	1
Mus 161-462 — Private Lessons (on a major instrument)	14
Mus 221, 222 — History of Music	6
Mus 231, 232 — Advanced Theory	6
Mus 233, 234 — Sightsinging and Ear Training	4
Mus 251 — Basic Conducting	2
Mus 307 — Ensembles	16
Mus 315 — Music Methods and Techniques	10
Mus 331 — Form and Analysis	3
Mus 351 — Choral Conducting	2
OR	
Mus 352 — Instrumental Conducting	2
Mus/Ed 409 — Music in the Elementary School	3
Mus 432 — Orchestration	3
Mus 472 — Master Class	0-8

Required Education Courses:	Credits
Ed 201 — Orientation to Education	3
Ed 212 — Human Development and Learning	3
Ed 313 — Educational Psychology	3
Ed 332 — Tests and Measurements	3
Ed 420 — Reading	6
Ed 423 — History, Philosophy, and Sociology of Education	3
Ed 452E — Student Teaching-Elementary	12
One of the following:	
Ed 420 — Language Arts	3
Ed 420 — Children's Literature	3

A half recital on the student's major instrument is required in the senior year.

BACHELOR OF MUSIC-SECONDARY EDUCATION

The Bachelor of Music-Secondary Education degree 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 his studies the student is also given sufficient time to develop excellence in performance areas.

1. Complete General College of Arts and Sciences Degree Requirements for the BM Degree.
2. Complete the following major specialty requirements.

Required Music Courses:	Credits
Mus 131, 132 — Basic Theory	6
Mus 133, 134 — Sightsinging and Ear Training	4
Mus 153 — Functional Piano (can be passed successfully anytime within the first four semesters)	1
Mus 161-462 — Private Lessons (on major instrument)	14
Mus 221, 222 — History of Music	6
Mus 231, 232 — Advanced Theory	6
Mus 233, 234 — Sightsinging and Ear Training	4
Mus 251 — Basic Conducting	2
Mus 307 — Ensembles	16
Mus 315 — Music Methods and Techniques	10
Mus 331 — Form and Analysis	3
Mus 351 — Choral Conducting	2
OR	
Mus 352 — Instrumental Conducting	2
Mus/Ed 405 — Methods of Teaching Music	3
Mus 432 — Orchestration	3
Mus 472 — Master Class	0-8

Required Education Courses:	Credits
Ed 201 — Orientation to Education	3
Ed 212 — Human Development and Learning	3
Ed 313 — Educational Psychology	3
Ed 332 — Tests and Measurements	3
Ed 410 — Methods for Reading in the Secondary School	6
Ed 423 — History, Philosophy, and Sociology of Education	3
Ed 452S — Student Teaching-Secondary	12

A half recital on the student's major instrument is required in the senior year.

MINOR IN MUSIC

Mus 104 and 131 or 132	6
Mus 122 or 221 or 222	3
Mus 307	4
Mus 161-462	4
Mus 313 or 315 or 472	3
including 6 or more upper-division credits	

Courses in Music

Mus 104 **3 Credits**

FUNDAMENTALS OF MUSIC (3+0)

Introduction to the basic materials of music. Study of intervals, scales and key signatures and rhythm and meter. Keyboard orientation. Basics of sightsinging and ear training. (offered only in the summer) (BA-H)

Mus 122 **3 credits**

MUSIC OF TODAY (3+0)

Investigation of the basic elements of music, popular music, classical music, folk and ethnic music, jazz, and music for the theatre. To be offered during the summer only. No Prerequisites. (BA-H)

Mus 131 **3 Credits**

BASIC THEORY I (3+0)

The organization of musical materials with emphasis on diatonic functional harmony. Introduction to part writing and to keyboard skills. Should be taken concurrently with Mus 133. (BA-H)

Mus 132 **3 Credits**

BASIC THEORY II (3+0)

Continuation of Mus 131 with emphasis on part writing and melody harmonization. Non-harmonic tones and simple modulation. Development of keyboard skills. Should be taken concurrently with Mus 134. Prerequisite: Mus 131 or permission of instructor. (BA-H)

Mus 133 **2 Credits**

SIGHTSINGING AND EAR TRAINING I (2+0)

The development of basic skills in hearing and reading music. The study of intervals, chords and common metrical patterns. Should be taken concurrently with Mus 131. (BA-H)

Mus 134 **2 Credits**

SIGHTSINGING AND EAR TRAINING II (2+0)

Continuation of Mus 133 with emphasis on rhythmic, melodic and harmonic dictation. Should be taken concurrently with Mus 132. Prerequisite: Mus 133 or permission of instructor. (BA-H)

Mus 153 **1 Credit**

FUNCTIONAL PIANO (1+0)

Instruction designed to help music majors obtain the performance, sight-reading, and harmonization-transposition skills needed to pass

the Piano Proficiency Examination. Prerequisites: Music Majors — Mus 131 or equivalent or concurrent enrollment in Mus 131.

Mus 161 **2 or 4 Credits**
PRIVATE LESSONS
Students are required to confer with music staff to determine appropriate placements. Voice, Piano and instruments of the band and orchestra may be taken indefinitely by non-music majors or as preparatory division for music majors and minors. Performance majors may enroll for 4 credits.

Mus 162 **2 or 4 Credits**
PRIVATE LESSONS
Continuation of Mus 161.

Mus 221 **3 Credits**
HISTORY OF MUSIC I (3+0)
Music before 1750. (BA-H)

Mus 222 **3 Credits**
HISTORY OF MUSIC II (3+0)
Music since 1750. (BA-H)

Mus 231 **3 Credits**
ADVANCED THEORY I (3+0)
Continued study of part writing and melody harmonization. Modulation to related keys, secondary dominants and introduction to chromatic harmony. Free style harmonization. Binary and ternary forms. Should be taken concurrently with Mus 233. Prerequisite: Mus 132 or permission of instructor.

Mus 232 **3 Credits**
ADVANCED THEORY II (3+0)
Continuation of Mus 231. Chromatic harmony and higher numbered chords. Introduction to 20th Century harmony. Keyboard harmonization of melodies. Should be taken concurrently with Mus 234. Prerequisite: Mus 231 or permission of instructor.

Mus 233 **2 Credits**
SIGHTSINGING AND EAR TRAINING III (2+0)
The development of advanced skills in hearing and reading music. Introduction to modulation and chromaticism. More complex rhythmic patterns. Should be taken concurrently with Mus 231. Prerequisite: Mus 134 or permission of instructor.

Mus 234 **2 Credits**
SIGHTSINGING AND EAR TRAINING IV (2+0)
Continuation of Mus 233. Should be taken concurrently with Mus 232. Prerequisite: Mus 233 or permission of instructor.

Mus 251 **2 Credits**
BASIC CONDUCTING (2+0)
Introduction to principles of conducting. Prerequisite: Mus 132 or permission of instructor. (BA-H)

Mus 261 **2 or 4 Credits**
PRIVATE LESSONS
Continuation of Mus 162

Mus 262 **2 or 4 Credits**
PRIVATE LESSONS
Continuation of Mus 261.

Mus 307 Ensembles **2 Credits**
PIANO CHAMBER MUSIC AND ACCOMPANYING (2+0)
Important course for pianists, especially designed to train them in the area of chamber music and in the art of accompanying.

UNIVERSITY SINGERS (0+4)
The study of depth, the rehearsal and performance of chamber vocal literature from the Renaissance up to and including 20th century contemporary literature. Ensemble credit for vocal majors. Prerequisite: certified vocal majors and others who qualify by audition.

UNIVERSITY WIND ENSEMBLE(2+0)
In-depth study of the rehearsal and performance of original band music and transcriptions from the Renaissance up to and including 20th Century Literature. Permission of instructor.

PERCUSSION ENSEMBLE (2+0)
The study and performance of percussion chamber music including 20th century literature for percussion as well as transcriptions of earlier music. Permission of instructor.

MUSIC 308 **1 Credit**
UAA PEP BAND (1+0)
Ensemble rehearsals and performances for UAA athletic events. UAA Pep Band is scheduled through hockey and basketball season. No prerequisitie. Participation in the Pep Band will not qualify for the Music Majors ensemble requirement.

Mus 313 **1-3 V Credits**
OPERA WORKSHOP (0+3, 6, OR 9)

Mus 315 **2 Credits**
MUSIC METHODS AND TECHNIQUES (2+0)
Instruction in voice and the basic instruments of band and orchestra as part of the teacher training program.
Brass
Woodwinds
Strings
Voice
Percussion

Mus 331 **3 Credits**
FORM AND ANALYSIS (3+0)
Structural principles and stylistic analysis of music of the 18th and 19th centuries. Prerequisite: Mus 232 or permission of instructor.

Mus 351 **2 Credits**
CHORAL CONDUCTING (2+0)
Principles of conducting and interpretation with vocal ensembles. Prerequisite: Mus 232 or permission of instructor.

Mus 352 **2 Credits**
INSTRUMENTAL CONDUCTING (2+0)
Principles of conducting and interpretation with instrumental ensembles. Prerequisite: Mus 232 or permission of instructor.

Mus 361 **2 or 4 Credits**

Mus 362 **2 or 4 Credits**
PRIVATE LESSONS
Continuation of Mus 261, 262.

Mus 405/Ed 405 **3 Credits**
METHODS OF TEACHING MUSIC (3+0)
Methods and problems of teaching music in junior and senior high schools with emphasis on the general Music Program. Prerequisites: Admission to Teacher Certification, 100 semester hours, Mus 232 and Ed 332 and prerequisites thereto, or permission of instructor.

Mus 409/Ed 409 **3 Credits**
MUSIC IN THE ELEMENTARY SCHOOL (3+0)
Principles, procedures, and materials for teaching music to children at the elementary level. Prerequisites: Ed 313 and prerequisites thereto.

Mus 420 **3 Credits**
MUSIC IN THE MEDIEVAL AND RENAISSANCE PERIODS (3+0)
Investigation of musical developments in Europe from Gregorian Chant to 1600. Evolution of the motet, medieval and Flemish. Structures of the canti fermi. Sacred and secular monody and choral polyphony from Gregorian Chant through Palestrina. Survey of cross-cultural influences in regard to the Church, the Schools: Notre Dame, Burgundi-

an, Flemish, etc. Vocal and instrumental notation. Paleography of the periods. Intensive listening and reading. Prerequisite: Mus 222 or permission of instructor.

Mus 421 **3 Credits**

MUSIC IN THE BAROQUE PERIOD (3+0)

Style study of the music from about 1600 to 1750. Examination of style and performance practices in opera, oratorio, cantata, and other vocal forms of the period. Development of the keyboard instruments: organ, harpsichord, spinet, clavichord, virginals, and piano. Historic consideration of the instrumental evolution: strings, winds and brasses. Cross-cultural influences: art, literature, and painting. Intensive listening and reading of contemporary documents in translation. Consideration of modern performance of old music. Prerequisite: Mus 222 or permission of instructor.

Mus 422 **3 Credits**

MUSIC IN THE CLASSICAL PERIOD (3+0)

Musical styles from J.S. Bach through Beethoven, as exemplified by the works of Bach's sons, Haydn, Mozart, Beethoven, and others of the period. Examination of the development of sonata and concerto forms, as well as opera and chamber music. Style studies of representative examples from the works of Haydn, Mozart, and Beethoven. Musical developments in Italy, England, France, Germany and Austria. Prerequisite: Mus 222 or permission of instructor.

Mus 423 **3 Credits**

MUSIC IN THE ROMANTIC PERIOD (3+0)

Study of musical trends in the 19th century. Romanticism, Nationalism, Italian Opera, the Wagnerian Drama, the Art Song for voice and piano, the character piece for piano, and the symphonic poem for orchestra, as exemplified by representative works, chosen from the music of Schubert, Berlioz, Mendelssohn, Schumann, Chopin, Liszt, Wagner, Brahms, Verdi, Tchaikowsky, and others. Related readings in other aspects of the Romantic movement. Prerequisite: Mus 222 or permission of instructor.

Mus 424 **3 Credits**

MUSIC IN THE TWENTIETH CENTURY (3+0)

Important manifestations and trends in music since 1900. Style studies of significant works from the modern and contemporary repertoire. Prokofieff, Stravinsky, Hindemith, Schoenberg, Bartok, the avant-garde, etc. Prerequisite: Mus 222 or permission of instructor.

Mus 431 **3 Credits**

COUNTERPOINT (3+0)

Study of contrapuntal techniques of the sixteenth and eighteenth centuries. Writing in appropriate vocal and instrumental forms. Prerequisite: Mus 232 or permission of instructor.

Mus 432 **3 Credits**

ORCHESTRATION (3+0)

Principles and practices of composing and transcribing music for various instrumental ensembles, including band and orchestra. Prerequisite: Mus 232 or permission of instructor.

Mus 461 **2 or 4 Credits**

Mus 462 **2 or 4 Credits**

PRIVATE LESSONS

Continuation of Mus 361, 362.

Mus 472 **2 Credits**

PIANO MASTER CLASS (2+0)

Performance, comparative analysis and discussion of the piano literature, and close examination of its styles and periods (early Baroque through 20th Century). Lecture course on the technical and interpretive aspects of the pianistic literature, evolution and development of both the instrument and the technique from their origins to the present, cross-cultural influences in regard to styles, movements, schools, etc. Illustrated by the performance of related pianistic works. Mandatory at all times for piano performance majors. 8 credits minimum required for piano majors in Music Education.

2 Credits

VOICE MASTER CLASS (2+0)

Performance and discussion of the vocal literature and close examinations of its styles and periods. Opportunity for student vocalists and listeners to respectively expose themselves in a semi-public situation which is necessary to their performing ability and to build their senses of analysis and criticism. Mandatory for all voice majors (2 or 4 credits) at all times and in all music degrees.

Natural Sciences

In today's highly technical world, an interdisciplinary understanding of the sciences is highly desirable, if not requisite, for opportunities for advanced study or career upward mobility. There is no area of modern science that does not draw heavily on the basic tenets of at least one other science.

Although it is possible to follow the traditional majors in sciences, a more realistic approach is to allow for an interdisciplinary curriculum that emphasizes the interaction of the sciences. The Natural Science program provides such an alternative and is becoming recognized as the preferred academic preparation for the career objectives of increasing numbers of students.

The health science option was specifically developed for health science practitioners who would like to obtain a strong supportive background in biological and chemical sciences. It is particularly valuable for those wanting career mobility into other health sciences.

BACHELOR OF SCIENCE

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.
2. Follow a four-year curriculum developed in consultation with a faculty advisor from the College of Arts and Sciences to complete a minimum of 130 credits.

Curriculum is according to study plan developed in consultation with your faculty advisor. It must include at least 50 science credits from at least two sciences in addition to one year from each of three science areas (Biol 107-108 or equivalent, Chem 105-106, and Phys 211-212). At least 35 upper-division credits in science are required.

SUGGESTED PROGRAM ELECTIVES

While it is true that any science credits may be used to meet the program credit hour requirements, it is necessary that your advisor approve the courses listed in your program of study. There is no minimum number of additional credits required from any science area, provided you do earn some credits from at least two disciplines, and that there are at least 35 upper-division credits.

Possible combinations include the following:
Biology and Chemistry
Biology/Psychology/Statistics
Mathematics and Chemistry

Acceptable science credits from the following may be taken at UAA, or in transfer from other institutions:

Natural Resource Management
Environmental Sciences
Wildlife Management
Oceanography
Health Sciences
Engineering
Geography
Applied Statistics
Mathematics
Psychology

PREPROFESSIONAL (MEDICINE, DENTISTRY, VETERINARY MEDICINE) DEGREES

The University of Alaska, Anchorage offers several programs designed to meet all admission requirements for most professional schools. Since there is no specified preprofessional degree, students usually major in one of the sciences, such as Biological Sciences, Chemistry, or Natural Sciences. The Natural Science Degree is most flexible and can be used to meet admission requirements of specific professional schools. The degrees available in the Departments of Biological Sciences and Chemistry can be utilized as preprofessional courses of study while offering the potential for alternate careers in a wide range of science related areas.Students interested in a preprofessional course of study should contact Chairpersons or Coordinators of one of the programs named above.

HEALTH SCIENCES OPTION

Students who have completed an associate or baccalaureate degree in the health sciences (i.e., nursing, dental hygiene, etc.) may elect to follow the program shown below. (In all cases, the General University Requirements and the General College of Arts and Sciences Degree Requirements must be met.)

	Credits
Transfer credit from health science program up to	65
Biology sequence	16
Biol 487 — Comp. Anat. of Vertebrates	
Biol 488 — Vert. Develop. Anatomy	
Biol 340 — General Microbiology	
Biol 361 — Cell Biology	
Chemistry sequence	15
Organic Chemistry, Biochem I, II	
Additional science electives, including AS 307 or Math 200	17-18

Philosophy

Phil 101 **3 Credits**
INTRODUCTION TO LOGIC (3+0)
An analysis of argumentation and informal fallacies; an introduction to deductive logic; and an examination of evidence, proof and testability in the sciences. (BA-M)

Phil 201 **3 Credits**
INTRODUCTION TO PHILOSOPHY (3+0)
An introduction to the traditional topics of Western philosophy: truth, knowledge, the nature of Being, good, and evil. The course will examine these subjects from a systematic point of view, drawing on the whole spectrum of Western philosophers. (BA-H)

Phil 211 **3 Credits**
HISTORY OF PHILOSOPHY I (3+0)
An introduction to the great thinkers of the Greek, Latin, Medieval and Renaissance periods in Western civilization; a comparative examination of the cosmological, religious, ethical, political and scientific ideas which shaped, intellectually, each of these epochs. (BA-H)

Phil 212 **3 Credits**
HISTORY OF PHILOSOPHY II (3+0)
An introduction to the great thinkers of the 17th century scientific revolution, the Enlightenment, German Idealism, contemporary positivism and existentialism; a comparative examination of the cosmological, ethical, political and scientific ideas which shape each of these periods. Prerequisite: Phil 211 (BA-H)

Phil 301 **3 Credits**
ETHICS (3+0)
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. (BA-H)

Phil 401 **3 Credits**
AESTHETICS (3+0)
An investigation into the nature of art and the creative process from both an historical and theoretical perspective, utilizing especially the philosophy of the ancient Greeks, the Romantic thinkers and contemporary semiotics. (BA-H)

Phil 421 **3 Credits**
PHILOSOPHY OF THE SOCIAL SCIENCES (3+0)
A general introduction to the philosophical problems common to the social sciences, focusing on issues concerning method, epistemology and modes of explanation. (BA-H)

Physics

Phys 103 **4 Credits**
BASIC PHYSICS I (3+3)
Non-calculus, introduction to study of motion, forces, gravitation; fluids; introduction to thermo-dynamics. Prerequisites: college algebra and trigonometry or equivalent. (BA-N)

Phys 104 **4 Credits**
BASIC PHYSICS II (3+3)
Non-calculus, introduction to thermodynamics, waves, electricity and magnetism, light. Prerequisite: Phys 103. (BA-N)

Phys 211 **4 Credits**
GENERAL PHYSICS (3+3)
Calculus based course covering mainly classical mechanics (statics and dynamics of translational and rotational motion), and some thermodynamics. Prerequisites: Math 200; high school physics or non-calculus college level physics.

Phys 212 **4 Credits**
GENERAL PHYSICS (3+3)
Calculus based course emphasizing simple electromagnetic theory, geometrical and simple optics, and selected topics in modern physics. Prerequisites: Math 200 and Phys 211. Math 201 would be useful. (BA-N)

Phys 213 **3 Credits**

ELEMENTARY MODERN PHYSICS (3+0)

Elementary level modern physics, including special relativity, atomic and molecular physics, nuclear physics, solid-state physics, elementary particles, simple transport theory, kinetic theory and concepts of quantum mechanics. Prerequisites: Phys 211 and 212.

Political Science

Politics and government are ubiquitous human activities. The study of politics and of political behavior has been a focus for human intellectual endeavor throughout man's history. 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 the least definite boundaries and the widest concerns. Consequently, political science covers many different subjects and uses diverse methods.

The Political Science Program is designed to serve the needs of students enrolling as Political Science majors by providing a comprehensive foundation in the subject matter of the discipline. The Program also provides courses for students who are not Political Science majors but who need to gain some understanding of the discipline and insights into the nature of politics.

BACHELOR OF ARTS

1. Complete the General University Requirements and the General College of Arts and Sciences Degree Requirements on page 45-54.
2. Complete 18 hours of foundation courses:

	Credits
Econ 201, 202 — Intro. Macro and Micro Econ.	6
Hist 131, 132 — History of U.S.	6
PS 101, 102 — Introduction to American Government and Introduction to Political Science	6
	18

3. Complete one course from each of the following areas within Political Science for a total of 27 credits.

Comparative Government:

PS 311, 312 — Comparative Politics

Governmental Institutions:

PS 330 — The American Presidency
PS 331 — The Legislative Process

International:

PS 321 — International Relations
PS 322 — U.S. Foreign Policy
PS 323 — International Law and Organization

Theory:

PS 315 — The American Political Tradition
PS 411 — History of Political Theory I: Classical
PS 412 — History of Political Theory II: Modern
PS 415 — Contemporary Political Theory

Public Administration:

PS 301 — Public Administration in Political Process
PS 302 — Public Policy Process and Analysis
PS 480 — Organizational Theory

Research Methods:

PS 352 — Social Science Methods
PS 432 — Research Methods

State and Local:

PS 211 — State and Local Government
PS 332 — Urban Government and Administration

Parties and Elections:

PS 402 — Political Parties and Group Politics
PS 407 — Campaigns and Elections

Political Behavior:

PS 221 — Introduction to Political Sociology
PS 401 — Public Opinion and Political Behavior

4. Complete a further 6 hours of Political Science electives.
5. Electives to total 130 hours, of which a minimum of 48 hours must be at the 300 level or higher.

Minor in Political Science

A minor in Political Science requires at least 18 credit hours of Political Science, including PS 101 and 102. At least 6 hours must be upper division credit.

Minor in Public Administration

A minor in Public Administration requires PS 101, PS 301, PS 302, PS 480 and 6 hours of approved PS electives.

Political Science

PS 101 **3 Credits**

INTRODUCTION TO AMERICAN GOVERNMENT (3+0)

The United States Constitution and its philosophy: the branches of government, and the American political process. (BA-S)

PS 102 **3 Credits**

INTRODUCTION TO POLITICAL SCIENCE(3+0)

The concepts of political science; political processes; goals, methods and levels of government. (BA-S)

PS 211 **3 Credits**

STATE AND LOCAL GOVERNMENT (3+0)

Organization and politics of state and local government in the United States: the Alaskan Constitution; problems of statehood in Alaska. Prerequisite: PS 101 or permission of instructor. (BA-S)

PS 221/SOC 221 **3 Credits**

INTRODUCTION TO POLITICAL SOCIOLOGY (3+0)

An introduction to the social nature of politics and to the nature and distribution of power in society. An examination of how social institutions are engaged in the political processes of different societies and of the complex relationships existing between social and political change. (BA-S)

PS 301 **3 Credits**

PUBLIC ADMINISTRATION IN POLITICAL PROCESS (3+0)

Techniques and problems of administering public policy. The changing face of the executive branch in the political process. Prerequisite: PS 101 or permission of instructor. (BA-S)

PS 302 **3 Credits**
PUBLIC POLICY PROCESS AND ANALYSIS (3+0)
The process of public policy adoption and implementation, with emphasis on the rational actor, bureaucratic and governmental process models. Extensive use of case studies. Prerequisite: PS 101 or permission. (BA-S)

PS 311 **3 Credits**
INTRODUCTION TO COMPARATIVE POLITICS (3+0)
An introduction to the subject matter, concepts and methods of comparative politics. (BA-S)

PS 312 **3 Credits**
COMPARATIVE POLITICS: CASE STUDIES (3+0)
Case studies of selected nation states drawn from three groups: Western democracies, Communist systems, and developing countries. Prerequisite: PS 311 or permission. (BA-S)

PS 315 **3 Credits**
THE AMERICAN POLITICAL TRADITION (3+0)
The political theory of liberal democracy examined in its application to crucial events in American political history. Prerequisites: Hist 131, 132 strongly recommended. (BA-S)

PS 321 **3 Credits**
INTERNATIONAL RELATIONS (3+0)
An introduction to the various aspects of international relations including foreign policy, international transactions and interactions, international organizations, and the international system. (BA-S)

PS 322 **3 Credits**
US FOREIGN POLICY (3+0)
An introductory course in U.S. foreign policy considering the history of U.S. foreign policy and the constitutional provisions for making foreign policy. The course will also review the bases of current foreign policy by focusing on selected contemporary foreign policy problem areas. (BA-S)

PS 323 **3 Credits**
INTERNATIONAL LAW AND ORGANIZATION (3+0)
Development, structure, policies, and problems of public international law and organizations. Accomplishments and limitations of universal and regional organizations and law. (BA-S)

PS 330 **3 Credits**
THE AMERICAN PRESIDENCY (3+0)
The Presidency, its evolution, occupants, and place within the American system. Topics include presidential character, war, elections, Watergate, the economy, and the Constitution. Prerequisite: PS 101 or permission. (BA-S)

PS 331 **3 Credits**
THE LEGISLATIVE PROCESS (3+0)
The Legislative process in Congress and the States, lobbying, legislative roles, the theory and practice of representative government. Prerequisite: PS 101 or permission. (BA-S)

PS 332 **3 Credits**
URBAN GOVERNMENT AND ADMINISTRATION (3+0)
The problem of government in cities, the forms of city government, municipal management, relationships among levels and areas of government, and emerging patterns of urban regionalism. (BA-S)

PS 340 **3 Credits**
TOPICS IN CONTEMPORARY POLITICS (3+0)
An in-depth examination of contemporary political issues and questions. Topics vary from year to year. (BA-S)

PS 352/SOC 352 **3 Credits**
SOCIAL SCIENCE METHODS (3+0)
Introductory research methods including definition of research problems, development of hypotheses, experimental and non-experimental research design, sampling, data collection and analysis. Students are expected to participate in various field exercises and to develop critical capacities for evaluating research studies. Prerequisite: PS 102 (BA-S)

PS 401 **3 Credits**
PUBLIC OPINION AND POLITICAL BEHAVIOR (3+0)
The effect of public opinion on political behavior in America, with comparative materials from other countries. (BA-S)

PS 402 **3 Credits**
POLITICAL PARTIES AND GROUP POLITICS (3+0)
The theory and behavior of political parties and interest groups in the American political system. The role of parties in organizing elections and in the legislative and executive branches is discussed as well as general organized activity with both local and national examples. (BA-S)

PS 407 **3 Credits**
CAMPAIGNS AND ELECTIONS (3+0)
The American electoral process, voting and opinion formation. The process and techniques of campaigning. Prerequisite: PS 101 or permission. (BA-S)

PS 411 **3 Credits**
HISTORY OF POLITICAL THEORY I: CLASSICAL (3+0)
Political philosophy from Plato to Marsilius, with emphasis on the question of justice. (BA-S)

PS 412 **3 Credits**
HISTORY OF POLITICAL THEORY II: MODERN (3+0)
Political philosophy from Machiavelli to Nietzsche, with emphasis on liberalism and its critics. (BA-S)

PS 415 **3 Credits**
CONTEMPORARY POLITICAL THEORY (3+0)
The political thought of the contemporary world examined through leading texts in political philosophy. (BA-S)

PS 432/BA 432/JPC 432 **3 Credits**
RESEARCH METHODS (3+0)
Course will include developing competence as a consumer of research as well as methodology and techniques of empirical research: scientific method design of research, sampling, use of statistics, methods of data collection and analysis, including the use of computer data processing. Students will design and carry out a complete basic empirical study. Prerequisite: BA 373 or equivalent. (BA-S)

PS 480/BA 480 **3 Credits**
ORGANIZATIONAL THEORY AND BEHAVIOR (3+0)
Literature of organizational theory; emphasis on theoretical concepts, org. design, dynamics of formal and informal groups, communication in leadership, org. development, org. effectiveness, social science research techniques. Prerequisites: Junior or Senior standing. BA 335 or permission of instructor. (BA-S)

Psychology

The baccalaureate program in psychology offers students psychological information, theoretical application, and skills for living more effectively, for gaining

or advancing in employment, and admission to higher levels of education. A student may elect to obtain either a Bachelor of Arts or Bachelor of Science degree.

The psychology major requirements are flexible and are designed to serve a variety of career goals. The student majoring in psychology to pursue 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.

BACHELOR OF ARTS
BACHELOR OF SCIENCE

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.

Degree Requirements in Psychology
Psychology Major Requirements

1. Complete the required courses in the psychology major (X).
2. Take a laboratory course in (Psych 360 or 366) (Y).
3. Take either Psych 412 or 495 (Z).
4. Take a minimum of 40 credits of courses approved for the major.
5. Take a minimum of 21 upper divison credits (300 or 400) in the major.

Psychology Minor Requirements

1. Complete the required courses in the psychology minor (x).
2. Take a minimum of 18 credits of courses approved for the major.
3. Take a minimum of 9 upper division credits in the minor.

Course #	Course Title	Required Major	Required Minor
Psy 111	Introduction to Psychology	X	x
Psy 150	Human Development		
Psy 153	Human Relations		
Psy 245	Child Development	X	
Psy 261	Intro. to Experimental Psychology	X	
Psy 265	Abnormal Psychology	X	x
Psy 275	Social Psychology	X	x
Laboratory Courses (Majors take One)			
Psy 360	Learning & Behavior	Y	
Psy 366	Perception	Y	
Psy 328	Comparative Psychology		
Psy 333	Cognitive Psychology		
Psy 368	Personality Theories		
Psy 370	Physiological Psychology		
Psy 372	Community Psychology		
Psy 373	Psychological Testing		
Psy 382	Stress Management		
Psy 412	Systems and Theories of Psychology	Z	
Psy 415	Theories of Learning & Motivation		
Psy 420	Research Methods in Experimental Psych.		
Psy 425	Techniques of Psychotherapy		
Psy 445	Behavior Modification		
Psy 450	Rehab. of Substance Abusers		
Psy 452	Crisis Intervention		
Psy 458	Advanced Child Development		
Psy 480	Psych. of Addictions		
Psy 495	Senior Seminar: Contemp. Issues in Psych.	Z	

MINOR IN PSYCHOLOGY

Complete a total of 18 credits in Psychology, including:

1. Psy 111, Introduction to Psychology
2. Psy 265, Abnormal Psychology
3. Psy 275, Social Psychology
4. At least 9 total credits drawn from the junior (300) and senior (400) levels.

Psychology, Counseling

MASTER OF SCIENCE

Deadline for Fall Admission is March 15.

Admission to graduate study:

1. B or above average in the major discipline. A major in psychology is preferred.
2. Compliance with General University Requirements for application for admission to graduate study.
3. Submission of scores on the Graduate Record Exam (GRE) for both the general aptitude test and the Psychology Specialty exam. Successful applicants typically have G.R.E. general aptitude scores on the quantitative and verbal subtests that sum to at least 1000 and scores on the psychology speciality exam that are above 530.
4. Submission of a letter of intent describing the applicant's interest in the psychology graduate program.

Departmental approval for admission to graduate study is contingent upon the applicant's qualifications, interests, and available space.

Graduate classes in psychology have certain prerequisites. The student should complete these prerequisites as early as possible.

M.S. Degree Requirements

General Requirements: A mimimum of 36 credits must be taken including 5 core courses, 2 internships, a thesis, and 2 comprehensive exams. A minimum

grade of "B" is required in all course work applied to the graduate degree.

Phase I: (Prior to Advancement to Candidacy for the M.S. degree)

1. Be admitted to graduate study. 2. Take two required courses (Psy 623 and 625) — 6 credits.
3. Take a minimum of 6 more graduate credits.
4. Complete all undergraduate prerequisites to required graduate courses.

Phase II: (After Advancement to Candidacy for the M.S. degree)

1. Be admitted to Candidacy.
2. Take approved courses to bring total credits to 36.
3. A maximum of 6 credits of 400 level psychology classes which are not prerequisites to graduate courses may be applied toward the M.S. degree.
4. Include Psy 631, 633, 637, *690* (if not taken in Phase I).
5. Include Psy 670 and 680 internships.
6. Include Psy 699 Thesis presentation.
7. Complete the comprehensive written exam and the videotaped counseling exam.

Required Core Courses:

Psy 623 — Counseling Skills (Prereq. Psy 265, Psy 425)
Psy 625 — Family Therapy (Prereq. or Co-req. Psy 623)
Psy 631 — Advanced Behavioral Therapy (Prereq. Psy 445, Psy 623, Psy 625)
Psy 633 — Individual Assessment (Prereq. Psy 373, Psy 623)
Psy 637 — Organizational Environments (Prereq. Psy 275)

Elective Courses Offered Annually

Psy 624 — Group Counseling (Prereq. or Co-req. Psy 623)
Psy 641 — Community Applications (Prereq. or Co-req. Psy 623)
Psy 693 — Special Topics — Addictions Counseling (Prereq. Psy 480, Psy 623)

Other Required Courses:

Psy 670 — University Practicum (Prereq. Advancement to Candidacy, Psy 623, Psy 625; Prereq. or Co-req. Pay 631, Psy 633)
Psy 680 — Agency Internship (Prereq. Psy 670, Pre- or Co-req. Psy 637)
Psy 690 — Orientation to Thesis (Prereq. Psy 420)
Psy 699 — Thesis

COMPREHENSIVE EXAMINATIONS

A comprehensive written exam will be offered during the first two months of Fall and Spring semesters, on dates to be announced not less than three months in advance.

THESIS

The student will present a thesis under the direction of an advisory committee. Student must be admitted to Candidacy before enrolling in Thesis.

Courses in Psychology

Psy 111 **3 Credits**
INTRODUCTION TO PSYCHOLOGY (3+0)
An Introduction to the entire area of Psychology through a presentation of the outstanding facts and theories. The course is organized around traditional topics: physiological, perception, motivation, learning, cognition, developmental, personality, abnormal, treatment, and social. Distributed through the topical material are other themes such as scientific methodology, ethical considerations, practical applications, and everyday life examples. (BA-S)

Psy 150 **3 Credits**
HUMAN DEVELOPMENT (3+0)
An introductory overview of the various aspects of development and changes which occur throughout a person's life span. Covers prenatal period, infancy, early and middle childhood, adolescence, early, middle and late adulthood. (BA-S)

Psy 153 **3 Credits**
HUMAN RELATIONS (3+0)
Application of psychological principles to the problems of everyday life. Course focus will be an emphasis on the analysis of developmental life style adjustment patterns. Mechanics of adjustment will be demonstrated by various practicum assignments. Prerequisite: Psy 111 (BA-S)

Psy 245 **3 Credits**
CHILD DEVELOPMENT (3+0)
A study of the physical, emotional, cognitive and social aspects of a child's development from the prenatal period to the beginning of adolescence. Theoretical view of development and the effects of genetics, the environment and socialization are included. Prerequisite: Psy 111 (BA-S)

Psy 261 **3 Credits**
INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY (3+0)
Introduction to and laboratory application of the experimental methods to some problems of psychology using both human and animal subjects. Prerequisite: Psy 111 (BA-S)

Psy 265 **3 Credits**
ABNORMAL PSYCHOLOGY (3+0)
The continuum from normality, everyday types of upset; emotional crises and normal neurosis through abnormal neurosis and psychosis is identified in lecture and discussion. Prerequisite: Psy 111 (BA-S)

Psy 275/Soc 275 **3 Credits**
SOCIAL PSYCHOLOGY (3+0)
An analysis of inter-group relationships in terms of process and value orientation, their influences on the personality, and the various aspects of collective behavior on group and person. Prerequisite: Psy 111 and/or Soc 101 (BA-S)

Psy 328 **3 Credits**
COMPARATIVE PSYCHOLOGY (3+0)
A survey of animal behavior throughout the phylogenetic scale. Application of theories to human behavior will be included but not emphasized. Prerequisites: Psy 111 and one other psychology course. (BA-S)

Psy 333 **3 Credits**
COGNITIVE PSYCHOLOGY (3+0)
A survey of the area of cognitive psychology. Memory, verbal learning, concept learning, and imagery are discussed. Prerequisites: Psy 111 and one other psychology course. (BA-S)

Psy 360 **4 Credits**
LEARNING AND BEHAVIOR (3+3)
An examination of the basic principles of respondent and operant behavior. Material is drawn from both human and animal studies to illustrate positive and negative reinforcement, punishment, extinction, shaping, changing schedules of reinforcement and stimulus control. Weekly laboratory sessions involve progressive experiments with rats. Prerequisites: Psy 111 and one other psychology course. (BA-S)

Psy 366 **4 Credits**
PERCEPTION (3+3)
Current theories and phenomena in how we process the wrold around us. Much of the material will be presented via demonstration and in weekly laboratory sessions. The implications of the human tendency to "misunderstand" situations will be considered. Prerequisites: Psy 111 and one other psychology course. (BA-S)

Psy 368 **3 Credits**
PERSONALITY THEORIES (3+0)
A comprehensive survey of contemporary and classical personality theories, research, individual assessment and personality development. Prerequisites: Psy 111 and one other psychology course. (BA-S)

Psy 370 **3 Credits**
PHYSIOLOGICAL PSYCHOLOGY (3+3)
An introduction to the structures and functions in the central nervous system and how these may explain behavior phenomena. Prerequisites: Psy 111 and one other psychology course. (BA-S)

Psy 372 **3 Credits**
COMMUNITY PSYCHOLOGY (3+0)
An examination of interaction theories and research applied to communication, dynamics of power, confrontation and conflict, and creative problem solving. Prerequisite: Psy 111 and one other psychology course. (BA-S)

Psy 373 **3 Credits**
PSYCHOLOGICAL TESTING (3+0)
Standarized psychological tests in various applied areas, administration, scoring and interpretation of established tests and study of ethical standards applied to development and administration of tests. Prerequisite: AS 300 and two psychology courses. (BA-S)

Psy 382 **3 Credits**
STRESS MANAGEMENT (3+0)
Examines the use of self-control and anxiety-reduction techniques in the managment of stress. Topics include self control, goal setting, time management, assertive training and relaxation techniques. Prerequisites: Psy 265 or Psy 415 and one other psychology course or permission of instructor. (BA-S)

Psy 412 **3 Credits**
SYSTEMS AND THEORIES OF PSYCHOLOGY (3+0)
A survey of influential theories and concepts related to contemporary psychology. This course provides a general overview of psychological thought for the potential graduate student. Prerequisites: Psy 111 and three other psychology courses. (BA-S)

Psy 415 **3 Credits**
THEORIES OF LEARNING AND MOTIVATION (3+0)
Historical and contemporary theories of learning and motivation are discussed. Theories relevant to simple conditioning will be emphasized and current areas of experimental activity will be explored. Prerequisites: Psy 111 and three other psychology courses. (BA-S)

Psy 420 **3 Credits**
RESEARCH METHODS IN EXPERIMENTAL PSYCHOLOGY (3+0)
A survey of the essential elements of research design, from formulating on experiment, statistically analyzing the data, to interpreting and reporting the results. Useful to those anticipating a project (such as thesis) and also vaulable to those who wish to better understand the research reports they read. Prerequisites: Psy 111 and three other psychology courses; one statistics course as a prerequisite or corequisite is required. (BA-S)

Psy 425 **3 Credits**
TECHNIQUES OF PSYCHOTHERAPY (3+0)
A survey of current psychotherapeutic approaches, including basis assumptions, basic techniques, and related research findings. Films, demonstrations and experimental involvement are included. Prerequisites: Psy 265 or Psy 368 and three other psychology courses. (BA-S)

Psy 445 **3 Credits**
BEHAVIOR MODIFICATION (3+0)
Survey of behavior modification techniques and application. Examines the use of behavior therapy techniques with preschoolers, children, adolescents, and adults. Prerequisite: Psy 360 and three other psychology courses. (BA-S)

Psy 450 **3 Credits**
REHABILITATION OF SUBSTANCE ABUSERS (3+0)
The purpose of this course is to strengthen the knowledge base of substance abuse counselors and others regarding the principles and practices of rehabilitation. Techniques of instruction will include lectures, simulation and demonstration, guided group discussions, resource persons and independent guided study. Prerequisites: Psy 387 and three other psychology courses. (BA-S)

Psy 452 **3 Credits**
CRISES INTERVENTION (3+0)
The theory of historical and contemporary approaches to crisis intervention will be explored. Specific emphasis will be on the identification of crises situations and their resolution. Prerequisites: Psy 265 and three other psychology courses. (BA-S)

Psy 454/Just 454 **3 Credits**
EVALUATION RESEARCH AND CHANGE (3+0)
Application of evaluation research to the policy making process. Presented are evaluative research strategies including mointoring, process evaluation, cost-benefit analysis and impact evaluation. Special attention is given to designing evaluation projects, analyzing and interpreting results, preparing and presenting evaluation research reports in the justice field. Prerequisite: Justice 451 or a Research Method course. (BA-S)

Psy 458 **3 Credits**
ADVANCED CHILD DEVELOPMENT (3+0)
Study of the development of the child as a product of the interaction between the developmental processes studied in Child Development (mental, emotional, social, and physical) and the child's life experiences. Prerequisites: Four psychology classes including Psy 245 or permission of the instructor. (BA-S)

Psy 480 **3 Credits**
PSYCHOLOGY OF ADDICTIONS (3+0)
The intent of this course is to provide a forum which will explore approaches to the understanding of alcohol and drug use, the problems which both can create, and methods of treatment prevention. Prerequisites: Two psychology courses. (BA-S)

Psy 490 **1 Credit**
DISTINGUISHED PRACTITIONER SERIES (1+0)
Topics in clinical or applied psychology presented by practicing members of the professional community. Specific titles as announced. May be repeated for credit up to a limit of 6 credits. Prerequisite: 12 credits of psychology or permission of instructor.

Psy 495 **3 Credits**
SENIOR SEMINAR: CONTEMPORARY ISSUES IN PSYCHOLOGY (3+0)
Seminar for senior students with a major or minor in psychology to discuss issues in contemporary psychology. Prerequisites: Senior class standing, Psy 111, and three other psychology courses. (BA-S)

Psy 623/Ed 623 **3 Credits**
COUNSELING SKILLS (3+0)
A basic counseling skills training course, including theory, philosophy, and experience. Emphasis is on the interactions which promote both emotional growth and positive behavioral change. Prerequisites: Psy 265 and 425. Permission of the instructor is required for students not admitted to graduate standing in the Psychology Department.

Psy 624/ED 624 **3 Credits**
GROUP COUNSELING (3+0)
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. Prerequisite or Co-requisite: Psy 623 or permission of instructor.

Psy 625 **3 Credits**
FAMILY THERAPY (3+0)
A combined theory and technique course, reviewing leading family therapy approaches and related research findings. Special attention will be given to assessment and therapy for parenting and marital difficulties. Prerequisite or Co-requisite: Psy 623.

Psy 631 **3 Credits**
ADVANCED BEHAVIOR THERAPY (3+0)
Advanced behavior therapy course, emphasizing the clinical application of behavior modification techniques, and familiarity with advanced professional literature. Prerequisites: Psy 445, Psy 623, Psy 625.

Psy 633 **3 Credits**
INDIVIDUAL ASSESSMENT (3+0)
Administering, scoring and interpreting assessment toools (such as intelligence, personality, behavioral, educational and vocational measures) and writing psychological reports, such as interviews, case histories and case conference techniques resulting in a meaningful individual evaluation. Prerequisite: Psy 373 and Psy 623.

Psy 637 **3 Credits**
ORGANIZATIONAL ENVIRONMENTS (3+3)
Fostering productive living environments within organizations by the use of effective supervision and climate management. Prerequisite: Psy/Soc 275.

Psy 641 **3 Credits**
APPLICATIONS OF COMMUNITY PSYCHOLOGY (2+3)
Practical implementation of community self-management packages, with the students acting as group leaders in their residential communities. Exploration of system models of community change and self-support. The students will plan and prepare to carry out future training programs in the community. Prerequisites: or Co-requisite Psy 623.

Psy 670 **3 Credits**
UNIVERSITY PRACTICUM
The application of skills learned in the Psychology Counseling program in the work setting of the UAA Counseling and Growth Center. Students must apply to Center Director for approval to enroll. Prerequisites: (1) Admission to Candidacy, (2) Psy 623, Psy 625, (3) Permission of the Director; Prerequisites or Co-requisites: Psy 631, Psy 633.

Psy 680 **3 Credits**
AGENCY INTERNSHIP
Students will apply skills in an approved counseling agency. Experience is supervised jointly by agency staff and UAA faculty, encouraging increased autonomy and more specialization than the Counseling and Growth Center internship (Psy 670 above). Prerequisites: Psy 670, Pre- or Co-requisite Psy 637.

Psy 690 **3 Credits**
ORIENTATION TO THESIS (3+0)
This course allows graduate students about to begin their thesis to discuss possible thesis topics, thesis design issues, and to prepare their thesis proposals. Prerequisites: Admission to graduate studies in Psychology, and Psy 420.

Psy 692 **1-3 Credits**
ADVANCED PSYCHOLOGICAL ASSESSMENT SERIES (1-3+0)
Topics and techniques in psychological assessment presented by faculty and practicing members of the professional community. Specific titles as announced. Prerequisite: Two courses in testing, including a graduate level individual assessment course.

Psy 699 **3 Credits**
THESIS
An acknowledgement of the work in progress toward completing a thesis. The Psychology staff is available to provide advice and assistance on specific problems encountered. Recommended courses: Engl 414 and Psy 690.

Social Work

BACHELOR OF SOCIAL WORK

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.

Within an overall emphasis on client-centered problem solving, the Bachelor of Social Work degree program at Univeristy 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 upon reciprocal role performance

Social work education engages the student in carefully planned experiences to achieve the knowledge, skill and attitudes necessary for beginning professional competence. These experiences take place in the classroom, small seminars and selected field work practicums.

The Bachelor of Social Work degree is accredited by the Council on Social Work Education.

Credits earned in non-accredited degree programs will not transfer to UAA accredited degree programs without departmental approval.

1. **General Education Requirements** **CREDITS**

ORAL COMMUNICATION 3
Spch 111 OR Spch 241
WRITTEN COMMUNICATION 9
Engl 111 3
Engl 211 or Engl 213 3
Eng 311 or Engl 372 or Engl 414 3
QUANTITATIVE SKILLS 3
AS 300
NATURAL SCIENCES 7
Biol 107 and Biol 108 OR Biol 111 4
Choose one other course (3 credits) from: 3

Astr 103	Biol 271
Astr 104	Chem 105
Biol 112	Chem 106
Biol 215	Chem 120
Biol 239	Chem 121
Biol 252	Intro. to Geology
	Intro. to Physics.

REASONING SKILLS 3
CS 105, 106, 107, OR 108 OR Ling 110 OR Phil 101
ARTS 3
Art 160 *OR* MUS 122 *OR* Thr 111
Humanities 12
Choose two disciplines with a maximum of six credits in any one:

Engl 121	Hist 101
Engl 201	Hist 102
Engl 202	Art 261
Phil 201	Art 262
Phil 211	Mus 221
Phil 212	Mus 222

SOCIAL SCIENCES 21
Choose three disciplines with a maximum of nine (9) credits in any one. (Note prerequisites courses required for the social work major.)

Anth 101	PS 101
Anth 200	PS 102
Econ 201	Psy 111
Econ 202	Psy 150
JPC 101	Soc 101
JPC 215	Soc/Swk 106
Just 110	

2. **Major Requirements**

INTRODUCTION TO SOCIAL WORK 3
SWK 206 3
SOCIAL WORK METHODS AND PRACTICE 24
Four semesters, taken sequentially, six (6) credits each:
SWK 361 A and B 6
SWK 362 A and B 6
SWK 461 A and B 6
SWK 462 A and B 6
SOCIAL WELFARE AS A SOCIAL INSTITUTION 6
SWK 305 (Prereq. Soc/Swk 106) 3
SWK 306 3
PEOPLE AND THEIR ENVIRONMENT 9
SWK 342 (Prereq. Anth 200) 3
SWK 343 3
SOC 407/SWK 407 (Prereq. Soc 101) 3
SOCIAL SCIENCE METHODS 3
SOC 352 3
SOCIAL WORK PROBLEM AREA (S) 15
In consulation with advisor, student selects appropriate courses in no more than two special interest areas such as substance abuse, family and child welfare, corrections, health services, geriatrics, etc.

3. **Electives (to total 130)** 9
(48 credits must be at the 300 level or higher)

BACHELOR OF SOCIAL WORK ADMISSION REQUIREMENTS

1. Admission to the University of Alaska-Anchorage.
2. Completion of 45 semester credit hours with an accumulative GPA of 2.0.
3. Achievement of at least a grade of "C" in prerequisite social work courses.
4. Successful completion of SWK 361 A and B.
5. Submission of an admission application and a personal statement related to the student's interest in social work.
6. Participation in an interview with faculty for joint assessment of student's achievement of objectives of SWK 361 A and B and readiness to complete requirements of the program.

ADDITIONAL REQUIREMENTS

Students in the Social Work program must have a grade of C or better in each course required in the major. Adherence to the Code of Ethics established by the National Association of Social Workers is also required.

Courses in Social Work

SWK 106/SOC 106 **3 Credits**
INTRODUCTION TO SOCIAL WELFARE (3+0)
Functions and historical development of modern social welfare and the profession of social work. Designed primarily to assist in the understanding of social welfare problems and services. Prerequisite: SOC 101. (BA-S)

SWK 206 **3 Credits**
INTRODUCTION TO SOCIAL WORK METHODS (3+0)
An introduction to client centered social work practice and the profession of social work including knowledge and skill base for effective practice. Theory and practice in conducting a social work interview will be covered along with principles of problem identification, goal setting and contracting for services. Diverse influences such as cultural, gender, ethnicity will be identified. Prerequisite: SWK/SOC 106

SWK 305 **3 Credits**
SOCIAL WELFARE: PROGRAMS AND SERVICES (3+0)
Social welfare as a basic institution in contemporary society. Analysis of the structure and function of current social welfare programs and the role of social work within those systems will be addressed. Prerequisite: SOC/SWK 106. (BA-S)

SWK 306 **3 Credits**
SOCIAL WELFARE: POLICIES AND ISSUES (3+0)
The formulation of social welfare policy as the result of interacting social, political and economic factors. Emphasis is placed analyzing various current social welfare policies and on various methods of influencing policy development and change. Prerequisite: SWK 305 or permission of instructor.

SWK 310 **3 Credtis**
MENTAL HEALTH PROGRAMS AND SERVICES (3+0)
A broad overview of current mental health programs and service delivery systems and 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 342 **3 Credits**
HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT (3+0)
Identification and analysis of various theoretical frameworks for understanding human behavior with emphasis on interaction between the individual and his/her social environment. Developmental stages and tasks will be viewed in the context of social systems and societal institutions with focus on the diverse influences impacting human growth and change. Prerequisite: Anth 200 or consent of instructor. (BA-S)

SWK 343 **3 Credtis**
HUMAN BEHAVIOR: DIVERSITY, DISCRIMINATION & SERVICE DELIVERY (3+0)
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. Organizational structures and service delivery systems will be analyzed for their effectiveness in responding to human diversity. Prerequisite: SWK 342 or permission of instructor.

SWK 361-A **3 Credits**
SOCIAL WORK METHODS I (3+0)
Beginning social work methods with focus on client-centered problem solving, values and ethics, selected theory and knowledge base for professional social work practice, diversity of client systems and professional roles and relationships. Permission of instructor. TAKE CURRENTLY WITH SWK 361-B. (BA-S).

SWK 361-B **3 Credits**
SOCIAL WORK PRACTICE I (0+9)
Beginning social work practice in which concepts and knowledge acquired in SWK 361-A are applied to client-centered problem solving. The student completes 9 hours of field work each week in an approved agency under the supervision of a field instructor appointed by the University. A bi-monthly field work seminar is also required. Permission of instructor. (BA-S).

SWK 362-A **3 Credits**
SOCIAL WORK METHODS II (3+0)
Expansion of knowledge and skill acquired in SWK 361-A with particular emphasis on client-centered problem solving with individuals, families and small groups. Selected practice theory applicable to social work with these system sizes is covered. Prerequisites: SWK 361-A or permission of instructor. TAKE CONCURRENTLY WITH SWK 362-B.

SWK 362-B **3 Credits**
SOCIAL WORK PRACTICE II (0+9)
Expanison of social work practice in which concepts, theories and knowledge acquired in SWK 362-A are applied to client-centered problem solving with individuals, families and smalll groups. The student completes 8 hours of field work each week in an approved agency under the supervision of a field instructor appointed by the University. A bi-monthly seminar is also required. Prerequisite: SWK 361-B or permission of instructor.

SWK 407/Soc 407 **3 Credits**
FORMAL ORGANIZATIONS (3+0)
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. Prerequisite: SOC 101

SWK 409 **3 Credits**
INTRODUCTION TO CHILD WELFARE (3+0)
Survey of public and private Child Welfare Services from a historical perspective and examination of current Child Welfare Services available to children and their families. National standards for services are reviewed along with policy development, legislation, funding and research related to programs and service delivery. Services such as in-home support, premanency planning, child protection, foster care, adoption and residential care will be addressed.

SWK 410 **3 Credits**
CHILD PLACEMENT: PREVENTION AND PRACTICE
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 wil be discussed, with emphasis on permanency planning and matching children and parental needs with programs and services. Prerequisite SWK 409 or permission of instructor. (BA-S)

SWK 444 **3 Credits**
CLIENTS OF SOCIAL WORK, HEALTH AND HEALTH CARE SYSTEMS (3+0)
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. (BA-S)

SWK 461-A **3 Credits**
SOCIAL WORK METHODS III (3+0)
Advanced social work methods with emphasis on client-centered problem solving in professional practice with organizations, communities and consummer groups. Selected theory applicable to professional practice with these client systems is covered. Prerequisites: SWK 362-A or permission of instructor. TAKE CONCURRENTLY WITH SWK 461-B

SWK 461-B **3 Credits**
SOCIAL WORK PRACTICE III (0+9)
Advanced social work practice in which concepts, theory and knowledge acquired in SWK 461-B are applied to client-centered problem solving with organizations, communities and consummer groups. The student completes 9 hours of field work each week in an approved agency under the supervision of a field instructor appointed by the University. A bi-monthly seminar is also required. Prerequisite: SWK 362-B or permission of instructor.

SWK 462-A **3 Credits**

SOCIAL WORK METHODS IV (3+0)

Expaniosn, selected and integraton of knowlege and skills for use with varying client system sizes. Emphasis is placed on responding to the intricacies of the change process. Additional practice theory from social work and related disciplines is studied in preparation for generalist social work practice. Prerequisite: SWK 461 or permission of instructor. TAKE CONCURRENTLY WITH SWK 462-B.

SWK 462-B **3 Credits**

SOCIAL WORK PRACTICE IV (0+9)

Differential use of social work values, knowledge and skills in client-centered problem generalist social work practive. The student completes 8 hours of field work each week in an approved agency under the supervision of a field instructor appointed by the University. A bi-monthly seminar is also required. Prerequisite: SWK 461 or permission of instructor.

Sociology

Sociology is the study of social systems — the way they are formed, sustained, and changed. It is concerned with processes which shape man's language, world view and behavior. The curriculum in sociology is meant to provide the student the following: a contribution to liberal education, preparation for graduate training in sociology, and general preparation for the helping services.

BACHELOR OF ARTS
BACHELOR OF SCIENCE

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.
2. Complete a total of at least 38 credits in Sociology including the following courses.

	Credits
Soc 101 — Introduction to Sociology	3
Soc 201 — Social Problems	3
Soc 202 — Social Structure	3
Soc 251 — Introduction to Statistics or AS 300 Elementary Statistics	3
Soc 275 — Social Psychology	3
Soc 309 — Urban Sociology	3
Soc 352 — Social Science Methods	3
Soc 363 — Social Stratification	3
Soc 402 — Theories of Sociology	3
Soc 405 — Social Change	3
Soc 492 — Senior Sociology Seminar	3

3. During the junior year, Sociology majors will select two tracks within the discipline with two courses, including one required course, taken from each of the chosen tracks. Sociology track electives include the following three credit courses:

(a) Social Change and Community Development:

Required:
Soc 405 — Social Change

Elective:
Econ 337 — Economic Development
Psy 445 — Behavior Modification
SWK 305 — Social Welfare Programs and Services
SWK 306 — Social Welfare: Policies and Issues
SWK 310 — Mental Health Programs and Services
Soc 222 — Community

(b) Family and Life Cycles:

Required:
Soc 242 — The Family

Elective:
Psy 245 — Child Development
Psy 458 — Advanced Child Development
SWK 342 — Human Behavior in the Social Environment
SWK 409 — Introduction to Child Welfare
SWK 410 — Child Placement: Prevention and Practice
Soc 310 — Sociology of Aging

(c) Deviant Behavior:

Required:
Soc 343 — Sociology of Deviant Behavior

Elective:
Just/Soc 203 — Juvenile Delinquency
Just 210 — Principles of Correction
Just 251 — Criminology
Just 350 — Contemporary Correctional Issues
Just 455 — Rural Justice
Psy 265 — Abnormal Psychology

(d) Minorities and Ethnic Groups:

Required:
Soc 408 — American Minority Groups

Elective:
Anth 200 — Natives of Alaska
Anth 326 — Arctic Ethnology
Anth 335 — Native North Americans
Ed 480 — Education of Culturally Different Youth
SWK 343 — Human Behavior

(e) Formal Organizations:

Required:
Soc/SWK 407 — Formal Organizations

Elective:
BA/PS 480 — Organizational Theory

(f) Social Psychology:

Required:
Soc/Psy 275 — Social Psychology

Elective:
Anth/Soc 324 — Culture and Personality
Psy 368 — Personality Theories

(g) Demography and Ecology:

Required:
Soc 406 — Human Ecology

Elective:
Soc 307 — Population Problems
Soc 404 — Environmental Sociology

(h) Practicum in Sociology:

Required: Independent study courses (Soc 487 and 488) covering two semesters during which students perform practicum or field research project, including the presentation of a senior thesis.

MINOR IN SOCIOLOGY

A minor in Sociology requires 18 credits in Sociology beyond Soc 101, and must include as required courses Soc 101, Soc 202, Soc 352 and Soc 402. A minimum of three of

these courses must be taken at the upper-division level.

Courses in Sociology

Soc 101 **3 Credits**
INTRODUCTION TO SOCIOLOGY (3+0)
An introduction to the science of man as a social animal, emphasizing the social processes which give rise to and shape man's language, experiences, perception, meaning and behavior. Multiple frameworks are used in understanding and predicting human behavior. (BA-S)

Soc 106/SWK 106 **3 Credits**
INTRODUCTION TO SOCIAL WELFARE (3+0)
Functions and historical development of modern social welfare and the profession of social work. Designed primarily to assist in the understanding of social welfare problems and services. Prerequisite: Soc 101. (BA-S)

Soc 201 **3 Credits**
SOCIAL PROBLEMS (3+0)
Problems of contemporary society; analysis of factors giving rise to them, and an attempt to explore remedial strategies. (BA-S)

Soc 202 **3 Credits**
SOCIAL STRUCTURE (3+0)
An examination of attempts by human societies to regulate and organize behavior; a study of the variety and nature of organizational forms. Prerequisite: Soc 101. (BA-S)

Soc 203/Just 203 **3 Credits**
JUVENILE DELINQUENCY (3+0)
A conceptual approach to deviant and delinquent behavior, contributing social problems, adolescence as a subculture with emphasis on the juvenile code and treatment procedure. Prerequisites: Soc 101 or permission of instructor. (BA-S)

Soc 221/PS 221 **3 Credits**
INTRODUCTION TO POLITICAL SOCIOLOGY (3+0)
An introduction to the social nature of politics and to the nature and distribution of power in society. An examination of how social institutions are engaged in the political processes of different societies and of the complex relationships existing between social and political change. (BA-S)

Soc 222 **3 Credits**
COMMUNITY (3+0)
A conceptual approach to group structure and stratification in society; basic patterns of social organization; and relationships of individuals and groups that sustain form, special interest groups, and life styles in a community. Prerequisite: Soc 101. (BA-S)

Soc 242 **3 Credits**
THE FAMILY (3+0)
A study of the contemporary patterns of marriage and family relationships in the US. A social psychological approach to factors associated with the life cycle of the family, including mate selection, marital interaction and adjustments, parent-child relationship, and the later years of married life. Prerequisite: Soc 101 recommended. (BA-S)

Soc 251 **3 Credits**
INTRODUCTORY STATISTICS FOR BEHAVIORAL SCIENCES (3+0)
Introduction to the basic concepts, purposes, and procedures of statistics. Areas of study include: data reduction; descriptive measures for group data; inferential measures for single groups and between group means; probability; measures of association; and correlation and regression analysis.

Soc 275/Psy 275 **3 Credits**
SOCIAL PSYCHOLOGY (3+0)
An analysis of inter-group relationships in terms of process and value orientation, their influences on the personality, and the various aspects of collective behavior on group and person. Prerequisites: Psy 111 and/or Soc 101. (BA-S)

Soc 307 **3 Credits**
POPULATION PROBLEMS (3+0)
The demographic structure of population and its implications. Prerequisite: Soc 101. (BA-S)

Soc 309 **3 Credits**
URBAN SOCIOLOGY (3+0)
Growth and development of urban communities with reference to migration patterns, differentiation of functions, ecological patterns of land use, social control, secondary group associations of metropolitan magnitude. Prerequisite: Soc 101. (BA-S)

Soc 310 **3 Credits**
SOCIOLOGY OF AGING (3+0)
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. Prerequisite: Soc 101. (BA-S)

Soc 324/Anth 324 **3 Credits**
CULTURE AND PERSONALITY (3+0)
Examination of the relationship between culture, social institutions and psychological variables on a cross-cultured basis. Anth 202 or Soc 101 recommended as prerequisites. (BA-S)

Soc 343 **3 Credits**
SOCIOLOGY OF DEVIANT BEHAVIOR (3+0)
A study of the social etiology of deviant behavior, both criminal and noncriminal with an emphasis on the nature of group interaction, and an examination of the institutions involved. Prerequisite: Soc 101. (BA-S)

Soc 347 **3 Credits**
SOCIOLOGY OF RELIGION (3+0)
The study of the historical development and functional significance of religion, values, and forms of institutions, groups and reform movements and their influence on social organization. Prerequisite: Soc 101. (BA-S)

Soc 352/PS 352 **3 Credits**
SOCIAL SCIENCE METHODS (3+0)
Introductory research methods, including definition of research problems, development of hypotheses, experimental and non-experimental research design, sampling, data collection and analysis. Students are expected to participate in various field exercises and to develop critical capacities for evaluating research studies. Prerequisite: PS 102 (BA-S)

Soc 363 **3 Credits**
SOCIAL STRATIFICATION (3+0)
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. Prerequisite: Soc 101. (BA-S)

Soc 402 **3 Credits**
THEORIES OF SOCIOLOGY (3+0)
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. Prerequisites: Psy 275 or Soc 275. (BA-S)

Soc 404 **3 Credits**
ENVIRONMENTAL SOCIOLOGY (3+0)
A critical analysis of the interaction 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. (BA-S)

Soc 405 **3 Credits**
SOCIAL CHANGE (3+0)
Social change in long-time perspective, with emphasis on social movements and the influence of technology. Prerequisite: Soc 101. (BA-S)

Soc 406 **3 Credits**
HUMAN ECOLOGY (3+0)
Modern industrial and centralized society; institutional structure of community life — political, economic, religious with reference to internal structure and external sources of control and domination, with some emphasis on the nature of ruralism. Prerequisite: Soc 101. (BA-S)

Soc 407/SWK 407 **3 Credits**
FORMAL ORGANIZATIONS (3+0)
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 possibilites of the future. Particualr attention is given to Social Welfare organizations. Prerequisites: Soc 101.

Soc 408 **3 Credits**
AMERICAN MINORITY GROUPS (3+0)
Present status of ethnic, religious and national minorities and their changing sociological, economic, and political status. (BA-S)

Soc 487 **3 Credits**
SOCIOLOGY PRACTICUM
Independent study 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 completes a minimum of 6 hours per 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. Prerequisites: junior or senior standing and prior permission of instructor. (BA-S)

Soc 488 **3 Credits**
SOCIOLOGY PRACTICUM
Continuation of Soc 487 in which the student will be expected to complete a formal report on the field research or community action/agency project in which he or she is engaged. Students will continue to attend a weekly seminar while working under the guidance of a single faculty member and potential field supervisor. A minimum of 6 hours per week in the field is required of the student throughout the semester. Prerequisites: junior or senior standing and prior permission of instructor. (BA-S)

Spanish

Span 101 **5 Credits**

Span 102 **5 Credits**
ELEMENTARY SPANISH I AND II (5+0) (5+0)
Introduction to the Spanish language. Vocabulary and grammar. Practice in understanding, speaking, reading and writing Spanish. Oral practice is emphasized. Prerequisite for 102: Span 101. (BA-H)

Span 201 **3 Credits**

Span 202 **3 Credits**
INTERMEDIATE SPANISH I and II
This course reviews the fundamental structures of the Spanish language through the study of its grammar and vocabulary. The study of thematic vocabularies would prepare the way for conversational discussions within the framework of grammatical structures. Dictation of short excerpts, reading of papers and contemporary magazines, together with short compositions or resumes of the readings, would give the student fluency in reading, writing, speaking and hearing the language correctly. Prerequisites: Span 101 and 202 or equivalent besides Span 101 and 102. Span 201 is required for Span 202. (BA-H)

Span 340 **3 Credits**

Span 341 **3 Credits**
STUDIES IN SPANISH LITERATURE I and II
Survey of modern and contemporary Spanish literature from the 1700's to the mid 1950's. Focus is on the literary spirit that flourished in the various genres of drama, novel, essay, short story, and lyrical poetry. Prerequisites: Basic knowledge of the language and instructor's permission. (BA-H)

Span 370 **3 Credits**
STUDIES IN LATIN-AMERICAN LITERATURE I (3+0)
Survey of the main Latin-American literary trends from the post-independence Romantic period of the nineteenth century to the "boom" of the contemporary novel. The concentration is on literature as the artistic expression of the character and human values of Latin America. The course is conducted in Spanish. Prerequisites: Basic reading knowledge of the langauge and permission of instructor. (BA-H)

Span 371 **3 Credits**
STUDIES IN LATIN AMERICAN LITERATURE II (3+0)
Survey of the major Latin-American authors and their corresponding literary movements through the examination of representative selections in poetry and prose. Stress is on the cultural aspects of the social, economic and political structures of the Spanish speaking worlds. Conducted in Spanish. Offered bi-annually. Prerequisite: Signature of Instructor or 3 years of university Spanish.

Speech

Spch 111 **3 Credits**
FUNDAMENTALS OF ORAL COMMUNICATION
An introduction to the processes of interpersonal and group communication patterns, focusing on the effective elements of language and culture. Work is based on specific structural technique combined with creative delivery methods and the essentials of audience analysis, audience response and constructive listening.

Spch 241 **3 Credits**
PUBLIC SPEAKING I
Theory and practice of exposition and persuasion and platform speaking situations. Training in the selection, organization and effective presentation of material to large audiences in a variety of situations.

Spch 346 **3 Credits**
ORAL INTERPRETATION
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 that literature. Prerequisites: Engl 111, 211 or 311 and Spch 111.

Theater

BACHELOR OF ARTS

1. Complete the General University Requirements, and the General College of Arts and Sciences Degree Requirements on pp. 45-54.
2. Complete the major requirements as follows:
   - Thr 111 — Introduction to Theater 3
   - Thr 121 — Acting I 3
   - Thr 141 — Stagecraft I 3
   - Thr 221 — Acting II 3
   - Thr 243 — Scenery and Lighting Design 3
   - Thr 257 — Costume Design and Construction I 3
   - Thr 311/312 — Representative Plays I or II 3
   - Thr 331 — Directing I 3
   - Thr 411 History of Theater I 3
   - Thr 412 History of Theater II 3

   Choose one of the following:
   - Thr 321 — Acting III 3
   - Thr 343 — Scene Design 3
   - Thr 357 — Costume Design and Construction II 3
   - Thr 435 — Directing II 3
   - Electives 7

   Total credits 40
3. For a **minor in Theater,** students need to complete the following minimum requirements:
   - Thr 111 — Introduction to the Theater 3
   - Thr 121 — Acting I 3
   - Thr 141 — Stagecraft I 3
   - Thr 311/312 — Representative Plays I or II 3
   - Thr 411/412 — History of Theater I or II 3
   - Electives 3

   Total credits 18

Courses in Theater

Thr 101 **1-3 V Credits**
THEATER PRACTICUM (0+6)
Participation in Drama Workshop or theater productions as performer or technical staff member.

Thr 111 **3 Credits**
INTRODUCTION TO THE THEATER (3+0)
Survey of theater with emphasis on dramatic form (BA-H).

Thr 121 **3 Credits**
ACTING I (3+0)
Instruction in this course consists of work in three closely related areas: movement, voice production/speech and basic acting techniques. The study of movement begins with exploratory exercises; the study of speech covers voice building and breath control, and how these techniques apply to basic acting.

Thr 123 **1 Credit**
BEGINNING MODERN JAZZ TECHNIQUE(0+3)
Basic techniques of line, placement, relationhip to space, and basic jazz dance vocabulary.

Thr 124 **1 Credit**
DANCE FOR THE MUSICAL THEATER(0+3)
Basic stage dance performance techniques. Styles of dance from early 1900's to the present.

Thr 141 **3 Credits**
STAGECRAFT I (1+4)
The beginning course in technical theater. Materials of scene construction painting and their use.

Thr 151 **2 Credits**
MAKE-UP FOR THE THEATER (1+2)
Theatrical make-up for actors, teachers, directors and other theater workers; make-up materials and use; straight and character make-up; illusory and plastic relief; national types; influence of lighting.

Thr 201 **1-3 V Credits**
THEATER PRACTICUM (0+6)
Sophomore course in Practicum. Participation in Drama Workshop or theater productions as performer or technical staff member.

Thr 221 **3 Credits**
ACTING II (3+0)
Characterization techniques, emphasis on physical development for the actor through the study of bio-mechanics. Prerequisite: Thr 121.

Thr 243 **3 Credits**
SCENERY AND LIGHTING DESIGN (4+1)
Fundamental principles of design for the stage, including drafting, rendering, theory and practice. Prerequisite: Thr 141.

Thr 257 **3 Credits**
COSTUME DESIGN AND CONSTRUCTION I (1+4)
Basic principles of fabric selection and construction techniques for stage costumes. Fundamentals of costume design with emphasis on beginning technique and theory of design.

Thr 271 **3 Credits**
THEATER MANAGEMENT(3+0)
Introduction to the economic and administrative aspects of theater, especially as they apply to professional, community and educational theater.

Thr 301 **1-3 V Credits**
THEATER PRACTICUM (0+6)
Junior course in Practicum. Participation in Drama Workshop or theater productions as performer or technical staff member.

Thr 311 **3 Credits**
REPRESENTATIVE PLAYS I (3+0)
A survey course of dramatic literature from Greek drama to 1800. Emphasis is placed upon the playwrights' work and relationship to the production of these plays in their own time and in today's theater. Prerequisite: English 111 and Junior standing. (BA-H)

Thr 312 **3 Credits**
REPRESENTATIVE PLAYS II (3+0)
A survey of dramatic literature from 1800 to the present. Emphasis is placed upon the playwrights' work and relationship to the production of these plays in their own time and in today's theater. Prerequisites: English 111 and Junior standing. (BA-H)

Thr 321 **3 Credits**
ACTING III (3+0)
Intermediate techniques in characterization, script analysis, and their application to scene study. Prerequisite: Thr 221.

Thr 325 **3 Credits**
THEATER SPEECH (2+2)
Vocal techniques for actors. Standard stage diction and foreign dialects.

Thr 331 **3 Credits**
DIRECTING I (1+4)
Direction of short plays for drama lab productions. Prerequisite: Thr 221.

Thr 341 **3 Credits**
STAGECRAFT II (1+4)
Continuation of Thr 141. Course emphasis is on 3-D scenery, plastics, steel, other new materials and use for the stage. Prerequisite: Thr 141.

Thr 343 **3 Credits**
SCENE DESIGN (1+4)
A continuation of Thr 243, concentration on use of new techniques, detail drawing for stage and television. This is an advanced course to teach the student the more complex techniques of scene design. Design theory is coupled with advanced drafting and rendering techniques to facilitate the student's completion of a unique, versatile and artistic stage set. Prerequisite: Thr 243.

Thr 347 **3 Credits**
LIGHTING DESIGN (1+4)
Continuation of Thr 243, emphasis is on theory, light plots and practical application of theory. New developments in instruments, equipment and lighting theory. The class offers higher skill in lighting design and more complex theory, which gives the student new and more progressive tools to use in designing lighting for the theater. Prerequisite: Thr 243.

Thr 357 **3 Credits**
COSTUME DESIGN AND CONSTRUCTION II (1+4)
Advanced work in costume design and construction. This course is a continuation of Thr 257. Prerequisites: Thr 257.

Thr 401 **1-3 V Credits**
THEATER PRACTICUM (0+6)
Senior course in Practicum. Participation in Drama Workshop or theater productions as performer or technical staff member.

Thr 411 **3 Credits**
HISTORY OF THE THEATER I (3+0)
Study of theater history from Greek to 1800 period. The history and the influence of different cultures, traditions and technologies on the development of the theater as a social institution. Prerequisites: Junior or Senior standing and completion of written communication General College Requirements. (BA-H)

Thr 412 **3 Credits**
HISTORY OF THE THEATER II (3+0)
Continuation of Thr 411. Theater history from 1800 to Modern. Prerequisites: Junior or Senior standing and completion of written communication General College Requirements. (BA-H)

Thr 413 **3 Credits**
DRAMATIC THEORY & CRITICISM (3+0)
Study of Theories and criticisms of drama and theatrical art from Aristotle to the present. (BA-H)

Thr 421 **3 Credits**
ACTING IV (0+6)
Advanced acting techniques, emphasis on scenes from Greek and Elizabethan plays; their analysis, study of characterization and performance techniques. Prerequisite: Thr 321.

Thr 435 **3 Credits**
DIRECTING II (0+6)
Advanced directional analysis of a major dramatic work and public presentation of a play. Prerequisite: Thr 331.

Thr 445 **3 Credits**
ADVANCED THEATER PRODUCTION (0+6)
Advanced technical theater course with emphasis as selected by student in scenery design, lighting, stagecraft, or costume. Prerequisite: Junior level course in area of specialization.

Thr 448 **3 Credits**
SCENE PAINTING (1+4)
Techniques, styles and method of painting scenery for the theater. Prerequisite: Thr 141 or permission of instructor.

Thr 449 **3 Credits**
THEATER ARCHITECTURE AND DESIGN (3+0)
Fundamental principles of designing, constructing and equipping the modern theater or auditorium. Prerequisite: Senior standing or permission of instructor.

Thr 480 **5 to 15 Credits**
THEATER INTERNSHIP (0+25-40)
Advanced theater production course with emphasis as selected by student in directing, scenery and lighting, or costume design and construction. Prerequisite: Junior level course in area of specialization. Limitation: Only one internship may apply toward graduation (or a total of internship activitiy not to exceed 15 credits).

SCHOOL OF BUSINESS AND PUBLIC AFFAIRS

Faculty

Dean: Bradford H. Tuck

Accounting

Professor: Harold Nix
Associate Professors: Richard Maschmeyer, Henry Wichmann
Assistant Professor: Michael De Celles

Business Administration

Professors: Omer Carey, Hayden Green, Robert McWilliams
Associate Professors: Vern Hauck, Donald Marx, Earl Naumann
Adjunct Associate Professor: Dean Olson

Economics

Professor: Bradford H. Tuck
Associate Professor: P. J. Hill
Assistant Professor: Lee Husky
Adjunct Assistant Professor: Dona K. Lehr

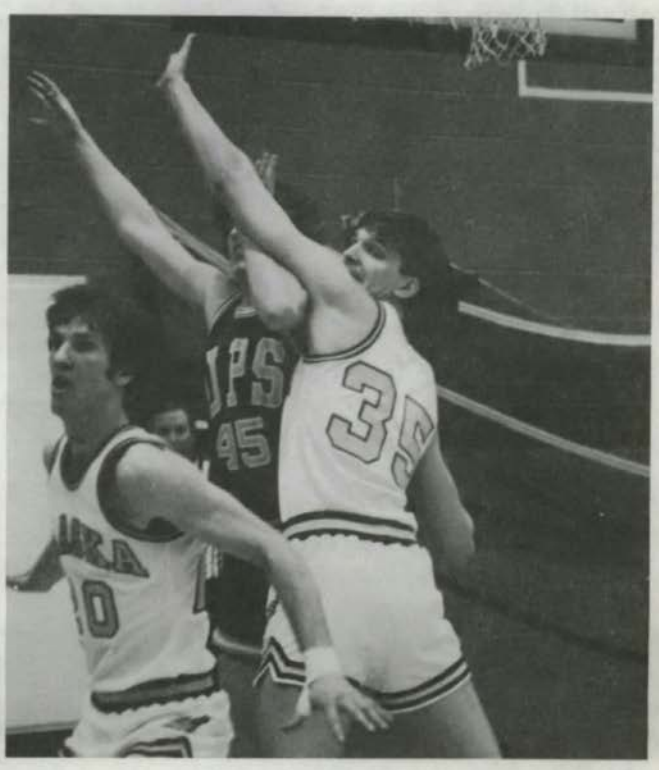
Planning

Professor: Lidia Selkregg

Public Administration

Professors: Richard L. Ender, Garth N. Jones
Associate Professor: John Choon Kim
Assistant Professor: Steven Aufrecht

The full time faculty is supplemented by part-time lecturers from business and government who bring realism and a wealth of experience into the classroom.



School of Business and Public Affairs

The School of Business and Public Affairs is located in the State's commercial, financial and cultural center, hub of international travel and trade. The proximity of the University to the city center allows the School of Business and Public Affairs faculty and students to work closely with business organizations and governmental units. Case studies, research and off-campus education are facilitated by the willingness of the community to assist faculty and students in studying business and governmental institutions and activities.

Undergraduate Degrees:

Bachelor of Business Administration
- Accounting
- Economics
- Finance
- Management
- Marketing
- Real Estate

Bachelor of Arts
- Economics

Graduate Degrees:

Master of Business Administration
Master of Public Administration
Master of Science
- *Planning*

Applications for admission to graduate study will be accepted on a continuous basis in the School of Business and Public Affairs.

Certificate Programs

- Planning

English Competence

The School of Business and Public Affairs requires that all degree candidates demonstrate competence in English. Competence may be judged by student written coursework or by examination.

Business Administration

BACHELOR OF BUSINESS ADMINISTRATION

The Bachelor of Business Administration (BBA) is a professional degree offered through the School of Business and Public Affairs. 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 six majors — Accounting, Economics, Finance, Management, Marketing, and Real Estate — 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 six major areas of concentration.

DEGREE REQUIREMENTS

To receive the BBA degree a student must satisfy all the University requirements for the baccalaureate degree as described in the paragraphs that follow. (See page 45-47 General Education Degree Requirements)

The minimum number of credits which must be earned, including those accepted by transfer, is 130. At least 60 of these must be at the upper division level. No more than 78 credits in accounting, business, and economics may be applied to the BBA degree.

The core requirements listed below and the major requirements in one of the six majors as listed below must be completed with a grade-point average of at least 2.0 (C). In addition certain lower division prerequisite courses and restrictions on the acceptability of general education requirement courses are implicit in the list that follows. In order to assure adequate preparation and academic maturity for reaping the greatest possible benefit from upper division course work and to facilitate timely completion of the program with a minimum of scheduling conflicts, the student is strongly encouraged to complete all of these courses before registering for any upper division SBPA courses.

	Credits
Arts	3
Humanities	6
Spch 111 Fundamentals of Oral Communication	3
Engl 111 Methods of Written Communication	3
**Engl 211 or 213 Intermediate Exposition	3
BA 110 Computer Concepts in Business	3
Math 270 Applied Finite Mathematics	3
Math 272 Calculus for the Managerial Sci	3
Econ 201 Introductory Macroeconomics	3
Econ 202 Introductory Microeconomics	3
Acct 201 Principles of Financial Accounting	4

Acct 202 Principles of Managerial Accounting 3
(Accounting majors take Acct 260 Intermediate Accounting instead of Acct 202)
*Natural Science Electives 7
*Social Science (Anth, Soc, or Psych) 6

*For a list of acceptable courses see the GENERAL EDUCATION DEGREE REQUIREMENTS section, page 45-47.

If the student does not receive a grade of A or B in Engl 211 or 213, he/she must pass one additional English exposition course at the intermediate or advanced level.

CORE REQUIREMENTS

	Credits
BA 325 — Financial Management	3
BA 331 — Business Law I	3
BA 335 — Management Principles and Practices	3
BA 343 — Principles of Marketing	3
BA 373 — Elementary Statistics	3
BA 377 — Operations Management	3
BA 462 — Administrative Policy	3
BA 488 — Social Issues in Business	3

Accounting Major Requirements

	Credits
Acct 301 — Intermediate Accounting II	3
Acct 302 — Intermediate Accounting III	3
Acct 310 — Income Tax	3
Acct 342 — Managerial Cost Accounting	3
Acct 401 — Advanced Accounting	3
Acct 404 — Advanced Cost Accounting and Controllership	3
Acct 452 — Auditing	3
BA 332 — Business Law II	3
Upper-Division Economics Electives	6
Upper-Division Electives	6

Economics Major Requirements

	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
Upper-Division Electives	12

Finance Major Requirements

	Credits
Acct 260 — Intermediate Accounting I	3
Acct 301 — Intermediate Accounting II	3
Acct 302 — Intermediate Accounting III	3
BA 425 — Adv. Corp. Financial Problems	3
BA 426 — Financial Markets & Instit.	3
BA 450 — Investment Management	3
Econ 350 — Money and Banking	3
Econ 351 — Public Finance	3
Econ 429 — Business Forecasting	3
Upper-Division Electives	9

Management Major Requirements

Business Management Emphasis:

	Credits
BA 359 Regulation of Industry	3
BA 361 Personnel Management	3
BA 376 Management Information Systems	3
BA 461 Labor Management Relations	3
BA 480 Organizational Theory and Behavior	3
BA 489 Corporate Management and Planning	3
Econ 429 Business Forecasting	3
Upper-Division Electives	15

Management Information Systems Emphasis:

	Credits
CS 102 Survey of Programming Languages	3
CS 108 Introduction to COBOL	3
CS 208 Advanced COBOL	3
CS 210 Software and Hardware Concepts	3
CS 315 Systems Analysis Methods	3
CS 316 Structured Systems Analysis and Design	3
CS 360 Database Program Development	3
CS 414 Information System Planning and Management	3
CS 470 Software Development Project	3
Acct 316 Accounting Information Systems	3
Econ 429 Business Forecasting	3
Upper-Division Electives	15

Marketing Major Requirements

	Credits
BA 310 — Consumer Behavior	3
BA 327 — Product Promotion Strategies	3
BA 379 — Inter. Marketing Mgmt.	3
BA 441 — Marketing Problems	3
BA 445 — Marketing Research	3
BA 480 — Organizational Theory and Behav.	3
Econ 429 — Business Forecasting	3
Upper-Division Electives	15

Real Estate Major Requirements

	Credits
BA 306 — Real Estate Fundamentals	3
BA 316 — Real Estate Brokerage	3
BA 322 — Real Estate Law	3
BA 323 — Real Estate Appraising	3
BA 324 — Real Estate Financing	3
BA 410 — Real Estate Investment Analysis	3
BA 448 — Property Management	3
Upper-Division Electives	15

MINORS

Accounting

	Credits
Acct 201 — Principles of Financial Accounting	4
Acct 202 — Principles of Managerial Accounting	3
Upper-division credits in accounting	9
	16

Business

BA 325 — Financial Management	3
BA 335 — Mgmt. Principles and Practices	3

BA 343 — Principles of Marketing 3
BA 462 — Administrative Policy 3
BA 480 — Organizational Theory and Behav. 3
BA 489 — Corp. Mgmt. & Planning 3
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(Prerequisites for the above courses must be satisfied)

Real Estate

Any 15 credits in Real Estate at the 300 or 400 level.

Economics

BACHELOR OF ARTS

The Bachelor of Arts in Economics is designed to provide a broadly based liberal arts education.

1. Complete the General Degree Requirements for the BA degree as shown on page 45-54.
2. Complete major requirements as set forth below:

Credits

Econ 201 —Introductory Macroeconomics 3
Econ 202 — Introductory Microeconomics 3
Econ 321 — Intermediate Microeconomics 3
Econ 324 — Intermediate Macroeconomics 3
Econ 350 — Money and Banking 3
BA 373 — Elementary Statistics for Business and Economics 3
Econ 430 — Mathematics for Economists 3

Additional electives in Economics (from 300 and above) to total 30 semester hours. Math 272 or equivalent competency is required.

A minimum of 48 upper division credit hours is required.

MINOR

Econ 201, 202 and 12 credits of upper division Economic subjects to include Econ 321 and 324.

Master of Business Administration

1. This degree is designed for the individual who desires to pursue a professional career in management or one of its subfields. A minimum of 30 credit hours is required for this program. The basic program consists of three major course blocks:
   a. Core courses (21 credits)
   b. Elective Courses (6 credits)
   c. Administrative Policy Course BA 655 (3 credits)
2. Core Courses:

Credits

BA 602 — Applied Statistics 3
BA 610 — Organizational Theory and Behavior 3
BA 612 — Management Science 3
Econ 625 — Economics and Public Policy 3
Acct 650 — Management Accounting Seminar 3
BA 680 — Seminar in Finance 3
BA 630 — Seminar in Marketing 3
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3. Elective Courses:
   Elective courses must be approved by the student's graduate advisor.
4. In addition to satisfactorily completing the above 30 hours of course work, the student must pass a comprehensive examination. The comprehensive examination will be taken at the end of the student's program.
5. Students applying for admission (See pg. 25 Grad. Adm.) to the MBA program must have taken the Graduate Management Admission Test (GMAT — formerly ATGSB) and have scores submitted to the Office of Admissions and Records, together with certified transcripts from all colleges and universities attended. In general, the candidate should have a total of at least 950 points based on the formula: 200 times the overall GPA plus the GMAT score (GPA based on 4.0 system); a limited number of students who do not meet the above requirements may be considered for admission on an individual basis by presenting appropriate evidence of potential for graduate work. This may include relevant managerial experience or previous graduate study in other programs.
6. The content of the MBA core courses assumes an undergraduate business administration background or equivalent level of knowledge. A student entering the program is expected to have introductory-level knowledge of accounting, finance, marketing, management, micro and macroeconomics, statistics, quantitative analysis, business law and mathematics (calculus). A list of undergraduate courses which will satisfy deficiencies is available through the Graduate Program Director's office.
7. At the time of admission to the Master of Business Administration program, each student will be assigned a graduate advisor. The advisor will assist the student in developing a program, identifying deficiencies, and suggesting appropriate methods for correcting any deficiencies.
8. Upon approval of the student's advisor and by completing additional course work (minimum of 21 credit hours) an MBA student may receive both the MBA and MPA degrees.
9. Real Estate Emphasis:
   The MBA student may also elect an emphasis in real estate. The emphasis courses are:

   BA 644 Seminar in Real Estate Development
   PL 650 Comp. Planning & Applied Science
   Candidates selecting the real estate emphasis must satisfy additional program prerequisites (BA 323, 324, 410, 448). Real Estate emphasis candidates do not need to take any other MBA elective courses.
10. The above program description outlines *minimum* requirements. 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 appropriate preparation in order 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.

11. In order to facilitate the forecasting of MBA course enrollments, and to encourage candidates to be committed to completing their degree, a minimum of 9 semester credit hours per calendar year, commencing with their first term of enrollment, must be earned by the MBA candidate. The 9 semester credit hours may consist of either undergraduate prerequisite courses or graduate program courses. Failure to comply with the 9 credit minimum per calendar year will result in the student being dropped from the program.

Master of Public Administration

1. This degree is designed for the individual who wants to pursue a professional career in public administration. A minimum of 33 credit hours is required for this program. *The basic program consists of three major course blocks: (See pg. 25 Graduate Admission)
   a. Core courses (21 credits)
   b. Elective Courses (9 credits)
   c. Administrative Policy Seminar Course PADM 659 (3 credits) or thesis (6 credits)
   *Thesis option requires 36 credit hours
2. Core Courses:

	Credits
PAdm 601 — Public Administration in the Contemporary Society	3
PAdm 603 — Management Analysis	3
PAdm 604 — Research Methods in Administration	3
PAdm 610 — Organizational Theory and Behavior	3
PAdm 618 — Accountability, Law and the Administrative Process	3
Econ 625 — Economics and Public Policy	3
PAdm 628 — Administration of Financial Resources	3
	21

3. Elective Courses:
   Students must take 9 credit hours of electives. They may choose to specialize in a subject area. Elective courses must be approved by the student's graduate advisor.
4. In addition to satisfactory completion of the above 33 (or 36) credit hours to course work, the student must pass a comprehensive examination. The examination will be taken at the end of the student's program.
5. Students applying for admission to the MPA program must have taken the Graduate Records Examination (GRE) or the Graduate Management Admission Test (GMAT) and have scores submitted to the office of Admissions and Records, together with certified transcripts from all previous colleges and universities attended.
6. A student entering the MPA program is expected to have introductory-level knowledge of American government, statistics, micro and macro economics, organizational theory, behavior and accounting. Students deficient in one or more of these areas must make up these deficiencies by completing equivalent undergraduate courses.
7. At the time of admission to the Master of Public Administration program, each student will be assigned a graduate advisor. The advisor will assist the student in developing a program, identifying deficiencies, and suggesting appropriate methods for correcting these deficiencies.
8. Upon approval of the student's advisor and by completing additional course work (minimum of 21 credit hours) an MPA student may receive both the MPA and the MBA degrees.
9. If the thesis option is selected, the student will have a thesis committee appointed. The individual candidate's thesis proposal is subject to the approval of the candidate's thesis committee.
10. The above program description outlines *minimum* requirements. The faculty reserve the right, where warranted by an evaluation of a student's progress and apparent knowledge, to require additional course work or other appropriate preparation in order to insure that the degree recipient possesses adequate professional skills and capabilities.
11. In order to facilitate the forecasting of MPA course enrollments, and to encourage candidates to be committed to completing their degree, a minimum of 9 semester credit hours per calendar year, commencing with their first term of enrollment, must be earned by the MPA candidate. The 9 semester credit hours may consist of either undergraduate prerequisite courses or graduate program courses. Failure to comply with the 9 credit minimum per calendar year will result in the student being dropped from the program.

COOPERATIVE DOCTORAL PROGRAM IN PUBLIC ADMINISTRATION WITH UNIVERSITY OF SOUTHERN CALIFORNIA

In cooperation with the School of Public Administration of the University of Southern California, a doctoral program in public administration is available where part of the candidate's academic degree requirements may be completed in the University of Alaska, Anchorage School of Business and Public Affairs. PAdm 689 applies to this program, and is listed in the course descriptions section.

Further information about this cooperative doctoral program may be obtained from the School of Business and Public Affairs graduate program coordinator.

MASTER OF SCIENCE IN PLANNING

1. The primary objective of the planning degree program is to provide a graduate education which offers the required theory, methods, and experience for persons seeking entry into the field of regional and urban planning or other planning related fields. This degree is designed for the individual who after completion of

a Baccalaureate degree has become professionally involved, or intends to become involved, in physical, economic and social planning. The degree will provide theoretical knowledge and practical application in the planning process, and is designed to meet a broad range of urban and rural affairs and administration needs. The interdisciplinary content of the degree will make students aware of the interrelations between the physical, social, and economic factors necessary to formulate and implement sound planning decisions and will provide an interdisciplinary focus for dealing with complex problems of human settlement and the environment.

2. A baccalaureate degree is required for admission to the planning program. The student's educational background must show a balance between physical, social, and economic courses to ensure adequate performance at the graduate level. When a student's background is considered deficient, a requirement will be made either to take courses offered at the undergraduate level or to take a proficiency exam on the subject. (See pg. 25 Graduate Admission)
3. At the time of admission to the Master of Science in Planning program, each student will be assigned a graduate committee of three faculty members. The committee will assist during preparation of the thesis.
4. The Master of Science Degree in Planning degree requirements consist of:
   a. Core Requirements ..... 30 credit hours
   b. Mini-courses/seminars..... 6 credit hours
   c. Internship/special studies/practical experience..... 6 credit hours
   d. Thesis ..... 6 credit hours
5. Core Requirements

Students will take the following required courses (30 cr. hrs.)

	Credits
PAdm 628 — Administration of Financial Resources	3
PAdm 604 — Research Methods in Administration	3
Econ 626 — Economics for Planners	3
PAdm 634 — Resource Policy Administration	3
PI 650A — Comprehensive Planning and Applied Science	3
PI 650B — Community/Regional Planning	3
PI 650C — Community/Regional Planning	3
PI 661 — Social Environment of Planning	3
PI 662 — Legal Issues in Planning	3
PI 663 — Design Criteria and Cost Consideration in Planning	3
	—
	30

Mini-courses/Seminars:

Students will take 6 credits chosen from the following one unit mini-courses or others as developed (6 hours).

	Credits
Land Laws	1
Social Impact of Land Development	1
Land Economics	1
Citizen Organizations and Socio-Political Structures — Citizen Input	1
Urban Economics	1
Source of Program Funding and Preparation of Grant Proposals	1
Housing — Analysis of Needs, Availability, Design and Financing Cities in History — New Towns	1
Writing of Reports for Public and Administration Use — Research, Editing, Graphics and Photography	1

Internship/Special Studies/Practical Experience:

Specialization in specific areas may be obtained either 1) by credit acquired through internship in an approved planning agency, 2) by taking courses, as approved by the advisory committee, in fields offered by the graduate Schools of Business and Public Affairs, Arts and Sciences, or Engineering, or 3) by selecting independent studies with the advice of the graduate school staff (6 hours).

Practical experience will be obtained by student participation in the activities of citizen commissions existing within the local government and state and federal agencies (Planning and Zoning Commission; OEDP Committee; Planning Board; Coastal Zone Management Council; Public Forum; Community Councils; School Budget Advisory Committee, etc.).

Thesis:

Each student will undertake a major research effort resulting in the preparation of a thesis. The thesis topic will be from some area of community or regional planning. A three member faculty advisory committee will evaluate the adequacy of the thesis upon its completion. One faculty advisor will assist the student during development of the thesis (6 credit hours).

Each student must pass successfully an oral examination on the topic of the thesis and its preparation and defend proposed recommendations. Questions will also be asked on major planning areas covered.

Certificate Program

PLANNING CERTIFICATE

This certificate is intended to increase understanding of the planning function of individual employers in local, regional, state, and federal governments. Persons engaged in certain kinds of private industries associated with resource development and management will find it useful as well. It is especially designed to enhance the abilities of persons engaged in urban, regional, resource, and environmental planning and such related areas as architecture, landscape architecture, engineering, community and rural development, general public administration, and real estate.

The certificate is designed for professionals who desire to expand their knowledge in the fields of planning, applied sciences, programming and sched-

uling of capital improvements, in addition to acquiring or increasing knowledge of:

1. The physical, social, economic and political context in which planning takes place.
2. The complexity of the planning process of various state, federal and local agencies and departments.
3. The importance of citizen participation in the planning cycle.
4. Methods of evaluation of public needs and development of systems and schedules for delivery of services.
5. Knowledge of the administrative/management processes.

Persons admitted to this certificate program may pursue their work either within a graduate degree program or on a non-degree academic basis.

Application to the Professional Certificate Program in Planning will follow the same procedure as application to the Masters in Business and Public Administration program, except that graduate admission testing is not required.

Specific certificate requirements may be obtained from the School of Business and Public Affairs. Individual programs will be developed with the academic advisor.

Program Content and Standards

1. The candidate for the Planning certificate must have met the following prerequisites or show equivalent knowledge:
   a. Statistics; Public Administration; Economics; and Financial Administration. A list of specific courses to fulfill these prerequisites may be obtained from the candidate's graduate advisor.
2. For persons who meet the prerequisite, a *minimum* of 18 graduate semester credit hours of course work is required to receive a professional certificate in planning.
   a. *Planning Courses:* (12 semester credit hours)
      PI 650A — Comprehensive Planning and Applied Science
      PI 650B — Community/Regional Planning I
      PI 650C — Community/Regional Planning II
      Econ 626 — Economics for Planners
   b. Electives (6 credit hours) from the following:
      PAdm 604, 634, PL 661, 692
   c. Internship (3 credit hours)
      The requirement may be waived provided the student has acquired practical experience. If waived, the student must take an additional 3 semester hours of electives, from the following areas:
      (1) Natural Resources: (3 semester hours)
      PAdm 634 — Resource Policy Administration, or an equivalent course in the field of natural resources.
      (2) Research Methods: (3 semester hours)
      PAdm 604 — Research Methods in Administration.
      (3) Seminar — Topics in Planning (1 semester credit hour each)
      PI 692 — Various subjects dealing with planning processes, implementation, management of resources, etc. will be announced in schedules.
   d. Students wishing to receive *both* a Planning Certificate and a graduate degree (other than the Planning degree) must complete at least 6 credits of appropriate work beyond the minimum required for the degree alone.

Course Descriptions

Accounting

Acct 201 **4 Credits**
PRINCIPLES OF FINANCIAL ACCOUNTING (4+0)
An introduction to accounting concepts and principles. Preparation and analysis of financial reports as they relate to a sole proprietorship and corporation. (Equivalent to Acct 101 and 102. Credit will not be counted for both Acct 101/102 and Acct 201).

Acct 202 **3 Credits**
PRINCIPLES OF MANAGERIAL ACCOUNTING (3+0)
The course treats the following topics at a principles level: Analysis and use of financial statements; costs behavior as it relates to break-even analysis and decision costs; basic elements of cost accounting and control; budgeting and cash flow planning. Prerequisite: Acct. 201.

Acct 260 **3 Credits**
INTERMEDIATE ACCOUNTING I (3+0)
Accounting processes, theory, principles of financial statements with in depth study of present value, cash, marketable securities, receivables, and current liailities. Prerequisite: Acct 201 or equivalent.

Acct 301 **3 Credits**
INTERMEDIATE ACCOUNTING II (3+0)
Inventories, Property-Plant-Equipment, Intangible assets and accounting for stockholder equity. Prerequisite: Acct 260

Acct 302 **3 Credits**
INTERMEDIATE ACCOUNTING III (3+0)
Long-term investments, bonds payable, pension costs, leases, accounting changes and analysis of financial statements. Prerequisites: Acct 301

Acct 310 **3 Credits**
INCOME TAX (3+0)
A course designed for those who will practice tax (such as CPA's). Course content will be those aspects of Federal Income Tax Law pertaining to the computation of taxable income for individuals and sole proprietorship. Emphasis will be on theory, history and developing the ability to relate the various principles into tax planning and research. Prerequisite: Acct. 201, or permission of instructor.

Acct 316 **3 Credits**
ACCOUNTING INFORMATION SYSTEMS (3+0)
The design and analysis of accounting systems for business entities in various industries. Internal control for the business, data processing and its relationship to accounting systems examined. Prerequisite: Acct 201.

Acct 342 **3 Credits**
MANAGERIAL COST ACCOUNTING (3+0)
A cost accounting course with managerial emphasis that includes the principles and practice of product costing techniques. Accounting as a control device is studied by applying the concepts of standards, variance analysis and budgeting. The course also covers the use of cost data in decisions, including cost-volume-profit models, and relevant cost decisions. Prerequisite: Acct 201.

Acct 401 **3 Credits**
ADVANCED ACCOUNTING (3+0)
A study of accounting for partnerships, business conbinations, parent- subsidiary consolidated financial statements, and selected topics, such as branch accounting, foreign exchange accounting installment sales, consignment accounting, fiduciary accounting, fund accounting, joint-ventures, real estate and franchise accounting. Prerequisite: Acct 302.

Acct 402 **3 Credits**
ACCOUNTING FOR NOT-FOR-PROFIT ORGANIZATIONS (3+0)
This course covers the principles and practices of not-for-profit accounting for municipalities, school districts, hospitals, colleges, universities, and other non-profit entities in accordance with the latest pronouncements. Prerequisite: Acct 201 or permission of instructor.

Acct 403 **3 Credits**
ADVANCED TAXES (3+0)
A study of federal and state income taxes relating primarily to partnerships, trusts and corporations with emphasis on the preparation of tax returns, tax planning, and selected tax problems. Also, social security taxes, sales taxes, gift, and estate taxes. Prerequisite: Acct 310.

Acct 404 **3 Credits**
ADVANCED COST ACCOUNTING AND CONTROLLERSHIP (3+0)
A course designed to help the student interpret and apply complex cost data to specific management situations. The course will cover cost analysis for investment decisions, cost allocations, product costing using the process costing technique, and the presentation of cost data for management purposes. Emphasis is on application of data to management situations. Prerequisites: Acct 342.

Acct 406 **3 Credits**
PETROLEUM ACCOUNTING (3+0)
Designed to prepare individuals for the many entry level accounting positions which will be available due to the Alaska pipelines and related oil and gas production. Course covers accounting applicable to exploration and development costs, production, and disposition of product. Prerequisite: Acct 201.

Acct 452 **3 Credits**
AUDITING (3+0)
A study of the procedures for verification of financial data and the professional standards applicable to the auditors examination of financial statements and his expression of opinion relative to them. Prerequisite: Acct 302.

Acct 454 **3 Credits**
ACCOUNTING INTERNSHIP (3+0)
Work experience in an approved position with supervision and training in various phases of accounting. Prerequisites: advanced standing as an accounting major and permission of the head of the department.

Acct 462 **6 Credits**
CONTEMPORARY ACCOUNTING PROBLEMS (6+0)
A course designed to cover accounting, statistical and ethical topics either not covered or covered superficially in the program requirements leading to the BBA-Accounting degree, and to develop the additional proficiency necessary to meet entry level requirements for a career as a public accountant. Prerequisites: Advanced standing in accounting and permission of instructor.

Acct 480 **3 Credits**
ACCOUNTING THEORY (3+0)
This is a capstone course designed to help accounting students find relationships among the various procedures learned in other courses. The content will cover income definition and measuring problems, asset input valuations, asset value changes, and AICPA statements relating to theory. Emphasis is on helping the student to learn to identify a type of problem, relate it to basic principles that govern and to apply the principles to the specific problem at hand. Prerequisite: Acct. 302.

Acct 615 **3 Credits**
TAX PLANNING AND RESEARCH (3+0)
Tax planning for individuals, business organizations, estates, and trusts is explored by a study of the taxes which affect such plans. Special emphasis will be placed on planning for business organizations. Prerequisite: Acct 310, 403.

Acct 650 **3 Credits**
MANAGEMENT ACCOUNTING SEMINAR (3+0)
A basic graduate course for non-accounting majors. The subjects covered deal with the assumptions and concepts underlying financial statements, the analysis and uses of financial statements and the uses of cost accounting for decisions and control. Prerequisite: Acct 201 and 202.

Business Administration

BA 110 **3 Credits**
COMPUTER CONCEPTS IN BUSINESS (3+0)
An introductory course in computer concepts and programming designed to prepare the student to utilize a portion of the computer resources available at UAA. Topics include machine organization, program logic, flowcharting, programming, TSS and batch processing, and Honeywell series 6000/600 TSS library programs. Actual hands-on experience with the computer is obtained by designing, building and executing simple programs.

BA 151 **3 Credits**
INTRODUCTION TO BUSINESS (3+0)
Business organization, nature of major business functions, such as management, finance, accounting, marketing, personnel administration. The opportunities and requirements for professional business careers.

BA 306 **3 Credits**
REAL ESTATE FUNDAMENTALS (PRINCIPLES) (3+0)
Principles of real estate and urban land economics and governmental aspects of real property ownership and control.

BA 310 **3 Credits**
CONSUMER BEHAVIOR (3+0)
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 343 recommended.

BA 316 **3 Credits**
REAL ESTATE BROKERAGE (3+0)
This is a course in managing the real estate brokerage firm. Topics covered are real estate buyer behavior, market analysis, image development, market information systems, and marketing strategies. The course emphasises the management of personnel, compensation programs, and other management topics. Prerequisite: BA 306 or permission of instructor.

BA 322 **3 Credits**

REAL ESTATE LAW (3+0)

A practical course surveying the various kinds of deeds and conveyances, mortgages, liens, rentals, appraisals, and other transactions in the field of real estate and the law. Prerequisite: BA 306 or permission of instructor.

BA 323 **3 Credits**

REAL ESTATE APPRAISING (3+0)

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. Prerequisite: BA 306 or permission of instructor.

BA 324 **3 Credits**

REAL ESTATE FINANCING (3+0)

A comprehensive coverage of real estate financing. It begins with a discussion of methods to estimate the closing cost of a real estate transaction. The students learn to prorate taxes, interest and other impound account items and to calculate the true rate of interest where discount points are involved in a loan. This course covers instruments used in real estate financing, risk and return analysis, sources of real estate credit and government involvement in real estate financing. Prerequisite: BA 306 or permission of instructor.

BA 325 **3 Credits**

FINANCIAL MANAGEMENT (3+0)

Intensive analysis of financial planning and control. Emphasis on both sources of funds and management of funds. Prerequisite: Acct 201, 202, Econ 201, 202, and BA 373. Acct. majors take Acct. 260 instead of Acct 202.

BA 327 **3 Credits**

PRODUCT PROMOTION STRATEGIES (3+0)

Analysis of alternative persuasive communication strategies designed to promote consumer and/or industrial products or ideas. Topics include determination of communication objectives, selection of media, brand positioning, media buying, campaign implementation and measurement of promotion effectiveness. Prerequisite: BA 343 recommended.

BA 331/JUST 331 **3 Credits**

BUSINESS LAW I (3+0)

A survey of basic institutions, litigation, judicial process, dispute resolution and preventive law; substantive law of torts, agency, contracts and the uniform commercial code including sales, negotiable instruments and secured transactions.

BA 332/JUST 332 **3 Credits**

BUSINESS LAW II (3+0)

The law of business organizations, business crimes, employment, landlord-tenant, and real property.

BA 335 **3 Credits**

MANAGEMENT PRINCIPLES AND PRACTICES(3+0)

Examination of both the theory and techniques of the managerial process, with emphasis on the core functions of planning, organizing and controlling. Contributions of the major schools covered: behavioral, classical and management science. Selected management concepts and models studies within system constructs. Junior standing or permission of instructor.

BA 343 **3 Credits**

PRINCIPLES OF MARKETING (3+0)

Role of marketing in society and economy. The business firm as a marketing system, management of the firm's marketing effort. Prerequisites: Acct 201, 202, (Acct majors take Acct 260 instead of Acct 202), Econ 201 and 202.

BA 359 **3 Credits**

REGULATION OF INDUSTRY (3+0)

Effects of government regulation, economic policy and executive policy on private and public enterprise. Prerequisites: Econ 201 and 202 (BA-S)

BA 361 **3 Credits**

PERSONNEL MANAGEMENT (3+0)

Personnel practice in industry; analysis of labor-management problems; methods of administrations of recruiting, selecting, training, and compensating employees, labor laws and their application. Prerequisites: Econ 201, 202 and BA 335. (BA-S)

BA 373 **3 Credits**

ELEMENTARY STATISTICS for BUSINESS and ECONOMICS (3+0)

Descriptive statistics, probability, Bayesian inference, statistical inference. Prerequisites: Math 270 and Math 272 or equivalent.

BA 376 **3 Credits**

MANAGEMENT INFORMATION SYSTEMS (3+0)

Theory, analysis, and design of information systems for management planning and control. Prerequisites: Math 270 and 272 or permission of instructor.

BA 377 **3 Credits**

OPERATIONS MANAGEMENT (3+0)

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. Prerequisite: BA 373.

BA 379 **3 Credits**

INTERMEDIATE MARKETING MANAGEMENT (3+0)

Analysis of product, price, promotion and distribution decisions from a strategic marketing planning perspective. Emphasis is placed on marketing decision models applied to profit and non-profit organizations. Prerequisite: BA 343.

BA 410 **3 Credits**

REAL ESTATE INVESTMENT ANALYSIS (3+0)

An introductory overview so that the student may define investment risks and understand the benefits of cash flow, tax-sheltered income and proceeds of sales. An analysis of the risks and rewards of investing in the various types of real estate from vacant land, houses and small apartments to high rise apartments, offices and industrial buildings. A detailed description of the forms of investment, whether it be direct ownership, group ownership, real estate corporations or investment trusts. Prerequisite: BA 324 or BA 325.

BA 425 **3 Credits**

ADVANCED CORPORATE FINANCIAL PROBLEMS (3+0)

A consideration of corporate financial problems, planning and controls, and major functions performed by corporate financial managers. Prerequisite: BA 325.

BA 426 **3 Credits**

FINANCIAL MARKETS AND INSTITUTIONS (3+0)

An examination of the economics and performances of the financial markets. Financial institutions, capital markets and money markets are studied, including the international dimensions. Prerequisites: BA 325, Econ 350.

BA 432/PS 432/JPC 432 **3 Credits**

RESEARCH METHODS (3+0)

Course will include developing competence as a consumer of research as well as methodology and techniques of empirical research: scientific methods, design of research, sampling, use of statistics, methods of data collection and analysis, including the use of computer

data processing. Students will design and carry out a complete basic empirical study. Prerequisite: BA 373 or equivalent.

BA 441 **3 Credits**
MARKETING PROBLEMS (3+0)
Approaches and problems of marketing decision-making under conditions of uncertainty. Planning and execution of a complete marketing program. The role of the marketplace development of marketing plans; product and product line decisions; pricing decisions; channels of distribution; personal selling and advertising. Prerequisite: BA 343 and BA 379 or permission of instructor.

BA 445 **3 Credits**
MARKETING RESEARCH (3+0)
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 formulation, exploratory research, research design, basic observational and sampling requirements, data analysis, interpretation, and reporting. Research projects conducted on actual marketing problems. Prerequisite: BA 343 or BA 373 or permission of instructor.

BA 448 **3 Credits**
PROPERTY MANAGEMENT (3+0)
This course introduces property management as a specialized activity. Emphasis is placed on managing residential, commercial, industrial, multi-residential, and special-purpose property. The general topics covered are real estate management process, the marketing process and the administrative process as it pertains to property management. Prerequisite: BA 306 or permission of instructor.

BA 450 **3 Credits**
INVESTMENT MANAGEMENT (3+0)
Study of security analysis and money market instruments, with particular emphasis on personal investing. Technical analysis, capital markets and current theory are reviewed. Application, rather than theory, is emphasized. Prerequisite: BA 325 or permission of instructor.

BA 454 **1-6 Credits**
BUSINESS ADMINISTRATION INTERNSHIP (0+3-0+18)
Work experience in an approved position with supervision and training in various phases of business. Prerequisites: Junior standing in a Business Administration major and permission of the department chairperson.

BA 461 **3 Credits**
LABOR-MANAGEMENT RELATIONS (3+0)
Study of labor-management relations from analytical viewpoints. Application of processes and methodology associated with collective bargaining and labor arbitration.

BA 462 **3 Credits**
ADMINISTRATIVE POLICY (3+0)
Organization role in a dynamic society; decision problems in varying social, economic, and political environments. Prerequisites: BA 325, BA 335, BA 343, BA 373, and BA 377.

BA 464 **3 Credits**
ADVANCED PERSONNEL (3+0)
The course concerns the management of relations between the organization and its personnel; building and maintaining a productive work force and providing job satisfaction. Specific topics include: Compensation Management, Selection and Placement, Training and Performance Appraisal. Prerequisite: BA 361.

BA 469 **3 Credits**
LABOR RELATIONS LAW AND PUBLIC POLICY (3+0)
The course stresses the institutional framework in which the government structure of collective bargaining is cast. The course deals with major trends in the law of collective bargaining, the reasons for these trends, and their consequences on the overall functioning of collective bargaining. Prerequisite: BA 361 and BA 461.

BA 480/PS 480 **3 Credits**
ORGANIZATIONAL THEORY AND BEHAVIOR (3+0)
Literature of organizational theory; emphasis on theoretical concepts, org. design, dynamics of formal and informal groups, communication in leadership, org. development, org. effectiveness, social science research techniques. Prerequisites: Junior or Senior standing. BA 335 or permission of instructor.

BA 488 **3 Credits**
SOCIAL ISSUES IN BUSINESS (3+0)
A study of the rights and duties of businessmen in specific fields in the light of those principles which have graced the perennial moral tradition of our Western world. Dilemmas caused by the apparent conflict of such values as family well-being, personal integrity, and career advancement. Business involvement in urban problems.

BA 489 **3 Credits**
CORPORATE MANAGEMENT AND PLANNING (3+0)
Topics in planning, strategy selection and implementation, motivation, and control from the perspective of top management. Prerequisite: Senior standing.

BA 602 **3 Credits**
APPLIED STATISTICS (3+0)
An advanced course in statistics concentrating on applications of statistics to management. Regression analysis, time series, forecasting, sampling theory and methods, analysis of variance, nonparametric statistics, goodness of fit, and experimental design. Use of computer and SPSS for data analysis. Prerequisite: undergraduate statistics.

BA 608 **3 Credits**
LEGAL ENVIRONMENT OF BUSINESS (3+0)
The impact of law on business, public administration, and professional services. Various topics will be covered including legal processes, government regulations, labor-management relations, protection of consumers and debtors, and the law of torts. This course provides required prerequisite knowledge of law for MBA students, and may not count as meeting the minimum 36 credit requirement for the MBA degree.

BA 610/PAdm 610 **3 Credits**
ORGANIZATIONAL THEORY AND BEHAVIOR (3+0)
A detailed study of organized behavior, including such concepts as leadership styles, authority, organizational change, among many others.

BA 612 **3 Credits**
MANAGEMENT SCIENCE (3+0)
A survey of quantitative approaches to decision making. Philosophy and methodology of operations research. Conceptual models include general systems theory, cybernetics, and decision theory. Emphasis on linear programming and simulation as broad alternative modeling methods. Prerequisite: BA 602 or PAdm 604 and permission of instructor.

BA 614 **3 Credits**
SYSTEMS THEORY AND ANALYSIS (3+0)
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, economics, and public administration.

BA 616 **3 Credits**
LABOR LAW (3+0)
Integration of historical political, social, economic and legal threads underlying substantive labor law governing collective bargaining and labor management relations in the public and private sectors; occupational groups in education, hospitals as well as government and private industry considered.

BA 619 **3 Credits**
COMPUTER SIMULATION OF SYSTEMS (3+0)
Intensive study of simulation concepts and methods. Introduction to DYNAMO and GPSS simulation languages. Survey of simulation applications in various disciplines. Prerequisite: introductory statistics.

BA 621 **3 Credits**
SEMINAR IN MANAGEMENT INFORMATION SYSTEMS (3+0)
Selected topics in management information with emphasis on role of manager, the role of information in the decision making process, establishing a uniform data base, design of information systems, and information retrieval. Prerequisite: permission of instructor.

BA 622 **3 Credits**
QUANTITATIVE SYSTEMS SEMINAR (3+0)
Advanced topics in management science/operations research. Case study in quantitative analysis. Prerequisite: permission of instructor.

BA 630 **3 Credits**
SEMINAR IN MARKETING (3+0)
A survey of marketing institutions, systems, policies and practices. Review of marketing management concepts, marketing theory, and current marketing problems. Prerequisites: post-graduate or graduate standing. Prerequisite: BA 343 or permission of instructor.

BA 637 **3 Credits**
LABOR MANAGEMENT RELATIONS (3+0)
Analysis of collective bargaining process, labor agreements, administration of contracts; impact of public policy on management of labor relations in business and government; comparison of business and government labor relations.

BA 640 **3 Credits**
ADVANCED APPRAISING AND REAL ESTATE FEASIBILITY ANALYSIS (3+0)
A seminar course on appraising theory and feasibility analysis for development of an investment in real estate; real estate analysis related to current land-use practices and problems, and to property development and utilization. Prerequisite: BA 323.

BA 644 **3 Credits**
SEMINAR IN REAL ESTATE DEVELOPMENT (3+0)
This is a comprehensive course that takes the student through all phases of the real estate development process. Topics covered include site selection, environmental impact, financing, design analysis, consumer analysis, risk and investment analysis, project control and project continuity. The course is restricted to those students who have completed all prerequisites to admission to the MBA with emphasis in Real Estate or by special permission of instructor.

BA 652 **3 Credits**
INTERNATIONAL COMPARISON OF BUSINESS PRACTICES (3+0)
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, U.S.S.R., West Germany.

BA 655 **3 Credits**
ADMINISTRATIVE POLICY (3+0)
A case study course designed to provide students with an opportunity to utilize their knowledge in various functional areas in practical problem-solving situations. Prerequisite: completion of MBA Core Courses or permission of instructor.

BA 670 **3 Credits**
SEMINAR IN HUMAN RESOURCES ADMINISTRATION (3+0)
Fundamental industrial relations topics dealing with problems in the private and public sectors from an interdisciplinary viewpoint; current and future development in selection and placement, compensation administration, and managerial behavior, performance, and effectiveness

BA 680 **3 Credits**
SEMINAR IN FINANCE (3+0)
Case studies in business finance. Ratio analysis, proforma statements; short, intermediate and long term financing, capital budgeting, valuation. Prerequisites: Accounting (financial and managerial), BA 325 or equivalent, or proficiency exam.

BA 681 **3 Credits**
MODERN INVESTMENT PRACTICE (3+0)
Theory of bond yields and prices; traditional investment practice which will include common stock investment, securities markets operation, stock selection, sources of investment information; portfolio management practices, and new approaches to investing. Prerequisite: BA 325

Economics

Econ 201 **3 Credits**
INTRODUCTORY MACROECONOMICS (3+0)
Introduction to economic analysis and theory of national income; money and banking; public finance and taxation; economic systems. Prerequisite: working knowledge of algebra needed. (BA-S)

Econ 202 **3 Credits**
INTRODUCTORY MICROECONOMICS (3+0)
Theory of prices and markets; income distribution; contemporary problems of labor, agriculture, public utilities, international economic relations. Prerequisite: working knowledge of algebra needed. (BA-S)

Econ 321 **3 Credits**
INTERMEDIATE MICROECONOMICS (3+0)
Analysis of demand and supply under various market structures; cost and theory of production; factor pricing and theory of distribution; survey of welfare economics. Prerequisites: Econ 201, 202. (BA-S)

Econ 324 **3 Credits**
INTERMEDIATE MACROECONOMICS (3+0)
Concepts and measurement of income; analysis of aggregate demand and supply and their relation to prices, employment, and growth. Prerequisites: Econ 201, 202. (BA-S)

Econ 337 **3 Credits**
ECONOMIC DEVELOPMENT (3+0)
Theories of growth and development; problems of economic development illustrated with case studies; analysis of major policy issues. Prerequisites: Econ 201, 202. (BA-S)

Econ 350 **3 Credits**
MONEY AND BANKING (3+0)
Sources and uses of money and credit in modern society; regulation of money and credit and their impact on the economic welfare of the United States. Prerequisites: Econ 201, 202. (BA-S)

Econ 351 **3 Credits**
PUBLIC FINANCE (3+0)
Government taxation, borrowing, and spending; economic effects of taxation, influence of fiscal policy on economic activitity. Prerequisites: Econ 201, 202. (BA-S)

Econ 360/Hist 360 **3 Credits**
MODERN ECONOMIC HISTORY (3+0)
A survey of the economic history of the modern era (1800 to the 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. Prerequisites: Hist 102 and Econ 201 or consent of instructor. (BA-H)

Econ 412 **3 Credits**
ECONOMETRICS (3+0)
Applications of statistical methods in testing economic theory and estimating economic relationships. Emphasis on multiple regression analysis, serial correlation, and other problems and simultaneous equation methods. Selected applications in economics. Prerequisites: Econ 201, 202, BA 373. (BA-S)

Econ 415 **3 Credits**
URBAN AND REGIONAL ECONOMICS (3+0)
Economic issues examined at subnational level, such as states, regions, and cities and includes the location of economic activity in regions, relationship between regions, models of economic growth, the structure of regional economics, housing and land use issues, and urban and regional economic policy. Prerequisites: Econ 201, 202. (BA-S)

Econ 421 **3 Credits**
LABOR ECONOMICS (3+0)
Labor market analysis; employment and unemployment, wage ranges, structure and composition of the labor force; economic aspects of unionism, labor legislation; social insurance. Prerequisites: Econ 201, 202. (BA-S)

Econ 423 **3 Credits**
COMPARATIVE ECONOMIC SYSTEMS (3+0)
Contrasts structure, institutions, and dynamics of selected private enterprise, collectivist, and underdeveloped economics. Prerequisites: Econ 201, 202. (BA-S)

Econ 425 **3 Credits**
HISTORY OF ECONOMIC THOUGHT (3+0)
Economic thought from the physiocrats to the present, classical and neoclassical theory, exponents and critics; contemporary development in economic theory. Prerequisites: Econ 201, 202 and three credits of upper division courses in economic or other social sciences. (BA-S)

Econ 429 **3 Credits**
BUSINESS FORECASTING (3+0)
Analysis of fluctuations in economic acitivity; theories of business fluctuations; methods of control and forecasting. Prerequisites: Econ 201, 202. (BA-S)

Econ 430 **3 Credits**
MATHEMATICS FOR ECONOMISTS (3+0)
Application of theorems from calculus, matrix, algebra and probability theory in various areas of economics such as linear programming input/output analysis, game theory, demand theory, production theory, and expected utility theory. Prerequisites: Econ 321, 324 and Math 272.

Econ 435 **3 Credits**
ECONOMICS OF RESOURCES (3+0)
Concepts of resources, interaction among resources, industrialization and economic development; theories and problems of conservation; emphasis on Alaska. Prerequisite: Econ 201, 202. (BA-S)

Econ 454 **1-6 Credits**
ECONOMICS INTERNSHIP (0+3-0+18)
Work experience in an approved position with supervision and training in various phases of applied aconomics or economic research. Prerequisites: Junior standing as an Economic major; Econ 321 and Econ 324; and permission of the department chairperson.

Econ 463 **3 Credits**
INTERNATIONAL ECONOMICS (3+0)
Pure theory of international trade; comparative cost, terms of trade, and factor movements, international disequilibrium; balance of payments and its impacts on national economy, capital movement, economic development through international trade. Prerequisites: Econ 201, 202. (BA-S)

Econ 607 **3 Credits**
PUBLIC FINANCE AND TAXATION (3+0)
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; compensory finance; the public debt. Prerequisites: Permission of instructor.

Econ 625 **3 Credits**
ECONOMICS AND PUBLIC POLICY (3+0)
An examination of economics in relation to public policy, both as a determinant of policy and a tool of administration. Prerequisite: Econ 201, 202.

Econ 626 **3 Credits**
ECONOMICS FOR PLANNERS (3+0)
Concepts and issues of delineating regions, policy areas and functional economic areas. Regional income and wealth accounting. Determination of economic goals and objectives. Economic base analysis. Regional growth models. Economics and land use. Economics and social-cultural change. Economics and the environment. Prerequisite: Econ 201, 202.

Econ 634 **3 Credits**
PETROLEUM ECONOMICS (3+0)
Economics of petroleum exploration and extraction; review of public policies governing petroleum industry, import policies, tax concessions, etc. Prerequisite: permission of instructor.

Econ 640 **3 Credits**
ECONOMICS OF TRANSPORTATION (3+0)
Economic aspects of the transportation industry with special emphasis on problems of regulation and public policy; analysis of intermodal change. Prerequisite: permission of instructor.

Econ 688 **3 Credits**
SEMINAR IN ECONOMIC RESEARCH (3+0)
Methods of economic research used in analyzing specific, assigned topics. Discussion of problems encountered, results obtained. Report and formal paper required. Prerequisite: permission of instructor.

Planning

PI 620 **3 Credits**
ADMINISTRATIVE INTERNSHIP (3+0)
Students may take this course to obtain specialization in specific areas of planning. This shall consist of part-time work in approved federal, state, local and private agencies, to be supervised by a senior employee of that agency in cooperation with a faculty advisor analysis.

PI 650A **3 Credits**
COMPREHENSIVE PLANNING AND APPLIED SCIENCE (3+0)
Interrelationship of physical, economic and social data base (physical geography, hydrology, climatology, soil, slope, resources evaluation and economy, transportation, energy sources, social organizations, demography, education, health, etc.). Analysis of interrelationships and application of new methods of comprehensive planning to arrive at more suitable forms of spatial organization and systems. Special attention given to unique aspects of planning in Alaska.

PI 650B **3 Credits**
COMMUNITY/REGIONAL PLANNING I (3+0)
Introduction to the process of modern planning, planning theories, principles and methodologies. Land use planning in rural areas and metropolitan centers. Planning regulations and enforcement, social planning methods, political decisions and procedures for public and private implementation of plans. Prerequisite: PAdm 650A

PI 650C **3 Credits**
COMMUNITY/REGIONAL PLANNING II (3+0)
Introduction to systematic analysis of planning problems and their solution. Emphasis placed on accumulation, evaluation, and use of information; relationship between planners' recommendations and legislative action through analysis and review of how decisions are made. This will involve a series of meetings with local planners, political figures and citizens groups, as well as attendance at hearings on various issues. Prerequisite: PI 650A B.

PI 661 **3 Credits**
THE SOCIAL ENVIRONMENT OF PLANNING (3+0)
An examination of the social context in which planning takes place. The role of government in determining the nature of the planning process. The impact that the public can have on planning in different political systems. Organizations of political and social groups to participate effectively in the planning cycle. The dormant role of social groups that do not participate.

PI 662 **3 Credits**
LEGAL ISSUES IN PLANNING (3+0)
The course focuses on three major areas of law: 1) constitutional issues (due process, property rights, civil rights), 2) environmental legislation and state and federal planning laws, and 3) formulation of laws directed to physical and social issues.

PI 663 **3 Credits**
DESIGN CRITERIA AND COST CONSIDERATION IN PLANNING (3+0)
This course, to be team taught, will examine design considerations, life-cycle costing, design economy; teaching team will include architect/planner/government administrator/construction economist/engineer.

PI 692 **1 Credit**
SEMINAR: TOPICS IN PLANNING (1+0)
Various subjects dealing with planning process, implementation, management of resources, etc., will be announced in schedules.

Public Administration

PAdm 601 **3 Credits**
PUBLIC ADMINISTRATION IN THE CONTEMPORARY SOCIETY (3+0)
This course is an overview of the field of public administration, including the political, social and economic environments of public policy and administration.

PAdm 603 **3 Credits**
MANAGEMENT ANALYSIS (3+0)
Introduction to organizational and systems analysis, systems theory, information systems, procedure analysis, management planning; management problem solving.

PAdm 604 **3 Credits**
RESEARCH METHODS IN ADMINISTRATION (3+0)
Metbods and techniques of empirical research. Scientific method, design of research, data collection and analysis methods, survey sampling, statistical analysis including use of computers in data analysis. Prerequisite: introductory statistics.

PAdm 610/BA 610 **3 Credits**
ORGANIZATIONAL THEORY AND BEHAVIOR (3+0)
Role of the administrator: theories of complex organizations and their administration; administrative leadership; ethics. A detailed study of organized behavior, including such concepts as leadership styles, authority, organizational change, among many others.

PAdm 618 **3 Credits**
ACCOUNTABILITY, LAW AND THE ADMINISTRATIVE PROCESS (3+0)
The problems of maintaining a responsive bureaucracy subject to democratic controls; implications of administrative due process of law; selected case studies in state and federal administration.

PAdm 624 **3 Credits**
CONCEPTS AND PRACTICES IN PUBLIC PERSONNEL ADMINISTRATION (3+0)
Concepts of man and work; manpower, government personnel systems including merit concepts, classification, and compensation, collective bargaining; organizational justice, training, and development. Prerequisite: BA 361.

PAdm 628 **3 Credits**
ADMINISTRATION OF FINANCIAL RESOURCES (3+0)
Public financial organization, problems of financial management in government units, revenue sources; budgetary planning and control, methods of debt financing and intergovernmental relationships. Prerequisite: Acct 201 or equivalent.

PAdm 630 **3 Credits**
ADMINISTRATIVE PROBLEMS IN ALASKA (3+0)
Rural and small city administration; impact of government on the economy; fiscal management policies; technical assistance, loans, subsidies, contracts, public enterprise; resource administration.

PAdm 634 **3 Credits**
RESOURCE POLICY ADMINISTRATION (3+0)
Growth of the concept of conserving and developing natural resources; translation into public policy, interrelationships and coordination among principal state and federal resource administration agencies; development and ecology, interest groups affecting resource development.

PAdm 635 **3 Credits**
POLICY ANALYSIS AND PROGRAM EVALUATION
Critical examination and application of approaches to policy analysis and program evaluation for the public sector.

PAdm 659 **3 Credits**
ADMINISTRATIVE POLICY SEMINAR (3+0)
Management of the total organization. Policy formulation, strategy selection and implementation. Corporate organization and control. Prerequisite: completion of MPA Core Courses or permission of instructor.

PAdm 689 **8 Credits**
DOCTORAL SEMINAR IN PUBLIC ADMINISTRATION (8+0)
Scope and method of public administration; historical and philosophical perspective; role of government bureaucracies in society. This course is part of the joint University of Alaska, Anchorage/University of Southern California doctoral program. Students must be admitted to the program to enroll in the class.

SCHOOL OF EDUCATION

Faculty

Dean: Sidney Bergquist
Professors: Lewis Haines, James Hotchkiss, Marilyn Johnson, Troy Sullivan, Ralph Van Dusseldorp
Associate Professors: Margaret Greer, Blaine Hanni, Nancy Henry, Donald McDermott, M. Lee Wilson
Assistant Professors: Thomas Besh, Linda Bruns, Mark W. Conley, Richard Frey, Virginia Johnson, Carlos Ovando, A. Allan Turner
Instructors: Kelvin Christiansen, Harry Larrabee, Kerry McCaig

In its mission to provide instruction, service, and research to the Alaskan 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 endorsement for educational certification in the State of Alaska.
2. Undergraduate and graduate curricula leading to accredited degrees which are not involved with endorsement for educational certification in the State of Alaska.
3. Undergraduate and graduate programs leading to endorsement for educational certification in the State of Alaska. These programs do not necessarily lead to a college degree.
4. Graduate study in Adult Education with an individually selected specialization. This curricula leads to an accredited graduate degree in Education but does 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 the 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.

Degrees

Bachelor of Education (B.Ed.),
Master of Education (M.Ed.), Master of Arts in Teaching (M.A.T.).

Minimum Credit Hours Required For Degrees

B.Ed., — 130 credits
M.Ed., 36 additional credits
M.A.T., 30 additional credits

Students should be advised that actual credit hour totals frequently exceed minimums, especially at the graduate level. Due to prerequisite requirements and individually selected major and minors, areas of specialization and/or emphasis, the total required hours frequently exceeds minimum.

Certification Programs

The Alaska State Department of Education presently issues educational certificates under the "approved program" approach to certification. The University of Alaska, Anchorage, has the responsibility of recommending persons who successfully complete one or more of its approved programs to the Commissioner of Education for certification. 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:

- Elementary Education
- Secondary Education
- Physical Education
- Counseling and Guidance
- School Administration:
  - Elementary Principal
  - Secondary Principal
  - Superintendent
- Special Education:
  - Learning Disabilities
- Reading Specialist
  - Elementary
  - Secondary
  - K-12

In general, the coursework required in Education for the Elementary and Secondary certificate is identical to that required by the Bachelor of Education degree for those programs. Information regarding

required coursework for all approved programs may be obtained from the student's advisor and individual checklists of requirements are available upon request from the Office of the Dean. Students who have met part or all of the program requirements at another university must take at least 9 credits of approved education courses at the University of Alaska, Anchorage, prior to being admitted to student teaching, practicum, or internship, one of which is a requirement in every certification program.

BACHELOR OF EDUCATION DEGREES

Majors:

1. Elementary Education
2. Secondary Education
3. Physical Education

B. Ed. Degree with Teaching Certification Requirements

The sequence for completing a B. Ed. degree with teaching certification in Elementary, Secondary or Physical Education moves through four distinct phases, each of which is a prerequisite for subsequent steps.

A. Admission to Education Pre-Major

1. Graduation from accredited high school with GPA of 2.5 or higher
2. Completion of the following high school credits:
   English-3, Mathematics-2, U.S. History-1, Natural or Social Science-2, Academic and elective areas-7
3. Meet general requirements for admission to UAA (see pg. 45-47)
4. Submit SAT or ACT scores
5. Submit a minimum GPA of 2.0 on transfer credits from other institutions
6. Apply for and be admitted to appropriate pre-major program:
   Elementary, Secondary, Physical Education.

B. Admission to Teacher Certification Program

1. Meet all requirements for admission to education pre-major
2. Complete a minimum of 45 semester credits or more (transfer credits may be used) with minimum GPA of 2.5 or greater.
3. Complete the following courses with minimum grade of B or better for each:
   Engl 111; Engl 211, 213, or 311; Spch 111; Ed 212 (or their equivalent)
4. Successfully complete the School of Education English Proficiency and Writing Exams
5. Apply for and be accepted for admission to the Teacher Certification Program

C. Admission to Student Teaching

The Committee on Student Teaching shall have the responsibility of determining a student's readiness to enroll in ED 452, Student Teaching. The student must realize that standards set forth below constitute minimum preparation and it may be the judgement of the committee that the candidate needs further work to develop either content or methodological competencies.

1. Be an admitted student at UAA.
2. Be admitted to Teacher Certification Program: Elementary, Secondary or Physical Education
3. Completion of prerequisite coursework with minimum GPA of 2.0 of better.

   Elementary Education (K-8) Majors:
   General university degree requirements; Math 246; core courses: ED 201, ED 212, ED 313, ED 332, ED 423; methods: ED 401, ED 404, ED 407, ED 408, ED 411, ED 418, ED 420; instructional media competence checkout

   Secondary Education (7-12) Majors:
   a. Completion of a minimum of 26 approved credits in an approved teaching major with a GPA of 2.0 or more.
   b. Completion of PSY 111, ED 201, ED 212, ED 313, ED 332, ED 410, and ED 423, and all special methods courses required in the teaching major; and/or ED 402.

   Physical Education (K-12) Majors:
   a. General university degree requirements;
   b. Specific Physical Education degree requirements except ED 452.
4. Be admitted to student teaching
   For Fall Semester — submit application by March 1
   For Spring Semester — submit application by October 15
5. Submit verification of physical examination including a tine test
6. Submit UAA degree check or official program
7. Be recommended by Advisor.

D. Graduation Requirements for B.Ed. Degree with Certification

1. Completion of all degree requirements
   a. General university requirements (see pg. 45-47)

b. Specific major requirements (Note: Only courses with a C or better may be applied to meet certification requirements.)
c. Academic minor and elective courses to total a minimum of 130 credits

2. Completion of Teacher Certification Program
3. Recommendation of University student teaching supervisor and appropriate Department Chairperson
4. Endorsement of the Dean of the School of Education
5. Application for graduation
6. Application for Certification

DEGREE REQUIREMENTS
ELEMENTARY EDUCATION MAJOR

University General Education Degree Requirements

a. Oral Communication Skills — 3 credits
Spch 111
b. Written Communication Skills — 6 credits
Engl 111, 211, 213, 311
c. Reasoning Skills — 3 credits
BA 110
CS 105, 106, 107, 108
ES 201
Ling 110
Phil 101
d. Quantitative Skills — 3 credits
AS 300, 307
Math 106, 107, 108, 200, 201, 202, 270, 272
e. Arts Area — 3 credits
Arts 160, 261, 262, 367
JPC 367
Mus 122, 221, 222
Thr 111, 311, 312, 411, 412
f. Humanities Area — 6 credits
Hist 101, 102 or Hist 131, 132
g. Natural Science Area — 7 credits (including one laboratory course)
Biol 107, 108, 111, 112, 215, 239, 252, 271
Chem 105, 106, 120, 121
Phys 211, 212
Also, approved introductory courses in geology and physics
h. Social Science Area — 6 credits
Psy 111
Ling 101

Specific Major Requirements (60):
Elementary Major

1. Prerequisites — 3
Math 246
2. Core Courses — 15
ED 201, Orientation to Education 3
ED 212, Human Development and Learning 3
ED 313, Educational Psychology 3
ED 332, Tests and Measurements 3
ED 423, History, Philosophy and Sociology of Education 3
3. Methods Courses — 42
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, Elem. School Physical and Health Educ. 3
ED 420, Communications Block
A. Reading 6
B. Language Arts 3
C. Children's Lit 3
ED/Mus 409 Mus in Elem Sch 3
ED/Art 418 Meth: Art in the Elem Sch 3
ED 452E, Student Teaching 12

Students who wish to receive the degree **without** certification may substitute 12 credits of general coursework approved by the School of Education in lieu of student teaching requirements.

Approved Minor — 18-24

Elementary education majors are required to complete an approved minor. An approved minor may be chosen from any of the disciplines described in the UAA catalog, including the humanities, social sciences, natural sciences or mathematics, or an approved minor related specifically to elementary education: Physical Education, Special Education, Early Childhood, Social Sciences, Bilingual/Multicultural.

Approved Electives — 9-15

To total 130 credits.

DEGREE REQUIREMENTS
SECONDARY EDUCATION MAJOR

University General Education Requirements:

a. Oral Communication Skills — 3 credits
Spch 111
b. Written Communication Skills — 6 credits
Engl 111, 211, 213, 311
c. Reasoning Skills — 3 credits
BA 110
CS 105, 106, 107, 108
ES 201
Ling 110
Phil 101
d. Quantitative Skills — 3 credits
AS 300, 307

Math 106, 107, 108, 200, 201, 202, 270, 272

e. Arts Area — 3 credits
Arts 160, 261, 262, 367
JPC 367
Mus 122, 221, 222
Thr 111, 311, 312, 411, 412

f. Humanities Area — 6 credits
Hist 101, 102 OR Hist 131, 132

g. Natural Science Area — 7 credits (including one laboratory course)
Biol 107, 108, 111, 112, 215, 239, 252, 271
Chem 105, 106, 120, 121
Phys 211, 212
Also, approved introductory courses in geology or physics

h. Social Science Area — 6 credits
PS 101, 102

Specific Education Requirements — 39-40 Credits:

ED 201 Orientation to Education	3
ED 212 Human Development & Learning	3
ED 313 Educational Psychology	3
ED 332 Tests and Measurements	3
ED 410 Meth. for Reading in the Sec. Schools	6
ED Methods (ED 402 or ART 442, or ED 406/ ENGL 485 or Music 405 by advisement)	3-4
ED 423 History, Philosophy and Sociology of Education	3
ED 452S Student Teaching	12
Electives Selected From: ED 426 Principles & Practices of Guidance or ED 480 Education of Culturally Different Youth	3

(Students not admitted to the Undergraduate Certification Program and therefore not candidates for certification, may substitute 12 hours of general course work approved by the School of Education in lieu of the student teaching requirement.)

Secondary Education Teaching Major and Minor:

Secondary majors must declare a Teaching major and minor.

Two options are available. Any course (including both required and elective courses) may be used, with advisor's approval, to meet these requirements.

OPTION A: Complete a teaching major and a teaching minor in one of the approved areas. Credit hour requirements vary according to the selected area but this option typically involves approximately 50 credit hours of which about two-thirds are applied to the major area and one-third to the minor area. A significant proportion of these credits are typically upper division hours. Specific requirements for each area, as either a major or a minor, are available, along with worksheet checklists, in the Office of the Dean.

Major or Minor
Art
Biological Sciences
English
Mathematics
Music
Physical Education

OPTION B: Complete an integrated teaching major-minor of 51 approved credits.
Social Sciences

DEGREE REQUIREMENTS: PHYSICAL EDUCATION MAJOR

University General Education Requirements

a. Oral Communication Skills — 3 credits
Spch 111

b. Written Communication Skills — 6 credits
Engl 111, 211, 213, 311

c. Reasoning Skills — 3 credits
BA 110
CS 105, 106, 107, 108
ES 201
Ling 110
Phil 101

d. Quantitative Skills — 3 credits
AS 300, 307
Math 106, 107, 108, 200, 201, 202, 270, 272

e. Arts Area — 3 credits
Art 160, 261, 262, 367
JPC 367
Mus 122, 221, 222
Thr 111, 311, 312, 411, 412

f. Humanities Area —6 credits
Hist 101, 102 or Hist 131, 132

g. Natural Science Area — 7 credits (including one laboratory course)
Biol 111, 112

h. Social Science Area— 6 credits
Psy 111
Soc 101

Specific Major Requirements:

a. Education

ED 201 Orientation to Education	3
ED 212 Human Development & Learning	3
ED 313 Educational Psychology	3
ED 332 Tests and Measurements	3
ED 410 Meth. for Reading in Sec. Schools	6
ED 423 History, Philosophy and Sociology of Education	3
ED 452PE Student Teaching-Physical Education	12
ED Approved Education Electives	6

b. Physical Education — (50)

PE 150 Orientation to P.E.	2
PE 151 Sports Proficiency — Recreation	2
PE 152 Sports Proficiency — Team	2
PE 153 Sports Proficiency — Individual	2
PE 246 Advanced First Aid	2

PE 303 Techniques in Team Sports	2
PE 305 Techniques in Individual & Dual Sports	2
PE 309 Techniques in Aquatics	2
PE 310 Techniques in Rhythm and Dance	2
PE 332 Tests and Measurements in Physical Education	3
PE 406 Methods of Teaching Physical Education	3
PE 408 Elem. School Physical and Health Educ.	3
PE 421 Physiology of Exercise	3
PE 425 Organization and Administration of PE	3
PE 430 Adaptive Physical Education	3
PE 432 Biomechanics of Exercise and Sports	3
PE 440 Prevention and Care of Athletic Injuries	3
PE 460 Socio-psychological Bases of Physical Education and Sport	3
PE 470 Human Motor Learing and Performance	3
PE Electives	2

c. Natural Science Area — 6 credits

Chem 120 Survey of Chemistry	4
HS 203 Normal Nutrition	2

(Students not admitted to the Undergraduate Certification Program and therefore not candidates for certification, may substitute 12 hours of general coursework approved by the School of Education in lieu of the student teaching requirements.)

MINORS IN EDUCATION:

For students pursuing degrees outside the School of Education three minors in Education are available:

1. **Teaching minor in Secondary Education.** In addition to the course work shown below, certification requires admission to the Undergraduate Certification Program and admission to student teaching. Interested students should consult with the Dean of the School of Education.

	Credits
ED 201 Orientation to Education	3
ED 212 Human Development and Learning	3
ED 313 Educational Psychology	3
ED 332 Tests and Measurements	3
ED 410 Meth. for Reading in the Sec. Schools	6
ED 423 History, Philosophy, and Sociology of Education	3
Methods: 3 credits by advisement from ED 402, ART 442, ED 406, ENGL 485, or MUS 405	3-4
ED 452S Student Teaching — Secondary	12
Electives Selected From:	3
ED 426 Principles & Practices of Guidance	
ED 480 Education of Culturally Different Youth	
	39-40 credits

Completion of the Teaching Major leads to endorsement for educational certification in the State of Alaska. The Non-teaching Minor does not.

2. **Non-teaching minor in Education**

ED 201 Orientation To Education	3
ED 313 Educational Psychology	3
ED 332 Tests and Measurements	3
ED 423 History, Philosophy, and Sociology of Education	3
Education electives by advisement	6
	18 Credits

3. **Non-teaching Minor In Physical Education:**

	Credits
PE 150 Orientation to P.E.	2
PE 246 Advanced First Aid	2
PE 311 History & Princ. of P.E.	3
PE 425 Organization and Administ.	3
Electives by advisement	10
	20 Credits

ADMISSION REQUIREMENTS FOR CERTIFICATION ONLY

Elementary, Secondary and Physical Education

Students holding bachelor's degrees from U.A.A. or another institution may receive Alaska Teacher Certification for Elementary (K-8), Secondary (7-12) or Physical Education (K-12). These students should apply for admittance to U.A.A. as an Education Pre-major and complete the following sequence:

A. Admission to Teacher Certification

1. Complete prerequisite coursework with minimum GPA of 2.0 or better
2. Complete the following courses: ED 201, ED 212 (or equivalent)
3. Successfully complete the School of Education English Proficiency and Writing Exams.
4. Complete Admission to Teacher Certification application form
5. Provide evidence of a minimum GPA of 2.0 on former degree; **or** successful completion of 12 graded credits of U.A.A. coursework with 2.0 GPA.
6. Meet with the Teacher Certification Admission Committee if necessary.

B. Admission to Student Teaching

1. Be admitted to U.A.A. School of Education
2. Be admitted to the Teacher Certification Program
3. Complete all core coursework.
   a. Elementary: Math 246, ED 401, ED 404, ED 407, ED 408, ED 411, ED 418, ED 420
   b. Secondary: ED 410, and 3 credits from the following: ED 402, MUS 405, Engl 485 or Art 442
   c. Physical Education: All remaining specific major requirements (except ED 452PE) as listed under B. Ed. Degree with Teaching Certification for the Physical Education major.
4. Arrange an official program with advisor.
5. Submit verification of a physical examination including tine test
6. Complete the Admission to Student Teaching Application Form
   1. For Fall Semester, by March 1
   2. For Spring Semester, by October 15

C. Recommendation for Certification

1. Requirements for Certification Endorsement
   a. Admission to Teacher Certification Program
   b. Completion of all certification requirements
      (Note: Only courses with a C or better may be applied to meet certification requirements.)
2. Secondary students must submit scores on the National Teacher Examination or another approved measure of knowledge of subject matter.
3. Recommendation of appropriate Department Chairperson.
4. Endorsement of the Dean of the School of Education

GRADUATE DEGREES

The School of Education offers both master's programs and certification programs at the graduate level.

Graduate Certification Program

The School of Education endorses for certification to the Department of Education upon successful completion of graduate programs in guidance and counseling, reading, administration and special education — learning disabilities. Students admitted only to a graduate certification program are assigned to a standing committee comprised of the department chairperson and faculty involved in the delivery of that program. Students must meet the course requirements approved by the Department of Education in compliance with the NASDTEC standards.

Professional Field Practice

Prior to permitting the student to enter the final stage 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. Difficulities, 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 chairperson and the Dean.

MASTER OF EDUCATION (M.ED.)

Students admitted to masters' programs are assigned 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 must be completed within seven years of the earliest coursework on the program.

Within the curriculum of the M.Ed. program are several Emphasis options, each with its own set of specific requirements. Each is designed to provide the student with advanced preparation in professional education. All but Adult Education may also lead to endorsement for educational certification in the State of Alaska.

Emphases:

1. Elementary Education
2. Secondary Education
3. Counseling and Guidance

4. Public School Administration (Elementary Principal, Secondary Principal/Superintendent)
5. Reading (Elementary or Secondary or K-12 Specialist)
6. Special Education (Learning Disability)
7. Adult Education (Selected Specializations)

Candidacy

When the student is in his/her final coursework, the master's committee will review the student's progress for admision to candidacy. Candidacy allows the student to enter the final program phase which includes written comprehensives and in some programs the development of a thesis or investigative project. Students must have completed their coursework with the minimum of a "B" average. No "C" grades can be counted toward a masters program if earned in an *undergraduate* course. In addition, the committee will seek evidence of a student's acceptable performance in written expression prior to entry into the final phases of the advanced academic degree.

The chairperson of the master's 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.

Application Process to All Graduate Programs (See p. 25 Graduate Admission)

Applications for admission to graduate programs in Education should be initiated in the Office of Admissions and Records.

The following steps outline the student's responsibility in the admission process:

1. Obtain an application form from the Office of Admissions and Records and return with appropriate fee.
2. Request that all official transcripts from previous college work be sent to the University of Alaska, Anchorage, Office of Admissions and Records. 3211 Providence Drive, Anchorage, Alaska, 99508.
3. Sign up for the General Aptitude and the Advanced Education portions of the Graduate Record Examination. If you are not an Anchorage resident, this examination may be given at a University or Community College near you. Applicants who already possess an advanced degree need not take the GRE.
4. Take the Graduate Record Examination at the earliest date and have scores forwarded to the Office of Admissions and Records.
5. Monitor the receipt of materials in the Office of Admissions and Records. It takes approximately six weeks for Graduate Record Scores to be received after the testing date.
6. See an advisor in the School of Education.
7. Prepare the materials for a file in the School of Education by completing an application form and obtaining a minimum of three letters of recommendation or field experience rating forms describing recent pertinent professional experience. 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 my be required to sign up for one credit of supervised practicum. Completed forms should follow this experience.

ADMISSION PROCEDURES

When all transcripts, Graduate Record Scores, and other pertinent materials have been received by the Office of Admissions and Records the file is forwarded to the School of Education and combined with the School of Education materials for consideration by the Graduate Screening Committee.

The Graduate Screening Committee meets a minimum of 3 times a semester to consider applicants for all programs. Students may be contacted for scheduling personal interviews with the Graduate Screening Committee after their completed files have been reviewed. Written notification of committee will be sent to the student.

One of the following actions can be expected from the Graduate Screening Committee:

1. Unconditional admission.
2. Conditional admission to include such requirements as taking a specified minimum of education coursework, maintaining a specified performance in coursework and/or retaking portions of the Graduate Record Examination.
3. Denial of Admission for stated reasons.

CRITERIA FOR ADMISSION

Minimum Qualifications:

1. Hold a bachelor's degree.
2. Have a grade point average of 3.0 (on a 4-point scale) in the last 60 credits.
3. Graduate Record Examination with a combined aptitude score of 800 plus a

performance on the Advanced Education portion at or above the 60th percentile.

Competitive Qualifications:

All materials will be reviewed by the Graduate Screening Committee when all information has been compiled. In addition students may be requested to meet with the Graduate Screening Committee. Applicants who meet the above criteria will be considered for program admission on a competitive basis, taking into account that higher scores are preferrable to lower scores; good recommendations are preferrable to marginal ones; a good interview is preferrable 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.

Graduation Requirements:

Minimum degree requirements for Master's Degrees in Education include:

1. Completion of the general university requirements and Master's degree requirements.
2. At least one year of successful contract teaching or administrative service, and hold, or eligible to hold, an Alaska Teaching Certificate.
3. An official program must be approved by completion of 9 hours of coursework.
4. Complete a minimum of 18 credits in a program at the graduate (600) level.
5. Complete a minimum of 36 hours of approved coursework in a program. (See section on degree requirements)
6. At least 18 hours must be completed after the semester in which the student was admitted and an official program approved by his/her graduate committee.
7. Pass a comprehensive written examination. An oral examination may also be required by the student's committee.

(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 undergraduate credit is of concern to the candidate's committee when developing the graduate program, coursework completed seven or more years before the date of the degree may not be used to fulfill the requirements of the degree.

Undergraduate courses with grades lower than a B cannot be applied to meet requirements. (Please refer to General University graduate degree requirements)

Certification Endorsement Requirements:

1. Completion of the certification requirements. (Note: only courses with a grade of C or better may be applied to meet certification requirements.)
2. Recommendation of the appropriate Chairperson.
3. Approval of the Dean.

Requirements for the Emphasis Areas

ELEMENTARY EDUCATION EMPHASIS

Required Courses ..... 26 Credits

ED 603 Seminar: Reading Program in Elementary School	3
ED 604 Diagnosis and Correction of Reading Deficiencies	3
ED 605 Reading Lab — Elementary	2
ED 612 Human Relations	3
ED 622 Philosophy of Education	3
ED 627 Education Research	3
ED 631 Advanced Educational Psychology	3
ED 635 Public School Organization	3
OR	
ED 641 School Law	3
ED 651 Curriculum and Instruction, Elementary	3
Electives by advisement	10

SECONDARY EDUCATION EMPHASIS

Prerequisite Preparation

ED 313 Educational Psychology
ED 332 Tests and Measurements
ED 410 Methods for Reading in the Secondary School

Required Courses ..... 21 Credits

ED 426 Principles and Practices of Guidance	3
ED 607 Reading in Secondary Schools	3
ED 622 Philosophy of Education	3
ED 627 Education Research	3
ED 631 Advanced Educational Psychology	3
ED 635 Public School Organization, Control, and Support	3
OR	
ED 641 School Law	3
ED 652 Curriculum and Instruction-Secondary	3

Electives by advisement 12-14

COUNSELING AND GUIDANCE EMPHASIS

Prerequisite Preparation

ED 212 Human Development and Learning
ED 313 Educational Psychology
PSY 265 Abnormal Psychology
ED 332 Tests and Measurements
Or Equivalent

Required Courses ..... 37-42 Credits

SWK 305 Social Welfare	3
ED 480 Education of Culturally-Different Youth	3
ED 600 Orientation to Counseling/Guidance	1
ED 612 Human Relations	3

ED 426 Principles and Practices of Guidance 3
ED/PSY 623 Counseling Skills 3
ED/PSY 624 Group Counseling 3
ED 627 Education Research 3
ED 630 Practical Aspects of Testing 2
ED 631 Advanced Educational Psychology 3
ED 632 Career Information in the Public Schools 3
ED 634 Counseling Practicum I 3
ED 636 Counseling Practicum II 3
ED 651 Curriculum and Instruction: Elementary
OR
ED 652 Curriculum and Instruction: Secondary 3
ED 698 Individual Research 1-6
OR
ED 699 Thesis 1-6

PUBLIC SCHOOL ADMINISTRATION EMPHASIS

Prerequisite Preparation
ED 313 Educational Psychology
ED 332 Tests and Measurements
Or Equivalent

Required Courses ..... 33 Credits
ED 612 Human Relations in Education 3
ED 627 Education Research 3
ED 631 Advanced Educational Psychology 3
ED 635 Public School Organization, Control, and Support 3
ED 637 Public School Administration 3
ED 639 Public School Finance 3
ED 641 School Law 3
ED 647 Community-School Board Relations 3
ED 651 Curriculum and Instruction Elementary
OR
ED 652 Curriculum and Instruction-Secondary 3
ED 660 Practicum: Principal 1-6
Electives by advisement 3

READING EMPHASIS

Two distinct programs are available. A third, which essentially is a combination of the first two, may also be elected. This latter option is designed to develop the competencies required of a Reading Specialist across the full grade range of K to 12.
However, the student may elect to focus on the Elementary or Secondary area instead. Requirements differ according to the track selected.

Elementary Level Track

Prerequisite Preparation
ED 411 Reading Instruction in the Elementary School
ED 420 Reading 6
Listening, Speaking, Writing 3
Children Literature 3
Or Equivalent

Required Courses ..... 36 Credits
ED 603 Reading Program in Elem. School 3
ED 604 Diagnosis and Correction of Rdg. Def. 3
ED 605E Reading Lab — Elementary 2
ED 606 Reading Clinic 3
ED 609 Reading: Supervised Practicum 3
ED 631 Advanced Educational Psychology 3
ED 651 Curriculum and Instruction Elem., 3
ED 680 Theories of Learning Disabilities 3
ED 682 Diagnosis of Learning Disabilities 3
ED 683 Remediation of Learning Disabilities 3
Electives by advisement ..... 7 credits

Secondary Level Track

Prequisite Preparation
ED 410 Methods for Reading in the Secondary Schools
Or Equivalent

Required Courses ..... 36 Credits
ED 604 Diagnosis and Correction of Reading Deficiencies 3
ED 605S Reading Lab — Secondary 2
ED 606 Reading Clinic 3
ED 607 Reading in the Secondary School 3
ED 609 Reading Supervised Practicum 3
ED 631 Advanced Educational Psychology 3
ED 652 Curriculum and Instruction — Sec. 3
ED 680 Theories of Learning Disabilities 3
ED 682 Diagnosis of Learning Disabilities 3
ED 685 Adolescent and Adult Learning Disabilities 3
Electives ..... 7 Credits

K-12 Inclusive Track

Prerequisite Preparation
ED 410 Methods for Reading in the Secondary Schools
Ed 420 Reading 6
Children's Literature 3
Listening, Speaking, Writing 3
Or Equivalent

Required Courses* ..... 36 Credits
ED 603 Seminar: Reading Program in Elem. School 3
ED 604 Diagnosis and Correction of Reading Deficiencies 3
ED 605E Reading Lab — Elementary 2
ED 607 Reading in Secondary Schools 3
ED 609 Reading: Supervised Practicum 3
ED 651 Curriculum and Instruction — Elem. 3
OR
ED 652 Curriculum and Instruction — Sec. 3
ED 680 Theories of Learning Disabilities 3
ED 682 Diagnosis of Learning Disabilities 3
ED 683 Remediation of Learning Disabilities 3
Electives by advisement ..... 10 Credits

*Endorsement for K-12 certification also requires one year of teaching experience at either the elementary or secondary level, and student teaching at both levels.

SPECIAL EDUCATION EMPHASIS

Required Courses ..... 15-21 Credits
ED 460 The Exceptional Child 3
ED 471 Issues & Trends in Special Education 3
ED 627 Education Research 3
ED 687 Advanced Practicum: Special Ed. 1-9
ED 698 Individual Research 1-6
OR
ED 699 Thesis 1-6
Electives by advisement ..... 15-21 Credits

ADULT EDUCATION EMPHASIS

The Adult Education emphasis is a specialized program within the Master of Education degree area. The program is designed to serve baccalaureate graduates who wish to complete a graduate degree program relevant to community, organization or institutional activities involving adult learners in a variety of situations. Individuals aspiring to instructional and/or managerial positions in such contexts as recreational programs, community mental health centers, programs for the retired or senior citizens, aerospace careers, community colleges, or similar learning environments may wish to enroll in this program. Successful completion of requirements leads to a Master of Education Degree with emphasis in Adult Education. It does not lead to teacher certification either directly or indirectly.

The Adult Education emphasis includes 4 distinct segments:

Admission Requirements:

1. A bachelor's degree from an accredited college or university with a concentration in a subject normally taught in a high school, community college or community education program or an Alaska teaching certificate with a minimum of 24 credits of education courses with an average g.p.a. of 3.00
2. One year of satisfactory teaching or administrative experience in an accredited public secondary school, community college or agency.
3. Admission is also contingent upon (1) satisfactory scores on various standardized tests, (2) a satisfactory personal interview conducted by School of Education faculty members, and (3) approval and availability of the desired specialization area, (4) meeting of prerequisites which may vary by specialization area.

		Credits
1.	**General Core Requirements:**	9-12
	ED 612 Human Relations In Education	3 Credits
	ED 627 Education Research	3 Credits
	ED 698 Individual Research, or	
	ED 699 Thesis	1-6 Credits*
2.	Teaching or Managerial Track Requirements:	6
	a. **Teaching Track** Student selects 2 of 3 courses	
	ED 631 Adv. Educational Psych.	3 Credits
	ED 655 Seminar: The Adult Learner	3 Credits
	Ed 638 Supervision for Improvement of Instruction	3 Credits
	OR	
	b. **Managerial Track** Student selects 2 of 5 courses	
	PSY 637 Organizational Environments	3 Credits
	BA 670 Seminar In Human Resources Administration	3 Credits
	PAdm 603 Management Analysis	3 Credits
	PAdm/BA 610 Organizational Theory and Behavior	3 Credits
	ED 637 Public School Admin.	3 Credits
3.	Courses in selected area of specialization (See cautionary note below)	12-15
4.	Supervised field experience	6
	TOTAL Required Courses	36

*The number of hours required in the specializaton area will vary from 12 to 15 depending upon the variable credit elected in the research area. The total requirement of 36 credits is not affected.

Cautionary Note:

Choice of specialization area must be made at the time of application for admission. Courses to satisfy this requirement will be jointly selected by the student and the student's graduate committee. Since courses must be selected from offerings currently available at UAA, careful consideration of available specializations is necessary. Students will not be admitted to areas for which adequate course offerings are not available. Pre-application advisement is available through the office of the Dean of Education.

MASTER OF ARTS IN TEACHING (M.A.T.)

The Master of Arts in Teaching degree is designed to serve the following categories of students.

Category I

Baccalaureate graduates with a good general education and with majors or equivalent majors in subjects commonly taught in high school and who wish to prepare for a career in secondary school classroom teaching.

NOTE: Students under Category I will be admitted by the School of Education as education majors. The student's advisory committee consisting of at least two members from education and one member from the student's major subject area will be appointed by the Dean of the School of Education.

Category II

Baccalaureate graduates who have 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 and or minor as well as in Education.

NOTE: Students under Category II will enroll in a department or program which offers an approved M.A.T. program. Students who have been accepted for the M.A.T. degree must also apply through the School of Education for admission to the Teacher Education program.

ADMISSION REQUIREMENTS:

1. Eligibility for one of the three above mentioned categories.
2. In general, a grade point average of at least 3.00 in the baccalaureate major and in the case of Category II at least 3.00 both in the teaching major and in education courses.
3. Submission of the following to the Office of Admissions and Records.
   a. a completed University Application for Admission to Graduate Study.
   b. a statement of goals to which the M.A.T. will contribute.
   c. official transcripts of all previous college or university work.
   d. at least three letters of reference.
4. Additional evaluative material may be required by some departments: e.g.
   a. Scores from the aptitude test of the Graduate Record Examination and/or scores from the advanced tests in the field of the baccalaureate major.
   b. An interview (an interview is required for admission to a teacher certification program).
5. Recommendation for admission by the Dean of the School of Education and the dean (or head) of the subject matter discipline.

DEGREE REQUIREMENTS:

1. A minimum of 36 semester credits is required for the M.A.T. degree, 15 or more of which must be at the 600-level for Categories I and II (secondary). While 36 semester credits is the minimum number of credits required, experience has shown that many M.A.T. students find it necessary to earn 45 or more credits in order to satisfy academic deficiencies and/or professional certification requirements.
2. The general education background of each M.A.T. student should include approximately 15 semester credits of study in each of the following areas (a) mathematics and natural science, (b) social science, and (c) humanities.
3. The total program of the student preparing for a career in secondary school teaching must include an approved teaching major as adjudged by the School of Education standards and/or accreditation standards of the Northwest Association of Secondary and Higher Schools.
4. The total program of the student preparing for a career in secondary teaching must include the course requirements necessary for Alaska teacher certification endorsement.
5. Education Courses
   Specific courses required by the members of the student's graduate committee may vary depending on the particular degree.
6. Some departments may have additional degree requirements.
7. Each candidate must pass a written comprehensive examination.
   The examining committee shall consist of the student's advisory committee. There is no thesis requirement for the M.A.T. degree.

APPROVED PROGRAMS:

The M.A.T. degree at the University of Alaska has been approved for English. Departments other than English must request specific approval for offering the M.A.T. Normally, such approval will be restricted to departments representing commonly taught secondary school subjects. Students wishing to study toward M.A.T. degree in areas not previously approved may apply for admission under the University's interdisciplinary (individual attention) program.

Course Descriptions

Education

Courses which are required on degree or certification programs are offerd on a regular basis. Some courses are offered once each year and some are offered every term. Generally, required courses are offered at least once during alternate summer sessions. Courses which are not required for degree or certification programs may be offered on an irregular basis.

Ed 201 **3 Credits**

ORIENTATION TO EDUCATION (1+6)

Nature of teaching, including the scholastic, professional, and personality requirements for effective teaching. Involves laboratory time in the public schools as teacher's aide. Open to all students. Required for students majoring or minoring in education. Fall and Spring.

Ed 212 **3 Credits**

HUMAN DEVELOPMENT AND LEARNING (3+0)

Synthesis of the interrelated principles of human growth development adjustment and learning. Designed primarily for students preparing for a career in teaching but is also open to parents, counselors, community workers and others interested in human development and learning. Prerequisite: Psych 111 or instructor permission. Fall and Spring.

Ed 280 **2 Credits**

SIGN LANGUAGE I (3+0)

Introductory training in manual communication methods used in the United States. Students will learn how to carry on basic communication with deaf persons via manual mode. Credit will be awarded upon demonstration of mastery of the materials.

Ed 281 **2 Credits**

SIGN LANGUAGE II (3+0)

Advanced instruction in manual communication methods. Students will become fluent in the most commonly used methods of communicating with deaf persons. Credit awarded only upon demonstration of successful mastery of the competencies required in the course. Prerequisites: Ed 280.

Ed 313 **3 Credits**

EDUCATIONAL PSYCHOLOGY (3+0)

Study of psychological principles and experience in applying them to classroom teaching and learning in public school classrooms. Prerequisites: Psy 111, Ed 212. Fall and Spring.

Ed 332 **3 Credits**

TESTS AND MEASUREMENTS (3+0)

Theory and practice of educational evaluation; emphasis on testing aspects most applicable for classroom teachers; construction of teacher-made tests; interpretation of teacher-made and standarized instruments emphasized. Not open to students having credit in Psy 373. Prerequisites: Ed 212. Fall and Spring.

Ed 351 **1 Credit**

WORKSHOP ON ALASKA (1+0)

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 401 **3 Credits**

SOCIAL STUDIES FOR ELEMENTARY TEACHERS (3+0)

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. Prerequisites: Ed 201, Ed 313, Ed 332 and prerequisites thereto. Spring.

Ed 402 **3 Credits**

METHODS OF TEACHING — SECONDARY (3+0)

Methods and teaching strategies, classroom management techniques, hands-on experience in secondary classroom. Prerequisite: Admission to Teacher Certification Program and ED 332. Must be taken prior to ED 452. Fall and Spring.

Ed 404 **3 Credits**

TEACHING SCIENCE IN ELEMENTARY SCHOOLS (3+0)

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. Prerequisites: Ed 201, Ed 313, Ed 332 and prerequisites thereto. Spring.

Ed 405/Mus 405 **3 Credits**

METHODS OF TEACHING MUSIC (3+0)

Methods and problems of teaching music in junior and senior high schools with emphasis on the general music program. Prerequisites: Admission to Teacher Certification, 100 semester hours, Ed 332 and prerequisites thereto, and Mus 232, or permission of instructor.

Ed 406/Engl 485 **4 Credits**

METHODS OF TEACHING ENGLISH FOR THE HIGH SCHOOL (3+3)

A study to assist future English teachers to determine objectives and to prepare plans to implement those objectives in the teaching of language, composition, and literature. All students, in addition to attending class three hours per week, will spend one period three days each week, for eight consecutive weeks, in a highschool English class to assist the classroom teacher. Prerequisites: Admission to Teacher Certification, Ed 313, and 332.

Ed 407 **3 Credits**

TEACHING OF ELEMENTARY MATHEMATICS (3+0)

Math topics and their relationship to the methods used in teaching elementary children, includes: Sets; Patterning; Place Value; Operations with Whole Numbers & Errors with them; Operations with Fractions & 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. Prerequisites: Math 246, Math Proficiency Test, Ed 201, Ed 313, and prerequisites thereto. Fall.

Ed 408/PE 408 **3 Credits**

ELEMENTARY SCHOOL PHYSICAL AND HEALTH EDUCATION (2+3)

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. Prerequisites: Ed 313 and prerequisites thereto. Fall and Spring.

Ed 409/Mus 409 **3 Credits**

MUSIC IN THE ELEMENTARY SCHOOL (3+0)

Principles, procedures, and materials for teaching music to children at the elementary level. Prerequisites: Ed 313 and prerequisites thereto Spring.

Ed 410 **6 Credits**

METHODS FOR READING IN THE SECONDARY SCHOOL (4+6)

Provides understanding of the nature of the reading process and other prerequisites to teaching reading skills at the secondary level. Techniques and materials for teaching comprehension of subject matter. Field experience in a classroom is a requirement. Prerequisites: Ed 332, prerequisites thereto and Admissions to Teacher Certification Program. Fall.

Ed 418/Art 418 **3 Credits**

METHODS: ART IN THE ELEMENTARY SCHOOL (3+0)

Methods of teaching art principles, procedures and materials for the elementary school level. Students will explore a wide variety of art media basic to elementary art curricula. Throughout the semester, students will be responsible for developing, conducting and evaluating curriculum activities in this area with elementary children in an actual classroom setting. Prerequisites: Ed 332 and prerequisites thereto. Spring.

Ed 420 **12 Credits**

DEVELOPING COMMUNICATION COMPETENCIES IN ELEMENTARY SCHOOL (12+0)

A comprehensive study of listening, speaking, reading and writing processes and the interrelated nature of the development of these communication competencies in elementary school children. Includes focus on appropraite methodology and materials for developing competencies in each area. A survey of types of children's literature; integration of literature with other materials in the curriculum and methodology to develop and sustain interests in reading. Extensive field experience in elementary classroom required. Prerequisites: Ling 101, Ed 201, Ed 313, Ed 332 and prerequisites thereto. Fall.

Ed 420A READING (6+0)

Ed 420B LISTENING, SPEAKING, WRITING (3+0)

Ed 420C CHILDREN'S LITERATURE (3+0)

Ed 423 **3 Credits**

HISTORY, PHILOSOPHY AND SOCIOLOGY OF EDUCATION (3+0)

Significant influences on American education from three aspects: the historical, with special emphasis on American roots of education; the sociological, with special emphasis on the social system which is the school; the philosophical, with special emphasis on the ancient roots and modern branches of influential thinking. Fall and Spring.

Ed 426 **3 Credits**

PRINCIPLES AND PRACTICES OF GUIDANCE (3+0)

Introduction to the philosophies, organizations, patterns, tools, and techniques that aid teachers and guidance personnel in preparing students for responsible decision-making in modern society. Prerequisites: Ed 332 and prerequisites thereto. Fall.

Ed 442/Art 442 **3 Credits**

CURRICULUM AND INSTRUCTION IN SECONDARY ART (3+0)

Introduction to the philosophies, organization, patters, tools, and techniques that aid teachers and guidance personnel in preparing students for responsible decision making in modern society. Prerequisites: Admission to Teacher Certification, Ed 332, and prerequisites thereto. Fall.

Ed 452E **12 Credits**

STUDENT TEACHING — ELEMENTARY (3+36)

Elementary student teaching consists of a sixteen-week semester of full days in the classroom of the elementary schoolss approved by the Education School. 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. Prerequisites: See requirements for admission to student teaching. Fall and Spring.

Ed 452PE **12 Credits**

STUDENT TEACHING — PHYSICAL EDUCATION (3+36)

Supervised teaching of physical education in schools approved by the School of Education. Course requires teaching full days for entire semester on the elementary and/or secondary level depending on certification sought. Weekly seminar meetings of all student teachers with University faculty member. Prerequisites: Admission to student teaching. Fall and Spring.

Ed 452S **12 Credits**

STUDENT TEACHING — SECONDARY (3+36)

Supervised teaching in secondary schools approved by the School of Education. The School may limit registration, determine assignments, prescribe the number of teaching hours required, and cancel the registration of students doing unsatisfactory work. Prerequisite: Admission to student teaching. Fall and Spring.

Ed 460 **3 Credits**

THE EXCEPTIONAL CHILD (3+0)

The introductory course to the field of Special Education. The nature and characteristics of various physical and mental exceptionalities included in the special education population are covered. Prerequisites: ED 212, or equivalent. Fall and Summer.

Ed 471 **3 Credits**

ISSUES AND TRENDS IN SPECIAL EDUCATION (3+0)

A critical analysis of the current trends affecting special education programming across the country and in the state and local community. Includes an indepth review of the literature describing trends and participation by local individuals in issues pertinent to the Alaska communities. Exposure to private and public agencies available to and for handicapped persons in Alaska is included in this course. Prerequisite: ED 460 or may be taken concurrently with ED 460. Spring and odd Summers.

Ed 475 **3 Credits**

THE HANDICAPPED PRE-SCHOOL CHILD (3+0)

Objectives, principles, and procedures for developing pre-school programs for the handicapped child. Basic understandings of child development precedes a discussion of the preventative and educational role of pre-school programming for the handicapped child. Management techniques and specific methods for teaching the pre-school handicapped child. Prerequisite social, emotional, and academic behaviors are described. Prerequisite: Ed 460. As demand warrants.

Ed 477 **3 Credits**

ESL/SECOND LANGUAGE METHODS(3+0)

Overview for teachers of the current theories and methodologies involved in second language instruction. The focus will be on ESL (English as a Second Language) instruction for children and young adults. Field experience in a bilingual classroom is required. Fall

Ed 478 **3 Credits**

METHODS AND MATERIALS FOR BILINGUAL EDUCATION (3+0)

Overview for teachers of current theory and methodologies for bilingual and multicultural 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. Spring.

Ed 479 **3 Credits**

ASSESSMENT OF BILINGUAL/ESL EDUCATION (3+0)

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 assessments 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. Spring.

Ed 480 **3 Credits**

EDUCATION OF CULTURALLY-DIFFERENT YOUTH (3+0)

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. Prerequisites: Ed 313. Fall.

Ed 481 **3 Credits**

THE MENTALLY RETARDED (3+0)

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. Prerequisite: Ed 460 as demands warrants.

Ed 484 **3 Credits**

COMMUNICATION DISORDERS (3+0)

General field of communication disorders which includes the interrelated areas of speech, hearing, language, and vision. The psychologi-

cal, social, emotional, and physical problems that children with these handicaps encounter will be discussed. Etiological factors, diagnostic tests and procedures, and educational implications will be covered. Prerequisite: Ed 460. As demand warrants.

Ed 486 **3 Credits**
CURRICULUM AND MATERIALS FOR SPECIAL EDUCATION (3+0)

A comprehensive understanding of curriculum for mildly handicapped pupils, and the selection and evaluation of materials for this population. Curriculum is considered through the understanding of task analysis, and the development and implementation of the I.E.P. Materials are introduced, and evaluation standards for all facets of special education teaching are studied. The overall emphasis of the course is the individualization of instruction. Prerequisite: ED 460 or may be taken concurrently with ED 460. Fall and Summer.

Ed 487 **1-6 Credits**
PRACTICUM IN SPECIAL EDUCATION (0+3-18)

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 of from 7-20 hours a week. 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 major in special education. Prerequisite: ED 460 or may be taken concurrently with ED 460. Fall and Spring.

Ed 600 **1 Credit**
ORIENTATION TO COUNSELING/GUIDANCE (1+0)

An introduction to the counseling/guidance program. Emphasis is placed on helping the student to become aware of the elements that go into the basic counseling process. Students are helped to become aware of their own strengths and weaknesses as they relate to becoming an effective counselor.

Ed 603 **3 Credits**
SEMINAR: READING PROGRAMS IN THE ELEMENTARY SCHOOL (3+0)

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. Prerequisites: Ed 420. Fall.

Ed 604 **3 Credits**
DIAGNOSIS AND CORRECTION OF READING DEFICIENCIES (3+0)

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; newer approaches to teaching reading. Prerequisites: Ed 420 or Ed 410 and experience in the teaching of reading. (In conjunction with Ed 605, Reading Lab.) Spring.

Ed 605E **2 Credits**
READING LAB — ELEMENTARY (0+6)

Student works with a child who has been identified as having reading problems using testing and remedial techniques appropriate to his need. (Can be taken only in conjunction with Ed 604.)

Ed 605S **2 Credits**
READING LAB — SECONDARY (0+6)

Student works with a child who has been identified as having reading problems using testing and remedial techniques appropriate to his need. (Can be taken only in conjunction with Ed 607.)

Ed 606 **3 Credits**
READING CLINIC (2+3)

A practicum approach to learning the techniques for evaluation and therapy regarding multiple types of reading difficulties. Prerequisite: Ed 604 or equivalent.

Ed 607 **3 Credits**
READING IN SECONDARY SCHOOLS (3+0)

For teachers of reading and teachers of subject matter content area so that they may be better prepared to teach children who have reading problems or to act as reading specialists in the area of remedial reading and accelerated reading and to be able to organize reading programs in the junior and senior high school. Prerequisite: ED 410. Spring.

Ed 609 **3 Credits**
READING: SUPERVISED PRACTICUM (0+9)

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. Prerequisites: Ed 420 or Ed 410 and Ed 606.

Ed 612 **3 Credits**
HUMAN RELATIONS IN EDUCATION (3+0)

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. Fall and even Summers.

ED 613 **3 Credits**
AEROSPACE EDUCATION SEMINAR (3+0)

Graduate level orientation to the body of knowledge concerning Aviation and Aerospace industries. Designed for Elementary and Secondary teachers, aviation industry and agency participants.

Ed 614 **3 Credits**
METHODS OF TEACHING AEROSPACE (3+0)

Methods, materials, and techniques for imparting aerospace information to Elementary, Secondary, and Adult populations.

Ed 615 **3 Credits**
HISTORY OF AVIATION AND AEROSPACE (3+0)

In depth study of Aviation and Space exploration history and implications toward modern society.

Ed 616 **3 Credits**
AVIATION AND AEROSPACE — THE PRESENT AND FUTURE (3+0)

In-depth study of current and proposed research in Aviation and Aerospace. Closely coordinated with National Aeronautics and Space Administration publications.

Ed 622 **3 Credits**
PHILOSOPHY OF EDUCATION (3+0)

Basic philosophic concepts and their historical development; philosophy applied to education and related issues and problems; examination of contributions of outstanding educators. Prerequisite: graduate standing in Education. Fall and odd Summers.

ED 623/PSY 623 **3 Credits**
COUNSELING SKILLS (3+0)

A basic counseling skills training course, including theory, philosophy, and experience. Emphasis is on the interactions which promote both emotional growth and positive behavioral change. Prerequisites: Psy 265 and 425. Permission of instructor is required for students not admitted to graduate standing in the Psychology Department.

ED 624/PSY 624 **3 Credits**
GROUP COUNSELING (3+0)

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. Prerequisites or Co-requisite: ED 623 or permission of instructor. Spring.

Ed 626 **3 Credits**
INTRODUCTION TO COMPUTER ASSISTED INSTRUCTION (3+0)
Use of computers for instruction in elementary and secondary schools. Evaluation, selection and use of computer assisted instruction (CAI) programs. Integration of CAI into the curriculum. Emphasis is on microcomputers. Includes hands-on use of microcomputers.

Ed 627 **3 Credits**
EDUCATION RESEARCH (3+0)
Techniques of education research; selection of topics and problems, data gathering, interpretation and preparation of reports. Prerequisites: graduate standing in Education. Fall/Spring/Summer.

Ed 629 **3 Credits**
INDIVIDUAL TESTS OF INTELLIGENCE (2+3)
Individual intelligence tests with emphasis on the Revised Standard-Binet Intelligence Scale and the Wechsler Intelligence Scales. Prerequisites: Ed 332 and permission of instructor. As demand warrants and admission by consent of instructor.

Ed 630 **2 Credits**
PRACTICAL ASPECTS OF TESTING
Advanced work in understanding and interpretation of a wide variety of standardized diagnostic instruments designed for use with children and adults. Emphasis will be placed on instruments used for planning educational programs. Students will interpret the diagnostic tests and prepare case reports for use in the child study team meetings. Prerequisite: Ed 332. Fall.

Ed 631 **3 Credits**
ADVANCED EDUCATIONAL PSYCHOLOGY (3+0)
Human emotional, mental, physical and social development. Emphasis on individual differences. Assumes one previous course in human development, educational psychology, and teaching experience. Prerequisite: graduate standing. Spring and Summer.

Ed 632 **3 Credits**
CAREER INFORMATION IN THE PUBLIC SCHOOLS (3+0)
Principles and practices of career guidance. Explains process of career choice, theories of career choice, sources of career information, and methods of delivery of career information to counselees. Spring.

Ed 634 **3 Credits**
COUNSELING PRACTICUM I
The culminating activity of counselor preparation. The counselor candidate works in a school setting and experiences the real situation of a school counselor. Prerequisites: ED 623 and ED 624 and permission of instructor. Fall and Spring.

Ed 635 **3 Credits**
PUBLIC SCHOOL ORGANIZATION, CONTROL AND SUPPORT (3+0)
Fundamentals of public school organization, control, and support. Relation to federal, state and local agencies. Problems incident to public school organization, control, and support in Alaska. Fall and odd Summers.

Ed 636 **3 Credits**
COUNSELING PRACTICUM II
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. Prerequisites: Ed 623, Ed 624, and Ed 634. Permission of instructor. Fall and Spring.

Ed 637 **3 Credits**
PUBLIC SCHOOL ADMINISTRATION (3+0)
Responsibility pertaining to the organization of a school and the direction of personnel. Functions of instructional leadership. Public school administration as a career. Problems incident to public school administration in Alaska. Prerequisites: Ed 635 and graduate standing in Education. Spring and even Summers.

Ed 638 **3 Credits**
SUPERVISION FOR IMPROVEMENT OF INSTRUCTION (3+0)
Development, purpose, organization of supervisory programs; special attention to current in-service education programs. Prerequisite: graduate standing in Education. (Required for, but not limited to, administration majors.) Spring and even Summers.

Ed 639 **3 Credits**
PUBLIC SCHOOL FINANCE (3+0)
Contemporary basis for raising and distributing federal, state and local education funds; problems of school financing in Alaska. Prerequisite: graduate standing in Education. Spring and odd Summers.

Ed 641 **3 Credits**
SCHOOL LAW (3+0)
Rights and responsibilities of teachers and pupils; rulings of the Attorney General; decisions of the courts, regulations of the State Board of Education. Prerequisite: graduate standing in Education. Fall and even Summers.

Ed 645 **3 Credits**
SCHOOL BUILDING PLANNING (3+0)
School site visitation, discussions with planning personnel, and reading in the area of school architecture will be the course basis.

Ed 646 **3 Credits**
SCHOOL BUSINESS MANAGEMENT (3+0)
Operations of the school business manager will be the topic of research. State, federal, and local regulations and policies will be studied.

Ed 647 **3 Credits**
COMMUNITY — SCHOOL BOARD RELATIONS (3+0)
Opportunities to observe, participate and interact with educational leaders and organizations of the community. Reading and research in the area of community-school board relations will be included. Fall and even Summers.

Ed 651 **3 Credits**
CURRICULUM AND INSTRUCTION IN ELEMENTARY EDUCATION (3+0)
Opportunities for participants to explore a wide range of current developments in elementary education which relate to curriculum content and organization, teaching techniques, and current issues and movements in education. Spring and odd Summers.

Ed 652 **3 Credits**
CURRICULUM AND INSTRUCTION IN SECONDARY EDUCATION (3+0)
Opportunities for participants to explore a wide range of current developments in secondary education which relate to curriculum content and organization, teaching techniques, and current issues and movements in education. Spring and even Summers.

Ed 655 **3 credits**
SEMINAR ON THE ADULT LEARNER (3+0)
Discussion of special topics related to the distinctive characteristics of the adult learner in a variety of learning contexts. Prerequisite: Graduate standing.

Ed 660 **1-6 Credits**
PRACTICUM: PRINCIPAL
Field work in an appropriate educational or agency setting. Assignment will be respective to the principalship. Prerequisite: approval of student's advisory committee. Fall and Spring.

Ed 661 **1-6 Credits**
INTERNSHIP: SUPERINTENDENT
Field work in an appropriate educational or agency setting. Assignment will be respective to the superintendency. Prerequisite: approval of student's advisory committee. Fall and Spring.

Ed 675 **3 Credits**
METHODS FOR EDUCATING THE MENTALLY HANDICAPPED (3+0)
Principles and methods for 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. Prerequisite: Ed 460. As demand warrants.

Ed 677 **3 Credits**
COUNSELING FOR EXCEPTIONAL CHILDREN (3+0)
Theories and techniques for those professionals who work with exceptional children and/or their parents. Covers school, family, vocational, and personal problems of exceptional children, from the severely retarded to the brilliantly gifted. Prerequisite: ED 460 or may be taken concurrently with ED 460.

Ed 680 **3 Credits**
THEORIES OF LEARNING DISABILITIES (3+0)
Interdisciplinary contributions to the development of the field of learning disabilities including familiarity with a wide spectrum of theories such as educationally oriented concepts, perceptual motor systems, multisensory systems, language systems, psycholinguistic approaches, neuro-psychological concepts, and psychodynamic theories. The concept of specific learning disabilities will be developed by definition, probable cause, and characteristics of learning-disabled children. An overview proceeding from evaluation to instruction will include diagnostic teaching, newer approaches to reading and specialized methods to prevent and remediate deficits in social, mental and physical development. Fall and even Summers.

Ed 682 **3 Credits**
DIAGNOSIS OF LEARNING DISABILITIES (3+0)
A competency based course in the administration and interpretation of standardized and informal diagnostic procedures designed for use with students with various kinds of learning disabilities. Students will learn to administer, score and interpret tests and develop appropriate various informal procedures in order to make appropriate screening, placement and teaching decisions. Limited to majors in special education, and reading or by special arrangement. Prerequisite: Ed 680 or concurrent enrollment. Fall and even Summers.

Ed 683 **3 Credits.**
REMEDIATION OF LEARNING DISABILITIES (3+0)
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. Limited to majors in special education, and reading or by special arrangement. Prerequisites: ED 680 or concurrent enrollment. Spring and odd Summers.

Ed 684 **3 Credits**
THE GIFTED CHILD (3+0)
The education of the gifted child; social, emotional, and educational problems; divergent and convergent modes of thinking; understanding of high mental ability; and characteristics and methods of optimal classroom program. Prerequisite: ED 460 or may be taken concurrently with ED 460.

Ed 685 **3 Credits**
ADOLESCENT AND ADULT LEARNING DISABILITIES (3+0)
Study of specific problems concerning adults and adolescent learning disabled individuals. Emphasis is placed on preparing students to be able to recognize and cope with emotional characteristics, organize and manage an individualized program for secondary learning disabled students (including mainstreaming), demonstrate instructional techniques, and be cognizant of vocational and career opportunities available. Prerequisite: Ed 680. Spring.

Ed 686 **3 Credits**
WORK STUDY AND CURRICULUM FOR SECONDARY EXCEPTIONAL STUDENTS (3+0)
For secondary special education teachers it provides 1) a basic understanding of the work/study concept; 2) practice in developing appropriate instructional programs for the high school mentally handicapped student; and 3) an introduction to the principles and methods of vocational evaluation, counseling and placement of the handicapped. Prerequisites: Ed 460 and Ed 481. As demands warrents.

Ed 687 **1-9 Credits**
ADVANCED PRACTICUM: SPECIAL EDUCATION (0+3-27)
Supervised field experience with exceptional children in Anchorage area facilities. Students will be assigned to work with children in the area of specialization. From 15 to 30 hours per week in the facility are required. Prerequisite: students must be in the final phase of their programs and have instructor permission. Spring and Summer.

Ed 689 **3 Credits**
INDIVIDUAL AND CLASSROOM MANAGEMENT TECHNIQUES (3+0)
Theoretical basis of various behavioral theories of classroom management are covered with emphasis upon applied Behavior Modification techniques. Several projects using behavior management principles with children are required. Students must have access to children or classrooms or work with children in local institutions. Prerequisite: Ed 212 or equivalent background. Fall and Summer.

THESIS AND INDIVIDUAL RESEARCH
As directed by graduate committee. Prerequisite: Ed 627 and permission of instructor.

Physical Education

PE 100 **1 Credit**
PHYSICAL ACTIVITIES AND INSTRUCTION (0+3)
Instruction, practice and activity in a variety of physical activities, sports and dance in separate sections.

Sections as follows: Hockey; Fall. Intermediate Racquetball. Beginning Fencing; Fall and Spring. Beginning Figure Skating; Fall and Spring. Beginning Golf; Summer. Beginning Racquetball. Cross Country Skiing; Spring. Competitive Sports Conditioning. Racquet Sports. Physical Fitness; Fall, Spring, Summer. Swim Conditioning; Fall. Beginning Badminton. Soccer; Spring and Summer. Firearms and Hunter Safety; Fall. Basketball Conditioning — Men; Fall. Basketball Conditioning — Women; Fall. Hockey Conditioning — Men; Fall. Intermediate/Advanced Figure Skating; Fall and Spring. Beginning Swimming; Fall. Beginning Power Skating; Fall. Intermediate Figure Skating; Advanced Figure Skating. Ski Conditioning; Fall.

PE 150 **2 Credits**
ORIENTATION TO PHYSICAL EDUCATION
Introduction to basic theories and methods for achieving and maintaining high standards of physical fitness. General survey of community

and school sports and exercise programs as they relate to developing positive, long term, knowledgeable attitudes towards personal health. Orientation to current physical education and recreation activity, methods, and theory courses. Open to all students. Required of all physical education majors. Fall.

PE 151 **2 Credits**
SPORTS PROFICIENCY — RECREATIONAL SPORTS (1+3)
Development of an understanding of all rules and regulations as well as minimal skill level in the following recreational sports: archery, bowling, fencing, physical fitness, riflery, skiing, weight lifting, etc. Fall.

PE 152 **2 Credits**
SPORT PROFICIENCY — TEAM SPORTS (1+3)
Development of an understanding of all rules and regulations as well as minimal skill level in the following team sports: basketball, volleyball, soccer, softball, flag football, and hockey. Spring.

PE 153 **2 Credits**
SPORTS PROFICIENCY — INDIVIDUAL SPORTS (1+3)
Development of an understanding of all rules and regulations as well as minimal skill level in the following individual sports: tennis, handball/rackquetball, swimming, golf, track and field. Spring.

PE 200 **1 Credit**
VARSITY SPORTS
Student-athlete's participation in a recognized intercollegiate varsity sport. Registration required during semester of competition. Restricted to one credit per academic year. Prerequisite: permission of coach.
Includes the following: Varsity Cheerleading; Fall. Varsity Hockey; Spring. Varsity Rifle; Fall. Varsity Cross Country Running; Fall. Varsity Skiing; Spring. Varsity Swimming; Fall. Varsity Volleyball; Fall. Varsity Basketball — Women; Fall. Varsity Basketball — Men; Fall.

PE 246 **2 Credits**
ADVANCED FIRST AID (2+0)
Basic, Standard and Advanced First Aid packages of the American Red Cross. Successful completion of requirements leads to certification by the American Red Cross in Advanced First Aid. Fall.

PE 301 **2 Credits**
SPORTS THEORY AND COACHING (2+0)
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.
Includes the following: Basketball; Fall. Hockey; Spring. Gymnastics. Volleyball; Spring. Soccer; Spring and Summer. Football; Fall.

PE 303 **2 Credits**
TECHNIQUES IN TEAM SPORTS (2+0)
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. Even Falls.

PE 304 **2 Credits**
TECHNIQUES IN WINTER SPORTS (1+3)
Methods of teaching skills and coaching teams in snow and ice sports. Odd Falls.

PE 305 **2 Credits**
TECHNIQUES IN INDIVIDUAL AND DUAL SPORTS (1+2)
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. Odd Falls.

PE 306 **2 Credits**
TECHNIQUES IN GYMNASTICS (1+2)
Methods and practice in teaching tumbling and gymnastics apparatus. Even Springs.

PE 309 **2 Credits**
TECHNIQUES IN AQUATICS (1+2)
Satisfies requirements for American Red Cross certification in Basic Rescue and Water Safety and certification in Basic Swim Instructor or Water Safety Instructor. Prerequisite: Permission of the instructor. Spring.

PE 310 **2 Credits**
TECHNIQUES IN RHYTHMS AND DANCE (1+2)
Methods and practice in teaching rhythmic activities and dance. Odd Springs.

PE 311 **3 Credits**
HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION
The role of sports and physical education from ancient to contemporary societies, with consideration of principles of philosophy of physical education; overview of biological, psychological, and sociological foundations of physical education. Odd Springs.

PE 321 **1 Credits**
PRACTICUM IN PHYSICAL EDUCATION
Student serves as student-assistant in PE 100 class, or obtains an equivalent experience in a local school or recreation program. Prerequisite: approval of the department head. May be repeated for a maximum of 4 credits. Fall and Spring.

PE 332 **3 Credits**
TEST AND MEASUREMENTS IN P.E.
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. Odd Falls.

PE 340 **2 Credits**
SPORTS AND RECREATION MANAGEMENT (2+0)
A survey of core areas of private and public recreation management. Areas covered include management, finance, budgeting, marketing, personnel administration, planning and research. Analysis of recreation opportunities and programs in Alaska, including legal issues and land status, are also studied.

PE 406 **3 Credits**
METHODS OF TEACHING PHYSICAL EDUCATION (3+0)
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/Ed 408 **3 Credits**
ELEMENTARY SCHOOL PHYSICAL AND HEALTH EDUCATION (2+3)
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. Prerequisites: Ed 313 and prerequisites thereto. Fall and Spring.

PE 421 **3 Credits**
PHYSIOLOGY OF EXERCISE (3+0)
Physiological adaptations of the human body to muscular activity in exercise and sports under different environmental conditions. Relationships of endurance, training, nutrition, temperature, and altitude to

physical performance. Prerequisite: Biol 112 and permission of instructor. Even Falls.

PE 425 **3 Credits**
ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION (3+0)

Philosophy, methodology, and problems of planning, organizing, directing and evaluation school programs in physical education, intramural sports and inter-school athletics. Even Springs.

PE 430 **3 Credits**
ADAPTIVE PHYSICAL EDUCATION

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. Summer.

PE 432 **3 Credits**
BIO-MECHANICS OF EXERCISE AND SPORTS (3+0)

Mechanics of human movement, mechanical and muscular analysis of human movement patterns, especially in exercise and sports. Anatomical concepts and physical laws applied to joint and muscular action. Prerequisite: Biol 112 and permission of instructor. Odd Falls.

PE 440 **3 Credits**
PREVENTION AND CARE OF ATHLETIC INJURIES (2+2)

Prevention and care of injuries related to participation in sports and physical activity; theory and practice in taping and bandaging for prevention and rehabilitative purposes. Techniques in pre-activity and post-injury conditioning; equipment safety. Prerequisite: Biol 112. Spring.

PE 460 **3 Credits**
SOCIO-PSYCHOLOGICAL BASES OF PHYSICAL EDUCATION AND SPORT (3+0)

An examination of theoretical and applied psychological and sociological parameters as they pertain to sport participation and physical activity. Prerequisite: Psy 111. Odd Springs.

PE 470 **3 Credits**
HUMAN MOTOR LEARNING AND PERFORMANCE (3+0)

Examination of theoretical and applied psychological parameters as they pertain to motor skill acquisition and human motor performance. Prerequisite: Psy 111. Odd Springs.

SCHOOL OF ENGINEERING

Faculty

Dean: Oscar E. Dickason
Professors: John M. Hilpert, David C. Junge, William G. Nelson, Arvind Phukan
Associate Professors: Theodore G. Eschenbach, Robert E. Miller
Assistant Professors: Albert T. Stoddard, Eliza I. Wojtaszek
Instructor: Ronald G. Cothren

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 man and is responsible to society in the decisions he or she makes. 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 all of us 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 to enter law, medical, or business school or graduate studies in engineering. The engineering programs at the University emphasize Northern problems and principles; therefore, engineering graduates of the University of Alaska are in great demand in the Alaskan job market. Many of the leading professional engineers of Alaska are graduates of the University of Alaska's engineering program.

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.

Degrees

The School of Engineering offers the courses of study leading to the four-year Bachelor of Science degree in Civil Engineering. The first two years of this program also generally apply to most other fields of engineering, so that a student desiring other fields can begin an engineering program here. The School also offers graduate level Masters Degree programs in Engineering Management, Science Management, Environmental Quality Engineering, Environmental Quality Science, Civil Engineering and Arctic Engineering.

Expected Preparation for Undergraduate Study

The specific courses of high school work, which 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 students graduating from high school without the preparation indicated above enroll in the necessary courses to make up deficiencies during the summer term, so they can begin the Fall term with the complete freshman curriculum in engineering.

For those students required to take Math 106 during the Fall, ES 111 will be taken during the Spring semester.

FOR ADDITIONAL REQUIREMENTS OF THE SCHOOL REGARDING PROGRESS TOWARD DEGREES AND MAINTAINENCE OF GOOD STANDING, PLEASE CONSULT THE OFFICE OF THE DEAN, SCHOOL OF ENGINEERING.

Degree Programs

AVAILABILITY OF COURSES:

All required courses for the degree in Civil Engineering are presently offered. Students desiring degrees in engineering specialties other than Civil should plan to transfer at the end of their second year.

The graduate offerings of the School of Engineering are scheduled to accommodate part-time, evening students. As a result, the graduate programs normally require two or more years for completion.

Each student is expected to consult an advisor for proper course scheduling.

Applications for Admission to graduate study in the School of Engineering will be accepted on a continuous basis.

Engineering, Arctic

The Arctic Engineering program is designed to provide graduate education for engineers who must deal with the unique challenge of design, construction, and operations in the cold regions of the world. The special problems created by the 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 understanding of heat transfer processes. In addition, properties of frozen ground and frozen water are basic to most engineering activities in the Arctic. The areas of hydraulics, hydrology, 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 fields of interest. Research activities carried out by faculty associated with this program can provide opportunities for thesis or project papers dealing with the most current arctic knowledge.

Current 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

1. Complete General University Degree Requirements for the graduate degrees as shown on page 45-47.
2. Complete the following degree and major specialty requirements.
   a. Bachelor's Degree in Engineering
   b. Core Courses (minimum of 15 credits)

	Credits
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

   c. CE — Thesis or Project 3
   d. Electives: 12 credits in areas related to/or supportive of the student's degree program and approved by the student's graduate committee.
3. Statewide School of Engineering requirement: Pass the State of Alaska Engineer-in-Training examination (examinations of other states accepted by the Alaska State Board of Examiners will meet this requirement).

Engineering, Civil

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 developmental 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 Ocean Engineering, Environmental Quality Engineering, Engineering Management, and other areas in addition to the Civil Engineering courses.

BACHELOR OF SCIENCE—CIVIL ENGINEERING

1. Complete the General University Requirements on page 45-47.
2. Complete the General Education Degree Requirements for a baccalaureate degree on pp. 45-47.
3. Complete the major requirements:

FIRST YEAR

Fall Semester	Credits
Engl 111 — Methods of Written Communication	3

Math 200 — Calculus 4
ES 101 — Graphics 2
ES 111 — Engineering Science 3
Chem 105 — General Chemistry 4
16

Spring Semester

Spch 111 — Fund. of Oral Communications 3
Math 201 — Calculus 4
ES 102 — Graphics II 2
CE 112 — Elementary Surveying 3
Chem 106 — General Chemistry 4
ES 201 — Computer Techniques 3
19

SECOND YEAR
Fall Semester

Math 202 — Calculus 4
Phys 211 — General Physics 4
ES 209 — Engineering Statics 3
Engl 213 — Intermediate Exposition 3
Social Science/Humanities/Arts Area 3
17

Spring Semester

Math 302 — Differential Equations 3
Phys 212 — General Physics 4
ES 210 — Engineering Dynamics 3
CE 334 — Properties of Materials 3
Social Science/Humanities/Arts Area 3
16

THIRD YEAR
Fall Semester

ES 301 — Engineering Analysis 3
ES 307 — Elements of Electrical Engineering 4
ES 331 — Mechanics of Materials 3
ES 341 — Fluid Mechanics 4
Social Science/Humanities/Arts Area 3
17

Spring Semester

ES 346 — Basic Thermodynamics 3
ES 308 — Instrumentation and Measurements 4
CE 344 — Water Resources Engineering 3
CE 441 — Sanitary Engineering 4
GEOL Elective by Advisement 3
17

FOURTH YEAR
Fall Semester

CE 415 — Advanced Surveying 3
CE 435 — Soil Mechanics 3
CE 431 — Structural Analysis 4
Social Sciences/Humanities/Arts Area 6
16

Spring Semester

ESM 450 — Economic Analysis and Operations 3
CE 402 — Transportation Engineering 3
CE 422 — Foundation Engineering 3
CE 432 — Structural Design 4
CE 438 — Design of Engineering Systems 3
16

A minimum of 134 credit hours must be completed for the BS in Civil Engineering.

Of the 15 Social Science/Humanities/Arts Area credits, at least 6 must be above the 100 level or be advanced courses in a 100 level sequence.

MASTER OF CIVIL ENGINEERING

Students entering the Master of Civil Engineering program should have completed a bachelor's degree in engineering.

A student will elect a Civil Engineering program approved by his graduate committee and must complete the general university requirements and master's degree requirements.

Thirty credits of approved courses beyond the BS degree are required. MCE candidates will have passed a State Engineer-in-Training Examination prior to the awarding of the degree.

MASTER OF SCIENCE — CIVIL ENGINEERING

A student selecting this program will meet the general university requirements and master's degree requirements plus the following: 30 credits approved by his graduate committee, of which six to twelve credits will be thesis.

Engineering Management Science Management

The engineering management and science management curriculum is designed for graduate engineers and scientists who will hold executive or managerial positions in engineering, construction, industrial, or governmental organizations. It includes human relations, financial, economic, quantitative, technical, and legal subjects useful in solving problems of management.

The curriculum includes graduate-level core courses in the 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. In addition to an undergraduate degree, a candidate should have had on-the-job experience in engineering or science.

MASTER OF SCIENCE

Science Management

Engineering Management

1. Complete the General University Requirements for the graduate degrees as shown on page 45-47.
2. For the MS in EM candidates must hold a BS or MS in an engineering discipline. For the MS in SM candidates must hold a BS or MS in a scientific field.
3. Complete the following course requirements.

	Credits
ESM 605 — Engineering Economy	3
ESM 608 — Legal Environment for ESM	3
ESM 611 — Accounting for ESM	3
ESM 612 — Finance for ESM	3
ESM 613 — Personnel for ESM	3
ESM 621 — Operations Research	3
ESM 684 — ESM Project	3
AS 307 — Probability and Statistics	3
*Electives	6

*Electives must have the approval of the department. Electives may include advanced courses in computer science but not courses in basic FORTRAN.

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 nine credits of appropriate graduate-level course work completed at other institutions with a grade of A or B may be transferred and applied toward the total 30 credits of required and elective courses. Both substitutions and transfer of credit must be approved by the department.

4. In addition to completing the 30 credits indicated above, a candidate must demonstrate competence in computer programming by passing a programming course or a qualifying examination.
5. No course included in the 30 credits of a student's program may have counted toward another degree.
6. A student may not repeat a course that is part of his program, if he has received a "C" or better in that course.

Engineering, Environmental Quality

MASTER OF SCIENCE

Environmental Quality Engineering

Environmental Quality Science

(Interdisciplinary)

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. For students having non-engineering degrees, an interdisciplinary program is available leading to the Master of Science in Environmental Quality Science. Applicants should refer to the general requirements for graduate study.

1. Complete the General University Degree Requirements and degree requirements for the graduate degrees as shown on page 45-47.
2. Complete the following degree and major specialty requirements.

	Credits
EQE 601 — EQS Measurements	3
EQE 602 — Water Quality Management	3
EQE 603 — Solid Waste and Air Pollution	3
EQE 604 — Environmental Quality Evaluation	3
EQE 605 — C/P Processes	3
EQE 606 — Biological Processes	3
EQE 684 — EQE Project	3
*EQE 693 — Special Topics	0-3
*EQE 697 — Individual Study	0-6
*EQE 699 — Thesis	0-6
*Electives	6-9

A minimum of 30 credits of approved courses must be completed.

*Electives must have approval of graduate committee.

3. Thesis study (6 credits) is optional.

Thesis Option:	Credits
Thesis	6
Required courses	18
Electives	6
	30

Non-Thesis Option:	
Special Project	3
Required Courses	18
Electives	9
	30

Course Descriptions

Civil Engineering

CE 112 **3 Credits**

ELEMENTARY SURVEYING (2+3)

Basic plane surveying, chaining, use of transit level, theodolite, and plane table, stadia, public land system, circular curves, traverse. Prerequisite: ES 111 or permission of instructor. Spring Semester.

CE 334 **3 Credits**

PROPERTIES OF MATERIALS (1+6)

Introduction to the properties of engineering materials. Bonding, crystal, and amorphous structures. Relationships between microstructure and engineering properties. Modification of properties and environmental serviceability. Concrete and asphalt mixes. Spring Semester.

CE 344 **3 Credits**

WATER RESOURCES ENGINEERING (2+3)

Fundamentals of engineering hydrology and hydraulic engineering. Precipitation, runoff, statistical methods, flood control, open channels, and groundwater. Prerequisite: ES 341. Spring Semester.

CE 402 **3 Credits**
TRANSPORTATION ENGINEERING (2+3)
Administration, economics, location, construction and maintenance of highways, railways, airports and other transportation facilities. Spring Semester.

CE 412 **3 Credits**
ELEMENTS OF PHOTOGRAMMETRY (2+3)
Elementary study of aerial and terrestrial photographs as applied to surveying and mapping. Prerequisite: permission of instructor.

CE 415 **3 Credits**
ADVANCED SURVEYING (2+3)
Azimuth by astronomic methods, route surveying, including horizontal and vertical curves, cross-sectioning, earthwork, reduction of electronic distance measurement, Alaska State Plane Coordinate System. Prerequisite: CE 112. Fall Semester.

CE 416 **1 Credit**
BOUNDARY SURVEYING (1+0)
Surveying problems related to land subdivision with emphasis on the legal aspects. Both metes and bounds descriptions and platted subdivisions are considered.

CE 422 **3 Credits**
FOUNDATION ENGINEERING (3+0)
Principal of foundation action, spread footings, mats, pile foundations, retaining walls and bulkheads, bridge piers, cofferdams and abutments. Prerequisite: CE 435. Spring Semester.

CE 431 **4 Credits**
STRUCTURAL ANALYSIS (3+3)
Statically determinate structures. Loadings, graphical and analytical solutions: stresses and deflections; indeterminate structures; influence lines. Prerequisite: ES 331. Fall Semester.

CE 432 **4 Credits**
STRUCTURAL DESIGN (3+3)
Planning of structural systems, loadings, steel and reinforced concrete design, composite design, details and connections. Prerequisite: CE 431. Spring Semester.

CE 434 **1 Credits**
TIMBER DESIGN (1+0)
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. Prerequisite: ES 331.

CE 435 **3 Credits**
SOIL MECHANICS (2+3)
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. Prerequisites: ES 331. CE 334. Fall Semester.

CE 438 **3 Credits**
DESIGN OF ENGINEERING SYSTEMS (3+0)
Introduction to system design methods for large scale engineering systems. The application of linear and dynamic programming and statistical methods to design decisions. Emphasis on problems in civil engineering. Prerequisite: senior standing in an engineering program. Spring Semester.

CE 441 **4 Credits**
SANITARY ENGINEERING (3+3)
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. Prerequisite: ES 341 or permission of instructor Spring Semester.

CE 470 **1 Credits**
CIVIL ENGINEERING INTERNSHIP (0+3)
Designed to give students the opportunity to investigate the practical workings of engineering organizations. Assignments individually arranged with cooperating organizations and agencies. Prerequisites senior standing or permission of department coordinator. Spring Semester alternate years.

CE 603 **3 Credits**
ARCTIC ENGINEERING (3+0)
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. Prerequisite: graduate standing or permission of instructor. Fall and Summer Semesters.

CE 617 **3 Credits**
CONTROL SURVEYS (3+0)
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. Prerequisite: CE 415 or other surveying experience acceptable to instructor. Spring semester alternate years.

CE 620 **3 Credits**
CIVIL ENGINEERING CONSTRUCTION (3+0)
Construction equipment and methods, construction management and accounting, construction estimates and costs. Prerequisite: ESM 450 or equivalent.

CE 632 **3 Credits**
ADVANCED STRUCTURAL DESIGN (3+0)
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. Prerequisite: CE 431.

CE 649 **3 Credits**
CITY AND REGIONAL PLANNING (3+0)
Elements of city and regional planning for engineers. Demography, land use, physical planning techniques.

CE 662 **3 Credits**
SURFACE WATER DYNAMICS (3+0)
Principles of open channel flow, ice covered flow, unsteady flow, streamflow as a sediment and pollution transport agent. Prerequisite: ES 341.

CE 663 **3 Credits**
GROUND WATER DYNAMICS (3+0)
Fundamentals of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development. Prerequisite: ES 341.

CE 676 **3 Credits**
COASTAL ENGINEERING (2+1)
Review of deep and shallow water waves, littoral drift, coastal structures, pollution problems, harbor seiches.

CE 681 **3 Credits**
FROZEN GROUND ENGINEERING (3+0)
Nature of frozen ground, thermal properties of frozen soil classification, physical and mechanical properties of frozen soils, sub-surface investigation of frozen ground, thaw settlement and thaw consolidation, slope stability, and principles of foundation design in frozen ground. Prerequisite: training or experience in soil mechanics. Fall Semester alternate years.

CE 682 **3 Credits**

ICE ENGINEERING (3+0)

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. Prerequisite: ES 331, Math 202, training or experience in Soil Mechanics. Spring semester alternate years.

CE 683 **3 Credits**

ARCTIC HYDROLOGY AND HYDRAULIC ENGINEERING (3+0)

Aspects of hydrology and hydraulics unique to engineering problems of the north. Emphasis on Alaskan conditions, information from Canada and other circum-polar countries included. Prerequisite: CE 344 or equivalent. Fall Semester alternate years.

CE 684 **3 Credits**

ARCTIC UTILITY DISTRIBUTION (3+0)

Practices and considerations of utility distribution in Arctic regions. Emphasis on proper design to include freeze protection, materials, energy conservation and system selection. Prerequisite: ES 341 or permission of instructor. Fall Semester alternate years.

CE 590 **4.8 CEU Credits**

ENGINEERING REFRESHER (PE)

Designed for the practicing engineer who has passed the State of Alaska Engineer-in-Training exam. It provides a review of fundamentals in civil engineering with emphasis upon material required to pass the State of Alaska Professional Engineer Exam.

Engineering Science

ES 101 **2 Credits**

GRAPHICS (0+4)

Correct use of drafting instruments. Lettering, geometric construction, orthographic projection, sketching dimensioning, perspective drawing, simple design project. Introduction to computer graphics. Fall and Spring semesters.

ES 102 **2 Credits**

GRAPHICS (0+4)

Descriptive geometry, graphic solution of three-dimensional problems, design project, graphic solution of vector problems, perspective drawings by computer, graphs, charts and diagrams, graphical calculus. Prerequisite: ES 101 or equivalent. Spring Semester.

ES 111 **3 Credits**

ENGINEERING SCIENCE (3+0)

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. Prerequisite: High school algebra and trigonometry or concurrent registration in Math 200. Fall and Spring Semesters.

ES 201 **3 Credits**

COMPUTER TECHNIQUES (3+0)

An introduction to programming and analysis using FORTRAN. Computer solution of problems in engineering and physics. Microcomputer and programmable calculator applications. Prerequisite; Math 107, 108 or enrollment in Math 200. Fall and Spring Semesters.

ES 209 **3 Credits**

ENGINEERING STATICS (3+0)

Vector quantities, equilibrium including friction forces, structural mechanics, center of gravity and moments of inertia are considered. Prerequisites: ES 111 or Physics 211 and Math 201. Fall Semester.

ES 210 **3 Credits**

ENGINEERING DYNAMICS (3+0)

Kinematics and kinetics of particles and rigid bodies are studied. Newton's laws of motion, momentum and work and energy concepts are studied. Prerequisite: ES 209. Spring Semester.

ES 301 **3 Credits**

ENGINEERING ANALYSIS (3+0)

Application of mathematical tools to engineering with emphasis on the mathematical formulation of typical engineering problems. Selected topics from all fields of engineering. Prerequisites: Math 302 and ES 201. Fall Semester.

ES 307 **4 Credits**

ELEMENTS OF ELECTRICAL ENGINEERING (3+3)

Electrical fundamentals; elementary circuits and theorems, natural, forced and steady state response; principles of electronics; circuit models and system parameters. Prerequisite: Math 302 or permission of instructor. Fall Semester.

ES 308 **4 Credits**

INSTRUMENTATION AND MEASUREMENT (3+3)

Characteristics of AC and DC machines, transformers and devices; transducers; data sensing, recording and display; electronic amplifiers and instrumentation systems. Prerequisite: ES 307. Spring Semester.

ES 331 **3 Credits**

MECHANICS OF MATERIALS (2+3)

Theory and practice of structural material. Stress-strain relationships. Torsion. Shear and moment diagrams. Beams, columns, shafts. Connections. Indeterminate analysis. Prerequisites: ES 210, Math 201. Fall Semester.

ES 341 **4 Credits**

FLUID MECHANICS (3+3)

Statics and dynamics of fluids. Basic equations of hydrodynamics, dimensional analysis, simple hydraulic machinery. Prerequisites: ES 210, Math 201. Fall Semester.

ES 346 **3 Credits**

BASIC THERMODYNAMICS (3+0)

Systems, properties, processes, and cycles. Fundamental principles of thermodynamics (first and second laws), elementary applications. Prerequisites: Math 202, Phys 212. Spring Semester.

ES 590 **4.8 CEU Credits**

ENGINEER REFRESHER (EIT)

The purpose of this course is to enable engineers to pass the State Engineer-in-Training (Fundamental) Examination. Will cover thermodynamics, physics, chemistry, mathematics (calculus), electricity, statics, dynamics, strength of materials, kinematics, and hydraulics. Spring Semester.

Engineering and Science Management

ESM 401 **3 Credits**

CONSTRUCTION COST ESTIMATING AND BID PREPARATION (3+0)

Compilation and analysis of the many items that influence and contribute to the cost of the proposals and study of bidding procedures. Preparation of cost proposals and study of bidding procedures. Alternate Spring Semesters.

ESM 450 **3 Credits**

ECONOMICS ANALYSIS AND OPERATIONS (3+0)

Fundamentals of engineering economy, project scheduling, estimating legal principles, professional ethics, human relations (Not offered for credit toward the Master of Science in Engineering management or Science Management). Spring Semester.

ESM 605 **3 Credits**
ENGINEERING ECONOMY (3+0)
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. Fall Semester.

ESM 608 **3 Credits**
LEGAL ENVIRONMENT FOR ENGINEERING MANAGEMENT (3+0)
Devoted to those aspects of law specifically related to technical management. Contracts, sales, real property, business organization, labor, patents, insurance. Spring Semester.

ESM 609 **3 Credits**
PROJECT MANAGEMENT (3+0)
Organizing, planning, scheduling and controlling projects. Use of CPM and PERT;' computer applications. Case studies of project management problems and solutions.

ESM 611 **3 Credits**
ACCOUNTING FOR ESM (3+0)
A first course in accounting principles, industrial accounting, business organization; business finance; emphasis on use of data management rather than its generation. Fall Semester.

ESM 612 **3 Credits**
FINANCE FOR ESM (3+0)
Development of ability to seek out needed information, analyze it, and make recommendations over a wide range of managerial problems involving fiscal matters; cases involving capital acquisitions, profit maximization, management problems. Prerequisite: ESM 605 and ESM 611. Spring Semester.

ESM 613 **3 Credits**
PERSONNEL FOR ESM (3+0)
Human element in management; labor relations, human relations, personnel administration, industrial psychology, employee relations, and labor economics from the viewpoint of a manager. Fall Semester.

ESM 621 **3 Credits**
OPERATIONS RESEARCH (3+0)
Mathematical techniques for aiding managerial decision-making. Waiting line theory, inventory models, linear programming, transportation problems, dynamic programming, PERT/CPM, machine scheduling, and simulation. Emphasis on application of techniques to actual management situations. Prerequisite: AS 307 or permission of instructor. Spring Semester.

ESM 623 **3 Credits**
COMPUTER PROGRAMMING FOR ENGINEERING MANAGERS (3+0)
A course in basic FORTRAN programming, with application to engineering and science management problems. (NOT offered for credit toward the MS in Engineering Management or Science Management.)

ESM 684 **3 Credits**
ESM PROJECT (3+0)
Individual study of an actual engineering or science management problem, resulting in a report which includes recommendations for action. Fall, Spring, Summer Semesters.

Environmental Quality Engineering

EQE 601 **3 Credits**
ENVIRONMENTAL QUALITY SCIENCE MEASUREMENTS (2+3)
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 the Examination of Water and Wastewater." Experiments on unit processes of treatment systems are included along with consideration for solid waste and air pollution monitoring. Prerequisite: permission of instructor. Fall Semester*.

EQE 602 **3 Credits**
WATER QUALITY MANAGEMENT (3+0)
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. Prerequisite: permission of instructor. Fall Semester*.

EQE 603 **3 Credits**
SOLID WASTE AND AIR POLLUTION (3+0)
Planning, collecting and disposing of refuse. Techniques of open dumping, landfilling, sanitary landfilling, composting incineration, and resource recovery. Solid waste environmental relationships to water, air and land pollution. Economics and case studies are included. Air pollution topics will include quantity and quality of atmospheric emissions and their effects on man and his environment. Identification and location of sources, measurement of quality and quantity, control and regulations, economics and standards. Prerequisite: permission of instructor. Fall Semester*.

EQE 604 **3 Credits**
ENVIRONMENTAL QUALITY EVALUATION (3+0)
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. Prerequisites: graduate standing and permission of instructor. Fall Semester*.

EQE 605 **3 Credits**
CHEMICAL AND PHYSICAL WATER AND WASTEWATER TREATMENT PROCESSES (3+0)
The theory and design of chemical and physical unit process utilizing the treatment of water and wastewater. Sedimentation and flotation, ion exchange, absorption, coagulation, precipitation, filtration, disinfection, reverse osmosis and aeration theories will be studied. Design problems for all unit processes. Prerequisites: graduate standing and permission of instructor. Spring Semester*.

EQE 606 **3 Credits**
BIOLOGICAL TREATMENT PROCESSES (3+0)
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. Prerequisites: graduate standing and permission of instructor. Spring Semester*.

EQE 684 **3 credits**

EQE PROJECT (3+0)

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 sequence repeats every three semesters.

Mechanical Engineering

ME 685 **3 Credits**

ARCTIC HEAT AND MASS TRANSFER (3+0)

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. Prerequisite: graduate standing or permission of instructor. Spring Semester alternate years.

ME 687 **3 Credits**

ARCTIC MATERIALS ENGINEERING (3+0)

The performance of materials subjected to temperature extremes typical of the arctic are examined. Specific topics covered include metalic and nonmetalic solids, fuels and lubricants, batteries, electrical considerations, corrosions and human performance. Prerequisite: CE 603 Arctic Engineering or permission from instructor. Spring Semester.

ME 590 **4.8 CEU Credits**

ENGINEERING REFRESHER (PE)

Designed for the practicing engineer who has passed the State of Alaska Engineer-in-Training exam. It provides a review of fundamentals in mechanical engineering with emphasis upon material required to pass the State of Alaska Professional Engineer Exam.

Petroleum Engineering

Petr 101 **3 Credits**

INTRODUCTION TO THE PETROLEUM INDUSTRY (3+0)

A survey of the petroleum industry from exploration through refining.

Petr 301 **3 Credits**

PETROLEUM DRILLING ENGINEERING (3+0)

Fundamental principles of rotary oilwell drilling and the engineering principles used in actual field practice. Course will include field trip to observe drilling rig and related support equipment. Prerequisites: Phys 211, Math 201 or permission of instructor.

Petr 302 **3 Credits**

OIL WELL DESIGN AND PRODUCTION (3+0)

Fundamental principles underlying the analysis, design and engineering of petroleum production systems. Prerequisites: Phys 211, Math 201 or permission of instructor.

Petr 304 **3 Credits**

PETROLEUM RESERVOIR ENGINEERING (3+0)

Quantitative study and behavior prediction of volumetric and water drive oil and gas reservoirs by material balance. Prerequisites: Math 201 and Phys 212.

Petr 612 **3 Credits**

WELL TEST ANALYSIS (3+0)

A thorough treatment of oil and gas well test analysis including drawdown, buildup and interference, multiple rate testing, drill stem testing, fracture detection and transient rate analysis. Fundamental deviation and practical applications will be presented.

COLLEGE OF NURSING AND HEALTH SCIENCES

FACULTY

Dean: Clair Eugene Martin

NURSING

Professor: Clair Eugene Martin (Dean)
Associate Professors: Tina DeLapp, Effie Graham, Betty Hodo (Associate Dean), Annabelle Moore
Assistant Professors: Connie Bertholf, Ann Evans, Janet Hale, Susan House-Darden, Susan Littell, Janet Mischler, Gail Moses, Duane Pennebaker, Jackie Pflaum, Diane Toebe, Marcia Watson
Instructors: Bernice Carmon, Jill Janke, Kate Morris, Vincent Pelletier, Rose Wong Pray, Nancy Sanders

CONTINUING EDUCATION IN THE HEALTH SCIENCES

Assistant Professor: Gwen Otte (Director)
Instructor: Patricia Woods Brown, Daryl Young

ALCOHOL AND ADDICTION STUDIES

Professor: Bernard Segal (Director)
Associate Professor: Thomas D. Lonner
Assistant Professor: Jill G. McKelvy

HIGH LATITUDE STUDIES

Professor: William Mills (Director)
Instructor: Dale Walberg

The College of Nursing and Health Sciences is a comprehensive unit within the University of Alaska, Anchorage, whose mission is the provision of instructional, research and service programs that focus primarily on human health and health care delivery systems. Program emphasis is influenced by a concern for the needs of rural as well as metropolitan Alaskans in regard to health care, health care delivery systems and health-related education. In addition to local and State concerns, programs are influenced by the philosophy that addressing national and international concerns is an important contribution to be made by the College.

The College seeks to provide high quality instruction at the undergraduate, graduate and continuing education levels designed to produce competent professionals in health-related fields. The unit's interdisciplinary focus is felt to be important to accomplishment of this goal. The College recognizes the need for and strives to develop programs which will lead to greater numbers of Native Alaskans being educated as health care practitioners.

Research designed to enhance the knowledge and practice basic to quality health care is promoted. The College will become the center for high latitude health research. The philosophy that interdisciplinary effort is essential to a strong research program will guide project development. Thus, articulation of researchers with units inside and outside the College will be encouraged.

The College seeks to provide a resource pool to assist in the indentification of health care or health care delivery system needs and in the planning, implementation and evaluation of programs to meet these needs. Other public service responsibilities include development of the College as a repository for health-related information and as a clearinghouse for the dissemination of such information. Dissemination of health-related knowledge will also be accomplished through special programs of public instruction.

School of Nursing

The mission of the School of Nursing is to educate students for productive citizenship, personal growth, and professional nursing practice. Undergraduate students are provided both the theory and clinical base to assess, plan, implement, and evaluate health care needs and nursing actions relative to the prevention of illness, the promotion and restoration of health for individuals and groups in both institutional and community health settings. Instruction and clinical experiences are designed to maximize the students breadth of understanding of the unique health care needs of various age and socio-cultural groups. The program is designed to reflect Alaskan health care needs and our health care delivery system although the graduate is prepared for beginning practice positions in other health care delivery settings as well. The Baccalaureate program is accredited by the Alaska Board of Nursing and the National Division of Baccalaureate and Higher Degree Programs. Graduates of the program are eligible to write the National Council Licensure Examination for licen-

sure as a Registered Professional Nurse in any of the 50 states. The program also provides students with the academic base for graduate study in nursing.

Graduate studies at the masters level place a primary emphasis upon advanced professional nursing practice, theory, research and health care delivery systems. Students may develop a specialized practice focus in Community Health, Community Mental Health or as a Family Nurse Practitioner. Students may also choose to include advanced coursework to support advanced practice in functional areas: i.e., Nursing Administration, Nursing Consultation, or Nursing Education. Masters level studies provide a foundation for doctoral study.

Continuing Education in the Health Sciences

The Continuing Education mission is to provide academically based continuing education (CE) for heath care practitioners and contribute to the promotion of health awareness and responsibility.

Both traditional and nontraditional delivery systems are utilized to make a variety of courses, conferences and workshops accessible statewide. Each offering is planned on the basis of needs assessment with the collaboration of appropriate health professionals. Continuing Education Units (CEU's) are awarded on the national standard 1 CEU for 10 contact hours of presentation. A record of CE courses is kept on an individual transcript by UAA for each participant. Continuing Education programs in nursing are both National League of Nursing and Alaska Nurses Association accredited. Accreditation by national associations as appropriate for select groups of participants, whether nurses, EMTs, paramedics, dieticians, pharmacists, physical therapists, physician assistants, nurse practitioners or physicians is obtained for each course. A calendar of CE offerings is available upon request.

Center for Alcohol and Addiction Studies

The Center for Alcohol and Addiction Studies, represents the University's endeavor to address the problem of substance use and abuse in the state of Alaska. Established in 1972 by the Board of Regents at the request of the Governor's Advisory Board on Alcoholism and by petition from many prominent Alaskans, the Center's concerns with helping to alleviate alcohol and drug abuse in Alaska through the development and implementation of educational, training, research, and public service programs.

The Center's educational program are designed to provide an understanding of a) addictive substances and processes, b) treatment and prevention concepts and methods, and c) contemporary issues and concerns in the field of substance abuse.

The training activities undertaken by the Center are designed to provide opportunities for the acquisition and development of skills in substance abuse counseling, treatment, prevention methods, program management, and administration. The Center's training efforts, in conjunction with the College's Continuing Education in the Health Sciences programs, will broaden the scope of the Center's activities and facilitate programs emphasizing a health science perspective.

The Center's programs of applied, basic, and evaluative research are designed to expand the body of knowledge concerning the nature and scope of the alcohol and drug abuse problems in Alaska and the effectiveness of current prevention and treatment methods and approaches.

The Center also conducts a range of public service projects which include conferences and workshops for both the general public and helath related professionals. Consultation services in the areas of program planning, development, implementation, administration, and evaluation are also available.

Center for High Latitude Health Research

The High Latitude Health Research Projects represent a medical investigation of health problems frequently encountered in the cold environment at sea level and at high altitude. Research and field activities focus on the prevention, diagnosis, and treatment of frostbite, hypothermia, near drowning, and high altitude sickness. Project members work closely with rescue and transport of victims of the above. The project utilizes Mount McKinley/Denali as a natural laboratory for studies related to altitude, cold injury, and trauma. Biofeedback is utilized as a prevention and treatment modality for frostbite. Experimental animal physiology studies investigate environmental extremes where a variety of resuscitative and treatment techniques are employed.

Research results are published in symposia publications, journals, and public oriented articles. Project members participate in conferences and symposia and conduct continuing education courses.

The High Latitude Health Research Projects operate on state appropriated funds. The initial three year contract began in January of 1981. Future operation is dependent upon reappropriation of funding.

Degree Program

BACHELOR OF SCIENCE WITH A MAJOR IN NURSING

Admission requirements are the same for all Bachelor's Degree programs. However, admission to the university does not guarantee entry into clinical nursing courses. There are a limited number of seats available in each clinical course. Selective admission is based upon the students' relative standing on the following minimum requirements:

1. Cumulative GPA and at least a "C" in all Nursing courses.
2. Three letters of reference
3. Interview with faculty
4. Recent negative tine test or chest X-ray.
5. Rubella Titer
6. Successful completion of prerequisite courses.

Advanced placement will be based upon evaluation of previous college work and/or test scores. Official transcripts and syllabi of completed nursing courses should be forwarded to the School of Nursing.

Satisfactory Progress

In order to progress within the major, the student must have a grade of "C" or better in each required nursing course and must maintain an overall GPA of 2.0 or better.

Credit By Examination

The school offers R.N.'s an opportunity to earn credit by examination in a number of courses. Each student is individually evaluated on both theoretical and clinical competency. Additional information is available upon request.

Expenses

Students enrolled in clinical courses will have expenses in addition to regular tuition and fees. These expenses include a $10 per semester clinical course fee. Books, uniforms and instruments are variable additional costs. Students are expected to arrange their own transportation to class and clinical assignments.

Baccalaureate Degree Requirements*

1. Complete the General University Degree Requirements and the General Education Degree Requirements for a baccalaureate degree as shown on page 45-47. To be included among these requirements are:

	Credits
Engl 111 and 211, or 213, or 311	6
Spch 111	3
AS 300 or 307 — Elementary Statistics	3
Biol 111 and 112 — Human Anatomy and Physiology I and II	8
Chem 120 and 121 — Survey of Chemistry and Biochemistry	8
Psy 150 — Human Development	3
Biol 240 — Intro to Bacteriology	4
Reasoning Skills — General Education Requirement (see p. 47)	3
Social Science — General Education Requirement (see p. 47)	3
Social Science elective	3
Humanities — General Education Requirement (see p. 47)	6
Arts — General Education Requirement (see p. 47)	3

2. Complete support courses for Nursing Major:

	Credits
BA 335 — Management Principles and Practices	3
PS/BA/JPC 432 or Soc 352 or HS 380 — Reserach Methods	3
HS 203 — Normal Nutrition	2
HS 216 and 217 — Pathophysiology and Therapeutics I and II	6

3. Complete required courses for Nursing Major:

NS 110 — Nursing as a Personal and Social Response	3
NS 301 and 302 — Nursing the Well Client I and II	16
NS 303 — Nursing Clients Experiencing Temporary Health Disruptions	10
NS 401 — Nursing Clients Experiencing Long Term Health Disruptions	10
NS 402 — Concentration in Professional Nursing Practice	10
Upper Division Nursing Electives (300 level or higher)	3-10
Electives (must be in Humanities, Social Sciences, Mathematics, or Science — see your advisor for additional limitations) to total	130

*Nursing faculty are involved in curriculum revision activities. Contact the College of Nursing for information concerning Requirements implemented subsequent to catalogue publication.

MASTER OF SCIENCE WITH A MAJOR IN NURSING

A three semester sequence to provide advanced clinical preparation in a specialty area. Current clinical options are psychosocial nursing and family nurse practitioner. A community health option is being developed. Nursing theory and research methods are an integral part of advanced nursing practice.. A research thesis is required of all students. A fourth semester option also permits students to choose intensive study in a functional role, i.e.: administration, education or consultation.

Graduate Admission Requirements

1. Application to the University of Alaska, Anchorage and Graduate Application to the College of Nursing and Health Sciences.
2. Baccalaureate degree in nursing from a National League of Nursing accredited program.
3. A cumulative Grade Point Average of 3.0 or above on a 4.0 scale.
4. Recent scores from the Graduate Record Examination or the Miller Analogy Test.
5. Official college transcripts from current and previous studies.
6. Three letters of recommendation.
7. Evidence of recent preparation in history taking and basic physical assessment skills.
8. A grade of 2.0 or better in a basic statistics which includes both descriptive and inferential statistics.
9. A grade of 2.0 or better in a basic research methods course.
10. Eligibility for licensure as a registered nurse in the State of Alaska.
11. A statement of goals indicating professional career plans and development.
12. Personal interview.

Special consideration may be given to candidates with clinical expertise and a proven record of professional contributions. Such candidates will need to submit documentation along with their petition to the graduate faculty for special consideration.

Deadline for submission of applications and all other documentation is March 15th for admission to the graduate program in the Fall semester and October 15th for admission to the graduate program in the Spring semester.

COURSE SEQUENCE

Master of Science with a Major in Nursing **Semester I**	**Credits**
NS 660 — Family Nurse Practitioner I, *OR*	
NS 670 — Psychosocial Nursing I	6
NS 640 — Health Care in Social Context	3
NS 620 — Nursing Research Methods	3
Elective	3
Total	15

Semester II

NS 661 — Family Nurse Practitioner II, *OR*	
NS 671 — Psychosocial Nursing II	6
NS 622 — Nursing Theory and Research Methods	3
NS 699 — Thesis	3
Elective	3
Total	15

Semester III

NS 662 — Family Nurse Practitioner III, *OR*	
NS 672 — Psychosocial Nursing III	6
NS 642 — Professional Nursing in Perspective	3
NS 699 — Thesis	3
Elective	3
Total	15

Optional Functional Major
Semester IV

Students may elect to complete an additional sequence of coursework to prepare them for advanced practice in one of three functional areas: Nursing Administration, Nursing Education and Nursing Consultation. Coursework for the fourth optional semester in each area is listed below:

Nursing Administration	**Credits**
NS 634 — Administration Processes	3
NS 636 — Functional Practicum	3
NS — Independent Study	3
Elective	3
Total	12

OR

Nursing Consultation	**Credits**
NS 630 — Consultative Processes	3
NS 636 — Functional Practicum	3
NS — Independent Study	3
Elective	3
Total	12

OR

Nursing Education	**Credits**
NS 632 — Eduational Processes	3
NS 636 — Functional Practicum	3
NS — Independent Study	3
Elective	3
Total	12

Course Descriptions

Health Sciences

HS 203 **2 Credits**

NORMAL NUTRITION (2+0)

Basic principles of nutritional science with emphasis on application to the health professions. Origins, chemical nature, food sources of nutrients. Physiological and metabolic aspects of nutrient function. Individual requirements. Food choices and selections from the marketplace. Prevention and treatment of common nutrition-related disease states. Contemporary and controversial issues. Prerequisites: Physiology and chemistry recommended or permission of instructor.

HS 216 **3 Credits**

PATHOPHYSIOLOGY AND THERAPEUTICS I (3+0)

A basic conceptual study of disease and the resultant abnormal functioning. Key concepts are utilized to assist the student to develop the understanding of the basic physiologic mechanisms of disease and of the approaches to the therapeutic management of affected clients. Prerequisites: Grade of C or better in Biol 111 and 112 or equivalent

HS 217 **3 Credits**

PATHOPHYSIOLOGY AND THERAPEUTICS II (3+0)

A basic conceptual study of disease and the resultant abnormal functioning. Key concepts are utilized to assist the student to develop an understanding of the basic physiologic mechanisms of disease and of the various approaches to the therapeutic management of affected individuals. Prerequisites: Grade of C or better in HS 216

HS 380 **3 Credits**

RESEARCH METHODS IN HEALTH AND HUMAN SERVICES (3+0)

An introduction to research methods. Problem formulation, research design, data collection, and data analysis. The course will focus on research in community health care and human service settings and include program evaluation methods.

HS 381 **3 Credits**

RESEARCH STRATEGIES IN HEALTH SETTINGS (A PRACTICUM) (3+0)

This course will provide practical qualitative field research, data analysis, and report preparation experience in health care settings. It is intended to support skills and interests in policy and program issues and to result in major papers, research proposals, and theses. Prerequisites: PS/BA/JPC 432 or Soc 352 or HS 380 (or concurrent).

NS 110 **3 Credits**

NURSING AS A PERSONAL AND SOCIAL RESPONSE (3+0)

A seminar course reviewing the evolution of nursing, the variety of present and future nursing roles, the agencies, and the organizations influencing nursing education and practice, and the levels of nursing education available. Other issues such as personal choices and needs for entering nursing, social and cultural aspects of pursuing a career, nursing in an evolving health care system and additional areas of student interests are discussed.

NS 301 **8 Credits**

NS 302 **8 Credits**

NURSING THE WELL CLIENT I AND II (4+12) (4+12)

A two-semester sequence of theory and practice applications. The nursing process is applied to care of the essentially well client. Basic skills in collecting and assessing health data through interviewing, history taking, and selected health assessment procedures are introduced. Emphasis is upon maintenance and promotion of healthy function. Student experience is gained in community settings. Prerequisites: Admission to upper division clinical placement in the nursing program; completion of lower division requirements.

NS 303 **10 Credits**

NURSING CLIENTS EXPERIENCING TEMPORARY HEALTH DISRUPTIONS (5+15)

This course utilizes the framework of the integrated curriculum and systems theory principles to provide the student with a knowledge base for care of clients with temporary health disruptions.

The knowledge and skills in health maintenance and promotion provided in NS 301 and 302 are utilized and expanded to emphasize restoration of health function. Student experience is gained in acute care settings. Prerequisites: NS 302, HS 203, BA 335, PS/BA/JPC 432 or Soc 352, Grade of C or better in HS 217.

NS 307 **1 Credits**

INTELLIGENT SELF-MEDICATION (1+0)

An elective course dealing with medications utilized by basically health individuals. Following a general introduction to drug impact on living systems, various non-prescription drug classes are examined in depth. Emphasis is on the rationale for drug intervention or non-intervention and nursing implications with regard to teaching and to toxicity. Representative drug products are examined critically. Prerequisites: HS 216 or 217 or RN licensure.

NS 311 **2 Credits**

THE CHILD AND ILLNESS (1+3)

This course explores the theory related to the experience of illness and/or hospitalization for the child and his family. Focus is directed to planned, implementing and evaluating nursing interventions which minimize trauma and restore healthy function to the child and his family. The student will follow a pediatric client through illness and/or hospitalization. Prerequisites: NS 302, HS 217

NS 312 **2 or 3 Credits**

NURSING INTERVENTIONS FOR THE CRITICALLY ILL ADULT (2+0) (2+1)

Designed for the student who is interested in the specialty area of critical care nursing, this course provides the student the opportunity to focus learning on the specific needs of the critically ill adult and on the role of the critical care nurse. Case studies are used to assist the student to apply the nursing process (using the FANCAS format) to the management of the critically ill adult. Emphasis is placed on promoting the movement of the client from critical illness to recovery and independence.Prerequisities: HS 217 and NS 302 for 2 credit option; NS 303 for 3 credit option

NS 315 **3 Credits**

TRANSCULTURAL NURSING (3+0)

Examination of sociocultural factors that influence health, illness and health related human behavior. Students are introduced to concepts that place health related behavior within a cultural context and to the elements of a culturally sensitive approach to clients seeking professional nursing care services. Prerequisites: NS 301 or RN licensure.

NS 320 **2 Credits**

NURSING CARE DURING TRANSPORT (2+0)

Principles and theory underlying care of clients being transported by ground or air transportation including transfer from a field or hospital situation to a critical care unit. Emphasis is on individualization of care via application of the nursing process. Topics include pre-transport stabilization, equipment considerations, altitude physiology, transport stresses, safety, legal implications, communication and post transport evaluations. Prerequisites: NS 303 or RN licensure and concurrent enrollment in upper division clinical nursing major.

NS 401 **10 Credits**

NURSING CLIENTS EXPERIENCING LONG-TERM HEALTH DISRUPTIONS (5+15)

The nursing process applied to care of clients experiencing long-term disruptions to health. Knowledge and skill in activities promoting health

maintenance, restoration, and rehabilitation. Emphasis is on rehabilitation to maximize healthy function. Student experience is gained in rehabilitation and other chronic care settings. Prerequisite: NS 303.

NS 402 **10 Credits**
CONCENTRATION IN PROFESSIONAL NURSING PRACTICE (1+27)

Integration and synthesis of the knowledge and skill competencies basic to professional nursing practice. Emphasis is upon adjustments to realities of practice situations. Clinical sites selected in relation to individual student interests and learning needs. Prerequisite: NS 401.

NS 407 **2 Credits**
NURSING IMPLICATIONS IN PRESCRIPTION DRUG ADMINISTRATION (2+0)

An in depth pharmacology course that assists students to safely utilize pharmacologic agents within the framework of the nursing process in the care of clients with temporary and long term health disruptions. Students analyze clinical situations to identify nursing implications related to the use and administration of drug families and of specific agents within the following nursing practice concepts: Risk, Deprivation- Overload and Respiration. Prerequisites: HS 216, HS 217, NS 302 or RN licensure or permission of instructor.

NS 410 **2 Credits**
ONGOING DIMENSIONS AND DIRECTIONS OF NURSING (2+0)

An ongoing exploration of student selected trends, issues and problems in nursing and nursing education. The course is designed to build on the students' recognition of factors influencing the evolution of nursing that were introduced in NS 110 and refined throughout their program of study. Nursing organizations and legal responsibilities are further explored. Prerequisites: Senior standing in the School of Nursing or successful completion of NS 110 and RN licensure.

NS 415 **2 Credits**
NURSING MANAGEMENT OF THE CHEMICALLY DEPENDENT CLIENT (2+0)

An in depth study of the psychopharmacologic and sociocultural effects of chemical dependency. Students will utilize the nursing process to design strategies for the nursing management of clients within the preventive, restorative and reorganizational levels of wellness. Prerequisites: HS 217, NS 302 or RN Licensure with permission of the instructor.

NS 471 **3 Credits**
CLINICAL APPLICATIONS OF NURSING RESEARCH (3+0)

Critical evaluation of current nursing research and potential application of research methodology in clinical settings. Prerequisite: Instructor permission.

NS 620 **3 Credits**
NURSING RESEARCH METHODS (3+0)

Principles of the research process: nursing research problem identification, literature review, development of conceptual framework, research design, sampling and data collection methods, data analysis and proposal writing are included. Enhancement of skills for evaluation of nursing research. Prerequisite: basic statistics course.

NS 622 **3 Credits**
NURSING THEORY AND RESEARCH METHODS (3+0)

Content related to implementing the research process such as protection of human subjects, use of computers, funding and communicating findings to the scientific community. Focus on principles of theory development as relates to nursing research and the evolution of nursing science. Current research theories will be critically reviewed. Prerequisite: NS 620 or permission of instructor.

NS 630 **3 Credits**
CONSULTATION PROCESSES (3+0)

An intensive inquiry into the consultation process. Focus is on client-consultation relationships, units of change, consultative issues and problems, nature of intervention, planning, consultative strategies and evaluation of the process. Prerequisite: graduate standing and instructor permission.

NS 632 **3 Credits**
EDUCATIONAL PROCESSES (3+0)

Trends and issues in nursing education are discussed in the context of influence upon the current practices and implications for the future. Curriculum construction theory precedes a classroom project in this area. Styles and strategies appropriate for teaching nursing, including maintenance of practice sites, are discussed. Throughout is an emphasis on the growth and development of learners through their participation in the learning process. Prerequisites: graduate standing and instructor permission.

NS 634 **3 Credits**
ADMINISTRATIVE PROCESSES (3+0)

Covers the elements of the health related administrative role necessary for optimal performance, including effective leadership and management skills. Major emphasis is on personal and interpersonal competencies, maximizing resources for goal attainment and carrer planning. Prerequisites: graduate standing or instructor permission.

NS 636 **3 Credits**
FUNCTIONAL PRACTICUM (0+9)

Provides experiential learning in the functional role of teacher, administrator or consultant. Practicum setting and goals will be mutually agreed upon by faculty member, agency preceptor and student. The student is free to negotiate a preceptorship wherever an experience of academic quality can be arranged. Prerequisites: NS 630, NS 632 or NS 634.

NS 640 **3 Credits**
HEALTH CARE IN SOCIAL CONTEXT (3+0)

Analysis of concepts of community, organizations, power and authority, decision making, change process, collaboration, management, administration, and organization, with particular application to the role of the professional nurse as a change agent and advocate of the patient/client within the health care and social systems.

NS 642 **3 Credits**
PROFESSIONAL NURSING IN PERSPECTIVE (3+0)

Analysis of current issues and future trends and forces which influence nursing with special attention to leadership within nursing.

NS 660 **6 Credits**
FAMILY NURSE PRACTITIONER I (3+12)

Beginning preparation in the primary care component of the family nurse practitioner role. Family and individual health promotion, health maintenance and prevention of disease receive major emphasis. Students will begin to develop skills related to women's health care. Other focal areas include nutrition, mental health, pharmacology, and laboratory and other diagnostic methodologies.

NS 661 **6 Credits**
FAMILY NURSE PRACTITIONER II (3+12)

Continued preparation for the family nurse practitioner role. Major emphasis is on health promotion, health maintenance and management of minor, acute health problems. Client focus is across the lifespan. Content includes pathophysiologic processess, pharmacodynamics and chemotherapeutic action of major drug groups, nutrition and health education. Prerequisite: NS 660.

NS 662 **6 Credits**
FAMILY NURSE PRACTITIONER III (3+12)

Continued preparation for the Family Nursing Practitioner role. Emphasis is on the initial assessment and management of complex,

acute health problems with appropriate collaboration, consultation and referral and on the assessment and managment techniques for individuals with chronic health problems. A variety of settings, including rural Alaska, are explored. Prerequisites: NS 661.

NS 670 **6 Credits**

PSYCHOSOCIAL NURSING I: INTERPERSONAL BEHAVIOR — THEORY AND THERAPEUTICS (3+9)

Theory, research and clinical approaches related to the psychosocial health of individuals and groups. Current trends and issues in the treatment of psychosocial disablements 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 intervention occur. Clinical experiences provide students opportunity to apply and test psychosocial theory and therapeutics.

NS 671 **6 Credits**

PSYCHOSOCIAL NURSING II: FAMILY (3+9)

Theory, research and clinical literature related to the psychosocial health of families are reviewed. Current trends and issues in family research and clinical applications are discussed in the context of influence on psychosocial practice. Particular attention is given to family structure and process as a basis for assessment and intervention. Clinical experiences provide students opportunity to apply and test family theory and therapeutics. Prerequisites: NS 670

NS 672 **6 Credits**

PSYCHOSOCIAL NURSING III: COMMUNITY (3+9)

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 programs and personnel. Characteristics of the sociocultural environment are examined giving particular attention to major influence on mental health conditions. Current research findings are evaluated for purposes of assessment, planning and implementation of services for high risk, multicultural and underserved populations. The role of the psychosocial nurse is analyzed and developed through clinical experience. Prerequisite: NS 671

NS

INDEPENDENT STUDY

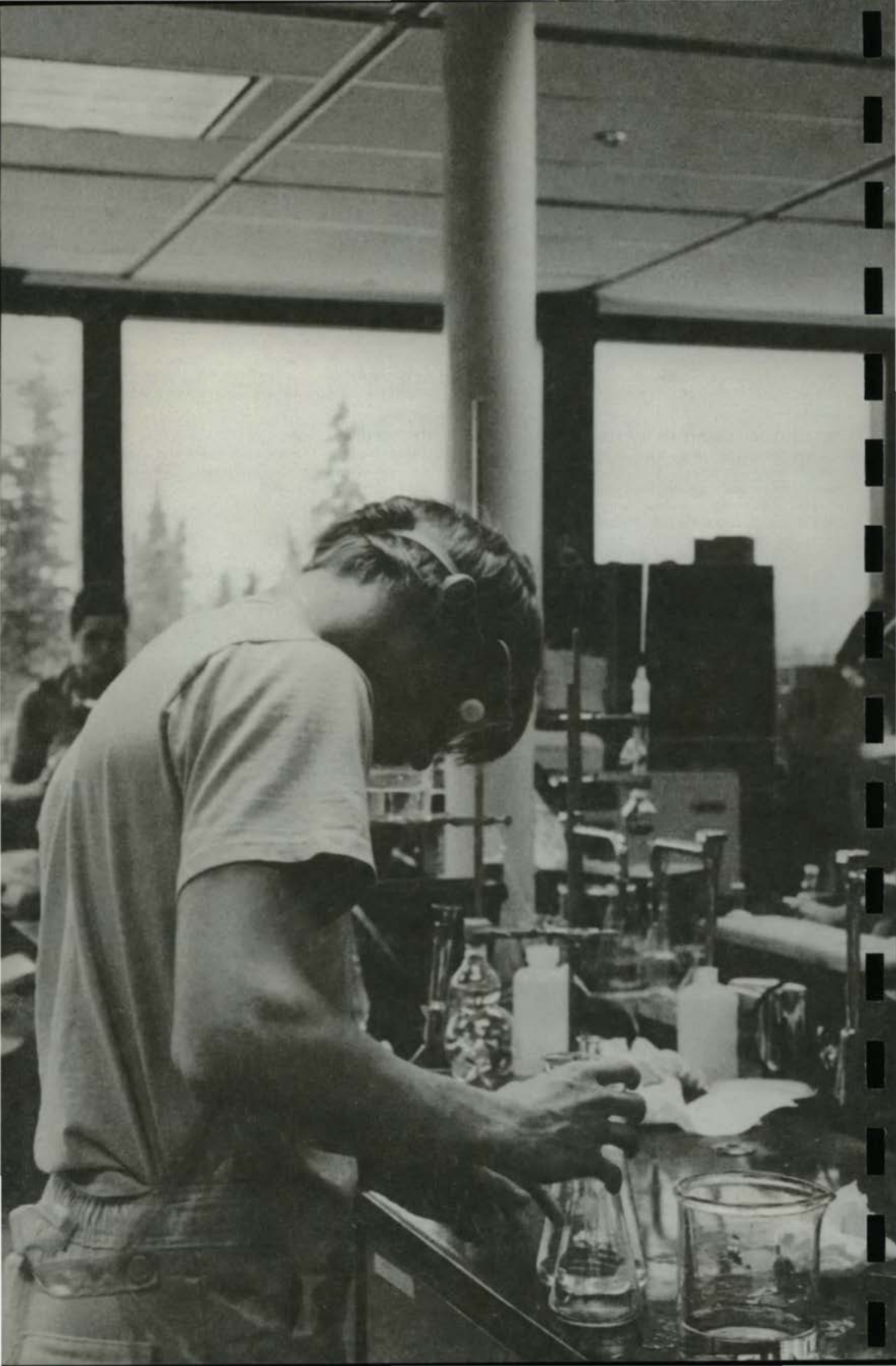
Provides an opportunity to graduate students to study in area of interest not taught in seminar format. Goals and purposes of the independent study are mutually agreed upon by faculty and student. Prerequisite: instructor permission and graduate standing.

NS 699 **1-6 Credits**

THESIS (0+Variable)

Under the guidance of the thesis advisor and in conjunction with thesis committee, student develops, refines and implements a research proposal. Prerequisite: NS 620

Additional information concerning nursing electives can be obtained in the College of Nursing and Health Sciences prior to registration.



SCHOOL OF JUSTICE

Faculty

Dean: John E. Angell
Director, Justice Center
Professors: John E. Angell, Stephen Conn, John E. Havelock
Associate Professors: Roger V. Endell, Knowlton W. Johnson
Assistant Professors: Nancy Schafer, Steven Edwards

The School of Justice has statewide responsibility for higher education and research related to the areas of crime, law and the administration of justice. The School offers a Justice baccalaureate degree program for students whose plans include a career or substantial policy interest in police, law or corrections areas.

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 other universities.

The School of Justice faculty have unique professional research and service obligations beyond classroom teaching. Such activities are performed through the Justice Center, the School's research arm. 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 polices and organizations.

JUSTICE MAJOR REQUIREMENTS

To earn a Bachelor of Arts degree with a major in Justice, students must satisfy the General University and General Education Degree Requirements shown on pp. 45-47. Students wishing to major in Justice must be accepted by the School of Justice. A Justice major may elect to obtain an emphasis in either a police, legal studies or corrections area, or in general justice.

Students majoring in other areas may enroll in Justice courses to possibly satisfy General Education or Elective course requirements. A student should examine the following specific requirements and consult with a faculty advisor before enrolling in Justice courses.

Credits

Oral Communications Skills 3
Spch 111, 241

Written Communication Skills 6
Engl 111, 211, 213, 311

Reasoning Skills 3
BA 110
CS 105, 106, 107, 108
ES 201
Ling 110
Phil 101

Quantitative Skills 6
AS 300, 307 (AS 300 required)
Math 106, 107, 108, 200, 201, 202, 270, 272

Arts Area 3
Art 160, 261, 262, 367
JPC 367
MUS 122, 221, 222
Thr 111, 311, 312, 411, 412

Humanities Area 12
(at least two disciplines outside the major)
Engl 121, 201, 202, 306, 307
Fren 101, 202
Hist 101, 102, 131, 132, 341
JPC 215
Phil 201, 211, 212, 301
Span 101, 202

Note: the courses listed in the Arts Area, except Art 160, Mus 122, and Thr 111, may be taken to fulfill the Humanities Area requirement; however, no course may be double-counted.

Natural Science Area 7
(including 1 lab. course)
Biol 107, 108, 111, 112, 215, 239, 252, 271
Chem 105, 106, 120, 121
Astr 103, 104
Phys 211, 212
Also, approved introductory courses in geology or physics

Social Science Area 6
(2 disciplines outside major)
Anth 101, 200, 202, 250
Econ 201, 202
Hist 201
JPC 101
Ling 101
PS 101, 102, 311, 312

Psy 111, 150
Soc 101, 106, 201, 202, 222, 242
SWK 106

Justice Required Courses 21
Just 110 — Intro. to Just (Fall, Spring) 3
Just 251 — Criminology (Fall, Spring) 3
Just 250 — Development of Law (Spring) 3
Just 221 — Just Org & Mgmt (Spring) 3
Just 330 — Just & Society (Fall) 3
Just 360 — Just Processes (Spring) 3
Just 451 — Research & Policy Making (Fall) 3
Justice Emphasis Electives 21

Emphasis options include 1) Corrections, 2) Legal, 3) Police or 4) General Justice. Students can obtain a list of suggested Justice courses for these emphasis areas from a Justice faculty advisor. At least 12 of these emphasis area credits must be from 300 or 400 level Justice courses.

Minor courses at least 15
Electives to total 130 credits

A minimum of 48 of the 130 credits required for a Bachelor's degree must be in 300 and 400 level courses.

JUSTICE MINOR

A student who is majoring in another field can choose to obtain a minor in Justice by satisfying the following requirements:

Just 110 — Introduction to Justice 3
Just 251 — Criminology 3
Complete a minimum of 12 additional credits of which 9 are at the 300 and 400 level in Justice courses.

Course Descriptions

Just 110 **3 Credits**
INTRODUCTION TO JUSTICE (3+0)
Survey of philosophies, functions and methods of social control with emphasis on role of law and those involved in its administration — police, courts, corrections organization. Includes study of history, organization, processes, and problems related to law and justice agencies in a heterogeneous, democratic society. This course is a prerequisite to most justice courses. Fall, Spring. (BA-S).

Just 203/Soc 203 **3 Credits**
JUVENILE DELINQUENCY (3+0)
A conceptual approach to deviant and delinquent behavior, contributing social problems, adolescence as a subculture with emphasis on the juvenile code and treatment procedure. Prerequisite: Soc 101 or permission of instructor. (BA-S)

Just 210 **3 Credits**
PRINCIPLES OF CORRECTIONS (3+0)
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. Prerequisites: Just 110, Just 251.

Just 215 **3 Credits**
PARALEGAL STUDIES (3+0)
A foundation course for the legal studies area. Explores role, responsibilities, and ethics of paralegal activities and the relationship of paralegals to lawyers. Areas of paralegal responsibilities studies include statute and regulation formats, litigation, insurance, probate and real estate. Interviewing, investigation writing and the application of social science techniques to paralegal problems will be covered. Prerequisites: Just 110, Just 250.

Just 221 **3 Credits**
JUSTICE ORGANIZATION AND MANAGEMENT (3+0)
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; principles of change. Prerequisite: Just 110. Spring. (BA-S).

Just 250 **3 Credits**
DEVELOPMENT OF LAW (3+0) **(Spring)**
Study of underlying philosophy, development and structure of law with emphasis on law system of United States and Alaska. Includes "Civil" precedents of such Constitutional provisions as "due process" and "equal protection" in the United States Bill of Rights, criticisms of law; review of Native law ways; procedures for changing law. Prerequisite: Just 110 (BA-S).

Just 251 **3 Credits**
CRIMINOLOGY (3+0) **(Fall, Spring)**
The study of deviant behavior and theories of crime causation and their relationship to society, law and law enforcement. Prerequisite: Just 110. (BA-S).

Just 252 **3 Credits**
SUBSTANTIVE CRIMINAL LAW (3+0)
A study of the elements, purposes, and functions of the substantive criminal law with emphasis upon historical and philosophical concepts. Prerequisites: Just 110, Just 250.

Just 254 **3 Credits**
PROCEDURAL CRIMINAL LAW (3+0)
Emphasis upon the legal limitations of the police and the right of the people to be secure from the government under the protection of the Constitution and the Rules of Evidence. Prerequisites: Just 110, Just 250.

Just 256 **3 Credits**
LEGAL ANALYSIS AND WRITING (3+0)
Introduction to Legal research methods and investigation. Topics covered include fact gathering, interviewing, law library and research library use, legal writing and oral advocacy, privacy, confidentiality and freedom of information.

Just 320 **3 Credits**
POLITICS AND CRIME PREVENTION (3+0)
An examination of the justice system's efforts to cope with the problem of crime. Public policy alternatives which emphasize crime prevention strategies are studied. The political and legal, moral and ethical considerations and problems of human and environmental manipulation are examined. (BA-S).

Just 330 **3 Credits**
JUSTICE & SOCIETY (3+0) **(Fall)**
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. Prerequisite: Justice 110 or permission of the instructor. (BA-S)

Just 331/BA 331 **3 Credits**
BUSINESS LAW I (3+0)
A survey of basic institutions, litigation, judicial process, dispute resolution and preventive law; substantive law of torts, agency, contracts and the uniform commercial code including sales, negotiable instruments and secured transactions.

Just 332/BA 332 **3 Credits**
BUSINESS LAW II (3+0)
The law of business organizations, business crimes, employment, landlord-tenant, and real property.

Just 350 **3 Credits**
CONTEMPORARY CORRECTIONAL ISSUES (3+0)
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 as well as the roles of the community, the media and special interest groups are examined. Rehabilitative program alternatives are explored in relationship to the need for protecting the public and deterring crime. Prerequisite: Just 110.

Just 360 **3 Credits**
JUSTICE PROCESSES (3+0) **(Spring)**
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, records; community-based programs; inspection, program assessment. Contemporary administrative process problems. Prerequisite: Just 110. (Offered Spring semester) (BA-S).

Just 365 **3 Credits**
COMPARATIVE JUSTICE SYSTEMS (3+0)
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. (BA-S).

Just 370 **3 Credits**
JUDICIAL POLICY AND COURT ADMINISTRATION (3+0)
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. Prerequisites: Just 110, Just 221.

Just 375 **3 Credits**
LITIGATION (3+0)
Forms of dispute settlement with emphasis on negotiative processes, mediation, arbitration, settlement in the legal context, litigation, the management of discovery, trial and evidence. Prerequisite: Just 110 or permission of instructor.

Just 380 **3 Credits**
SOCIAL SERVICE LAW (3+0)
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 **3 Credits**
URBAN POLICE PROBLEMS (3+0)
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. Prerequisites: Just 110.

Just 413/JPC 413 **3 Credits**
COMMUNICATIONS LAW (3+0)
Legal rights, privileges, and regulations of press, radio, television, and films; libel, contempt, copyright, rights of privacy; decisions of regulatory bodies.

Just 435 **3 Credits**
INTRODUCTION TO CONSTITUTIONAL LAW (3+0)
Growth and development of the United States Constitution as reflected in decisions of the Supreme Court. Federal system; executive, legislative and judicial powers; nature of the judicial process, regulation of commerce, taxation. (BA-S).

Just 436 **3 Credits**
COURTS AND CIVIL LIBERTIES (CONSTITUTIONAL LAW II) (3+0)
Origin and development of civil and political liberties; responsibility of branches of government and people for their maintenance. Cases and literature bearing on protection of constitutionally guaranteed rights with particular reference to period since 1937. (BA-S).

Just 440 **3 Credits**
POLICE ADMINISTRATION (3+0)
Focuses on critical issues and situations faced by police executives. Among the areas studied are decision making, organizational strategies and service mixes, citizen complaint systems, change strategies and models, information systems, personnel management, financial administration and productivity measurement. Prerequisites: Just 110, Just 221.

Just 451 **3 Credits**
RESEARCH AND POLICY MAKING (3+0)
An overview of social research methods and procedures as related to justice policy development, implementation and assessment. Students are exposed to the policy making process, qualitative and quantitative information producing tools, research utilization strategies and reserch proposal writing. Prerequisite: Justice 110 (offered fall semester). Fall. (BA-S).

Just 454/Psy 454 **3 Credits**
EVALUATION RESEARCH AND CHANGE (3+0)
Application of evaluation research to the policy making process. Presented are evaluative research strategies including monitoring, process evaluation, cost-benefit analysis and impact evaluation. Special attention is given to designing evaluation projects, analyzing and interpreting results, preparing and presenting evaluation research reports in the justice field. Prerequisite: Justice 451 or a Research Methods course. Spring.

Just 455 **3 Credits**
RURAL JUSTICE (3+0)
Multi-disciplinary 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 Alaskan 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. Prerequisite: Justice 110.

Just 456/Anth 456 **3 Credits**
ANTHROPOLOGY AND THE LAW (3+0)
This course will study variations cross-culturally in forms of social control of 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. (BA-S)

Just 462 **3 Credits**
INDIAN LAW AND THE SETTLEMENT ACT (3+0)
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 Alaskan 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. Prerequisites: Just 110, Just 250.

Just 465 **3 Credits**

LEGISLATION (3+0)

Relationship of ordering words and procedural language to policy objectives. Drafting and interpretation of rules, regulations, ordinances. Legal system design.

Just 470 **3 Credits**

LAW OF GOVERNMENT REGULATION (3+0)

Administrative law and procedure in the context of federal, state and local agencies operating in Alaska. The course will include consideration of unfair competition and anti-trust law from the perspective of the businessman and consumer.

Just 475 **3 Credits**

JUVENILE PROCEDURE (3+0)

A practical clinical course providing comprehensive coverage of the Alaska Children's Code and Juvenile Law procedures. Prerequisite: Just 203 or permission of instructor.

Just 480 **3 Credits**

CORRECTIONAL SYSTEMS MANAGEMENT (3+0)

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. Prerequisites: Just 110, Just 251.

Just 487 **3 Credits**

SEMINAR IN AMERICAN LEGAL HISTORY (3+0)

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. Prerequisite: Justice 250 or permission of instructor.

Just 488 **1-6 Credits**

RESEARCH PRACTICUM

The application of research skills to the study of a problem in the Justice field. Involves field research and related independent study. Prerequisite: Just 451 or equivalent.

Just 491 **3 Credits**

NATURAL RESOURCE LAW (3+0)

An introduction to the law of land and resource development, with special emphasis on land and water use regulation and public land issues.

FACULTY REGISTER

EMERITI

WILSON, JAMES R., Professor of English Emeritus. University of Tulsa, B.A. '47; M.A. '49; University of Oklahoma, Ph.D. '53

FACULTY

ADEN, LOIS, Associate Professor, Theater and Speech, College of Arts and Sciences. Queen's College, B.A. '53; Yale University, M.F.A. '60.

ANGELL, JOHN E., Dean, School of Justice, Professor. Michigan State University, B.S. '65; M.S. '67; Ph.D. '75.

ARD, SARADELL A., Professor, Art, Chairperson, College of Arts and Sciences. Asbury College, B.A. '42; University of Michigan, M.A. '43; Columbia University, D.Ed. '70.

AUFRECHT, STEVEN E., Assistant Professor, Public Administration, School of Business and Public Affairs. University of California at Los Angeles, B.A. '67; University of Southern California, M.P.A. '73; Ph.D. '77.

BARE, CHARLES, Assistant Professor, Mathematics, College of Arts and Sciences. Black Hills State College, B.S.; University of South Dakota, M.A. '68; University of Wyoming, Ph.D. '81.

BARING-GOULD, MICHAEL D., Associate Professor, Chairman, Sociology, College of Arts and Sciences. Williams College, B.A. '59; Instituto Interamericano de Ciencas Agricolas, M.S. '65; Cornell University, Ph.D. '74.

BEBEY, FRANK, Assistant Professor, Theater and Speech, College of Arts and Sciences. King's College, B.A. '64; Pennsylvania State University, M.A. '66.

BEIRNARD, CHARLES, Assistant Professor, English, College of Arts and Sciences. University of Wisconsin, B.S. '65; M.S. '66; Ohio State University, Ph.D.'79.

BELDEN, GEORGE R., Assistant Professor, Music, College of Arts and Sciences. Bethany College, B.M. '61; University of Northern Colorado, M.A. '72; North Texas State University, D.M.A. '76.

BERGQUIST, SIDNEY, Dean, School of Education, Professor. University of California, B.A. '56; California State University, M.A. '62; Stanford University, Ph.D. '65.

BERTHOLF, CONSTANCE, Assistant Professor, College of Nursing and Health Sciences. University of California, B.S. '70; M.S. '72.

BESH, THOMAS K., Head Ski Coach, Assistant Prof. in Physical Education and Ski Coach, School of Education. Western State College, B.A., '71; University of Alaska, Fairbanks, M.Ed., '77.

BILLAUD, JEAN-PAUL, Professor, Chairman, Music, College of Arts and Sciences. Ecole Normale de Musique de Paris, Diplome Superieur de Virtuosite, '55; License de Concert, '56; International Competitions Laureate: "Viotti" (Italy), '56; Paris, '57.

BOWMAN, JANICE, Affiliate Assistant Professor, College of Nursing and Health Sciences. University of Alaska, Fairbanks, B.A. '73; Tufts University, M.S. '79; Ph.D. '81.

BROADY, SYLVIA, Associate Professor, Chairman, Journalism and Public Communications, College of Arts and Sciences. Michigan State College, B.A. '48; Wayne State University, M.E. '56; Michigan State University, Ph.D. '62.

BROSAMER, JAMES J., Associate Professor, Chairman, English, College of Arts and Sciences. Seattle University, B.A. '63; University of California, Berkeley, M.A. '66; University of Oregon, D.A. '70; Ph.D. '76.

BROWN, PATRICIA WOODS, Instructor, College of Nursing and Health Sciences. Howard State University, B.S., '75; B.S.N., '77; M.S.N., '82

BROWNELL, JOHN A., Vice-Chancellor for Academic Affairs, Professor of Education, School of Education. Whitter College, B.A., '48; M.A., '49; Stanford University, Ed.D., '52.

BRUCE, RICHARD L., Professor, Psychology, College of Arts and Sciences. Whitman College, B.A. '60; Claremont Graduate School, M.A. '63; Ph.D. '67.

BRUNS, LINDA D., Head Women's Basketball Coach, Assistant Professor, School of Education. University of Montana, B.S. '64; Eastern Washington State College, M.A. '68.

BUKOWSKI, ARTHUR, Associate Professor, Chairman, Mathematics, College of Arts and Sciences. Ohio University, B.S. '66; M.S. '68; University of New Mexico, Ph.D. '72.

BYRD, L. BRIAN, Associate Professor, English, College of Arts and Sciences. University of Miami, A.B. '48; George Peabody College, M.A. '51; University of Colorado, Ph.D. '69.

CAREY, OMER L., Professor, Business Administration, School of Business and Public Affairs. Illinois, Wesleyan University, B.A. '54; Indiana University, M.B.A. '60; D.B.A. '62.

CARMON, BERNICE, Instructor, College of Nursing and Health Sciences. Bennett College, Greensboro, NC, B.S. '71; University of North Carolina — Chapel Hill, NC, M.P.H. '72; Case Western Reserve University, Frances P. Bolton School of Nursing, B.S.N. '77.

CARROLL, MARY, Associate Professor of Social Work, College of Arts and Sciences. Loyola University of Chicago, B.S. '61; M.S.W., '65; Smith College, D.S.W., '70.

CHANG, TOHSOOK P., Associate Professor, Library Science, Cataloging Librarian, University Library. Ewha Womans University, Seoul Korea, B.A. '59; University of New York, M.L.S. '63.

CHRISTIANSEN, KELVIN H., Head Hockey Coach, Instructor, School of Education. Alaska Methodist University, B.S. '72; Alaska Pacific University, M.A. '80.

CLARK, LEROY, Associate Professor, Theater and Speech, College of Arts and Sciences. University of Maine, B.A. '66; University of Oklahoma, M.F.A. '66; Kent State University, Ph.D. '76.

CONLEY, MARK W., Assistant Professor, School of Education. University of Rochester, B.A. '76; Cornell University, M.A. '77; Syracuse University, Ph.D. '83.

CONN, STEPHEN, Professor, School of Justice. Colgate University, B.A. '64; Columbia University School of International Affairs, M.I.A. '68; Columbia University Law School, J.D. '68; University of California at Los Angeles, M.A. '77.

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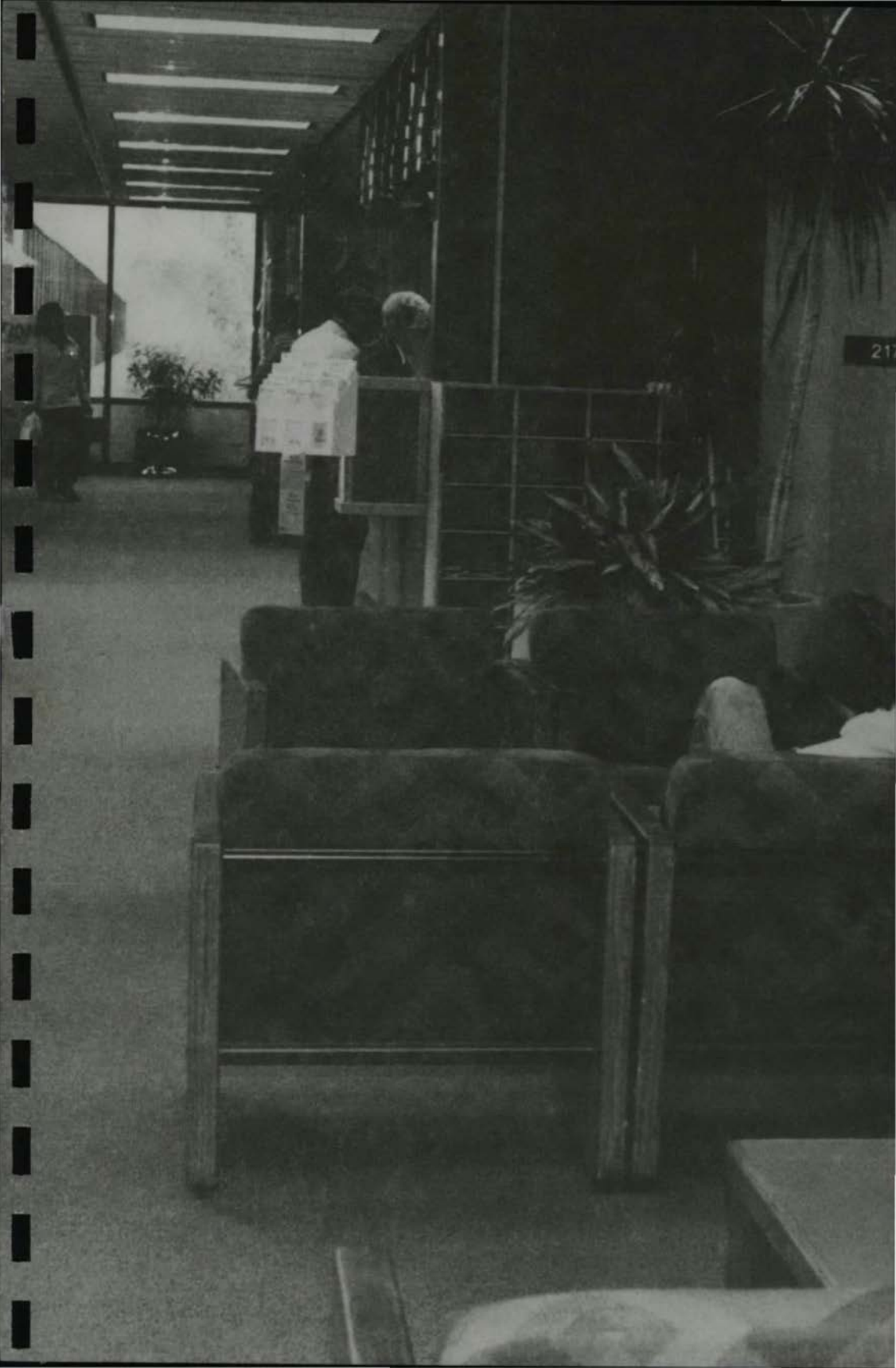

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