

1974

# 1974-75 Seattle University Bulletin of Information

Seattle University

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# Seattle University

1974-75 Bulletin of Information







The University reserves the right to change the fees, rules and calendar regulating admission and registration, instruction in, and graduation from the University and its various divisions and to change any other regulations affecting the student body. Changes go into effect whenever the proper authorities so determine and apply not only to prospective students but also to those who at that time are matriculated in the University. The University also reserves the right to discontinue courses at any time.

As a general rule, students follow the academic programs contained in the Bulletin of Information in effect at the time of their matriculation.

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**NO. 4**

Summer

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**Seattle University**

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**Summer Quarter 1974**

April 24 - May 24	Advance Registration
May 28 - June 12	Registration closed
June 13-14, 17	Registration days (Full & 1st Term)
July 15	Registration - 2nd Term
June 17	Classes begin
June 18-21	Late Registration
June 18-21	Add/drop/change schedules
July 3	Last day for 'W' - 1st Term
July 4	Independence Day - no class
July 12	Close of First Term
July 15	Registration day - Second Term
July 22	Last day to withdraw - Full Term
July 31	Last day to withdraw - Second Term
August 8-9	Final Examinations
August 14	Grades mailed

**Fall Quarter 1974**

September 23	Orientation
September 24	Registration — Continuing Students
September 25	Registration — New Students
September 26	Classes Begin
September 26	Mass of the Holy Spirit
October 2	Last Day to Register
October 2	Last Day to Add or Change
November 6	Last Day to Remove Incompletes
November 11	Veterans Day — No Class
November 13-22	Advance Registration (Winter 1975)
November 25	Last Day to Withdraw with 'W'
November 28-29	Thanksgiving Holiday — No Class
December 9-11	Final Examinations

**Winter Quarter 1975**

November 13-22	Advance Registration (Winter 1975)
January 6	Registration
January 6	Classes Begin
January 10	Last Day to Register
January 10	Last Day to Add or Change
February 17	Washington's Birthday — No Class
February 18	Last Day to Remove Incompletes
February 18-28	Advance Registration (Spring 1975)
February 28	Last Day to Withdraw with 'W'
March 12-14	Final Examinations

**Spring Quarter 1975**

February 18-28	Advance Registration (Spring 1975)
March 24	Registration
March 24	Classes Begin
March 27	Last Day to Register
March 28	Good Friday — No Class
March 31	Last Day to Add or Change
April 28 - May 16	Advance Registration (Summer 1975)
May 5	Last Day to Remove Incompletes
May 14	Last Day to Withdraw with 'W'
May 26	Memorial Day — No Class
May 27-30	Final Examinations
May 31	Baccalaureate
June 1	Commencement

**Summer Quarter 1975**

April 28 - May 16	Advance Registration (Summer 1975)
June 16	Registration
June 16	Classes Begin

1974

S M T W T F S

**JANUARY**

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**DECEMBER**

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## 1975

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JANUARY

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## FEBRUARY

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## MARCH

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## APRIL

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## AUGUST

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## SEPTEMBER

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## OCTOBER

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## NOVEMBER

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## DECEMBER

1 2 3 4 5 6  
7 8 9 10 11 12 13  
14 15 16 17 18 19 20  
21 22 23 24 25 26 27  
28 29 30 31



June 20  
June 20  
July 4  
July 11  
July 14  
August 7-8

Last Day to Register  
Last Day to Add or Change  
Independence Day — No Class  
Close First Term  
Registration — Second Term  
Final Examinations

## Fall Quarter 1975

September 22  
September 23  
September 24  
September 25  
September 25  
October 1  
October 1  
November 5  
November 11  
November 12-21  
November 24  
November 27-28  
December 8-10

Orientation  
Registration — Continuing Students  
Registration — New Students  
Classes Begin  
Mass of the Holy Spirit  
Last Day to Register  
Last Day to Add or Change  
Last Day to Remove Incompletes  
Veterans Day — No Class  
Advance Registration (Winter 1976)  
Last Day to Withdraw with 'W'  
Thanksgiving Holiday — No Class  
Final Examinations

## Winter Quarter 1976

November 12-21  
January 5  
January 5  
January 9  
January 9  
February 16  
February 17  
February 18-27  
February 27  
March 10-12

Advance Registration (Winter 1976)  
Registration  
Classes Begin  
Last Day to Register  
Last Day to Add or Change  
Washington's Birthday — No Class  
Last Day to Remove Incompletes  
Advance Registration (Spring (1976)  
Last Day to Withdraw with 'W'  
Final Examinations

## Spring Quarter 1976

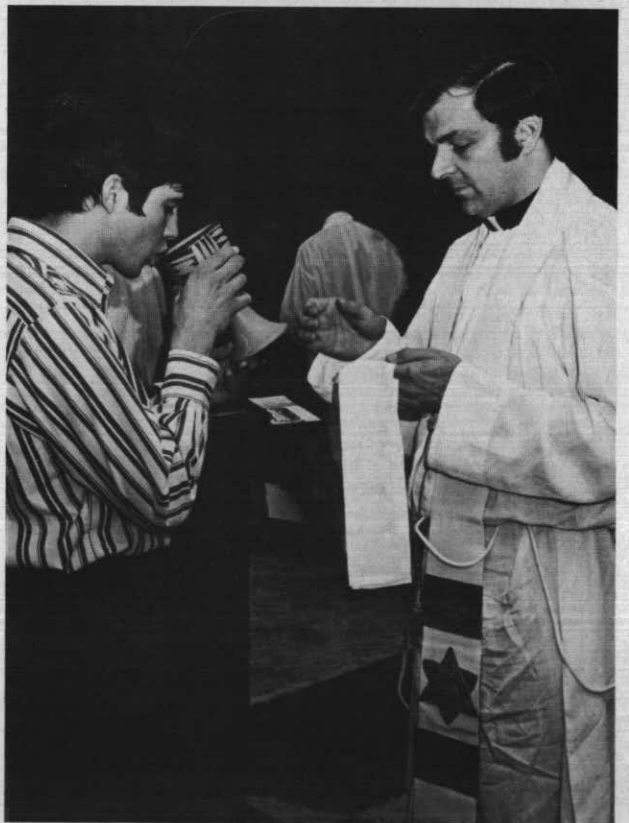
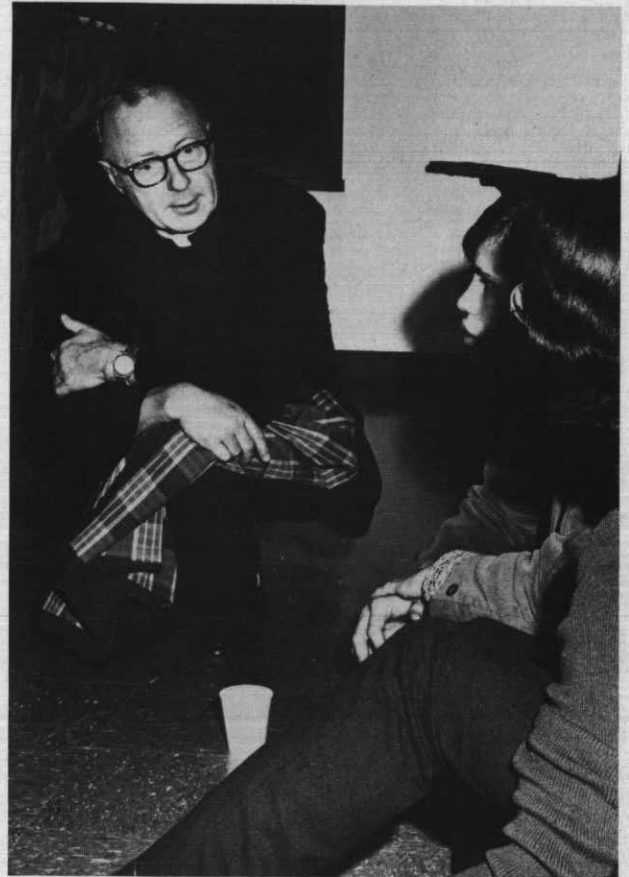
February 18-27  
March 29  
March 29  
April 2  
April 2  
April 16  
April 26 - May 21  
May 10  
May 19

Advance Registration (Spring Quarter 1976)  
Registration  
Classes Begin  
Last Day to Register  
Last Day to Add or Change  
Good Friday — No Class  
Advance Registration (Summer 1976)  
Last Day to Remove Incompletes  
Last Day to Withdraw with 'W'

May 31  
June 1-4  
June 5  
June 6

Memorial Day — No Class  
Final Examinations  
Baccalaureate  
Commencement





# Purpose and Scope



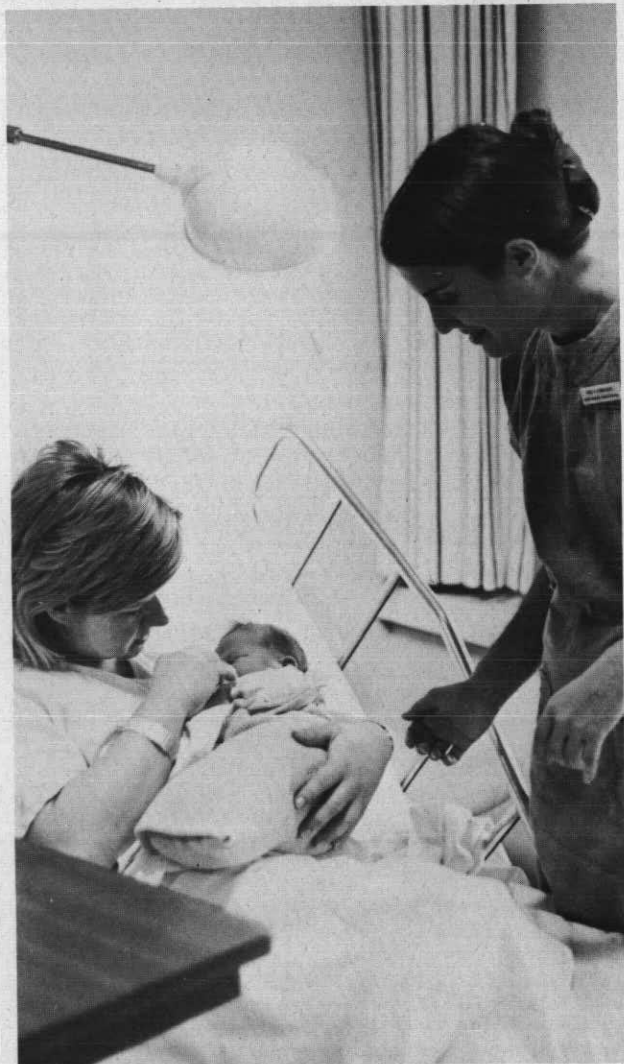
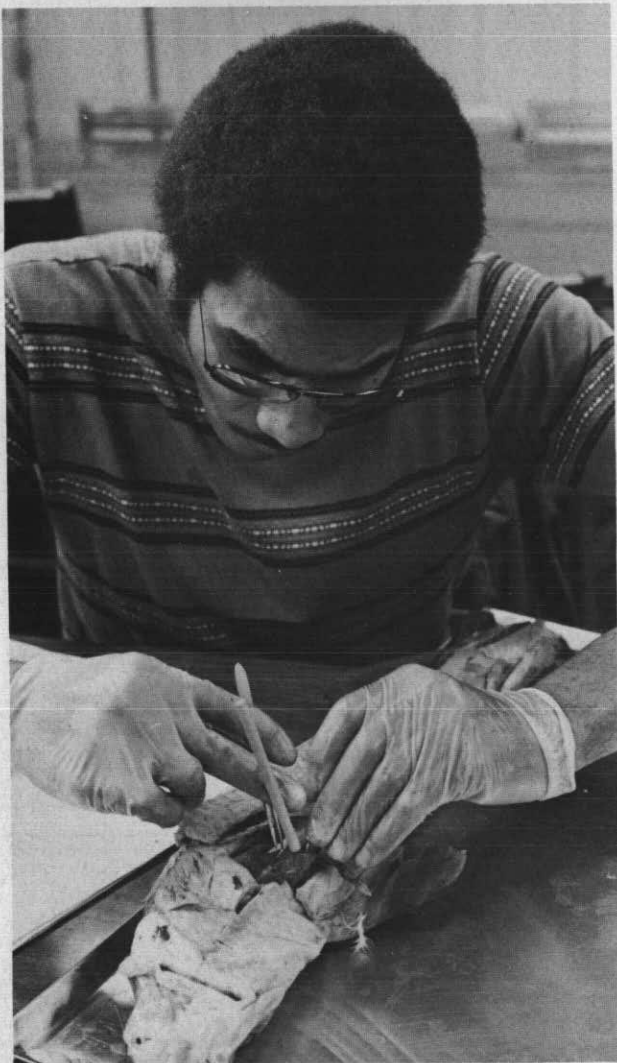
Seattle University, an institution of higher learning, has for its object and purpose:

- the conservation, interpretation and transmission of knowledge, ideas and values;
- the extension of the frontiers of knowledge by critical and exhaustive investigation or experimentation;
- the preparation for some of the professions by thorough and intelligent training in the theory and principles underlying those professions.

As a University, it attains its end not only through the sciences and humanities, including philosophy and theology, but also through its professional schools.

As a University operated under the sponsorship and direction of the members of the Jesuit order:

- it affirms its belief in a support of Christian ideals and values;
- it affirms its belief in the unity and totality of all human knowledge, whether experimental, speculative, or divinely revealed;
- it seeks, by a faculty inspired with the Spirit of Christ and by the creation of a liberal atmosphere inside and outside the classroom, to develop an unbiased, truly liberated and enlightened intelligence in its faculty and student body.







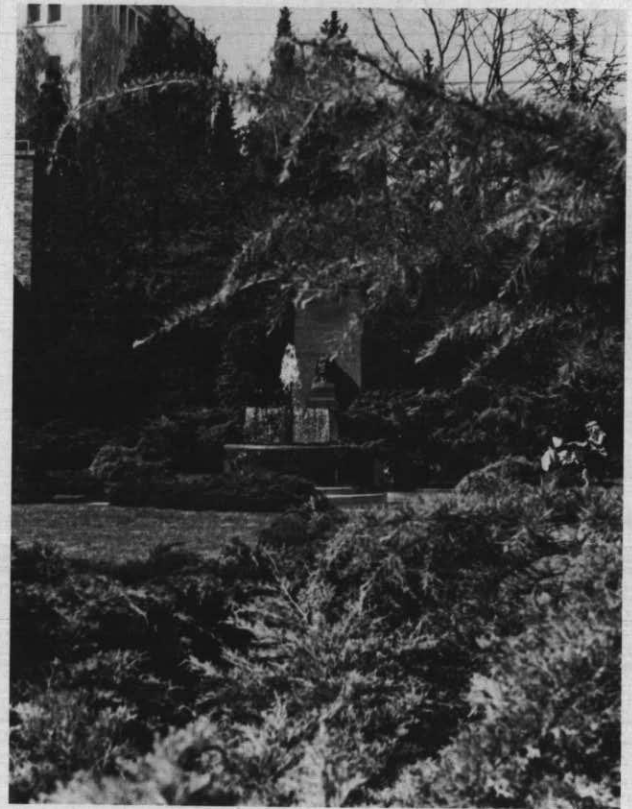
## History

Seattle University's development as one of the Pacific Northwest's leading universities is closely interwoven with the history of Seattle and the Pacific Northwest. It is the story of a continuing effort on the part of the University to help meet the educational demands of a burgeoning area.

In 1890, concerned with the problem of providing adequate educational opportunity for the young men of the area, the Rt. Rev. Aegidius Junger bishop of the then Nesqually diocese, asked the Jesuit fathers to establish a school in Seattle. Two pioneer priests, the Rev. Victor Garrand, S.J., and the Rev. Adrian Sweere, S.J., were sent by the Rev. Joseph Cataldo, S.J., superior of the Rocky Mountain Missions, to answer the bishop's request.

They arrived in Seattle early in 1891 and immediately set about choosing a site for the new school. Upon the advice of some of the area's leading figures, they purchased several lots in the Broadway addition on the eastern edge of the young city. Pending construction of their new building, the fathers were asked to begin classes in St. Francis Hall, at what is now Sixth and Spring Streets in downtown Seattle. They assumed administration of the church and school on September 23, 1891, changing the name of the latter to the School of the Immaculate Conception.

In 1893, the cornerstone of the first building on the present campus at Broadway and Madison Streets was laid. The building, now the Garrand Building, served both as a school and as the first Immaculate Conception Church in Seattle. The following year, under the direction of the Rev. Conrad Brusten, S.J., and the Rev. Patrick Mahony, S.J., students were first enrolled in an



"Academic" course of studies at the high school level. Four years later, the school received its Articles of Incorporation as an institution of higher learning under the corporate title, Seattle College.

The years that followed were years of struggle for the young institution. The frontier atmosphere of the time was not especially conducive to its growth and it was not until 1900 that the collegiate program was begun with a course in "The Humanities," the forerunner of today's College of Arts and Sciences. The following year the first graduate degree was awarded and in 1907, at the request of former students, evening courses were first offered. The University granted its first bachelors' degrees in the spring of 1909.

Conditions during the First World War led to the suspension of classes from 1918 until 1922. The latter year they were resumed on a seven-acre campus on Interlaken Boulevard which, with two buildings, had been presented to the college by Mr. and Mrs. Thomas C. McHugh. Both college and high school classes were held on the new campus until 1931 when the college returned to its former Broadway and Madison site.

The first women students were admitted to credit courses in 1933. Seattle University's second academic unit, the School of Education, was added in 1935. In 1937, full accreditation was granted by the Northwest Association of Secondary and Higher Schools. The School of Nursing was established in 1940 and the School of Engineering added in 1941. A fifth major academic unit, the School of Commerce and Finance was initiated in 1945.

On May 28, 1948, full university status was granted by the State of Washington and Seattle College assumed its present title, Seattle University.

## Organization

Seattle University is a private, coeducational university conducted by the fathers of the Society of Jesus, popularly known as the Jesuits. It is open to students of all races and denominations and is incorporated under the laws of the State of Washington. One of 28 Jesuit colleges and universities in the United States, it derives its tradition and objectives from the four centuries of academic experience and educational ideals of the Society of Jesus, implemented by nearly two thousand years of Christian tradition and knowledge.

The University is composed of six major academic units:

The College of Arts and Sciences comprises 12 departments. These are English, fine arts, foreign languages, history, journalism, military science, philosophy, political science, psychology, rehabilitation services, sociology and theology and religious studies. Program divisions are: community services, general studies, honors, police science and administration, prelaw and speech.

The School of Business offers programs in accounting, economics, finance, general business, management and marketing.

The School of Education offers programs which qualify its students for teaching certificates and principals' credentials issued by the State Department of Public Instruction.

The School of Science and Engineering is composed of the departments of biology, chemistry, mathematics, physics and civil, electrical and mechanical engineering. Program divisions are: environmental studies, general science, health information services, medical technology, predental, premedical and preoptometry studies.

The School of Nursing offers a baccalaureate program in professional nursing which qualifies students for registration through state licensure.

The Graduate School has programs leading to masters' degrees in business, education, English, history, natural science, philosophy and religious education.

### Accreditation

Seattle University enjoys the highest accreditation and its students are accepted for graduate and advanced study by leading colleges and universities in all parts of the country.

#### The University is accredited by:

Northwest Association of Secondary and Higher Schools  
National League For Nursing  
American Chemical Society  
Engineering Council for Professional Development  
American Assembly of Collegiate Schools of Business  
National Council for Accreditation of Teacher Education

#### is approved by:

Washington State Board of Education  
American Medical Association  
American Society of Clinical Pathologists  
American Medical Record Association  
Washington State Board of Nursing

#### The University is a member of:

American Association of Colleges for Teacher Training, American Association of University Women, American Council on Education, Association of American Colleges, Association of Higher Education, Association of Jesuit Colleges and Universities, National Catholic Education Association, National Commission on Accrediting, Northwest Association of Colleges, Western Interstate Commission for Higher Education.









## Campus and the City

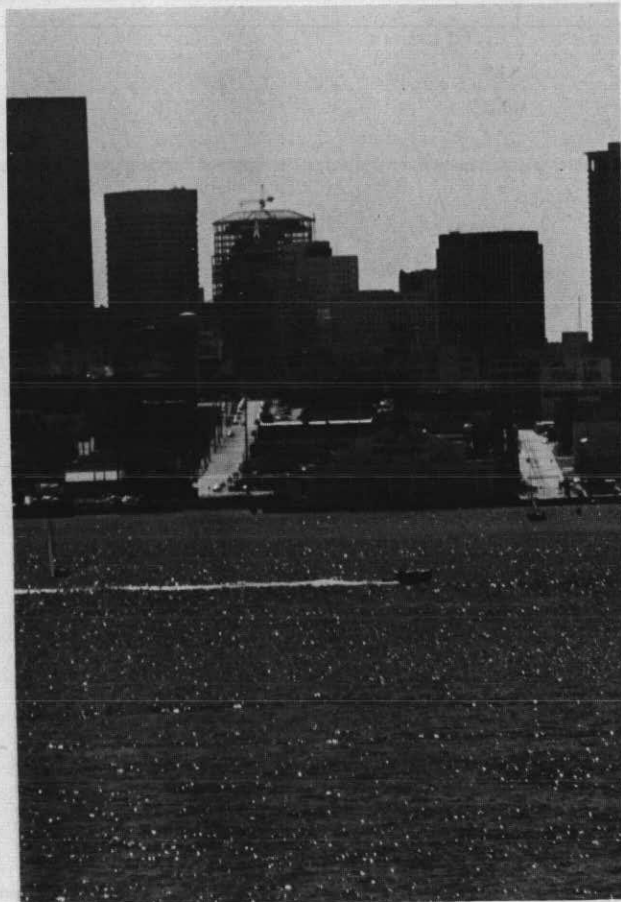
Seattle University is located on a 41-acre campus on Seattle's historic First Hill. Within short walking distance are the city's major education, cultural and recreational facilities, business and shopping centers and the Puget Sound waterfront.

The University's physical facilities serve a current student enrollment of 3,000. Presently, the campus contains 23 buildings, including modern classrooms, student and faculty residences and service units.

The housing facilities available on campus are Bellarmine Hall (1962), coed residence, with accommodations for 450 students and Xavier Hall (1955), the major men's residence, with a capacity of 200.

On campus facilities include the A.A. Lemieux Library (1966), the major study and resource center, with seating for 1,100 students. A variety of study areas, including individual carrels, study lounges and conference rooms, are available for the student's comfort and convenience.

The Connolly Center (1969) is the physical education teaching facility. In addition to classroom areas, recreational facilities include two swimming pools, basketball, badminton, tennis, squash and handball courts and a gymnastics and dance area.



The Student Union Building (1953), the Chieftain, houses student government offices, dining, lounge and meeting areas. A selection of auditoriums are available in the A.A. Lemieux Library, the William Pigott (1957) and Thomas J. Bannan (1961) Buildings for films, lectures, meetings and musical presentations. Teatro Inigo (1964) is the theatre for student drama productions.

Other major campus structures include the Liberal Arts Building (1945); Bookstore Building (1964); Loyola, the Jesuit faculty residence (1955); and Campion Tower (1965).

Seattle University is located in a seaport city surrounded by unsurpassed natural beauty. Seattle, the largest city in the Pacific Northwest and one of the 25 largest in the United States, has all the scenic and cultural variety of a metropolitan city with the unique advantage of mountains and water at its back door.

Within city boundaries, Lake Union and Lake Washington provide the opportunity for sailing, boating, water skiing and swimming.

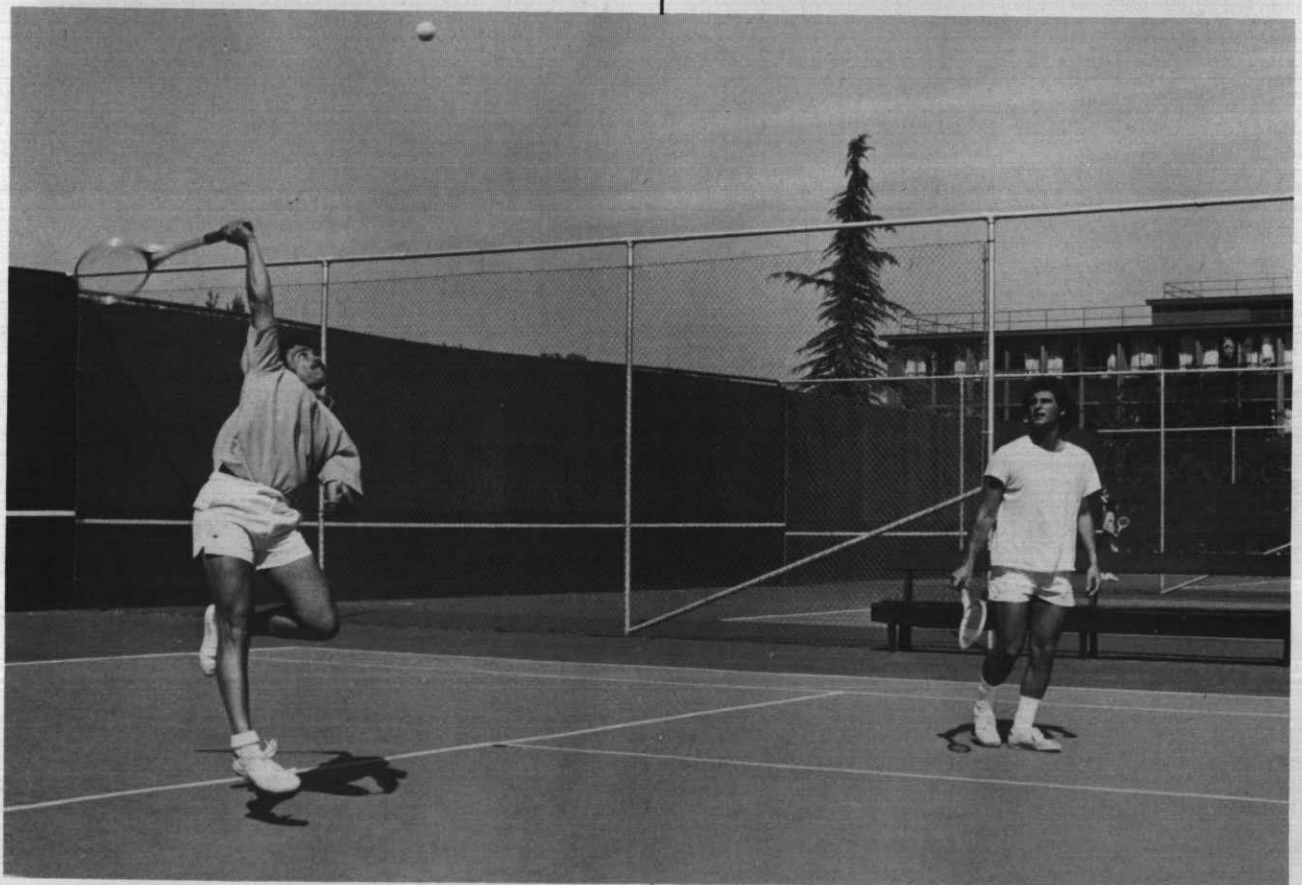
Ski areas are within an hour's drive of the city, with night and weekend skiing during winter months. Easy hikes, with trails marked and guide books available, are popular in the spring and summer months, as well as more difficult hikes for seasoned enthusiasts.

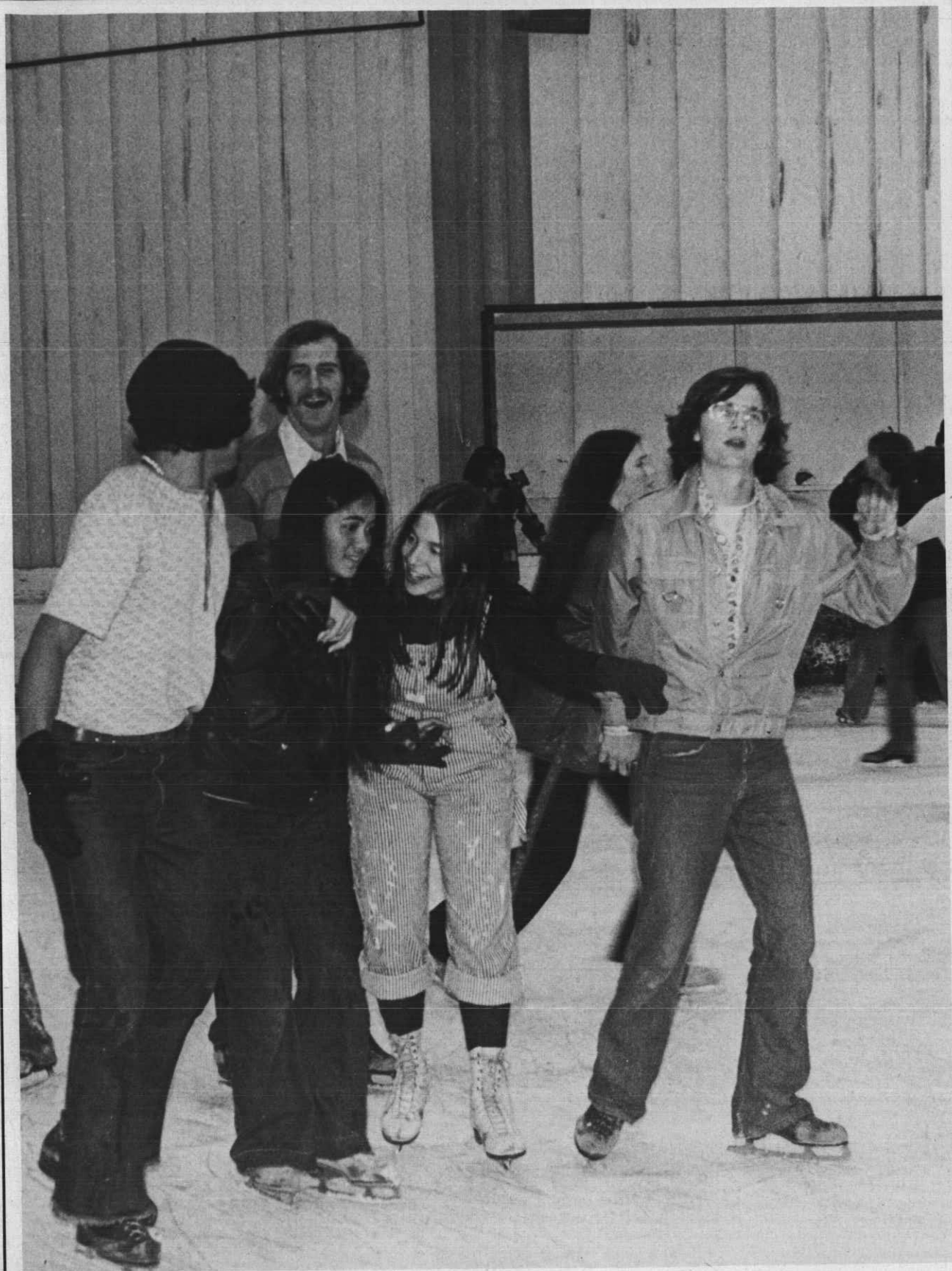
Bicycling has become increasingly popular and trails are set aside in various areas of the city.

Golf Courses, tennis courts, and indoor and outdoor pools for year-round swimming are available in addition to fishing and hunting opportunities.



# Student Services







## Costs

Tuition, Fees, Board and Room are due and payable according to the following schedule:

Fall Term — At registration

Winter Terms — Advanced registration in person or mail at Treasurer's Office no later than day of registration; others on registration day only.

Students have not completed registration until Tuition, Fees, Board and Room and any outstanding bills are paid. Students requiring financial assistance may inquire at the Financial Aid office. See pages 16-18 for further information. Seattle University reserves the right to change its charges at any time without previous notice, although after the beginning of a quarter no change will be made which is effective within that quarter.

## Tuition

Tuition per quarter (10 to 15 credits)  
Entering students..... \$620.00

(Covers building fund, library, health fees; yearbook, student newspaper and student organization allotments; admission to athletic events.)

Over hours (per credit hour) ..... \$ 31.00  
Under 10 hours (per credit hour)..... \$ 62.00  
Auditor's tuition (per credit hour)..... \$ 30.00  
Graduate courses School of Business  
(per credit hour)..... \$ 62.00

## Residence Charges

Room and Board per academic year ..... \$1,105.00  
Payment Schedule  
Reservation Fee ..... \$ 70.00  
Fall Quarter ..... \$ 325.00  
Winter Quarter ..... \$ 355.00  
Spring Quarter ..... 355.00

## Occasional Fees (non-refundable)

Application fee — undergraduate and graduate (each paid only once, must accompany application) ..... \$ 10.00  
Matriculate fee  
(paid once, at first registration) ..... \$ 15.00  
Tuition deposit (applied to first quarter's tuition if student completes registration) ..... \$ 50.00  
Late registration (added to tuition and fees)  
\$5.00 per day — five day maximum .. \$ 25.00  
Special examination (per subject) testing .... \$ 5.00  
Make-up examination (per subject) ..... \$ 5.00  
Nursing achievement tests (each ..... \$ 1.25  
Credits by examination (per credit hour)..... \$ 10.00  
Validation of field experience (per credit hour) \$15.00  
Medical Technology Internship  
(per credit hour) ..... \$ 5.00  
Removal of incomplete ..... \$ 5.00  
Washington Pre-College tests  
(if not taken in high school) ..... \$ 7.00  
Thesis binding fee ..... \$ 10.00

Graduation fee (bachelor's degree) .....\$20.00  
(\$15 additional for each additional degree.)  
Graduation fee (master's degree) ..... \$ 45.00  
Graduation fees are due at the time of application for graduation and graduation forms will be released only upon presentation of a receipt for these fees.

Graduate Record Examination ..... \$ 7.00

## Laboratory Fees

Biology: All laboratory courses ..... \$ 10.00  
Business 210, 509, 590 (Computer) ..... \$ 20.00  
Chemistry: All laboratory courses ..... \$ 10.00  
Education: Ed 406 ..... \$ 5.00  
Engineering:  
Ce 496, 497; Me 496, 497 ..... \$ 5.00  
All other laboratory courses ..... \$ 10.00  
Cooperative Engineering: ..... \$ 75.00  
Mathematics: Mt 114, 215 ..... \$ 30.00  
Music:  
Mu 110, 111, 120, 122, 125 ..... \$ 40.00  
Piano practice room, one hour  
daily per quarter ..... \$ 5.00  
Physics: All laboratory courses ..... \$ 10.00  
Psychology:  
Psy 381, 401 ..... \$ 5.00  
Psy 402 ..... \$ 10.00  
Psy 390 ..... \$ 30.00

## Refunds

### Withdrawals

1-10 class days .....80 per cent  
11-15 class days .....60 per cent  
16-20 class days .....40 per cent  
Thereafter .....No Refund

### Class Load Reduction

1-5 class days ..... 100 per cent  
6-10 class days .....80 per cent  
11-15 class days .....60 per cent  
16-20 class days .....40 per cent  
Thereafter .....No Refund

Refunds are based on the number of consecutive Monday through Friday days (class days) from the first day of classes until the official date of withdrawal or class load reduction according to the above schedules. At least 10 class days must elapse between your payment and date of refund.

## Family Tuition Plan

Two or more members of a family living in the same household and dependent upon a common support and who are attending the University concurrently as full-time undergraduate students may apply for a tuition discount. Further information on the Family Tuition Plan can be obtained at the Controllers office.

## Student Services

The principal function of any university is to provide for its students an atmosphere conducive to intellectual progress—laboratories, library, classrooms and stimulating teachers. However, it is recognized that the total development of the individual is equally important. Consequently certain services have been introduced at Seattle University which exist for the purpose of serving the spiritual, social, personal and physical needs of the student body. These services of the university personnel described below are aids in making the educational pursuits of the students more profitable and satisfying.

### Orientation

To assist new students in becoming better acquainted with the University and familiar with their academic program, the Academic Vice President, assisted by the Director for Student Activities, the staff of the Counseling and Testing Center and members of the Student Government, sponsors a New Student Orientation Program prior to fall quarter registration. Freshmen students are expected to attend all orientation sessions.

### Advisory System

The deans of the several schools supervise the academic guidance and counseling program of both freshmen students and upperclassmen in their school. Through the department chairman, they assign an adviser for each student according to his major or area of concentration. The assignment of an adviser is normally made either during orientation or at the time the student is interviewed.



## Counseling and Testing Center

Specialized counseling is available at the Counseling and Testing Center by persons trained in clinical psychology. Here tests of scholastic and vocational aptitude, interest and personality are available to students. The service is administered without charge for students enrolled in the University. The Counseling and Testing Center also administers University-wide testing programs for the academic guidance of new students and supervises the National League for Nursing achievement tests for students in the School of Nursing. At the discretion of the individual instructor, students may make up class examinations at the Center.

### Minority Student Affairs Programs

Seattle University offers to students from culturally, economically and academically deprived backgrounds a special program of supporting services. These services include financial assistance, counseling, tutoring, employment, placement, post graduate and career information and ethnic cultural programs. For information contact Program Director, Minority Student Affairs office.

### Spiritual and Personal Guidance

Members of the Campus Ministry team are chiefly responsible for the spiritual and personal guidance of students. They are aided in this work by other members of the student personnel staff. The Jesuit Fathers living in Loyola Hall and those who serve as moderators in the residence halls are also trained counselors, and students should feel free to come to them when in need of assistance. These faculty and staff members are available by appointment or through the informal contacts of campus life.







### Religious Program

The Campus Ministry team organizes and directs liturgical and religious programs aimed at furthering the spiritual welfare of the University community. Masses are offered daily in Bellarmine Hall, the Liberal Arts Chapel and the Liturgical Center. Confessions are heard at posted times each weekday as well as before the Masses.

Special liturgical and religious events are planned throughout the year by the Campus Ministry team in cooperation with a student liturgical committee. One such event is the Search. The Search is a religious experience which involves a weekend away from campus where participants have an opportunity to reflect on their personal growth in the Christian life. In addition, retreats, Pre-Cana and penance services, Scripture study programs, prayer groups and faith instruction classes are scheduled to meet student needs. Non-Catholic students are invited to take part in all these activities.

For students who want to give some time to helping others, opportunities are provided to become involved in social action programs or to work with volunteer service organizations both during college years and following graduation. The Campus Ministry office also coordinates these activities on campus.

### Student Health Center

Students enrolled for 10 or more credit hours qualify to participate in University health services. These services are administered through the Student Health Center on campus.

### Student Health Insurance

Full-time students and their dependents are eligible to participate in the University's voluntary student health



insurance program. The program provides accident and sickness benefits. This insurance may be purchased at registration.

### Athletic Program

Seattle University is a member of the National Collegiate Athletic Association and the West Coast Athletic Conference. Its athletic policies are governed by the constitution and by-laws of these associations. The athletic program is administered by the Director of Athletics and his staff. Major sports at the University are basketball, baseball, golf, tennis, crew and soccer.

An intramural athletic program is conducted for both men and women students. The program is administered by the Director of the Connolly Center and includes a wide range of group and individual athletic activities.

### General Organizations

Associated Students of Seattle University — Has general supervision of all campus organizations and extracurricular activities. Direction is exercised through the student senate, activities board, financial committee, and the Director for Student Activities.

Associated Women Students—An organization whose purpose is to provide for the welfare of women students, to promote educational, religious, cultural and social interests, to foster cooperation and understanding and to instill ideals of leadership.

### Student Publications

The Aegis—student yearbook.  
The Spectator—semi-weekly student newspaper.  
Fragments—literary publication.

### Student Organizations

Many campus organizations provide the student with an opportunity to develop his talents and to broaden his social and professional background. Included are professional societies, service clubs, student government groups, musical organizations, student publications, scholastic honoraries, religious committees and civic and charitable organizations. A list of authorized organizations may be obtained from the Office of the Director for Student Activities.

### Academic Honoraries

Alpha Sigma Nu—national Jesuit honorary recognizing outstanding scholastic attainment, loyalty and service.  
Alpha Epsilon Delta—international premedical honorary.  
Beta Gamma Sigma—national business school honorary.  
Kappa Delta Ph—national education honorary.  
Sigma Theta Tau—national nursing honorary.  
Tau Beta Pi—national engineering honorary.

### Service Honoraries

Alpha Phi Omega—a national service fraternity open to male students.  
Intercollegiate Knights—a national service fraternity open to men.  
Spurs—a women's service organization open to sophomore women who have shown qualities of scholarship, interest in school events and attributes of leadership and personality.  
IK Little Sisters—women's service honorary.



## Housing

Seattle University requires all full-time freshmen under 21 years of age to live in University housing unless they are married or living with their parents, or unless they have been granted an advance waiver. Sophomores with written parental permission may live off campus. Letters of permission and requests for waivers are to be sent to the Director for Resident Student Services (men) or the Office of the Dean for Women (women). Upperclassmen may live in the residence halls if space is available.

### Residence Halls

Bellarmino Hall has a capacity of 450 and Xavier accommodates 200. The halls provide study and recreational facilities and lounges. All students living on campus take their meals in the Bellarmine dining room. The residence halls are supervised by professionally trained directors, floor moderators and student resident assistants.

### Application for Housing

Requests for student housing are made through the Director for Resident Student Services or through the Office of the Dean for Women. A seventy-dollar (\$70.00) deposit is required to make reservations. See page 10 for schedule of housing costs.

Cancellation of a reservation must be received at the office of the Director for Resident Student Services or Dean for Women no later than August 1.

Applicants who do not cancel contracts by the above date forfeit the deposit fee. Residents who terminate their stay in University residence halls before the end of a quarter incur significant financial loss.





## Financial Aid

### Aims

The financial aid program at Seattle University is designed to assist academically qualified students who would find it difficult to attend the University without financial assistance. Aid is available to all full-time students without racial or religious discrimination.

### Determining Need

To help determine which students are most qualified for aid, Seattle University requires each applicant to submit a Parents' Confidential Statement (PCS), or the American College Testing Program (ACT) Family Financial Statement. These documents reflect the amount the family can reasonably be expected to provide to meet college expenses. The University attempts to supply the balance of needed funds. The financial aid package may consist of a scholarship, grant, student loan or part-time work. All financial assistance is awarded for the academic year. Requests for renewal of assistance and revised Confidential Statements must be submitted annually. Whenever possible, the University will continue assistance each year as long as the need is demonstrated and the student's performance merits it.

### How to Apply

These are the steps entering freshmen must follow to apply for all forms of financial aid:

1. Submit either the Parents' Confidential Statement of the College Scholarship Service or the American College Testing Family Financial Statement. Secure a copy from your school counselor and forward it to the address indicated on the form no later than February 15.
2. Apply for admission to the University. The Admissions office will automatically send you an Application for Financial Aid, which should be completed and returned to the University as soon as possible. **NO AWARD CAN BE MADE UNTIL THE STUDENT HAS BEEN ACCEPTED FOR ADMISSION.**

Early and complete submission of all necessary forms is the key to insuring that requests receive maximum consideration. Applications received after February 15 will continue to be processed until available funds are exhausted.

Transfer and currently enrolled students must submit the Parents' Confidential Statement (or Student Confidential Statement if an independent student) and the Application for Financial Aid prior to April 1. These forms are available from the Director of Financial Aid. Students must reapply for aid each year.

### Scholarships

A limited number of scholarships are awarded annually to entering freshmen, transfer students and currently enrolled undergraduates. Awards are based on scholastic achievement, financial need, participation in school and community activities and leadership potential. Applicants must have a minimum of 3.25 grade point average on a 4.00 scale to be considered. Awards range from partial to full tuition remission.

Freshmen scholarships are normally awarded for four years subject to the maintenance of a cumulative grade point average of 3.25 or above. The amount of the award each succeeding year may be adjusted depending on the financial need of the student. Application for continuation must be made during winter quarter each year.

Applicants for scholarships follow the standard procedure required of all students desiring financial aid and must indicate on the application form that they wish to be considered for a scholarship. **February 15 is the deadline for receipt of all scholarship credentials. Awards are announced no later than April 1.**

#### Seattle University

Some scholarships are provided from Seattle University's own funds. The number awarded each year depends on available funds.

#### Honors Program Scholarships

Tuition scholarships are granted on a one-year basis, renewable on basis of performance. Applicants should contact Chairman, Honors Program, for complete information.

#### Fine Arts Talent Scholarships

Tuition scholarships are awarded annually by the Fine Arts department to students of outstanding talent in art, music or drama. Students interested in auditioning for these awards should contact the Chairman, Fine Arts department.

### Donated Scholarships

These are scholarships made available each year to Seattle University through the generosity of companies and individuals. In addition to qualifications indicated, academic achievement and financial need are major considerations in choosing recipients.

#### Father Beezer Memorial

Alumni and friends of the late Father Gerald Beezer, S.J. have established a fund to maintain a scholarship in memory of his many years of devoted service to the University.

#### The Blume Family

#### The Boeing Company

Grant given to students majoring in engineering, physics, mathematics, or business. Renewable annually.

#### Louella Cook Foundation

#### Farmers Insurance Group

Scholarship funds are granted to University students majoring in business or mathematics. Awards are renewable.

#### Handley Memorial

A one-year partial tuition scholarship established by the late Miss Agnes Handley, former president of the Seattle University Guild.

#### Italian Club of Seattle

For students whose parents are Italian Club Members.

#### Laventhol, Krekstein, Horwath & Horwath

An award to a student majoring in accounting.

#### Harry Kinerk Memorial Scholarship

#### Rosemary McCone Memorial

#### James B. McGoldrick, S.J. Scholarship Fund



#### **Seattle University Guild Scholarships**

For scholarships in the Fine Arts department.

#### **William E. Sullivan Memorial**

#### **Western Gear Foundation**

Awarded to students majoring in engineering in honor of the late Philip L. Bannan, Sr. These scholarships are renewable if the student maintains a high scholastic standing.

#### **Wyman Youth Trust**

#### **Army ROTC Scholarships**

Four-year scholarships which provide tuition, fees, textbooks, and a subsistence allowance of \$100 a month are available through the ROTC program for students desiring a military career. Information is available through high school counselors or by writing directly to Commanding General, Fourth ROTC Region, Fort Lewis, Washington 98433. Two and three-year scholarships are also available after the freshman year for students who display ability and a desire for a military career. Information on these scholarships may be received by contacting the ROTC Department, Seattle University. Juniors and Seniors in ROTC receive \$100 a month even though not on a ROTC scholarship.

#### **Federal Nursing Programs**

Information on these programs may be obtained from the Dean of the School of Nursing.

#### **Army Student Nurse Program**

#### **Navy Nurse Corps Candidate Program**

Programs provide funds for a final two years of undergraduate study.

#### **Mental Health Training Program**

Traineeship grants for the final two years of undergraduate study to selected full-time undergraduate students who have an interest in enrolling in a graduate program in psychiatric nursing upon completion of the baccalaureate program. These grants are for the final two years of undergraduate study.

#### **Federal Traineeship Programs**

Traineeship grants offer tuition, fees and a monthly stipend for full-time qualified registered nurse students who are completing their final year of undergraduate study.



#### **Charles E. Merrill Trust**

A grant to provide annual scholarships for highly qualified but needy students of the Roman Catholic faith.

#### **Paul Pigott Memorial**

#### **Pay-N-Save Corporation Scholarship**

For a student majoring in marketing.

#### **Albert A. Schafer Memorial**

#### **Seattle First National Bank Minority Scholarship**

A scholarship for a minority student enrolled in the School of Business.

### **Loans**

Loans are a vital part of the financial aid "package" offered to students. Some loans do not require payment of principal or interest until the student leaves school. At that time, low-interest payments which may be spread over a long period, begin. Loans are an excellent means for the student to assume at least part of the cost of education without relying totally on his parents to meet the costs out of income or savings. Students must be United States citizens or have a permanent visa to be eligible for loans.

#### **National Direct Student Loan**

Qualified students are eligible to borrow up to a maximum of \$1,500 in one academic year from funds made available under the National Defense Education Act. Three per cent simple interest and repayment on the principal begins nine months after the student has ceased to be a half-time student. Repayment is quarterly and may be spread over a ten-year period. Deferment of repayment is possible and special forgiveness features are included for full-time teachers in schools with a high concentration of low income or handicapped students.

#### **Federally Insured Loan**

Regardless of family income, any student is eligible to apply for a loan up to a maximum of \$2,500 for the academic year under this program. Students apply for these loans through their own bank or lending agency.

The Federal government pays the interest charge on the loan while the student is in school, if the family adjusted income is \$15,000 or less, and will repay the lender in the event of student default, total disability or death. Nine months after the date of graduation, or withdrawal from school, repayment



begins at seven per cent simple interest. Repayment may be deferred while the borrower is a member of the Armed Services, Peace Corps or VISTA. Early application is advised so funds will be available with the start of school. Processing takes 6 to 8 weeks.

#### **Nursing Student Loan**

Full-time nursing students are eligible for loans from funds furnished by the National Institute of Health. Amount of the loan is in relation to the student's need, up to a yearly maximum of \$1,500. No interest is charged while the student is enrolled in the School of Nursing. Repayment begins one year after the borrower ceases to be a full-time nursing student, at three per cent simple interest per year. Repayments are due quarterly but may be spread over a ten-year period, depending on the amount borrowed. Forgiveness of up to 85 per cent of the loan is possible.

#### **Law Enforcement Education Loan**

Full-time students enrolled in a graduate or undergraduate program leading to a degree in a program directly related to law enforcement are eligible for a loan under the Law Enforcement Education Program (LEEP). A LEEP loan will provide necessary funds to cover tuition, fees and related expenses. Seattle University's Police Science and Administration degree program and the Community Services program have been approved under this program.

#### **Student Short-Term Loans**

Students are expected to arrive on registration day with funds required to meet their expenses. In some cases, late applicants for the Federally Insured Loan will not have received their funds. The Alumni Credit Union may grant temporary loans in these cases, but restricts the loans to students who have completed at least one quarter at Seattle University. Application for these loans should be made before registration day, directly to the Seattle University Alumni Credit Union.

#### **Special Loan Funds**

##### **Ravetti Educational Fund**

A low-interest loan fund established by Armand J. and Bessie M. Ravetti to assist needy students.

##### **Bing Crosby Loan Fund**

A low-interest loan established by the Bing Crosby Foundation.

##### **Alda Medack Loan Fund**

A fund established to provide emergency short-term loans to students.

##### **Instrument Society of America, Seattle Section**

An emergency loan fund for engineering students.

#### **Grants**

Several forms of grants are offered as part of the financial aid package. These include non-repayable federal grants and Seattle University tuition grants, which provide partial tuition remission; need rather than grade point average is the primary consideration.

##### **Supplemental Educational Opportunity Grant**

Federal non-repayable grants of \$200 to \$1,000 may be made to students with exceptional financial need under this federally funded program. The grants may continue for four years if the student's financial situation remains unchanged.

#### **Basic Educational Opportunity Grant**

Federal Grants available to students attending a post-secondary institution for the first time and on a full-time basis. Current regulations require students to apply in the spring of the final year of high school. The grants are based on the ability of the student's family to share the cost of education, with the amount figured on a federal formula. Awards may range from \$49 to \$452.

#### **Nursing Scholarship Grant**

Federal non-repayable grants of up to \$1,500 per year are available to nursing students with exceptional financial need.

#### **Washington State Grant**

High school seniors with exceptional financial need are eligible for grants which allow them to attend any institution of higher education in the State. To be eligible a student must be: a resident of the State; planning to attend an institution in the State, and demonstrate need. Names of eligible students will automatically be submitted by the University's Financial Aid office. Grants are renewable if the need remains the same.

#### **Law Enforcement Education Grants**

Grants of up to \$250 per quarter are available for full-time employees of police, corrections agencies or the courts studying full or part-time in a course related to law enforcement.

#### **Social Security Assistance**

Full-time, unmarried students, until age 22, may be eligible for social security benefits if one of their parents receives social security disability or retirement benefits or has died after having become eligible for such benefits. Information may be obtained from any Social Security office.

#### **Educational Assistance for Veterans/War Orphans**

Any student whose parent has died or is totally disabled as a result of service in the Armed Forces of the United States may be eligible for up to 36 months of educational assistance.

Eligible veterans (or spouses of deceased veterans) may attend Seattle University for up to four years under terms of the Veterans' Readjustment Benefits Act of 1966 (GI Bill). Contact the Veterans Administration for information and procedures.

#### **Student Employment**

##### **Work-Study Program**

Seattle University participates in the Federal College Work-Study program. Based on financial need, students are given jobs either on or off campus for periods not to exceed 20 hours per week while school is in session.

##### **Part-Time Jobs**

Part-time employment opportunities are maintained in the Financial Aid office. Jobs with business firms in the Seattle area are listed as well as those on campus. There is no charge to the student.

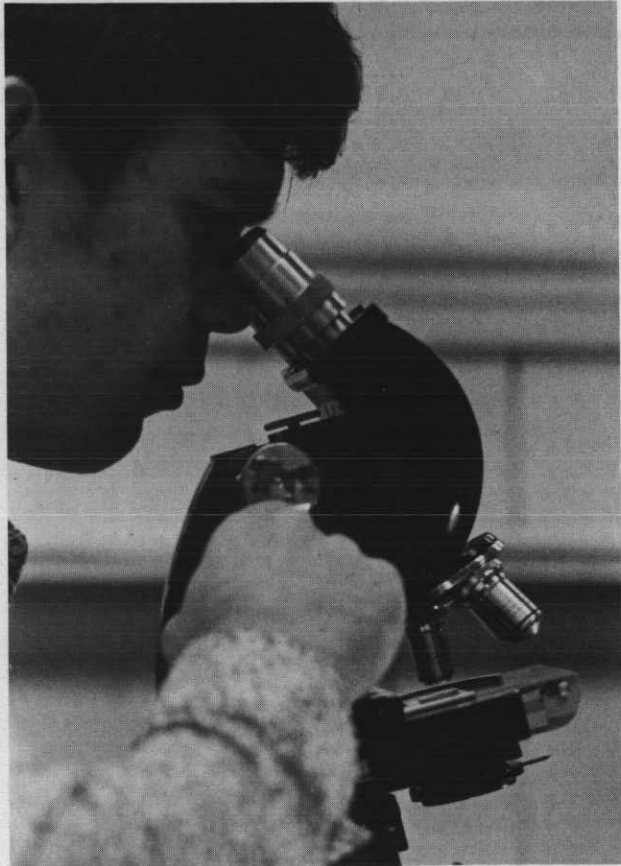
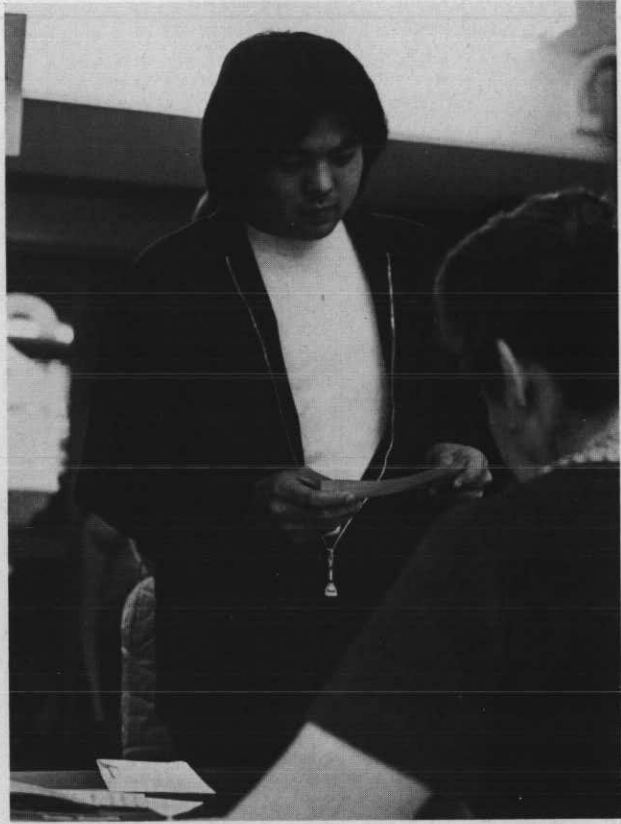
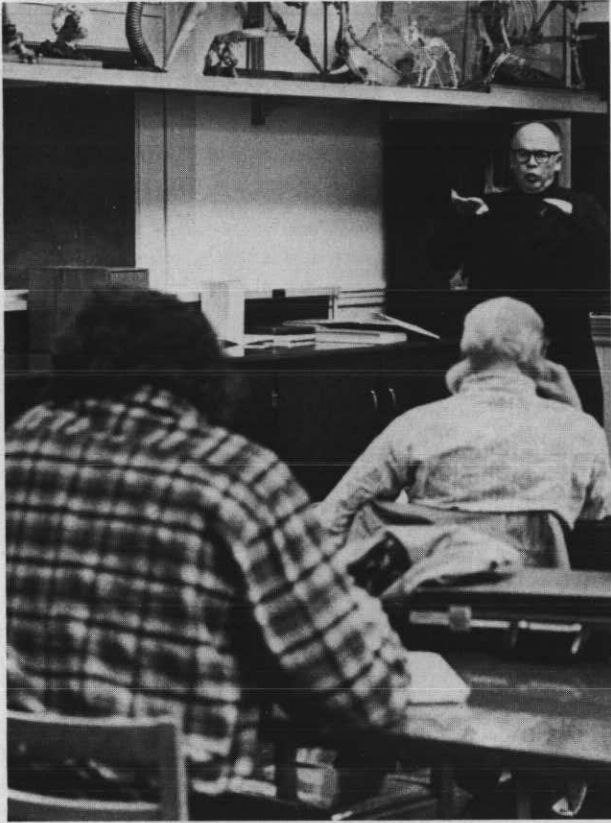
##### **Senior Placement Program**

Representatives of major business firms and government agencies visit the campus throughout the year to discuss career opportunities with graduating seniors. Interview schedules are publicized well in advance, with personal interviews scheduled through the Alumni office. A library of career information with assistance on career opportunities and preparation of resumes available.

##### **Alumni Assistance Program**

Employers contact qualified and experienced alumni by listing open positions with the Alumni office.

# Admission







## Admission Policy

Seattle University selects for admission those students who have demonstrated in their prior studies an ability to achieve a level of academic performance necessary to earn a degree. University admission policy is established by the Academic Council and the Board of Admissions. It is administered by the Academic Vice President through the Director of Admissions and Registrar. All records submitted by applicants become the property of Seattle University. In addition to the requirements for admission set forth in this section of the bulletin, reference must be made to additional or distinctive requisites in the individual colleges or schools of the University. This information will be found in the section of the bulletin dealing with the specific college or school.

Although the fall quarter is the usual and most satisfactory time to begin University studies, admission may be granted to qualified applicants for any of the four quarters of the academic year. All applicants, excluding transients and audits, must remit the \$10 application fee to the University. Inquiries concerning admission should be addressed to the DIRECTOR OF ADMISSIONS, SEATTLE UNIVERSITY, SEATTLE, WASHINGTON 98122.

### From Secondary Schools

To be admitted to the University as a regular student an applicant must meet the following entrance requirements:

Have graduated or will graduate from an accredited high school.

Have a high school grade point average of 2.50 or above as measured on the 4.00 scale.

Have completed 16 units of college preparatory courses.

Applicants with a grade point average between 2.00 and 2.50 as computed by the University admissions office will be reviewed by a special board. In some cases admission may be granted. Applicants with a grade point average below 2.00 will not be admitted to the University on either a regular or probationary status.

Each entering freshman must present evidence of that ability, motivation and sound secondary school education on which success in university work is founded.

## Unit Requirements

Admission is granted subject to graduation from an accredited high school and the applicant must present as part of his high school record successful completion of a minimum of 16 units. To count as a unit, a subject must be taught five times a week in periods of not less than 45 minutes for a high school year of 36 weeks. These 16 units must be distributed as follows:

English .....	3
Mathematics (Algebra, Geometry) .....	2
History .....	1
Laboratory Science .....	1
Electives (approved) .....	9

If the student lacks one of the above required units, he may be permitted in some cases, by way of exception, to enter with provisional standing.

Two courses of three or more quarter hours each will be considered equal to one high school unit. No college credit is granted for courses taken to remove deficiencies, except the laboratory science unit. High school students with a grade point average of 3.3 or above on the 4.0 scale and who are recommended by their high school principal will be considered for enrollment after their junior year at high school.

## Application

In the State of Washington, application blanks for those wishing to enter as freshmen may be obtained from high school offices. Out of state applicants may obtain forms by writing to the Director of Admissions. To be considered official, records must be forwarded to the University directly by the high school or registrar of a previous school.

In making application for admission the candidate must complete the following procedures after completion of at least the sixth semester:

1. Complete page one of the Washington uniform application for admission and leave the entire form with high school counselor to have the back of the page completed and forwarded directly to the Office of Admissions.
2. Submit a non-refundable application fee of \$10 to the Office of Admissions. Make remittances payable to Seattle University.
3. If University housing is desired, immediately upon receipt of housing material submit an advance room deposit of \$70. This deposit is not refundable after August 1.  
Requests for housing for men should be addressed to the Director of Resident Student Services, and those for women to the Dean for Women.
4. Submit the medical form provided by Seattle University after acceptance, properly completed per instruction.
5. Follow carefully any other instructions which are received.

Notification of acceptance or refusal will begin December 1 and continue as files are completed. However, students whose records do not give sufficient evidence of the ability to pursue college level work will be notified that a final decision will not be made until the receipt of specified information.

High school students who do not apply before May 1 should delay submitting applications until after graduation. All applications for admission should be received no later than one month before the beginning of each quarter.



### Early Decision Plan

Students who select Seattle University as their first-choice college and who have clearly demonstrated a high level of scholastic ability are eligible to apply for admission under this plan. Complete admission credentials should be submitted as soon as possible after the close of the sixth semester, but no later than November 1 of the senior year. Notification will be sent as soon as all credentials are received.

### Probation

Students admitted on probation will be placed in the General Studies Program under the guidance of the General Studies Director. Probation students must gain regular status by the end of the freshman year or be subject to dismissal from the University.

Test application forms and information concerning testing centers and test dates may be obtained from high school counselors and principals. Applicants planning to take the College Boards may also write directly to the Educational Testing Service, P.O. Box 1025, Berkeley, California 94701, or P.O. Box 592, Princeton, New Jersey 08540. Students living in the eastern half of the United States should write to the latter address. Applicants planning to take ACT tests may write directly to American College Testing Program, Inc., Iowa City, Iowa. The Washington Pre-College Test will be made available to juniors in all Washington High Schools.

### Medical Examination

After notification of their acceptance for entrance to Seattle University, all candidates will receive a medical questionnaire which must be completed and returned to the University.

### Placement Examinations

Placement tests in chemistry, mathematics and foreign languages are administered by these departments during Orientation and offer entering freshmen the opportunity to show the extent of their preparation in these areas and enable their department head or adviser to determine the level at which they are ready to begin college work. For additional mathematics placement information, consult the departmental section of this bulletin.



### Entrance Examination

In addition to the high school record, it is recommended that candidates for admission to the Freshman class take the Scholastic Aptitude Test of the College Entrance Examination Board or the test of the American College Testing Program or the Washington Pre-College Test and have the scores submitted to the Admissions Office of the University.

### Advanced Placement

Entering students interested in receiving advanced placement in subject matter other than as set forth above should plan to take the Advanced Placement Tests of the College Entrance Examination Board. Information concerning these tests may be obtained from high school guidance personnel or by writing to Educational Testing Service. The Educational Testing Service will forward test results directly to Seattle University. At the discretion of the dean of the school and the head of the department, a student who has been given advanced placement on the basis of the CEEB Advanced Placement Tests may also be granted college credit. Advanced Placement or credit may also be granted on the basis of the subject examinations of the College Level Examination Program (CLEP) of the College Entrance Examination Board. To receive course credit through CLEP, students must fulfill the requirements for credit by examination as stated on page 27 of this bulletin.

### Admission by Examination

Mature students who give exceptional promise may be admitted without rigid adherence to minimum unit requirements even if they have not graduated from high school or have graduated from a non-accredited high school. Decision as to admission in these cases is reserved to the Academic Vice President and the Board of Admissions. In some cases the student will be directed to the Counseling and Testing Center at Seattle University for guidance and testing.

### Auditor

Admission as an auditor must be approved by the instructor of the course. An auditor will not be required to participate in class discussion or laboratory work. Assignments may be made at the discretion of the instructor.





### From Other Universities

A student who has established a satisfactory record in another accredited college or university may apply for admission with advanced standings at Seattle University. An applicant for transfer must:

1. Submit to the Director of Admissions at Seattle University the application form, application fee and two official copy of a transcript from each college previously attended. Failure to furnish previous college records when applying for freshman standing or to supply complete college credentials when applying for advanced standing placed students under penalty of immediate dismissal.
2. Present a minimum 2.00 academic grade point average for college work attempted prior to transfer. Courses completed at the lowest passing grade are acceptable for transfer, but the dean or department chairman may require that such courses in the major field be repeated. There is no probation status for applicants with a grade point average below 2.00.
3. Transfer applicants who have completed less than one full year (45 quarter credits or 30 semester credits) at another university must fulfill secondary school unit requirements for admission to the Freshman class.
4. Submit a non-refundable application fee of \$10 to the Office of Admissions. Make remittances payable to Seattle University.

Students of other colleges or universities who have been placed on probation, suspended, or dismissed will not be considered for admission to Seattle University until at least one calendar year has elapsed. At the end of this period, admission can be granted only by the Board of Admissions. In such cases letters of recommendation will be helpful.

In assessing the student's record for admission, grades in non-credit courses will not be counted. For work done in institutions whose academic standing is unknown or for work with private teachers, admission and advanced credit will be granted only upon examination. Examination to establish credit for such work may be taken after completion of 15 credits in residence. This credit is granted according to conditions set down under Credit by Examination (see page 27).

### Advanced Standing

For the purpose of guidance and registration, the Admissions Office will make tentative evaluation of transfer credits. All evaluations are subject to the approval of the Academic Vice President and the dean of the appropriate school.

The following conditions apply to transfer students in granting credits acceptable to Seattle University:

1. Credit transferred from two-year colleges may be applied to University freshmen and sophomore years only. Transfer of such credit may not exceed 90 credits.
2. For admission with advanced standing no more than 135 quarter credits in academic subjects will be accepted toward a bachelor's degree requiring four years of college study. All transfer students must take at least two courses in their major field of study at Seattle University and meet philosophy and theology requirements. Consult page 24 for listing of required courses in philosophy and theology.
3. Credit earned through extension courses may be accepted if the institution offering such work is a member of the National University Extension Association. Not more than 45 credits of extension credit will be accepted. Credit earned through correspondence shall not exceed 12 credits and must be included in the extension credit total of 45 credits.
4. Credits over 10 years old will be reviewed to determine transferability.

### Foreign Students

Seattle University admits a limited number of students from foreign countries. Specific admission requirements and procedures for all foreign students, except Canadians, are listed on the official foreign student application form. Canadian applicants must meet the admission requirements outlined above for American students and eligible for admission to the university of their province. The Immigration Form (1-20) necessary to enter the United States is issued to the student upon receipt of proof of financial responsibility.

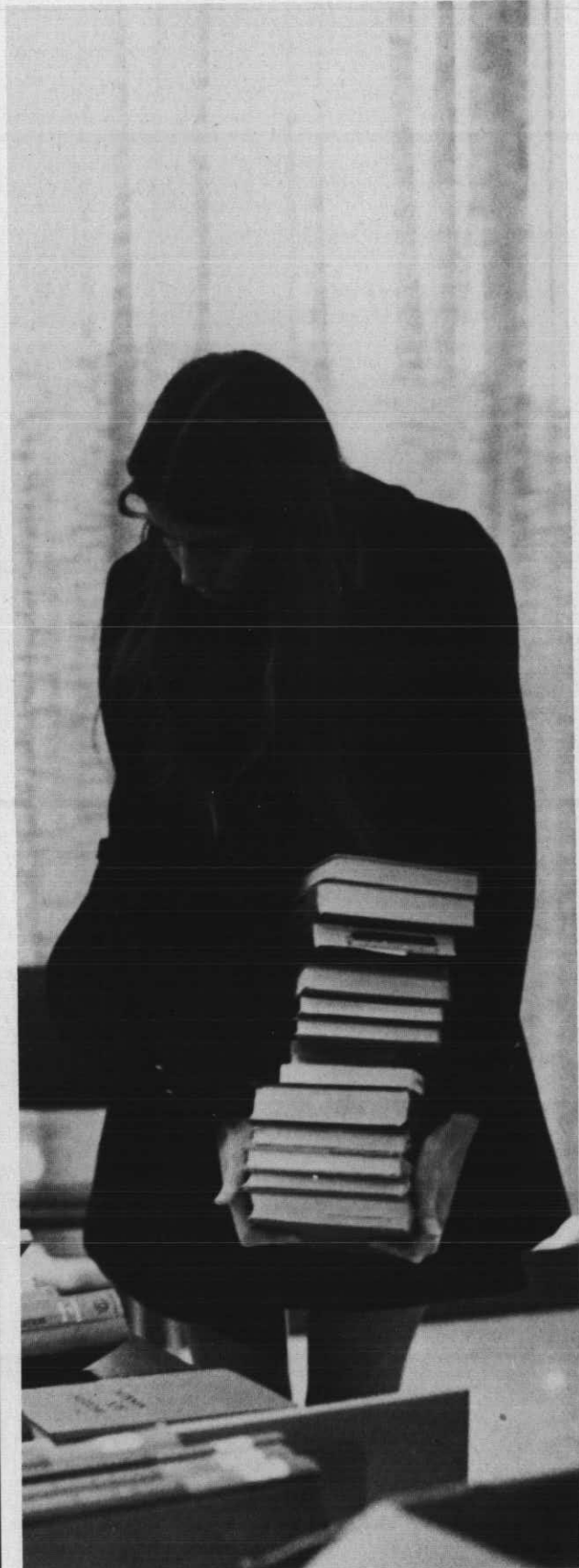
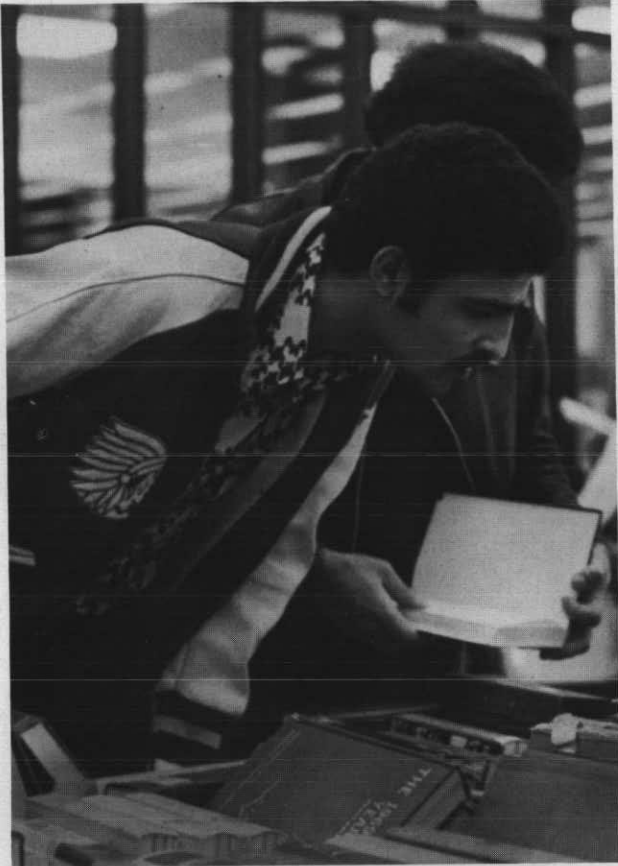
### Special Students

Mature individuals may apply to the Board of Admissions for special standing. A special student may take such undergraduate courses as the dean of his school may determine. A special student is not eligible for a degree until he fulfills the requirements for admission to the college in which he is enrolled. He may then become a regular student.

### Transient Students

Admission as a transient student is granted to a student in good standing in any recognized college who meets Seattle University's admission standards and who is taking work to be transferred to his college. By special arrangement superior high school students may be admitted to specific courses in a transient status. University credit will be awarded for successful completion of the course to be applied toward a degree after the student matriculates in a college or university.

# Academics





## The CORE CURRICULUM

Students at Seattle University take a basic program of liberal studies courses called the core curriculum. Additional requirements, exceptions and stipulated courses are established by the schools and departments of the University and those sections of this bulletin should be consulted before choosing core courses. Check course descriptions in the respective departmental sections for prerequisites.

### Required Sequences

#### ENGLISH SEQUENCE \_\_\_\_\_ 10 credits

- En 100 Freshman English \_\_\_\_\_ 5 credits  
and any one of the following:
- En 132 Masterpieces of American Literature \_\_\_\_\_ 5 credits
- En 133 Masterpieces of World Literature \_\_\_\_\_ 5 credits
- En 134 Masterpieces of British Literature \_\_\_\_\_ 5 credits
- En 220 Introduction to Poetry \_\_\_\_\_ 5 credits
- En 230 Introduction to Fiction \_\_\_\_\_ 5 credits
- En 240 Introduction to Drama \_\_\_\_\_ 5 credits
- En 383 Masterpieces of Black Literature \_\_\_\_\_ 5 credits

#### MATHEMATICS/SCIENCE SEQUENCE \_\_\_\_\_ 10 credits

Any two 5-credit courses in mathematics, biology, chemistry or physics, which the student is qualified to take, will fulfill the mathematics/science requirement. The following courses are recommended for non-majors in mathematics and the sciences:

- BI 101 Life Science \_\_\_\_\_ 5 credits
- Ch 100 Principles of the Physical Sciences \_\_\_\_\_ 5 credits
- Mt 175 Mathematics for Liberal Arts Students \_\_\_\_\_ 5 credits
- Ph 100 Modern Physical Science \_\_\_\_\_ 5 credits
- Ph 110 Fundamentals of Astronomy \_\_\_\_\_ 5 credits

Business, mathematics, engineering and science majors should consult their departmental programs for mathematics/science requirements.

#### PHILOSOPHY SEQUENCE \_\_\_\_\_ 15 credits

- PI 110 Philosophical Problems \_\_\_\_\_ 5 credits
- PI 220 The World \_\_\_\_\_ 5 credits
- Philosophical Problems \_\_\_\_\_ 5 credits
- Man \_\_\_\_\_ 5 credits

and any other 5-credit course in philosophy which the student is qualified to take. No philosophy courses may be taken in the fall quarter of the Freshman Year. Consult the course listings in the Philosophy department section of this bulletin for third course options.

Transfer students with junior or senior standing (90 or more credits) are usually required to take two philosophy courses after transferring. Transfer students with freshman or sophomore standing (89 or fewer credits) are usually required to take three philosophy courses.

#### THEOLOGY SEQUENCE \_\_\_\_\_ 10 credits

Students should choose one 5-credit course from each of the two theology and religious studies areas listed below:

##### AREA 1 — SCRIPTURE

- Rs 200 Judaeo Christian Origins \_\_\_\_\_ 5 credits
- Rs 210 Synoptic Gospels \_\_\_\_\_ 5 credits
- Rs 215 Johannine Theology \_\_\_\_\_ 5 credits
- Rs 220 Pauline Theology \_\_\_\_\_ 5 credits
- Rs 240 Prophetic and Wisdom Literature of the Old Testament \_\_\_\_\_ 5 credits
- Rs 289 Comparative Religion \_\_\_\_\_ 5 credits
- Rs 290 Religious Experience, East and West \_\_\_\_\_ 5 credits

##### AREA 2 — SYSTEMATIC THEOLOGY

- Rs 320 Fundamental Themes in Theology \_\_\_\_\_ 5 credits
- Rs 330 The Problem of God \_\_\_\_\_ 5 credits
- Rs 335 Christ and Modern Man \_\_\_\_\_ 5 credits
- Rs 340 Theology of Man \_\_\_\_\_ 5 credits
- Rs 344 Church as Community \_\_\_\_\_ 5 credits
- Rs 350 Perspective of Christian Hope \_\_\_\_\_ 5 credits
- Rs 420 Christian Sacraments \_\_\_\_\_ 5 credits
- Rs 433 Theology of Human Sexuality and Marriage \_\_\_\_\_ 5 credits
- Rs 443 Vatican II and Future \_\_\_\_\_ 5 credits
- Rs 475 Contemporary Christian Morality \_\_\_\_\_ 5 credits
- Rs 476 Social Theology \_\_\_\_\_ 5 credits
- Rs 477 Christian Response to Some Socio-Legal Problems \_\_\_\_\_ 5 credits
- Rs 490 Special Topics - Core \_\_\_\_\_ 3-5 credits

Students should begin their theology sequence in the Sophomore Year or later and should have taken some philosophy courses. Courses should be taken in proper numerical sequence, i.e., 200s before 300s.

Transfer students with junior or senior standing (90 or more credits) must take one theology course. Transfer students with freshman or sophomore standing (89 or fewer credits) must take two theology courses.

#### HISTORY SEQUENCE \_\_\_\_\_ 10 credits

Plan 1  
Any two of the following courses in sequence: Hs 101 and 102 or 102 and 103.

Plan 2  
Hs 103, Western Culture III, and any one of the following: Hs 231, 251, 271, 381, 347 or 348.

#### SOCIAL SCIENCE SEQUENCE \_\_\_\_\_ 10 credits

Any two 5-credit courses in economics, political science, psychology and/or sociology for which the student is qualified. The following are recommended:

- Cs 321 Asian-American Experience \_\_\_\_\_ 5 credits
- Ec 100 Nature of Economic Society \_\_\_\_\_ 5 credits
- Ec 271 Principles of Economics I \_\_\_\_\_ 5 credits
- Ec 272 Principles of Economics II \_\_\_\_\_ 5 credits
- Ec 273 American Economic History \_\_\_\_\_ 5 credits
- Ec 274 History of Economic Thought \_\_\_\_\_ 5 credits
- Pls 150 Introduction to Political Science \_\_\_\_\_ 5 credits
- Pls 160 American National Government \_\_\_\_\_ 5 credits
- Pls 200 Comparative European Democracies \_\_\_\_\_ 5 credits

Pls 214	Government and the Economy _____	5 credits
Pls 242	American Political Thought _____	5 credits
Pls 249	Introduction to International Politics _____	5 credits
Pls 340	Comparative Asian Systems _____	5 credits
Pls 341	Comparative African Systems _____	5 credits
Pls 375	Minority Politics In the United States _____	5 credits
Psy 100	Introductory Psychology _____	5 credits
Psy 210	Personality Adjustment _____	5 credits
Psy 315	Abnormal Psychology _____	5 credits
Psy 322	Psychology of Growth and Development _____	5 credits
Sc 101	Fundamentals of Sociology I _____	5 credits
Sc 200	Perspectives in Social Psychology _____	5 credits
Sc 266	Interracial and Interethnic Relations _____	5 credits
Sc 302	The Black People's Social Movement _____	5 credits

(Students in the School of Education substitute Ed 322 for Psy 322.)

### Core Exceptions for Science, Engineering and Business

Science and engineering students should consult the section of the bulletin giving their programs of studies for their history and social science requirements.

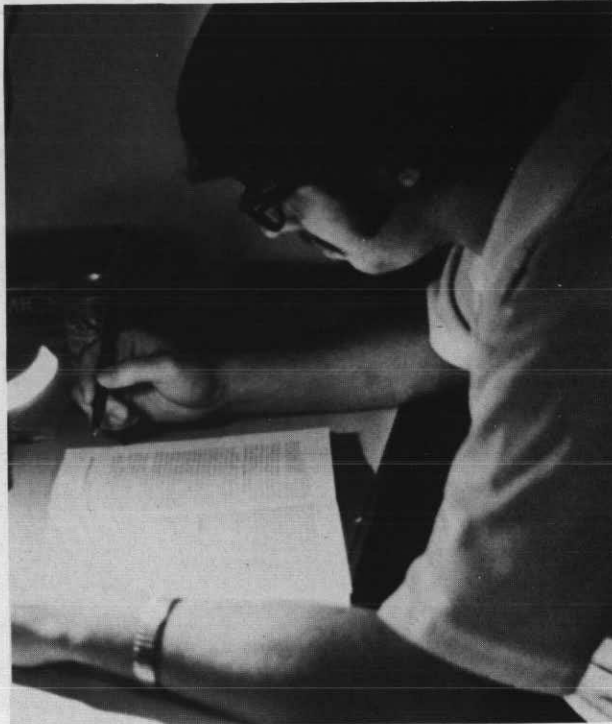
Students in the School of Business must consult that section of this bulletin for required courses.

## Academic Regulations

Each student is responsible for informing himself of the academic regulations and requirements set forth in this Bulletin of Information and for revisions of same as posted on campus bulletin boards or in other official publications of the University. Failure to meet the requirements or comply with regulations because of lack of knowledge thereof does not excuse the student from being subject to them.

A student's program of study must be approved by a member of the faculty, usually the adviser, at registration. However, such approval does not give official sanction to any failure to meet University requirements nor does it free the student of that responsibility necessary to intelligent personal choice.

The Academic Council has discretionary powers for all cases not covered by the rules and regulations listed in this section. The University reserves the right to cancel any class which does not meet the required minimum enrollment. The enrollment and graduation of each student, the awarding of academic credits, and the granting of any award or degree are strictly subject to the disciplinary power of the University. The University reserves the right to change any requirement and to ask a student to withdraw at any time.



### Academic Terms

**ACADEMIC AVERAGE** — Computed by the University for each applicant to determine the quality of high school work in academic subjects such as English, algebra, history, and laboratory sciences. Non-academic high school subjects such as music, physical education, and typewriting are excluded when this average is computed.

**ACCREDITED** — Certified as fulfilling standards set up by regional accrediting agencies. Indicates that course work is acceptable to other colleges or universities.

**ADVANCED PLACEMENT** — Admission of freshmen to courses beyond the beginning level. Granted to students who pass designated advanced placement tests.

**ADVANCED STANDING** — Granted to transfer students who have previous college work which is acceptable to Seattle University.

**ADVISER** — A member of the faculty designated to assist the student in planning his program of study.

**AUDITOR** — A student who is permitted to register for courses without obtaining college credit.

**BACCALAUREATE MASS** — Official academic function of Commencement Week for those graduating.

**CERTIFICATION** — Granted through the School of Education to graduates who have met State of Washington requirements for teaching in elementary or secondary schools.

**CHANGE OF MAJOR** — Procedure whereby student declares his intention to change from one subject field into another within the same division (school or college) of the University.

**CHANGE OF SCHOOL** — Procedure whereby student obtains permission to change from one school of the University into another and officially notifies deans and the Registrar of the change.



**CLASS CARDS** — Issued to students and collected from them during registration. Used to produce class lists which constitute official notification to instructor that the student is enrolled in his class.

**CLASSICAL** — One of two types of degree programs offered by the College of Arts and Sciences. The classical degree differs from the non-classical in that it requires 15 hours of Latin or Greek courses numbered 300 to 499.

**COLLEGE** — One of the six academic administrative divisions of Seattle University, i.e., College of Arts and Sciences, consisting of the dean, his advisory board, the faculty of the college and the students registered in his division.

**CORE CURRICULUM** — That body of subject matter common to programs of study and the foundation of Seattle University's liberal education.

**COMPREHENSIVE EXAMINATION** — An examination covering the entire scope of the student's major area of study.

**COREQUISITE** — A course which must be taken in the same quarter with another specified course.

**COURSE OF INSTRUCTION** — A complete set of lectures, quizzes, recitations, student exercises, laboratory periods, and examinations on a given subject.

**COURSE OF STUDY** — See program of study.

**CREDIT BY EXAMINATION** — Procedure to obtain credit for work done in private study or for work not otherwise acceptable to the University.

**CREDIT HOUR** — The unit of instruction used in computing University graduation requirements. A credit is given for each hour of class per week for a minimum of eleven weeks. A two-hour laboratory period is considered the equivalent of one hour of lecture and/or recitation work, except in the School of Science and Engineering. To earn five credits a student attends the class five hours each week for 10 weeks.

**CUMULATIVE GRADE POINT AVERAGE** — The quality measurement of each student's university work computed by dividing total quality points by total credits attempted.

**CURRICULUM** — An established program of study leading toward a degree in a particular subject field.

**DEFICIENCY** — Lack of credit in a course required for graduation, or lack of credit in subject matter required for entrance.

**DEGREE** — Awarded by the University upon successful completion of a specific program of study.

**DEGREE PROGRAM** — See Program of Study.

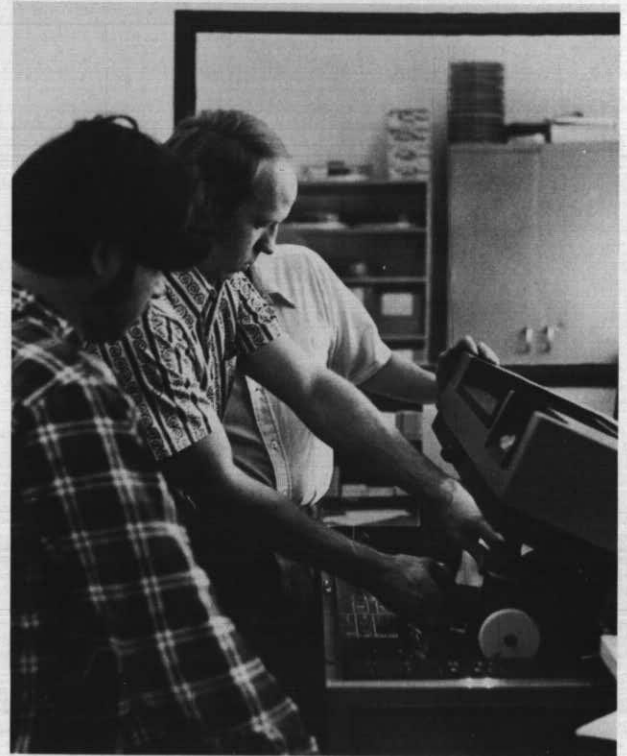
**DEPARTMENT** — A division of a school or college of the University consisting of those faculty members who are actively engaged in instruction, administrative or research work in a specific subject field under the direction of a chairman.

**ELECTIVE** — A subject chosen by the student not demanded by his program of study.

**FIELD OF CONCENTRATION** — Student's major field. See major.

**FIFTH YEAR** — Status of those with bachelor's degree taking additional college work in any undergraduate area of study with no specific degree objective; may be seeking teacher certification.

**FULL-TIME** — For academic reporting purposes, 12 credits is considered full-time for undergraduate students and nine credits full-time for graduate students.



**GENERAL STUDIES** — Program for students who have a wide range of interest and want a broad liberal arts education, as well as students who have not yet decided upon a traditional major.

**GRADE POINT AVERAGE** — An average computed on the basis of numerical values assigned to the letter grades received by students. To determine this average the quality points assigned to the letter grades are totaled and divided by the total number of credit hours attempted.

**GRADUATE STUDENT** — One who has been admitted to Graduate School to pursue a specific advanced degree program.

**HUMANITIES** — Cultural subjects as distinguished from social sciences (history, psychology, or sociology) and physical sciences.

**I-20 FORM** — United States Immigration Form No. 20 issued by the University to students from foreign countries who have been accepted for admission.

**INTERNSHIP** — A period of one quarter or one year during which a student gains experience in an actual work situation. The length of internship and type of agency to which a student is assigned are determined by his major or some special interest within his major field.

**LOW SCHOLARSHIP LIST** — A warning list published quarterly of students whose poor academic work in one quarter if not immediately improved will result in probation or dismissal.

**MAJOR** — The specific field of study selected by a student.

**MATRICULATE** — Enrollment at the University for the first time as a regular student to pursue a degree.

**MAKE-UP EXAMINATIONS** — Special examinations prepared by an instructor for students who for serious reason miss a scheduled examination.

**MINOR** — The secondary field of concentration selected by a student.

**ORIENTATION** — A period preceding fall quarter in which new students are introduced to the University.

**PART-TIME** — For academic reporting purposes, less than 12 credits is considered part-time for undergraduate students and less than nine credits part-time for graduate students.

**PERMANENT RECORD** — The University record of all courses for which a student registers.

**PLACEMENT TESTS** — Tests in a specific field administered to entering students to determine the level of achievement before assigning his college courses.

**PREREQUISITE** — A required course which must be complete before a student is permitted to register for a more advanced course.

**PROBATION** — Status resulting from academic performance below the minimum university level.

**PROVISIONAL STUDENT** — One who is admitted with an entrance requirement unsatisfied.

**PROGRAM OF STUDY** — The curriculum in a given subject matter field. A series of courses assigned by schools and departments of the University which must be completed by the student before a degree is awarded.

**QUALITY POINTS** — The numerical values assigned to letter grades. See the section of this bulletin on the grading system.

**QUARTER** — Term of instruction consisting of ten or eleven weeks during which a student completes a series of courses he has selected. There are three quarters in a regular academic year, Fall — September to December, Winter — January to March, and Spring — April to June. The summer quarter extends from June to August.

**RATIO STUDIORUM** — Traditional plan of studies of the Society of Jesus.

**READMISSION** — Procedure whereby a student who has not been in attendance for one or more quarters is permitted to register for continued course work.

**REGISTRATION** — Official enrollment in the University. Process in which student selects his courses each quarter.

**REGULAR STUDENT** — A fully matriculated student pursuing a degree program.

**SPECIAL STUDENT** — A non-matriculated student taking course work which is not applicable toward a degree until regular standing is achieved.

**SCHOOL** — An academic and administrative division of the University consisting of a dean, his advisory board, the faculty of the school, and the students registered in the school.

**SPECIFIC CURRICULUM** — In addition to the core curriculum required of all students, each individual student selects a specific curriculum or field of concentration. These curricula are offered by the component schools of the University according to degree requirements.

**TRANSCRIPT** — A copy of the student's permanent record. An official transcript is one bearing the University's seal. An unofficial transcript bears no seal and is not acceptable as a genuine copy of a student's record by other universities. There is no fee for a transcript unless the student has a financial obligation outstanding in which case the fee is the full amount outstanding.

**TRANSFER CREDIT** — Credit awarded to a student for work completed at another college or university.

**TRANSFER STUDENT** — One who is admitted to Seattle University having previously completed work at another college or university.

**UNIT OF INSTRUCTION** — See Quarter Hour.

**WITHDRAWAL** — Procedure whereby student notifies the University that he will not complete course(s) for which he is registered.

### Attendance

The instructor has the option to fail a student who by the end of the quarter has missed 15 per cent or more of classes and laboratory sessions. Absence is counted from the first scheduled class day.

### Student Classification

Regular undergraduate students of the University are classified as follows:

- Freshmen — less than 45 credits completed
- Sophomore — at least 45 but less than 90 credits completed
- Junior — at least 90 but less than 135 credits completed
- Senior — more than 135 credits completed.

### Course Numbering System

The course numbering system at Seattle University is as follows:

- 100 to 199 are freshman courses
- 200 to 299 are sophomore courses
- 300 to 399 are junior courses
- 400 to 499 are senior courses
- 500 and above are graduate courses — graduate standing required to register for courses numbered 500 or above.

### Credit by Examination

Examinations for advanced credit in courses offered by the University may be taken by a student for work done in private study or on subject matter taken at a non-accredited college or university, with the following restrictions:

1. Student must be currently registered at Seattle University.
2. No student may take an advanced credit examination in a course in which he has already been registered.
3. The maximum number of credits obtainable by advanced credit examination is 30, not more than 15 of which may be obtained in one subject matter field. All credits obtained by examination will be counted as extension credit and included in the maximum 45 extension credits allowed.
4. No credit will be granted unless the applicant has earned a minimum of 15 resident credits with a minimum grade point average of 2.50.
5. No student within a given field of study may receive advanced credit in subject matter more elementary than that for which he has previously received credit.
6. No student will be permitted to repeat an examination for advanced credit.





7. No student may take examinations for more than 15 advanced credits in any one quarter.
8. No student may receive advanced credit by examination for lower division foreign language courses in his native language or from earlier schooling except in rare cases and for the 106 language course only.
9. Students who wish to qualify for credit by examination must apply to the Dean, Registrar and Treasurer for approval.
10. No graduate credit is to be given by examination.
11. No credit by examination may be given for physical education activity courses.

### Credit Load

The normal load is 15 credits per quarter. No student may carry excess credit hours without permission from the dean of his school, which may be obtained before or during registration.

Students on academic probation may be required by the dean of their school to carry less than the normal credit load. Each student is responsible to his dean for judging the correct ratio between credit load, cocurricular activities and outside employment so that he has adequate time for academic preparation.

### Dismissal

Any student who fails eight credits or more in any one quarter is subject to dismissal from the University. The Academic Council shall decide when a student on probation, because of continued low scholarship or I grades shall be dropped. In order to be reinstated the student must petition the dean of his school. A student withdrawing voluntarily from the University is entitled to a statement of honorable dismissal if he is not liable to dismissal on account of scholarship, absence, breach of discipline, or financial indebtedness to the University.

### Examinations

Examinations in all courses are regularly held at the middle and end of each quarter, and at such other times as the instructor may determine. Absence from an announced written examination is excusable at the



discretion of the instructor and subject to review by the dean. Students absenting themselves from a scheduled examination without justifiable cause will receive a failing grade for the examination.

Make-up examinations assigned by an instructor for students excused from a scheduled one are administered by the Counseling and Testing Center. Arrangements for a make-up examination and payment of the required fee are the responsibility of the student.

### Grade Changes

Once a grade is recorded it can be changed only by the Academic Vice President on the written faculty action sheet completed by the instructor and countersigned by the department chairman and dean of the school. In no case will the grade be changed after 30 days following the issue of the student's quarterly grade report.

### Grade Point

The University uses a letter grade to indicate the level of individual student achievement. Each letter grade has a quality point value assigned for the grade achieved. The quality point value is assigned to each letter grade as follows:

A	.....	4 quality points
B	.....	3 quality points
C	.....	2 quality points
D	.....	1 quality point
E	.....	0 quality points

The grades of CR, NC, I, W, S, N or Y have no negative quality point value.

Each student is required to maintain a C average, which is equivalent to a 2.00 grade point average. The grade point average is computed by dividing the total number of quality points achieved in one quarter by the total number of credit hours attempted in which the student earns a letter grade A, B, C, D or E.

## Grade Reports

Student quarterly grade reports are mailed at the end of each quarter. Students may obtain copies of their transcripts on request to the Registrar. The University does not hold itself responsible for grade report errors unless the Registrar is notified of the error within six months after the issue of a grade report.

## Grading System

The University follows the letter grading system shown below.

Grade	Descriptive Value
<b>A</b>	<b>Superior student</b> — shows ability to use factual knowledge in reaching independent conclusions and can synthesize facts into a logical and coherent pattern; shows interest in relating collateral reading to the principles developed in course work; scholarship exceeds requirements.
<b>B</b>	<b>Above average student</b> — knowledge is very good, scholarship meets all requirements, information is complete but not detailed.
<b>C</b>	<b>Average student</b> — knowledge is good; scholarship meets assignments, but information is incomplete.
<b>D</b>	<b>Below average student</b> — knowledge is fair, scholarship does not meet assignments; essential information is lacking or false information given.
<b>E</b>	<b>Failing student.</b>
<b>W</b>	<b>Withdrawal</b> — official withdrawal during the first eight weeks of the quarter.
<b>CR</b>	<b>Credit</b> — grade assigned under credit/no credit option if work meets or is above minimum passing level.
<b>NC</b>	<b>No Credit</b> — grade assigned under credit/no credit option if work is below minimum passing level.
<b>I</b>	<b>Incomplete</b> — the incomplete grade policy is as follows: At the discretion of the instructor the student is given this grade when as a result of serious illness or other justifiable cause the work cannot be completed. I grades carry no penalty — i.e. they are not counted in credit or grade point average computations. The student has until six weeks after the beginning of the next quarter, regardless of whether the student is enrolled, to complete the work and file an official Incomplete Removal request with the required fee. I grades assigned spring quarter must be removed by six weeks after the beginning of the fall quarter. Once this period elapses an I cannot be removed. In cases of serious illness, extensions will be granted provided student requests same and obtains approval from instructor and Registrar before the six week period elapses.  Records will be audited annually. Students with more than one I grade per quarter and/or a consistent pattern of I's in consecutive quarters will be considered on probation.
<b>N</b>	<b>No Grade</b> — a suspended grade for courses in which work is not scheduled for completion until after the quarter closes, i.e. thesis or research courses at the graduate level. It is the responsibility of the student to arrange with the supervising instructor to remove

the N within one calendar year of the quarter the grade is assigned. One calendar year is taken to mean within the following four consecutive academic quarters per the schedule given below. Once the closing date has passed, re-registration and payment of regular tuition is required in order to obtain credit for the work completed. N grades assigned prior to Summer 1971 may be removed through August 1973 without re-registration.

N Grades Received	Must be Removed Before
Summer term	August of the following calendar year
Fall term	December 1 of the following calendar year
Winter term	March 1 of the following calendar year
Spring term	May 1 of the following calendar year

- S** **Satisfactory** — a satisfactory grade which may be given for thesis, research, independent study, off-campus courses, field experience type courses and in non-credit courses.
- Y** **Audit** — course for which no credit is given.
- M** **Missing** — symbol used on grade reports to inform student that grade has not been received from instructor.

## Honor Roll

Undergraduate students registered for 12 or more credits who achieve a 3.50 or higher grade point average for any quarter will be included on the honors list published by the Registrar. The privilege of attending a single lecture or all sessions of classes for which they are not registered is granted to honor roll students with the permission of the teacher.

## Credit/No Credit Option

Undergraduate students may elect a credit/no credit option in elective courses under the following conditions:

1. Student must declare his desire for credit/no credit during registration; student may change to or from credit/no credit only during the the five-day drop/add period.
2. Eight courses (except those mentioned in 6 below) regardless of credit hours per course, is the maximum number of credit/no credit classes acceptable toward a bachelor's degree. Transfer students will be allowed the following number of credit/no credit courses at Seattle University:

Transfer Credits	0-44	.....7 courses
	45-89	.....6 courses
	90-134	.....4 courses
	135-& above	.....0 courses
3. Credit/no credit may apply to a maximum of two courses in the major or departmental requirements outside the University core.





4. Students who elect a credit/no credit option are eligible for quarter honor roll only if credit for graded courses totals 12 or more.
5. Only one credit/no credit course may be taken in a given quarter, except those in 6.
6. All P.E. activity courses and music practice courses shall be credit/no credit.
7. All courses elected as credit/no credit will appear on the student's permanent record and will be graded:  
CR (credit) — PASS  
NC (no credit) — NO/PASS

CR and NC courses will not be computed in credits attempted and therefore will be excluded from computations of grade point averages. Courses in which a CR grade is given will be counted as completed credits.

### Probation

If a student falls below the standard he must maintain in order to graduate, he may be placed on probation and given the opportunity to improve the quality of his work before final dismissal. A student will be placed on probation if his cumulative grade point average falls below 2.00.

At the discretion of his dean a student on academic probation may be required to reduce the number of credits carried per quarter. Probation may extend for two quarters after the initial warning before dismissal is warranted.

### Readmission

Students who have been absent from Seattle University for one or more quarters and students who have attended another school since withdrawing from Seattle University are required to fill out an application-for-readmission form. A re-entering student who has attended another school since his withdrawal from Seattle University must arrange for two copies of his transcript to be submitted to the Registrar before his application for admission can be considered.

### Registration

Newly admitted students and returning students must present themselves at the University for registration on the date specified in the calendar or elsewhere by the Registrar.

No registrations are permitted after the fifth class day. Payment of the late registration fee of \$5 for the first day and \$5 for the next four days to a maximum of \$25 is required. Students registering late are held responsible for absences thus incurred.

Registration is completed only when fees are paid and approved registration cards are turned in to the Controller's office. No person may attend any University course for which he has not registered.

### Registration Changes

Students are held accountable for completion of every course entered on registration cards. If it is necessary to drop or add a course or to otherwise change a program of study, the student must obtain a change of course card from the Registrar's office and present it to his adviser or dean for approval. This card must be returned to the Controller within the specified time limit. No course may be added or changed after the fifth day of class. A student who drops or changes courses without following this procedure is ineligible for tuition refund and will be assigned a grade of I.

### Repeating a Course

Students who receive a grade of D or E may repeat the course. In such cases the grade received the second time shall be the one counted in computing the grade point average required for graduation. The grade earned the second time cannot be higher than a C. In determining University graduation honors only the grade received the first time will be counted.

### Transcripts

Students may obtain official transcripts from the Registrar's office. No official transcript copies will be sent for students with a financial obligation to the University until that obligation is satisfied.

Seattle University will not issue a transcript to any third party unless the student or graduate files a written request with the Registrar and supplies the necessary name and address. Parents or guardians may receive a copy of the student's record on written request to the Registrar's office.

Letters of recommendation or copies of transcripts should be requested at least one week before they are required. Transcripts cannot be issued during the period of registration, examinations, or commencement, nor will they be issued if the student has a financial or property obligation to the University.

The University does not hold itself responsible for any error on a transcript which is not brought to the attention of the Registrar within six months of the closing date of the quarter in which the error occurred.

### Transfer within the University

To transfer from one school of the University to another or from one department to another (change of major) the student must follow this procedure:

Obtain a form from the Registrar and present it to the dean of the school from which withdrawal is sought. When the form is approved by this dean it is presented to the dean of the school in which the student wishes to enroll. If approved by the new dean the form is returned to the Registrar and the student's record is altered accordingly.

### Withdrawal

The Registrar's office must be officially notified when a student withdraws from one or more of his courses. The withdrawal card is obtained from the Registrar and presented to the adviser, instructor, dean and Registrar in that order for approval and signature. In an emergency, notification of withdrawal may be made by telephoning the dean of the school or Registrar.

The official withdrawal is completed only when the approved card is presented to the Registrar within the specified time limit. A grade of W will be allowed until the eighth last class day of the quarter.

## Degrees and Honors

Official Commencement Exercises are held once a year in June. Students completing course requirements at the close of summer, fall or winter quarter will receive diplomas at the succeeding Commencement. All responsibility for fulfilling the requirements for graduation rests with the individual student.

### Application for a Degree

Application for a degree must be made at the Office of the Registrar within the period indicated in the University calendar or other official publications. Candidates for a degree normally file applications during the quarter preceding their final registration. A receipt for the graduation fee must be presented before the Registrar may issue the application forms.

### Degree Requirements

Candidates for an undergraduate degree must meet the requirements listed below.

1. Core curriculum requirements and specific requirements of the college or school from which the student expects to graduate must be fulfilled.
2. A minimum of 180 credits is required for the baccalaureate degree. However, only students matriculating as freshmen beginning September 1963 or later and transfer students matriculating January 1966 or later are eligible to graduate with 180 credits. Students who matriculated before these dates will be required to meet minimum requirements in effect at the time they were last enrolled as full time students, unless the following reduction scale applies:
  - a. Readmitted students who earn 12 credits after returning to campus will be permitted to graduate with 192 credits.
  - b. Readmitted students earning 35 credits after returning to campus may graduate with 185 credits.
  - c. Readmitted students earning 45 or more credits after returning to campus may graduate with 180 credits.

3. A minimum of 15 credits in philosophy and 10 credits in theology and religious studies are required in all degree programs. See page 24 for specific requirements.
4. The senior year must be spent in residence at the University, which shall be understood to mean the final 45 credits of degree requirements, and the class work is to be taken in the University classrooms under the direction of members of the faculty.
5. Completion of all degree requirements within 10 years of the date on which the college work was begun. Students who were in attendance prior to October 1951 are not affected by this regulation.
6. Satisfaction of all financial obligations toward the University.
7. While attendance at commencement is not compulsory, diplomas will be routinely mailed only to those graduates who declare their intention to graduate in absentia at least two weeks in advance of the commencement date.
8. Students working for a second baccalaureate degree, either consecutively or concurrently, must complete a minimum of 45 credits beyond the requirements of the first baccalaureate degree. These 45 credits must be completed in residence at Seattle University. A minimum of one course (5 credits) in philosophy and one course in theology and religious studies (5 credits) is required. Students completing this minimum of 10 credits in philosophy and theology at Seattle University or elsewhere as part of a first bachelor's degree will be considered as having fulfilled this requirement. Minimum academic and administrative requirements listed above must also be met.

Requirements for advanced degrees are given in the section on the Graduate School.

### Honors at Graduation

Graduation with honors requires completion of at least 90 credits in residence at Seattle University; the minimum of 90 credits must be earned in regularly graded courses (courses in which grades of A, B, C, or D are given). Should a student elect the CR/NC option for any one course as part of his 90 credit minimum, he loses his honors eligibility. In programs where CR/NC grades are mandatory for field experience courses, a student with these as a part of his minimum 90 units also loses his eligibility for automatic honors on the scale shown below. However, such students may apply for honors by filing a petition with their Dean. The petition must be received by May 1 and will be reviewed by the Deans, with notification of the decision on honors issued to the student by May 20.

	Through 1975	1976 and After
Cum Laude	3.25	3.40
Magna Cum Laude	3.50	3.65
Summa Cum Laude	3.75	3.90

### Special Awards

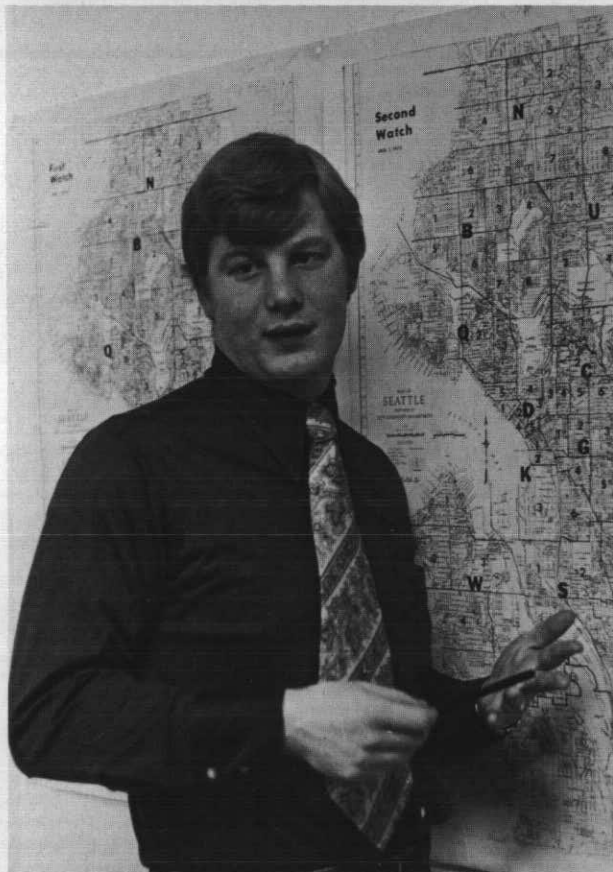
The President's Award — Awarded to the graduating senior who has maintained the highest scholarship throughout the four years of college work.



# College of Arts and Sciences

James G. Powers, SJ, Ph.D., Acting Dean









## College of Arts and Sciences

The College of Arts and Sciences has for its objective the development of personality — integral and liberal, Christian and humane. The instrumentalities it employs to attain this objective are the traditional principles and structures of Jesuit education, of which in the ensemble of the University it is the natural custodian and guide.

### Curriculum

Pursuant of this objective and these instrumentalities and commensurate with its position as the oldest and largest school of Seattle University, the College of Arts and Sciences has a dual role: 1) for all the students of the University it provides the programs and faculty of the core curriculum — the primary instrument of Jesuit higher education and 2) for its own students it offers, beyond the core curriculum, programs and faculty guidance toward graduate proficiency in one or more of the various arts and sciences.

### Organization

The College comprises 17 administrative subdivisions, of which 12 are departments in a specific academic subject. The departments are: English, Fine Arts, Foreign Languages, History, Journalism, Military Science, Philosophy, Political Science, Psychology, Rehabilitation, Sociology, Theology and Religious Studies.

The program divisions are: Community Services, General Studies, Honors, Police Science, Prelaw and Speech.

Each department chairman or program director, in collaboration with his proper or assigned faculty, arranges study programs and counsels individual students. All programs are coordinated and supervised by the Dean of the College. Students wishing to inquire about programs in detail should consult either the Dean or the respective department chairman or program director.

### Accreditation

Northwest Association of Secondary and Higher Schools

### Admission Requirements

Students entering the College must satisfy all entrance requirements for the University as outlined in the Admission section in this bulletin. In addition, some departments list further requirements for admission into certain major programs. Concerning these the respective departmental sections in this bulletin should be consulted.

### Degrees Offered

Bachelor of Arts (Classical)

### Bachelor of Arts

with a major in: Asian Studies, Community Services, Drama, English, Fine Arts, Foreign Languages, History, Humanities, Journalism, Latin American Studies, Music, Philosophy, Political Science, Psychology, Rehabilitation, Police Science and Administration, Social Science, Sociology and Theology and Religious Studies.

### General Program Requirements

Students in the College of Arts and Sciences must satisfy the core curriculum requirements of the University given on page 24 of this bulletin.

For the degree of Bachelor of Arts (Classical), in addition to these general requirements, the following must be fulfilled: 15 hours of courses number 300 to 499 in either Latin or Greek; 5 additional hours of English literature, and 5 additional hours of philosophy.

Additional specific requirements are set by the department or program division in which the student's major program is pursued. For these requirements consult the respective sections in this bulletin.

### Subject Majors

In all programs having a specific subject major, the number of required courses and hours varies according to the department or program division. The minimal number required in any subject major is 40 hours; majors in departments having core sequences must consist of 35 hours beyond the core sequence.



## Community Services

Eugene M. Corr, M.P.A., Director

### Objectives

Community Services is an interdepartmental undertaking involving social work courses and the departments of economics, political science, psychology and sociology. The three primary objectives in the program's undergraduate education for the social services are: to contribute to the liberal education of all students; to enhance the employability of those students seeking work in the field immediately after the bachelor's degree; and to prepare students for admission to graduate schools. Secondary objectives are to assist students in deciding on a career choice by making known the nature of and opportunities in the social service field and to provide knowledge and understanding of this field for students preparing for advanced training in the related professions.

Supervised field experience in agencies, institutions or related organizations is a unique and vital part of the program. This experience is provided in such areas as probation and parole, public assistance, mental health facilities, youth and children's services, employment counseling and economic opportunity programs. The Community Services program is not an apprenticeship system but rather a basic program with courses and supervised field practice aimed at giving those principles, skills, knowledge and attitudes necessary for workers in the above fields. Coordinating seminars, concurrent with two required field experiences, provide each student opportunity to understand himself more deeply and acquire a broad perspective of community services.

### Degree Offered

Bachelor of Arts in Community Services

### General Program Requirements

Candidates must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. A minimum of two field experiences is required, with which the coordinating seminars must be taken concurrently. The required experiences must be in diverse areas.

### Degree Requirements

Bachelor of Arts — 85 credits which must include CS 300, 376, 378, 379, 478 and 479; 20 credits in sociology; 15 credits in psychology; 15 credits in political science; 10 credits in economics; 5 credits in statistics courses, in either the sociology or psychology departments; and 5 credits of Fine Arts.

### Bachelor of Arts in Community Services

#### Freshman year

English 100 and core option .....	10 credits
History core option .....	10 credits
Mathematics/Science core option .....	5 credits
Philosophy 110 .....	5 credits
Psychology 100 .....	5 credits
Sociology 101 .....	5 credits
Political Science .....	5 credits

#### Sophomore year

Economics 271 .....	5 credits
Mathematics/Science core option .....	5 credits
Philosophy 220 and core option .....	10 credits
Sociology .....	5 credits
Psychology .....	5 credits
Theology core options .....	10 credits
Political Science .....	5 credits

#### Junior year

Community Services 300, 376 .....	10 credits
Economics 272 .....	5 credits
Fine Arts .....	5 credits
Political Science .....	5 credits
Psychology .....	5 credits
Sociology .....	5 credits
Electives .....	10 credits

#### Senior year

Community Services 378, 379, 478, 479 .....	20 credits
Psychology 201 .....	5 credits
Electives .....	20 credits

Total . . . 180 credits

## Alcohol Studies Program

James E. Royce, SJ, Ph.D., Director

### Objectives

This program is designed to provide a strong background for work in alcoholism treatment and rehabilitation, in education and prevention, in social service agencies, in industry or in referral centers. It examines various aspects of addiction to alcohol and other drugs: causes, nature, effects, treatment and prevention and also provides supervised field experience.





### **Alcohol Studies Certificate**

A certificate in Alcohol Studies will be granted upon successful completion of 20 credits, which must include the following courses: CS 400 (or Psy 490), 401, 402, 403, 407-8, and a choice of 404, 405, 406, 409 or 410. Certificate candidates may register as transient students. These courses may also be taken as electives, or applied by those eligible toward the BA in Community Services, the BA in Rehabilitation, the BA in Police Science and Administration, or the M.Ed. in Counseling. Candidates for the certificate may be a) paraprofessionals in or entering the field who wish stronger academic background to balance their experience, b) professionals lacking training in the specific field of alcoholism, or c) students in nursing, psychiatry or psychology, social work, rehabilitation, community services or allied fields.

The Certificate program is a combination of classroom instruction (12 credits) and supervised field experience (8 credits) under experienced counselors. Evening classes will permit in-service training.

### **Drug Abuse Studies Program**

**James W. King, SJ, S.T.D., Director**

#### **Objectives**

This program is designed to provide a strong background for work in drug treatment and rehabilitation, in education and prevention, in social services agencies, in industry or in referral centers. It examines various aspects of drug addiction — causes, nature, effects, treatment and prevention and also provides supervised field experience.

In the Seattle-King County area there are more than 54 agencies concerned with drug-related services exclusive of alcohol programs. Up to the present there has been no educational facility in this area which has instituted an in-depth training program for drug abuse specialists on the undergraduate level. This program will offer certification designed especially for the following groups: for students in the Rehabilitation Services degree program; for students in the Community Services degree program; for students in the Police Science and Administration program; for junior and senior high school health and drug counselors; for personnel from the law and justice system; for credentialed BSW and MSW graduates working in the field of drug rehabilitation; and for paraprofessionals working in drug rehabilitation agencies.

### **Drug Abuse Specialists Certificate**

A certificate for Drug Abuse Specialists will be granted upon successful completion of 20 credits which must be in courses taken from the sequence CS 420 through CS 430. Certificate candidates may register as transient students. These courses may be taken as part of the regular accredited curriculum of the University, either as electives or applied by those eligible toward the BA in Community Services, the BA in Rehabilitation Services, and the BA in Police Science and Administration. Candidates for the Certificate may be: a) pre-professionals, many of them recovered addicts, in or entering the field who wish stronger academic background to balance their experience; b) professionals lacking training in the specific field of drug abuse; or c) students in nursing, psychiatry or psychology, social work, rehabilitation, community services or allied fields.

### **Community Services Courses**

<b>CS 291</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>CS 292</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>CS 293</b>	<b>Special Topics</b>	<b>1-5 credits</b>

#### **CS 300 Introduction to Community Services 5 credits**

The historical development, structure and function of social welfare services and institutions with emphasis upon the philosophy and methods utilized by professional social work in meeting human needs. (fall, winter)

#### **CS 310 Dynamics of the Family 5 credits**

A study of the behavioral dynamics of interpersonal relationships with special emphasis on the impact of complementary roles in the family system. Overall concentration is on the reciprocal nature of relationships. Development of a conceptual framework for individual and family therapy through study of a variety of treatment modalities. (spring)

#### **CS 315 Working with Children 2 credits**

Concepts, principles and the practice of social settings — from day care and recreation to individual and family counseling situations. Theories of child development which direct the modes of service to children. Study of the laws which control agency services to children. Examination of selected agency case records.



- CS 321 Asian-American Experience 5 credits**  
From an historical perspective the course will cover the period beginning with the Asian immigrants to America. It will focus on the adaptations and the problems they faced and how they laid the groundwork for the present generation of Asian-Americans. The role of the dominant society in shaping the identity of the Asian-American will also be covered. (spring)
- CS 330 Citizen and the Law 3 credits**  
A discussion of the role of the lawyer in society; a survey of the fields of poverty law; the processes of legal research; the Court system; jurisdiction — federal, state and local; and the structures of a lawsuit from complaint to decision. The course will also cover family law, the contractual relationship, consumer law, landlord-tenant and house laws, tort law and personal liability, wills and probate. (spring)
- CS 360 Society and Justice 5 credits**  
Examination of the sanctions and processes of criminal law as related to the ethical implementations of social justice. Prerequisite: Upper division standing.
- CS 374 Intervention Skills 5 credits**  
Provides students with some understanding of the basic principles and processes involved in giving help to individuals, groups and communities in the human services field; focus on some of the basic methods, techniques and strategies employed in the provision of services to these groups. (fall)
- CS 376 Factors of Interviewing 5 credits**  
The interview as one of the major methods of helping people; study of factors of knowledge and method in proficient interviewing to provide a basis for future development. Prerequisite: CS 300 or permission. (winter, spring)

- CS 377 Field Experience 5 credits**  
(Sc 377)  
For Sociology majors only. (spring)
- CS 378 Field Experience I 7 credits**  
**CS 379 Field Experience II 7 credits**  
**CS 380 Field Experience III 3-7 credits**  
Direct observation, supervised practice experience and academic study in a selected social welfare agency or organization with stress placed upon the agency's clientele, its services and its functions in the community. Prerequisites: CS 376 or permission for 378; 378 for 379; 379 for 380. (fall, winter, spring)

#### **Alcoholism Courses**

- CS 400 Survey of Alcoholism (Symposium) 3 credits**  
History and scope of problems arising from addictive abuse. Socio-cultural, historical, criminal, statistical, industrial and family aspects of alcoholism. Definitions, stereotypes, myths, conflicting religious views. Psychology of addiction: patterns of progression, early symptoms and diagnosis, types of alcoholics. Theories of etiology; the disease concept. (Psy 490 may substitute for this course.) Pre or corequisite to CS 401 through 410.
- CS 401 Pharmacology, Detoxication and Medical Treatment 2 credits**  
Physiology of alcohol: ingestion, absorption, metabolism. Behavioral effects of different blood levels. Psychiatric complications: damage to brain, liver and other organs; the alcoholic psychoses. Acute alcoholism. Emergency treatment. Management as a chronic illness. Therapeutic uses of other drugs. Clinics, antabuse, aversion therapy, inpatient vs. outpatient. Evaluation and comparison of results. Prerequisite: CS 400.
- CS 402 Counseling Principles and Techniques 3 credits**  
Client-counselor relationships. Interview techniques. Intake and crisis intervention vs. long-range therapy. Supportive, client-centered, transactional, group, reality therapy and other approaches. Confrontation, role-playing, marriage problems. Report writing. Vocational and occupational guidance. Information and referral, use of local facilities. Pre or corequisite: CS 400.
- CS 403 Personal and Social Rehabilitation 2 credits**  
Motivation and personality reconstruction in the recovering alcoholic. Post-detoxication vs. long-range sobriety; relapses, the dry drunk. Spiritual aspects of rehabilitation. Alcoholics Anonymous. Family and social adjustments. Al-anon and Ala-teen. Industrial programs and policies. Pre or corequisite: CS 400.
- CS 404 Agency Administration 2 credits**  
Personnel policies and practices, budgeting, financing, office management, public relations, professional ethics. Informational and educational policies and techniques. Relations with public and private school systems, courts, other professions and agencies, law enforcement agencies, the clergy. Prerequisite: CS 400.
- CS 405 The Law and Alcohol 2 credits**  
Impaired driving, traffic court schools, probation and parole, correctional programs, constitutionality problems, preventative programs. Prerequisite: CS 400.





**CS 406 Counseling Ethnic/Minority Alcoholics 2 credits**  
Special problems and techniques, understanding of cultural background and instruction by members of minority groups. Prerequisite: CS 400.

**CS 407 Field Experience I in Alcoholism 4 credits**

**CS 408 Field Experience II in Alcoholism 4 credits**  
Supervised work in an agency, clinic, rehabilitation center and referral center. Oral and written reports by student required. Prerequisite: CS 400.

**CS 409 Special Topics 1-3 credits**  
Courses taught by a particular expert or on a certain aspect; e.g., counseling the alcoholic family.

**CS 410 Individual Research 1-3 credits**  
Open only to students with sufficient academic background to pursue independent study. Permission of director required.

### **Drug Abuse Courses**

**CS 420 History and Survey of Drug Abuse 2 credits**  
Scope and complexity of problems arising from addictive drug abuse. Socio-cultural, historical, criminal, statistical, industrial, family aspects of drug abuse. Psychology of drug addiction; patterns of progression, early symptoms and diagnosis; types of drug addicts. Theories of etiology.

**CS 421 Pharmacology, Detoxification and Medical Treatment 2 credits**  
Pharmacology: physiology of drug addiction, tolerance, physical dependence, behavioral effects; complications of drug abuse: medical, psychiatric; treatment: emergency, detoxification, maintenance, narcotic antagonists, relationships between medical and psychological rehabilitation.

**CS 422 Drug Counseling Principles and Techniques 2 credits**  
Client-counselor relationships. Interview techniques. Intake and crisis intervention vs. long-range therapy. Supportive, client-centered, transactional group confrontation, aversion therapy, other treatment modalities. Vocational and occupational guidance. Information and referral, use of local facilities.

**CS 423 Personal and Social Rehabilitation 2 credits**  
Personality reconstruction in the recovering drug addict or abuser. Post-detoxification vs. long-range drug-free state, relapses, spiritual aspects of drug rehabilitation. Family and social adjustments. Follow-up techniques. Civil government and industrial programs and policies.

**CS 424 Agency Administration 2 credits**  
Personnel policies and practices, budgeting, financing, office management, public relations, professional ethics. Governmental regulations of drug agencies. Informational and educational policies and techniques. Relations with public and private school systems, courts, other professions and agencies, law enforcement agencies and the clergy.

**CS 425 The Law and Drug Misuse 2 credits**  
Local, state, federal laws concerning schedule drugs and opiates. Changing patterns of law on these governmental levels. Possession-sale law patterns. Marijuana and the law.

**CS 426 Counseling Ethnic/Minority Drug Abusers 2 credits**  
Special problems and techniques, understanding of cultural background. Instruction by qualified members of such groups as Blacks, Asian Americans and American Indians.

**CS 427 Field Experience I - Drugs 4 credits**

**CS 428 Field Experience II - Drugs 4 credits**  
Supervised work in two different agencies, clinics, rehabilitation centers, referral centers, mental health centers. Oral and written reports of students required.

**CS 429 Special Topics - Drugs 1-2 credits**  
Courses taught by experts in specialized areas or on certain aspects of drug use, abuse, rehabilitation, e.g., Transcendental Meditation and drug rehabilitation; behavioral modification; milieu; Gestalt theory.

**CS 430 Individual Research - Drugs 1-2 credits**  
Open only to students with sufficient academic background to pursue independent study. Permission of director required.

**CS 478 Coordinating Seminar I 3 credits**

**CS 479 Coordinating Seminar II 3 credits**  
Discussion and analysis of practices, programs, objectives, policies and procedures of various agencies, organization and institutions. Corequisites: CS 378 with 478; 379 with 479.

**CS 491 Special Topics 1-5 credits**

**CS 492 Special Topics 1-5 credits**

**CS 493 Special Topics 1-5 credits**  
Prerequisite: Upper division standing and permission.

**CS 497 Individual Research 1-5 credits**  
By arrangement, with professional supervision. Prerequisite: Upper division standing and permission.

**CS 498 Independent Study 1-5 credits**  
Prerequisite: Upper division standing and permission.



## English

Alexander F. McDonald, SJ, M.A. (Oxon.), Chairman

### Objectives

The English department offers courses which are designed to develop in the student a knowledge and appreciation of the literature which comprises our cultural heritage, to give the student a knowledge of the language and its effective use in communication, and to prepare graduates for those professions which require a broad background in language, rhetoric and literature.

### Degrees Offered

Bachelor of Arts  
Master of Arts  
Master of Arts (Teaching)

### General Program Requirements

Students in English must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. A Fine Arts sequence, FA 101, 102, 103, is recommended. For English majors the second core course requirement is met by En 264, 265 or 266. Those students who plan to go to graduate school, unless they have already achieved reading proficiency in French or German, are strongly advised to take 15 credits of one of those languages.

### Departmental Requirements

Bachelor of Arts — 60 credits of English which must include the following basic courses: En 100, 250, 264, 265 and 266. The remaining 35 credits must be taken in courses in the 300 and 400 series. The nature of these courses is to be determined by the student and his adviser and approved by the department chairman. A comprehensive examination, covering major literary works, will be required for graduation.

Teaching Major (School of Education) — 60 credits of English which must include En 100, 220 or 230 or 240, 250, 264, 265, 266 or 280, 301, 330, 407 and 3 additional literature courses in the 300 or 400 series.

Undergraduate Minor — 20 credits of English beyond En 100, 264, 265, 266 or 280. Three of these courses should be in the 300 series and one course in the 400 series, as specified by the department.

Master of Arts — 35 credits of English of which 25 must be in courses numbered 500 or above. In addition, a final written and oral examination, reading knowledge of a foreign language (normally French or German) and a master's essay are required. Details of this program can be obtained from the English Department.

Master of Arts-Teaching — 40 credits of English of which 25 must be in graduate courses. En 501, 505, 507 (or their equivalents) are required. Neither a language nor thesis required, and there is no final comprehensive examination.

### Bachelor of Arts

#### Freshman year

English 100, 250 .....	10 credits
Fine Arts 101, 102, 103 .....	15 credits
History core option .....	10 credits
Philosophy 110, 220 .....	10 credits

#### Sophomore year

English 264, 265, 266 .....	15 credits
Mathematics/Science core option .....	5 credits
Philosophy core option .....	5 credits
Social Science core options .....	10 credits
Theology core options .....	10 credits

#### Junior year

English 300 series courses .....	20 credits
French or German 105, 106 .....	10 credits
Mathematics/Science core option .....	5 credits
Electives .....	10 credits

#### Senior year

English 400 series courses .....	15 credits
Electives .....	30 credits

Total . . . 180 credits

### English Courses

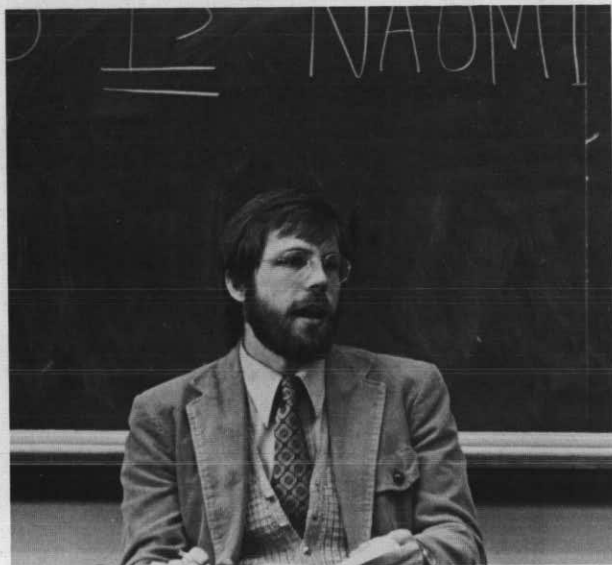
<b>En 100</b>	<b>Freshman English</b>	<b>5 credits</b>
	Study and practice in rhetoric, emphasizing expository writing and mastery of style.	
<b>En 132</b>	<b>Masterpieces of American Literature</b>	<b>5 credits</b>
	Close reading and analysis of American literary classics: novels, plays, poetry and essays.	
<b>En 133</b>	<b>Masterpieces of World Literature</b>	<b>5 credits</b>
	Close reading and analysis of World literary classics: novels, plays, poetry and essays.	
<b>En 134</b>	<b>Masterpieces of British Literature</b>	<b>5 credits</b>
	Close reading and analysis of British literary classics: novels, plays, poetry and essays.	
<b>En 200</b>	<b>Advanced Composition</b>	<b>5 credits</b>
	Advanced study and practice in expository writing.	





- En 201 Report and Technical Writing 5 credits**  
Skills and techniques of business and other technical writing.
- En 203 Vocabulary 5 credits**  
A practical course in vocabulary building. Emphasis on etymology, Latin and Greek roots, prefixes and suffixes.
- En 220 Introduction to Poetry 5 credits**  
Introduction to the study of poetry with special emphasis on appreciation, form and technique.
- En 230 Introduction to Fiction 5 credits**  
Introduction to the study of fiction with special emphasis on appreciation, form and technique.
- En 240 Introduction to Drama 5 credits**  
Introduction to the study of drama with special emphasis on appreciation, form and technique.
- En 250 Practical Criticism 5 credits**  
Introduction to the terminology and techniques of literary analysis. Required of English majors.
- En 264 Great English Authors I 5 credits**  
**En 265 Great English Authors II 5 credits**  
**En 266 Great English Authors III 5 credits**  
I. Study of major British writers from the Medieval period through the Renaissance (1640). II. Study of major British writers from the Puritan period through Romanticism (1640-1832). III. Study of major British writers from the Victorian period to the Moderns (1832-present). Required of English majors.
- En 280 Survey of American Literature 5 credits**  
Study of major American writing from its beginnings.
- En 291 Special Topics 1-5 credits**  
**En 292 Special Topics 1-5 credits**  
**En 293 Special Topics 1-5 credits**
- En 301 Advanced Rhetoric and the Teaching of English 5 credits**  
Study of rhetorical theory and techniques and their application to writing, with emphasis on methods of teaching composition.
- En 305 Writing Fiction 5 credits**  
Study and practice in the forms and methods of short story writing, with subsidiary attention to other types of narrative writing.
- En 306 Writing Poetry 5 credits**  
Study of and practice in the modes and techniques of poetic composition.

- En 310 Introduction to Chaucer 5 credits**  
Study of Chaucer's "Canterbury Tales."
- En 311 Introduction to Medieval Literature 5 credits**  
Literary selections, in modern English, representative of the life and thought of the European Middle Ages.
- En 313 Mythology 5 credits**  
Study of the mythological backgrounds of English and American literature.
- En 314 World Literature I 5 credits**  
**En 315 World Literature II 5 credits**  
I. Classical to Renaissance: Homer, Aeschylus, Sophocles, Virgil, Dante, Rabelais, Cervantes and others. II. Neo-Classicism, Romanticism and Realism: Racine, Moliere, Voltaire, Rousseau, Goethe, Stendhal, Flaubert, Dostoevsky, Tolstoy and others.
- En 320 Sixteenth Century Poetry and Prose 5 credits**  
Wyatt, Surrey, Sidney, Spenser, the Humanists, Elizabethan prose.
- En 330 Introduction to Shakespeare 5 credits**  
Readings in the comedies, tragedies and histories.
- En 345 Seventeenth Century Poetry and Prose 5 credits**  
Donne and the metaphysical poets; shorter poetry of Milton, Jonson, Bacon, Burton and contemporaries.
- En 350 Eighteenth Century Poetry and Prose 5 credits**  
Dryden, Pope, Swift, Johnson, Gray and contemporaries.
- En 360 Romantic Poetry and Prose 5 credits**  
Blake, Wordsworth, Coleridge, Byron, Shelley, Keats and contemporaries.
- En 370 Victorian Poetry and Prose 5 credits**  
Tennyson, Arnold, Browning, Hopkins, Carlyle, Ruskin and contemporaries.
- En 380 Major American Poets 5 credits**  
From the Puritans to modern times: Taylor, Bryant, Poe, Whitman, Dickinson, Frost, Stevens and others.
- En 382 Major American Novelists 5 credits**  
American fiction from its beginning to modern times: Cooper, Melville, Twain, James, Hemingway, Faulkner and others.
- En 383 Classics of Black American Literature 5 credits**  
An historical approach to the literature of Afro-Americans, with emphasis on the moderns: Jones, Wright, Cleaver, Baldwin, Ellison and others, in the context of general American literature.
- En 390 Eighteenth Century Novel 5 credits**  
Defoe, Richardson, Fielding, Sterne, Smollett and contemporaries.
- En 392 Nineteenth Century Novel 5 credits**  
Austen, Bronte, Dickens, Thackeray, Eliot, Hardy and contemporaries.
- En 394 Twentieth Century Novel 5 credits**  
Conrad, Joyce, Lawrence, Gide, Mann, Hesse, Kafka, Camus and others.



En 395	<b>Modern Poetry</b>	5 credits
	Yeats, Rilke, French Symbolists, Eliot, Pound, Stevens and others.	
En 398	<b>Modern Drama</b>	5 credits
	Ibsen, Strindberg, Pirandello, O'Neill, Brecht, Genet and others.	
En 406	<b>Structure of the English Language</b>	5 credits
	Introduction to linguistic theory and the comparison of traditional and modern descriptions of English.	
En 407	<b>History of the English Language</b>	5 credits
	Study of the historical development of English.	
En 410	<b>Chaucer</b>	5 credits
En 411	<b>Medieval Literature</b>	5 credits
En 420	<b>Renaissance Literature</b>	5 credits
En 422	<b>Renaissance Drama</b>	5 credits
	Non-Shakespearean dramatists between 1550 and 1642.	
En 430	<b>Shakespeare I</b>	5 credits
En 431	<b>Shakespeare II</b>	5 credits
	I. Tragedies. II. Comedies/histories.	
En 440	<b>Milton</b>	5 credits
En 445	<b>Seventeenth Century Literature</b>	5 credits
En 450	<b>Restoration and Eighteenth Century Literature</b>	5 credits
En 460	<b>Romantic Literature</b>	5 credits
En 475	<b>Victorian Literature</b>	5 credits
En 480	<b>Seventeenth and Eighteenth Century American Literature</b>	5 credits
En 482	<b>Nineteenth Century American Literature</b>	5 credits
En 484	<b>Twentieth Century American Literature</b>	5 credits
En 485	<b>Modern Literature</b>	5 credits

En 487	<b>Contemporary Literature</b>	5 credits
En 488	<b>The Film and Literature</b>	5 credits
En 490	<b>Literary Criticism</b>	5 credits
En 491	<b>Special Topics</b>	1-5 credits
En 492	<b>Special Topics</b>	1-5 credits
En 493	<b>Special Topics</b>	1-5 credits
En 497	<b>Individual Research</b>	5 credits
En 498	<b>Individual Research</b>	5 credits

#### Graduate Courses

En 500	<b>Introduction to Graduate English Studies</b>	5 credits
En 501	<b>Studies in Rhetoric</b>	5 credits
En 505	<b>Comparative Grammars</b>	5 credits
En 507	<b>History of the English Language</b>	5 credits
En 508	<b>Old English</b>	5 credits
En 510	<b>Chaucer</b>	5 credits
En 512	<b>Medieval Literature</b>	5 credits
En 520	<b>The English Renaissance</b>	5 credits
En 522	<b>Elizabethan Drama (non-Shakespearean)</b>	5 credits
En 535	<b>Shakespeare (Comedies and Histories)</b>	5 credits
En 536	<b>Shakespeare (Tragedies)</b>	5 credits
En 540	<b>Milton</b>	5 credits
En 545	<b>Seventeenth Century Literature</b>	5 credits
En 550	<b>Eighteenth Century Literature</b>	5 credits
En 560	<b>English Romanticism</b>	5 credits
En 570	<b>Victorian Literature</b>	5 credits
En 580	<b>Colonial American Literature</b>	5 credits
En 581	<b>American Transcendentalists</b>	5 credits
En 582	<b>Modern American Literature</b>	5 credits
En 584	<b>The English Novel</b>	5 credits
En 586	<b>Modern Poets</b>	5 credits
En 588	<b>Modern Dramatists</b>	5 credits
En 590	<b>Theories of Criticism</b>	5 credits
En 593	<b>Special Topics</b>	5 credits
En 594	<b>Special Topics</b>	5 credits
En 595	<b>Special Topics</b>	5 credits
En 596	<b>Individual Research</b>	5-10 credits
En 597	<b>Individual Research</b>	5-10 credits
En 598	<b>Individual Research</b>	5-10 credits
En 599	<b>Thesis</b>	10 credits





## Fine Arts

William J.Dore,Jr., M.A., Chairman

### Objectives

The Fine Arts department provides that element of a liberal education which distinguishes the truly refined and cultured person. By studying the masterpieces of art, drama and music, the student is led to an awareness of one of man's superior intellectual powers, his creative imagination; by means of practical experience in the fine arts, he is enabled to understand the operation of that power.

By observing the characteristics of the arts in proper historical perspective, the student learns how changes of style reflect the changing attitudes, ideas, ideals and social conditions of various historical periods. Thus the fine arts become an integrative study sharing in the common goals of all liberal arts subjects. The department offers basic professional courses in its three areas, but does not seek to duplicate the art academy, school of drama or conservatory of music. While the fine arts major acquires the basic professional foundation in his own field, the interdisciplinary approach enables him to obtain practical experience in the related art forms. The student's ability to pursue advanced study in his field will depend upon the nature of his talents and the extent of special gifts for his subject. The department also offers an elective program in Aesthetics.

### Degree Offered

Bachelor of Arts

### General Program Requirements

Students in fine arts must satisfy the core curriculum requirements of the University given on page 24 of this bulletin. Fifteen credits of fine arts courses are required.

### Scholarships

The Fine Arts department maintains an active scholarship program in order to aid students towards graduation from Seattle University. Applicants must demonstrate talent in their chosen field as well as academic competency. Students applying for these scholarships should contact the chairman of the department for an application form.

### Departmental Requirements

Bachelor of Arts — Major in Art — 69 credits which must include Art 221, 222, 223, 231, 232, 233, 311, 312, 334, 346, 351; 21 elective credits in art; 10 elective credits in music; Dr 220 and 7 elective credits in drama.

Bachelor of Arts — Major in Drama — minimum of 81 credits which must include Dr 101, 220, 221, 222, 225, 226, 227, 261, 262, 263, 351, 352, 353, 420, 421, 425, 451, 452, 453, and one of the following pairs: 300-301, 310-311, or 410-411-412; Art 221, 231 and 6 elective credits in art; Music 202, 251 and 3 elective credits in music.

Bachelor of Arts — Major in Music — 83 credits which must include Mu 115, 116, 117, 215, 216, 217, 315, 316, 372, 373; any two groups of 370-415, 371-416, 374-417; 418; 6 credits of ensembles and 6 credits of vocal or instrumental lessons; 10 credits of art electives; Dr 220 and 7 elective credits in drama.

Bachelor of Arts — Area major in Fine Arts — 60 credits which must include Art 221, 222, 223, 231, 232, 233; 8 credits in the areas of painting, graphics and sculpture; Dr 220, 221, 225, 226, 227, 261, 300; Mu 115, 116, 117; 3 credits of ensembles, 3 credits of vocal or instrumental lessons; 5 credits of music electives numbered 200 or above.

Teaching Subject, Elementary, Art (School of Education) — 25 credits which must include Art 221, 231, 311, 312, 334, 346, 351, 370.

Teaching Subject, Elementary, Drama (School of Education) — 25 credits which must include Dr 220, 221, 225, 226, 227, 425.

Teaching Subject, Elementary, Music (School of Education) — 24 credits which must include FA 103, 115, 116, 117, 215; 2 credits of Mu 110 and 2 credits of Mu 130. Music 114 is required by the School of Education.

Teaching Subject, Elementary, Fine Arts (School of Education) — 25 credits which must include Art 221, 231; one course selected from 334-346-351; Art 370; Mu 115, 116; 1 credit of Mu 110 and 3 credits of Mu 130; Dr 220 and 261. Music 114 is required by the School of Education.

### Bachelor of Arts — Major in Art

#### Freshman year

Art 221, 222, 223 .....	6 credits
English 100 and core option .....	10 credits
Fine Arts 101 .....	5 credits
Philosophy 110, 220 .....	10 credits
Social Science core options .....	10 credits
Electives .....	4 credits

#### Sophomore year

Art 231, 232, 233 and electives .....	10 credits
Fine Arts 102 .....	5 credits
History 101-102 or 102-103 .....	10 credits
Mathematics/Science core options .....	10 credits
Philosophy core option .....	5 credits
Theology core option .....	5 credits

**Junior year**

Art 311, 312 and electives .....	20 credits
Drama 220 and electives .....	10 credits
Fine Arts 103 .....	5 credits
Music elective .....	5 credits
Theology core option .....	5 credits

**Senior year**

Art electives .....	33 credits
Music elective .....	5 credits
Electives .....	7 credits

Total . . . 180 credits

**Bachelor of Arts — Major in Drama**

**Freshman year**

Drama 101, 225, 226, 227, 261, 262 .....	11 credits
English 100, 134 .....	10 credits
History core option .....	10 credits
Philosophy 110 .....	5 credits
Electives .....	9 credits

**Sophomore year**

Art electives .....	4 credits
Drama 220, 221, 222, 263 .....	12 credits
Mathematics/Science core options .....	10 credits
Philosophy 220 and core option .....	10 credits
Social Science core options .....	10 credits

**Junior year**

Drama 351, 352, 353, 420, 421 .....	13 credits
Fine Arts sequence .....	15 credits
Music elective .....	5 credits
Theology core option .....	5 credits
Electives .....	5 credits

**Senior year**

Drama 425, 451, 452, 453 .....	18 credits
Drama electives .....	10 credits
English 430, 431 .....	10 credits
Music elective .....	3 credits
Theology core option .....	5 credits

Total . . . 180 credits

**Bachelor of Arts — Major in Music**

**Freshman year**

English 100 and core option .....	10 credits
Fine Arts 103 .....	5 credits
History core option .....	10 credits
Music 115, 116, 117 .....	9 credits
Music 130 or 131 or 135 .....	3 credits
Music 110 .....	3 credits
Social Science core option .....	5 credits

**Sophomore year**

Fine Arts 101, 102 .....	10 credits
Mathematics/Science core option .....	10 credits
Music 215, 216, 217 .....	15 credits
Music 130 or 131 or 135 .....	3 credits
Philosophy 110 .....	5 credits
Social Science core option .....	5 credits

**Junior year**

Art electives .....	4 credits
Drama 220 and electives .....	10 credits
Music 110 or 111 and 315, 316, 372, 373 .....	15 credits
Theology core option .....	5 credits
Electives .....	11 credits

**Senior year**

Art 221, 231 and elective .....	6 credits
Music 418; 12 credits	
from 370-415 or 371-416 or 374-417 .....	15 credits
Philosophy 220, option .....	10 credits
Theology .....	5 credits
Electives .....	6 credits

Total . . . 180 credits

**Bachelor of Arts — Area major in Fine Arts**

**Freshman year**

English 100 and core option .....	10 credits
Fine Arts sequence .....	15 credits
History core option .....	10 credits
Philosophy 110 .....	5 credits
Social Science core option .....	5 credits

**Sophomore year**

Art 221, 222, 223 .....	6 credits
Drama 220, 221 .....	6 credits
Mathematics/Science core options .....	10 credits
Music 130 or 131 or 135 .....	3 credits
Philosophy 220 and core option .....	10 credits
Social Science core option .....	5 credits
Theology core option .....	5 credits

**Junior year**

Art 231, 232, 233 and electives .....	12 credits
Drama 261 and electives .....	14 credits
Music 115, 116, 117 .....	9 credits
Theology core option .....	5 credits
Electives .....	5 credits

**Senior year**

Art electives .....	2 credits
Music 110 or 111 and electives .....	8 credits
Electives .....	35 credits

Total . . . 180 credits

**Fine Arts Sequence and Symposium Courses**

<b>FA 101 Fine Arts — Art</b>	<b>5 credits</b>
Synoptic view of art history; period and national styles; principles and implications of design, with cross-reference to music and drama.	
<b>FA 102 Fine Arts — Drama</b>	<b>5 credits</b>
Introduction to drama as an art form. An historical approach with emphasis on major periods, plays and philosophies.	
<b>FA 103 Fine Arts — Music</b>	<b>5 credits</b>
Introduction to music as an art and as a literature, with emphasis upon historical and cultural correlations.	
<b>FA 201 Fine Arts — Art and Music</b>	<b>5 credits</b>
Interdisciplinary course providing both fundamental concepts and historical perspective. May be taken in lieu of either FA 102 or 103.	
<b>FA 202 Fine Arts — Drama and Music</b>	<b>5 credits</b>
Interdisciplinary course providing both fundamental concepts and historical perspective. May be taken in lieu of either FA 102 or 103.	





- FA 400 Fine Arts — Symposium** **5 credits**  
Interdisciplinary course combining art, drama and music using team teaching techniques. May be taken by all students in lieu of a Fine Arts sequence course and by majors to count towards their required courses in the related divisions. (Fine Arts majors must also take the Fine Arts sequence course in their field of specialization.) Prerequisite: Any of the above Fine Arts courses or permission.

### Aesthetics Courses

- Ae 100 Introduction to Aesthetic Phenomena** **5 credits**  
Light, sound motion, time and space as they relate to the arts and the environment. Exercises and experiences to help sharpen sensory perception, and to integrate abilities through creative activity. Prerequisite for all other Aesthetics courses.
- Ae 200 Special Language of the Arts** **2 credits**  
Artists in their respective fields will lead the students in exercises and experiences which will help them encounter the specific sensory modes of thinking unique to each of the arts, by seeing and hearing works of art and developing their own skills through participation in and creating their own works.
- Ae 210 Relevance: The Arts and Society** **3 credits**  
Exploring the relationship between the arts and society. Guest artists will demonstrate new forms and the students will view works of art and aesthetic considerations (or lack of same) in the urban environment to determine the effect of the arts and aesthetics on society today.
- Ae 300 Ensemble: Dance and Drama** **2 credits**  
Artist-teachers in dance and drama will lead the students in exercises and experiences which necessitate ensemble work. Students will also view works of dance and theatre companies to determine effectiveness of ensemble.

- Ae 310 Cross Culture Aesthetics** **5 credits**  
Focus on a selection of several ethnic and/or cultural groups with special emphasis on those cultures reflected in the population of the Pacific Northwest. Members of various ethnic/cultural groups will demonstrate the arts of their community and lead student participation in some of their dances and music.

- Ae 400 Making Aesthetic Judgments** **3 credits**  
The class will view and listen to various works of art and apply aesthetic criteria in criticizing them. Guest critics in several of the arts will discuss their procedures and the function of criticism.

- Ae 410 Examining Point of View** **3 credits**  
The class will experiment with film to demonstrate understanding about point of view. They will apply aesthetic criteria in creating an environment of their own choosing, using three-dimensional models, design plans and/or photography to communicate their ideas. The students will respond to and criticize each other's work.

- Ae 491 Aesthetics: Special Topics** **1-5 credits**

### Art Courses

- Art 221 Drawing** **2 credits**  
**Art 222 Drawing** **2 credits**  
**Art 223 Drawing** **2 credits**  
Studies of line and value in the delineation of form; training in awareness and perception; structure and space indication; essential relationships of organic forms.
- Art 231 Design** **2 credits**  
**Art 232 Design** **2 credits**  
**Art 233 Design** **2 credits**  
Primary concepts and analysis of structure; problems of contemporary design; form in three-dimensional design.
- Art 291 Special Topics** **1-5 credits**  
**Art 292 Special Topics** **1-5 credits**  
**Art 293 Special Topics** **1-5 credits**
- Art 311 History of Art** **5 credits**  
**Art 312 History of Art** **5 credits**  
Survey of the arts of the Western world from the earliest times to the Renaissance and from the Renaissance to the present.
- Art 321 Advanced Drawing** **3 credits**  
**Art 322 Advanced Drawing** **3 credits**  
**Art 323 Advanced Drawing** **3 credits**  
Study of the human form; special problems in group composition. Prerequisite: Art 223.
- Art 331 Advanced Design** **3 credits**  
**Art 332 Advanced Design** **3 credits**  
**Art 333 Advanced Design** **3 credits**  
Problems of practical application; advertising art; synthesis and research. Prerequisite: Art 233.
- Art 334 Graphics** **2 credits**  
**Art 335 Graphics** **2 credits**  
**Art 336 Graphics** **2 credits**  
Principles and techniques of print-making; lithography and woodcut.



**Art 346 Painting 2 credits**  
**Art 347 Painting 2 credits**  
**Art 348 Painting 2 credits**  
 Study of the principles and practices of rendering in paint; complex composition; advanced problems.

**Art 351 Sculpture 2 credits**  
**Art 352 Sculpture 2 credits**  
**Art 353 Sculpture 2 credits**  
 Principles and practices leading to a realization of the nature of form; dependence of design on materials; advanced problems.

**Art 370 Arts and Crafts 5 credits**  
 Experience in artistic expression in basic art media for elementary and secondary school teachers.

**Art 446 Advanced Painting 3 credits**  
**Art 447 Advanced Painting 3 credits**  
**Art 448 Advanced Painting 3 credits**  
 Experimental research toward the development of a creative and personalized idiom, synthesis and research. Prerequisite: Art 348 or permission of department chairman.

**Art 451 Advanced Sculpture 3 credits**  
**Art 452 Advanced Sculpture 3 credits**  
**Art 453 Advanced Sculpture 3 credits**  
 Includes foundry techniques and lost wax process. Prerequisite: Art 453 or permission of instructor.

**Art 470 Advanced Media 5 credits**  
 Experience in artistic expression in advanced art media for elementary and secondary school teachers.

**Art 497 Independent Study 1-5 credits**  
**Art 498 Independent Study 1-5 credits**  
**Art 499 Independent Study 1-5 credits**  
 Advanced work in academic or experimental research. Prerequisites: Advanced standing in art and permission of department chairman.

### **Drama Courses**

**Dr 101 Oral Communication Techniques 3 credits**  
 Theory and practice of basic groups of communication. Exercises in relaxation, breathing and breath control, voice production. Emphasis on theatre speech.

**Dr 220 Pantomime 3 credits**  
 Study and practice of the form as a living art and as a basic part of all acting.

**Dr 221 Improvisation 3 credits**  
 Living in free form under imaginary circumstances. Group exercises and improvisations for development of sensory perception and imagination.

**Dr 222 Acting 3 credits**  
 Study and practice in modern realistic acting: preparation presentation and criticism.

**Dr 225 Body Movement 1 credit**  
**Dr 226 Body Movement 1 credit**  
**Dr 227 Body Movement 1 credit**  
 Development and discipline of the body as an expressive instrument.

**Dr 261 Production Preparation 5 credits**  
 Study of the specific technical areas of theatre and their inter-relation in production.

**Dr 262 Production Projects 3 credits**  
**Dr 263 Production Projects 3 credits**  
 Student specializes in one of the following areas: Scene Construction, Lighting-Sound, Costume-Makeup, Design (scene or costume). Laboratory periods in conjunction with major productions. Prerequisite: Dr 261

**Dr 291 Special Topics 1-5 credits**  
**Dr 292 Special Topics 1-5 credits**  
**Dr 293 Special Topics 1-5 credits**

**Dr 300 Dramatic Theory I 3 credits**  
**Dr 301 Dramatic Theory II 3 credits**  
 I. A study of Aristotle's Poetics and other dramatic theories to Lessing. II. Dramatic theories from Diderot to Langer and the Present. Prerequisite: Dr. 300 for 301

**Dr 310 American Theatre I 5 credits**  
**Dr 311 American Theatre II 5 credits**  
 I. The history of the American Theatre from its beginnings until the Civil War. II. The continuation of American Theatre history from the Civil War until the present.

**Dr 351 Representative Plays I 3 credits**  
**Dr 352 Representative Plays II 3 credits**  
**Dr 353 Representative Plays III 3 credits**  
 Great playwrights and representative plays presented in a chronological order. I. The Golden Age of Greece to the Elizabethan era. II. Restoration to the 20th Century. III. The 20th Century.

**Dr 400 Ensemble 1-5 credits**  
**Dr 401 Ensemble 1-5 credits**  
**Dr 402 Ensemble 1-5 credits**

**Dr 410 Tragedy 3 credits**  
 A senior seminar investigating tragic theories from Aristotle to the present.





- Dr 411 Comedy** **3 credits**  
A senior seminar on the nature of comedy from the Greeks until the present.
- Dr 412 Mixed Genre** **3 credits**  
A senior seminar on dramas that are neither tragedy nor comedy.
- Dr 420 Directing** **2 credits**  
Theory and practice in principles of directing various styles of drama.
- Dr 421 Directing Experience** **2 credits**  
Practical application of directing principles. Work done in the community. Prerequisite: Dr 420 or permission of instructor.
- Dr 425 Drama Internship** **12 credits**  
Actual apprenticeship in specific area of study in the community under the supervision of the drama faculty. Prerequisite: Drama majors only, plus permission of Drama faculty.
- Dr 451 Theatre History I** **2 credits**  
**Dr 452 Theatre History II** **2 credits**  
**Dr 453 Theatre History III** **2 credits**  
I. Primitive to Elizabethan era. II. Restoration to 19th century. III. 19th and 20th century.



- Dr 491 Special Topics** **1-5 credits**  
**Dr 492 Special Topics** **1-5 credits**  
**Dr 493 Special Topics** **1-5 credits**
- Dr 497 Independent Study** **1-5 credits**  
**Dr 498 Independent Study** **1-5 credits**  
**Dr 499 Independent Study** **1-5 credits**

### Music Courses

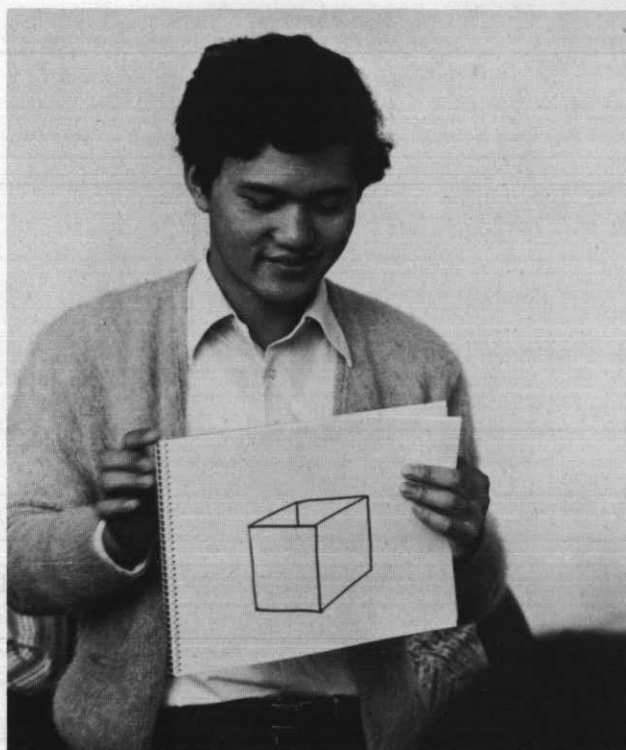
- Mu 110 Piano Lessons** **1 credit**  
**Mu 111 Vocal Lessons** **1 credit**  
**Mu 114 Music Fundamentals and Methods** **5 credits**  
Rudiments of music and methods that will lead to a successful music program in the elementary school. Required of all majors in elementary school education.
- Mu 115 Theory I** **3 credits**  
**Mu 116 Theory II** **3 credits**  
**Mu 117 Theory III** **3 credits**  
Basic musicianship, stressing scales and tonality, modes, intervals, chords, rhythm, form. Knowledge of these concepts will be acquired by listening, singing, analysis, discussion and keyboard practice. Prerequisite: Placement by examination.



<b>Mu 120</b>	<b>Violin</b>	<b>1 credit</b>
<b>Mu 122</b>	<b>Cello</b>	<b>1 credit</b>
<b>Mu 125</b>	<b>Organ</b>	<b>1 credit</b>
<b>Mu 130</b>	<b>A Cappella Choir</b>	<b>1 credit</b>
<b>Mu 131</b>	<b>Vocal Ensemble</b>	<b>1 credit</b>
<b>Mu 135</b>	<b>Fine Arts Ensemble</b>	<b>1 credit</b>
	Instruments, singers, dancers and actors in ensemble performance.	
<b>Mu 136</b>	<b>Orchestra</b>	<b>1 credit</b>
	Prerequisite: Audition	
<b>Mu 151</b>	<b>Songwriting</b>	<b>5 credits</b>
	A course for beginners in music theory. This course is designed for the general student.	
<b>Mu 200</b>	<b>Music of J.S. Bach</b>	<b>2 credits</b>
	Analysis of his instrumental and vocal music, particularly as reflecting the ultimate refinement of Baroque form. Prerequisite: FA 103	
<b>Mu 201</b>	<b>Studies in American Music</b>	<b>3 credits</b>
	Survey from the early folksong to the vocal and instrumental music of the present.	
<b>Mu 202</b>	<b>History of Opera</b>	<b>3 credits</b>
	Consideration of the basic elements in the combination of music and drama with a historical survey of the various solutions offered to the problems involved. Prerequisite: FA 103.	
<b>Mu 203</b>	<b>Chamber Music</b>	<b>2 credits</b>
	Selected topics in the chamber literature of the Classic, Romantic and Contemporary periods, with analysis of the special characteristics and qualities of the small instrumental ensemble. Prerequisite: FA 103.	

<b>Mu 205</b>	<b>Symphonies of Beethoven</b>	<b>3 credits</b>
	Nine works, preceded by a brief consideration of symphonic form. Prerequisite: FA 103.	
<b>Mu 207</b>	<b>History of Jazz</b>	<b>2 credits</b>
	Explorations of origins in Afro-American culture, its evolution as a result of merging cultures and the accomplishment of a distinctly new musical language.	
<b>Mu 214</b>	<b>Introduction to 20th Century Music</b>	<b>2 credits</b>
	Techniques, forms and styles of impressionism and expressionism; neo-classicism and dodecaphony; total control-chance-electronic music.	
<b>Mu 215</b>	<b>Theory IV</b>	<b>5 credits</b>
<b>Mu 216</b>	<b>Theory V</b>	<b>5 credits</b>
<b>Mu 217</b>	<b>Theory VI</b>	<b>5 credits</b>
	Advanced musicianship, beginning part writing and analysis.	
<b>Mu 251</b>	<b>Electronic Music</b>	<b>3 credits</b>
	Creative modification of electronic sound by means of synthesizers. Lectures and individual laboratory work. Recommended for public school teachers. No prerequisites.	
<b>Mu 291</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Mu 292</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Mu 293</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Mu 315</b>	<b>Theory VII</b>	<b>3 credits</b>
<b>Mu 316</b>	<b>Theory VIII</b>	<b>3 credits</b>
	Advanced part writing and analysis. Harmonic style of the common-practice period from the establishment of the principle of tonality to the extension of that principle in the late Nineteenth Century. Corequisites: Mu 315 with 372; 316 and 373.	
<b>Mu 370</b>	<b>History and Literature of Music I</b>	<b>3 credits</b>
<b>Mu 371</b>	<b>History and Literature of Music II</b>	<b>3 credits</b>
<b>Mu 372</b>	<b>History and Literature of Music III</b>	<b>3 credits</b>
<b>Mu 373</b>	<b>History and Literature of Music IV</b>	<b>3 credits</b>
<b>Mu 374</b>	<b>History and Literature of Music V</b>	<b>3 credits</b>
	I. Medieval and Renaissance Periods. II. Baroque Period. III. Classic Period. IV. Romantic Period. V. 20th Century. For music majors. Corequisites: Mu 415 with 370; 416 with 371; 315 with 372; 316 with 373; 417 with 374.	
<b>Mu 415</b>	<b>Modal Counterpoint</b>	<b>3 credits</b>
	Sixteenth-Century contrapuntal style as found in the music of Palestrina and his contemporaries. For music majors. Corequisite: Mu 370.	
<b>Mu 416</b>	<b>Tonal Counterpoint</b>	<b>3 credits</b>
	Eighteenth-Century contrapuntal style as found in the music of Bach and his contemporaries. For music majors. Corequisite: Mu 371.	
<b>Mu 417</b>	<b>Contemporary Counterpoint</b>	<b>3 credits</b>
	Contrapuntal techniques as used by composers in the Twentieth Century. For music majors. Corequisite: Mu 374.	
<b>Mu 418</b>	<b>Orchestration</b>	<b>3 credits</b>
	Practical application of study of the instruments and their creative use. Prerequisite: Permission of adviser.	
<b>Mu 491</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Mu 492</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Mu 493</b>	<b>Special Topics</b>	<b>1-5 credits</b>





## Foreign Languages

Gerald Ricard, M.A., Chairman

### Objectives

The foreign language programs in French, German, Italian, Spanish, Latin, Greek and the interdisciplinary Asian Studies all recognize academic, cultural and practical purposes.

**Academic** — These goals aim at broadening the scope of the student's intellectual formation by affording facility in one or more languages and a background in other cultures. This end is achieved through a major-minor in foreign languages or a double major coupling proficiency in a foreign language with a major in another field.

**Cultural** — Learning of another culture and civilization, its history, geography, literature and arts through the medium of its language leads to a better understanding of one's self and of the world. Consequently, all foreign language courses are taught in the language and in their cultural context.

**Practical** — Contrary to the common belief on many campuses, career opportunities involving foreign languages have never been greater. For the university student trained in a particular field with the extra asset, proficiency in foreign languages, openings exist in the following fields: teaching, government, military, social and foreign service; professions such as international law, engineering, librarianship, foreign trade and international management.

To meet these objectives, the Foreign Languages department offers regular, intensive, specialized and multi-discipline courses and programs on the Seattle University campus, in Europe, in South America and the Far East.

## Bachelor of Arts in Social Sciences — Asian Studies

### Objectives

The Asian Studies program features a period of study in residence at Sophia University in Tokyo or Ateneo de Manila, following a coordinated program of Japanese language, cultural and political history, literature, art, philosophy and religion as well as a concentration in economics and politics. In addition, field experience is planned with Japanese speaking organizations in fields of banking, foreign trade, insurance, airlines, shipping and transportation, brokerage, newspaper publishing, marketing and the tourist industry.

This major offers both academic and practical preparation for careers in economic, commercial and political areas of Foreign and Consular Service, Foreign Trade, International Management, the United Nations and career opportunities calling for a competence in Asian affairs and a working knowledge of an Asian Language.

### Degrees Offered

Bachelor of Arts  
Bachelor of Arts in Education — F/L Teaching  
Bachelor of Arts in Social Science — Asian Studies  
Master of Education — F/L Teaching (French)  
Master of Arts in Education — F/L Teaching (French)

### General Program Requirements

Students majoring in language must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin.

### Departmental Requirements

Bachelor of Arts (modern languages) — 40 credits beyond elementary language courses, including major language 215, 225, 235, 315, 325 and three courses from 415, 425, 435, 440 and 445.

Bachelor of Arts (classical languages) — 45 credits in a combination of courses approved by the Classics adviser and the Department Chairman.

Bachelor of Arts in Education — F/L Teaching — satisfying the degree requirements of the School of Education and 45 credits beyond elementary language courses including major language 215, 225, 235, 315, 450, 451, 452 and 455.

Bachelor of Arts in Social Science (Asian Studies) — 45 credits in an Asian language including field experience in the country of the language and 55 credits in a concentration of courses selected from economics, history, political science and sociology.

Undergraduate Minor (modern languages) — 20 credits beyond elementary language courses including 215, 225, 235 and 315.

Undergraduate Minor (classical languages) — 25 credits which must include two special topics courses.

Master of Education — F/L Teaching (French) — must meet the general requirements of the Graduate School and those of the School of Education. The foreign language requirements comprise an internship as a teaching assistant in the University's French-in-France Institute in Grenoble (Fr 460, 461, 462) and Fr 465 or 491

**Master of Arts in Education — F/L Teaching (French) —**  
Requirements are similar to those of the M.Ed. with a thesis required in place of the graduation project.

**The French-in-France Institute** offers a full academic year of study ( 45 credits) of French language, culture and civilization in Grenoble, France under the direction of regular faculty members of the Foreign Languages department. The program is open to all students of the University, with no prerequisites.

**The Spanish-in-Argentina Program** offers one full academic year of study in Argentina, three consecutive quarters — spring, summer and fall — for a total of 45 credit hours in Spanish language, culture, civilization, history and geography of South America. All courses are taught in Spanish by the Foreign Languages department faculty in residence. The Spanish-in-Argentina program is open to all students of the University with no prerequisites.

**The Asian Studies Program** offers facilities for the transfer to Seattle University of 45 credit hours, one full year's prearranged study of Japanese language (15 credits) and related studies (30 credits) in the International Program of Sophia University in Tokyo or Ateneo de Manila.

Reading Programs (sequence of two courses: 105, 106) prepare the student to translate the written text with accuracy and comprehension for scholarly purposes. They fulfill the foreign language requirements and help the student gain the facility needed to pass the graduate language examination.

The reading language requirements may not be satisfied by examination in a student's native language since the intent of such a requirement is mastery of a language new to the student.

Intensive programs are offered during the summer quarter in which one year's work in a language can be done, earning 15 credits.

The interdisciplinary concept is emphasized, in advanced courses, by the collaboration of the faculty of other departments as well as the participation of Foreign Language faculty in programs in related humanities.

Credit by examination and waiver — The Foreign Languages department, recognizing proficiency over requirements, reserves the right to waive all or part of the degree requirements for students who demonstrate, by examination, equivalent achievement at the college level. Courses may be waived, allowing substitution of electives, or credit may be obtained by meeting the University's requirements for credit by examination.

### **Bachelor of Arts — Modern Languages**

#### **Freshman year**

English 100, 133, 134 or 200 ..... 15 credits  
History 101, 102, 103 or 321 ..... 15 credits  
Major Language 115, 125, 135 ..... 15 credits

#### **Sophomore year**

Major Language 215, 225, 235 ..... 15 credits  
Philosophy 110, 220 and core option ..... 15 credits  
Social science core options ..... 10 credits  
Theology core option ..... 5 credits

#### **Junior year**

Major Language 315, 325, 415 ..... 15 credits  
Mathematics/Science core options ..... 10 credits  
Minor Language 115, 125, 135 ..... 15 credits  
Theology core option ..... 5 credits

#### **Senior year**

Major Language 425 or 435, 440 or 445 .... 10 credits  
Minor Language 215, 225, 235, 315 ..... 20 credits  
Electives ..... 15 credits

Total . . . 180 credits

### **Bachelor of Arts — Classical Languages**

Consult Classics adviser or department chairman.

### **Bachelor of Arts in Social Science — Asian Studies**

#### **Freshman year**

English 100 ..... 5 credits  
History 103, 281 ..... 10 credits  
Philosophy 110, 220 ..... 10 credits  
Theology core option ..... 5 credits  
Japanese 115, 125, 135 ..... 15 credits

#### **Sophomore year**

Social Science core option (Ec 100 or 271 and Pls 150 or 160 recommended) ..... 10 credits  
Philosophy core option ..... 5 credits  
Theology core option ..... 5 credits  
Mathematics/Science core options ..... 10 credits  
Japanese 215, 225, 235 ..... 15 credits

#### **Junior year**

Full academic year at Sophia University or Ateneo de Manila-Japanese 291, 292, 293 (including internship) ..... 15 credits  
Major related Asian Studies ..... 30 credits

#### **Senior year**

5 courses in the discipline of concentration selected from the 300 and 400 level ..... 25 credits  
Electives ..... 15 credits  
Senior Seminar ..... 5 credits

Total . . . 180 credits

### **Modern Language Courses**

#### **French Courses**

**Fr 105 Reading French 5 credits**  
**Fr 106 Reading French 5 credits**

An intensive two-course program of study of written French for reading and translation with accuracy and comprehension. The two-course sequence covers, at an accelerated pace, the matter generally studied in the traditional three-course sequence. The level of competency attained in 106 is consequently equivalent to that of the former 103.

All the following courses except Fr 390 are taught in French.

**Fr 115 French Language I 5 credits**  
**Fr 125 French Language II 5 credits**  
**Fr 135 French Language III 5 credits**  
**Fr 215 French Language IV 5 credits**  
**Fr 225 French Language V 5 credits**  
**Fr 235 French Language VI 5 credits**



**50/ARTS AND SCIENCES**  
**Foreign Languages**



Fr 291	Special Topics	2-5 credits
Fr 292	Special Topics	2-5 credits
Fr 293	Special Topics	2-5 credits
Fr 315	French Culture, Civilization, History and Geography	5 credits
Fr 325	Introduction to French Literature	5 credits
Fr 390	French Literature in Translation (for non-majors and non-minors only)	2-5 credits
Fr 415	XIXth Century, Literary Movements	5 credits
Fr 425	XVIIIth Century, Classicism	5 credits
Fr 435	XVIIIth Century, The Enlightenment	5 credits
Fr 445	XXth Century, Contemporary Literature	5 credits
Fr 450	Methodology of Teaching the French Language	5 credits
Fr 451	Teaching French Culture and Civilization	5 credits
Fr 452	Language Improvement	5 credits
These three courses form part of the requirements for the BA in Education — F/L teaching (French).		
Fr 455	Methodology of Teaching Foreign Languages (French)	2-5 credits
Fr 460	Theories, Techniques and Practice of Teaching the French Language	5 credits
Fr 461	Theories, Techniques and Practice of Teaching French Culture and Civilization	5 credits
Fr 462	Teaching Internship	5 credits
These three courses form part of the graduate teaching internship of the French-in-France Institute.		
Fr 465	Comparative Methods, Techniques and Performance Objectives of Foreign Language Teaching	3 credits
Fr 491	Supervised Studies	2-5 credits
Fr 492	Supervised Studies	2-5 credits
Fr 493	Supervised Studies	2-5 credits

**German Courses**

Gr 105	Reading German	5 credits
Gr 106	Reading German	5 credits
An intensive two-course program of study of written German for reading and translation with accuracy and comprehension. The two-course sequence covers, at an accelerated pace, the matter generally studied in the traditional three-course sequence. The level of competency attained in 106 is consequently equivalent to that of the former 103.		

Gr 115	German Language I	5 credits
Gr 125	German Language II	5 credits
Gr 135	German Language III	5 credits
Gr 215	German Language IV	5 credits
Gr 225	German Language V	5 credits
Gr 235	German Language VI	5 credits
Gr 291	Special Topics	2-5 credits
Gr 292	Special Topics	2-5 credits
Gr 293	Special Topics	2-5 credits
Gr 315	Introduction to German Literature	5 credits
Gr 325	German Culture, Civilization, History and Geography	5 credits
Gr 390	German Literature in Translation (for non-majors and non-minors only)	2-5 credits
Gr 415	Contemporary German Literature (Short stories-plays)	5 credits
Gr 425	Survey and Excerpts of German Literature before 1900	5 credits
Gr 430	Selected Works of German Literature	5 credits
Gr 435	Contemporary German Literature (Tragedy and Comedy)	5 credits
Gr 440	German Classicism and Romanticism	5 credits
Gr 445	Contemporary German Literature (Prose)	5 credits
Gr 455	Methodology of Teaching Foreign Languages (German)	5 credits
Gr 491	Supervised Studies	2-5 credits
Gr 492	Supervised Studies	2-5 credits
Gr 493	Supervised Studies	2-5 credits

**Italian Courses**

It 101	Reading Italian I	5 credits
It 102	Reading Italian II	5 credits
It 103	Reading Italian III	5 credits
Intensive study of written Italian for reading and translation with accuracy and comprehension.		
It 291	Special Topics	1-5 credits
It 292	Special Topics	1-5 credits
It 293	Special Topics	1-5 credits

**Japanese Courses**

Ja 115	Japanese Language I	5 credits
Ja 125	Japanese Language II	5 credits
Ja 135	Japanese Language III	5 credits
Ja 215	Japanese Language IV	5 credits
Ja 225	Japanese Language V	5 credits
Ja 235	Japanese Language VI	5 credits
Ja 291	Special Topics	1-5 credits
Ja 292	Special Topics	1-5 credits
Ja 293	Special Topics	1-5 credits

**Spanish Courses**

Sp 105	Reading Spanish	5 credits
Sp 106	Reading Spanish	5 credits
An intensive two-course program of study of written Spanish for reading and translation with accuracy and comprehension. The two-course sequence covers, at an accelerated pace, the matter generally studied in the traditional three-course sequence. The level of competency attained in 106 is consequently equivalent to that of the former 103.		

All the following courses except Sp 390 are taught in Spanish.

Sp 115	Spanish Language I	5 credits
Sp 125	Spanish Language II	5 credits
Sp 135	Spanish Language III	5 credits
Sp 215	Spanish Language IV	5 credits
Sp 225	Spanish Language V	5 credits
Sp 235	Spanish Language VI	5 credits
Sp 291	Special Topics	2-5 credits
Sp 292	Special Topics	2-5 credits
Sp 293	Special Topics	2-5 credits
Sp 315	Spanish Culture, Civilization, History and Geography	5 credits
Sp 325	Introduction to Spanish Literature	5 credits
Sp 390	Spanish Literature in Translation (for non-majors and non-minors only)	2-5 credits
Sp 415	XIXth Century. The Romanticism	5 credits
Sp 425	The Generation of 1898 — Essays and Poetry	5 credits
Sp 435	Early 20th Century Literature	5 credits
Sp 440	Contemporary Spanish Theatre	5 credits
Sp 445	Contemporary Spanish American Literature	5 credits
Sp 450	Methodology of Teaching the Spanish Language	5 credits
Sp 451	Teaching Spanish Culture and Civilization	5 credits
Sp 452	Language Improvement (Sp 450, 451, 452 form part of the requirements for the BA in Education F/L Teaching-Spanish)	5 credits
Sp 455	Methodology of Teaching Foreign Languages (Spanish)	5 credits
Sp 491	Supervised Studies	2-5 credits
Sp 492	Supervised Studies	2-5 credits
Sp 493	Supervised Studies	2-5 credits

## Classical Language Courses

### Greek Courses

Gk 101	Greek Language I	5 credits
Gk 102	Greek Language II	5 credits
Gk 103	Greek Language III	5 credits
	Functional treatment of the phonology, morphology, syntax and lexicon of Koine Greek with readings from the New Testament. (I—fall, II—winter, III—spring)	
Gk 291	Special Topics	2-5 credits
Gk 292	Special Topics	2-5 credits
Gk 293	Special Topics	2-5 credits
Gk 390	Greek Literature in Translation (for non-majors and non-minors only)	2-5 credits
Gk 491	Supervised Studies	2-5 credits
Gk 492	Supervised Studies	2-5 credits
Gk 493	Supervised Studies	2-5 credits

### Latin Courses

Lt 101	Latin Language I	5 credits
Lt 102	Latin Language II	5 credits
Lt 103	Latin Language III	5 credits
	Phonology, morphology, syntax and lexicon of Classical Latin. (I—fall, II—winter, III—spring)	
Lt 291	Special Topics	2-5 credits
Lt 292	Special Topics	2-5 credits
Lt 390	Latin Literature in Translation (for non-majors and non-minors only)	2-5 credits
Lt 491	Supervised Study	2-5 credits
Lt 492	Supervised Study	2-5 credits
Lt 493	Supervised Study	2-5 credits



## General Studies Program

Mary Margaret Ridge, B.A., Director

### Objectives

Students who have a wide range of interests and want a broad liberal arts education, AS WELL AS THOSE WHO HAVE NOT YET DECIDED UPON A MAJOR, may enroll in the General Studies Program. Such students begin their University work by taking core curriculum subjects required for all majors. They may then select courses from two or three related fields, and formulate a program that will best suit the needs of their long-range goals.

The thrust of the program looks to constructing in-depth combinations of a variety of disciplines such as fine arts, humanities, social sciences, or any other atypical interdisciplinary synthesis.

A student admitted to the General Studies Program may also transfer to one of the traditional majors of the College of Arts and Sciences, or to one of the professional schools, such as Business, Education, Nursing, Science and Engineering. A student may change at any time as long as academic qualifications for the intended program are met.

### Degrees Offered

Bachelor of Arts in Social Science  
Bachelor of Arts in Humanities

### General Program Requirements

Requirements of a General Studies degree are 60 credits beyond the core, of which 40 credits must be taken in courses designated 300 or 400 level, plus five credits in an interdisciplinary seminar to be taken during the senior year.

Suggested combinations are: 40 hours in one subject and 20 in another; or 35 hours in one, 15 in a second, and 10 in a third; or 25, 20 and 15. THE SELECTION OF SUBJECTS AND THEIR MEANINGFUL COMBINATION IS THE RESPONSIBILITY OF THE STUDENTS IN CONSULTATION WITH THE PROGRAM DIRECTOR OR AN ASSIGNED ACADEMIC ADVISER.





## History

Robert D. Saltvig, Ph.D., Chairman

### Objectives

The objectives of the History department are to provide an essential background to the study of Western Europe, the United States, Latin America and Russia-China-Japan for all students in the University and to deepen and broaden these studies for those majoring in history or those intending further study at the graduate level.

### Degrees offered

Bachelor of Arts  
Master of Arts

### General Program Requirements

Students in history must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. Required sequences are 15 credits each of philosophy and language and 10 credits each of English, theology, social science and mathematics/science.

### Departmental Requirements

Bachelor of Arts — 60 credits including Hs 101, 102, 103, 200, 400 and 499. Of the remaining 30 credits, a combination of three 300-numbered courses and two 400-numbered courses is to be taken in a general area (Western Europe, United States, Latin America or Russia-China-Japan) recommended by the student's adviser. Ten credits of language or their equivalent are required (may be taken in junior year). Further study in the same language or a second language is recommended for students contemplating graduate school.

Undergraduate Minor — 35 credits of history of which Hs 101, 102 and 103 are required.

Teaching Major (School of Education) — 55 credits of history including Hs 101, 102, 103, 231, 341, 300 (or Ed 420 for those preparing for elementary teaching) and five 300 numbered courses.

Master of Arts — 45 credits of history including Hs 500, 501 and seven field courses. Of the latter 15 credits are to be taken in a special area (Western Europe, United States, Latin America, and up to 20 credits may be taken from undergraduate courses numbered 405-498. In place of two of the 400-numbered courses a student may substitute a thesis, but he must register for Hs 599 the quarter in which he completes his work. A reading knowledge of a foreign language is required and an examination will be conducted before completion of one-half of the program. A final comprehensive examination, written and oral, covering all fields taken, but with emphasis on the special area, will be required.

### Bachelor of Arts

#### Freshman year

English 100 and core option .....	10 credits
History 101, 102, 103 .....	15 credits
Philosophy 110 .....	5 credits
Electives .....	15 credits

#### Sophomore year

History 200 and electives .....	15 credits
Philosophy 220 and core option .....	10 credits
Theology core option .....	5 credits
Electives .....	15 credits

#### Junior year

History electives .....	15 credits
Mathematics/Science core options .....	10 credits
Social Science core option .....	5 credits
Theology core option .....	5 credits
Electives .....	10 credits

#### Senior year

Modern Language .....	10 credits
History 400, 499 and elective .....	15 credits
Social Science core option .....	5 credits
Electives .....	15 credits

Total . . . 180 credits

### History Courses

<b>Hs 101</b>	<b>Western Culture I</b>	<b>5 credits</b>
<b>Hs 102</b>	<b>Western Culture II</b>	<b>5 credits</b>
<b>Hs 103</b>	<b>Western Culture III</b>	<b>5 credits</b>

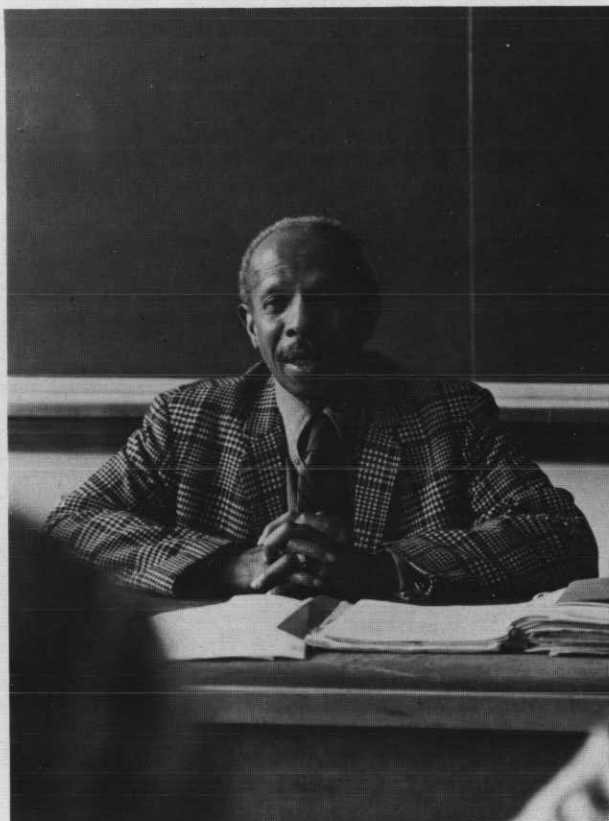
I. Topical studies in the civilizations of Western man from antiquity through the early Middle Ages. II. Western man from the High Middle Ages through the Napoleonic world. III. Western man through the 19th and 20th centuries. Prerequisite: Hs 102 for 103.

<b>Hs 200</b>	<b>Methodology</b>	<b>5 credits</b>
Techniques of historical research, criticism and writing. Prerequisites: Hs 101, 102, 103		

<b>Hs 231</b>	<b>Survey of the United States</b>	<b>5 credits</b>
Events, movements and institutions of American history from the era of discovery and colonization to the present.		

<b>Hs 251</b>	<b>Survey of Latin America</b>	<b>5 credits</b>
Events, movements and institutions of Latin American history from the era of discovery and colonization to the present.		

- Hs 271 Survey of Russian History 5 credits**  
An introduction to the history and culture of Russia and the Soviet Union.
- Hs 281 Survey of the Far East since 1900 5 credits**  
Domestic and international development of China, Japan and the states of Southeast Asia.
- Hs 291 Special Topics 1-5 credits**  
**Hs 292 Special Topics 1-5 credits**  
**Hs 293 Special Topics 1-5 credits**
- Hs 300 Teaching of History 5 credits**  
Techniques of instruction in historical awareness and in basic historical content for the secondary level of education. Limited to history majors and minors in the School of Education.
- Hs 304 Europe of the Early Middle Ages 5 credits**  
European origins of Western civilization from Constantine to Charlemagne. Prerequisite: Hs 101.
- Hs 305 Europe of the 11th and 12th Centuries 5 credits**  
Cultural, social and political institutions of Europe from the Ottonian Renaissance through the 12th century Renaissance. Prerequisite: Hs 102.
- Hs 306 Europe of the High Middle Ages 5 credits**  
Analysis of the cultural, social and political institutions of 13th century Europe. Prerequisite: Hs 102.
- Hs 307 Europe of the Renaissance 5 credits**  
Movements and institutions from Italy to the rest of Europe; from the 14th through the early 16th centuries. Prerequisite: Hs 102.
- Hs 309 Europe of the 16th Century 5 credits**  
The Protestant and Catholic Reformation. Prerequisite: Hs 102.
- Hs 310 Europe of the 17th Century 5 credits**  
The Scientific Revolution, baroque synthesis and European state system to Utrecht. Prerequisite: Hs 102.
- Hs 311 Europe of the 18th Century 5 credits**  
Cultural and political ferment of Western civilization in the century from Utrecht to Waterloo. Prerequisite: Hs 102.
- Hs 313 Europe of the 19th Century 5 credits**  
The era of revolutions, in ideas and society, from the Napoleonic wars to the beginning of World War I. Prerequisite: Hs 103.
- Hs 315 Europe of the 20th Century 5 credits**  
Contemporary movements and institutions in the home base of Western civilization, through war and peace. Prerequisite: Hs 103.
- Hs 321 Modern France 5 credits**  
Development of cultural and political France from Francis I to the present. Prerequisite: Hs 103.
- Hs 331 Colonial North America 5 credits**  
European discoveries, explorations and settlements from the 16th through the late 18th centuries.
- Hs 333 The Beginnings of the United States 5 credits**  
The Revolution and the Constitution, the first continental expansion and the first world contacts to the era of Monroe.

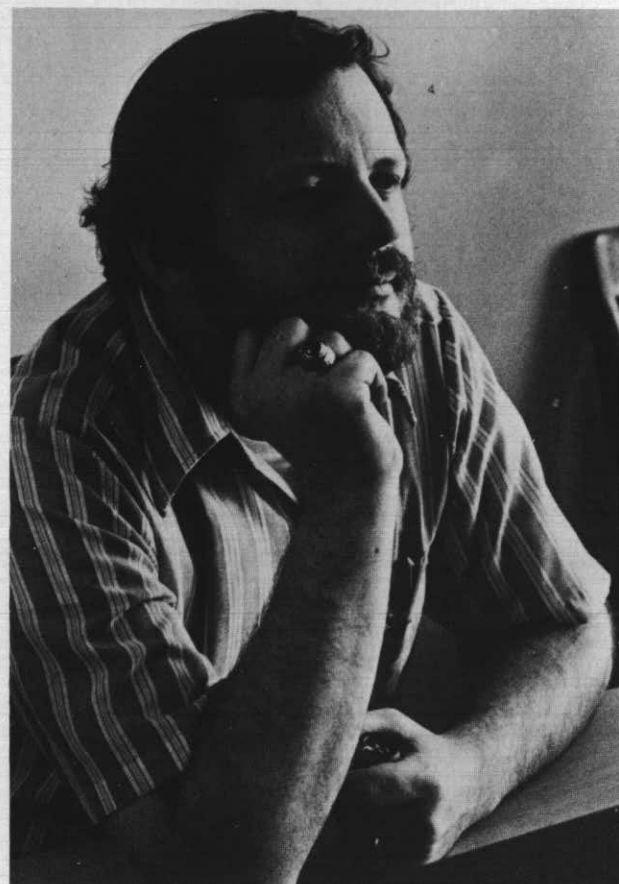


- Hs 335 The Expansion and Crisis of the Union 5 credits**  
The United States from the era of Jackson through the Civil War and Reconstruction.
- Hs 337 The United States - Expansion and World Power 5 credits**  
Domestic and foreign development of American power from the end of Reconstruction to Great Depression.
- Hs 339 Recent United States 5 credits**  
Development of American culture from the stock market crash of 1929 to the present with emphasis on political, social, diplomatic and economic affairs.
- Hs 341 The Pacific Northwest 5 credits**  
Past development and present problems of the states comprising the United States Pacific Northwest with emphasis on Washington State.
- Hs 347 Afro-American History I 5 credits**  
**Hs 348 Afro-American History II 5 credits**  
I. African origins, slave trade, and the Afro-American experience to Emancipation. II. History of the Afro-American from Reconstruction to the present. Prerequisites: Hs 102 for 347; 103 or 231 for 348.
- Hs 351 Mexico 5 credits**  
Formation and development of the Mexican nation from pre-Columbian and Spanish origins to the present.
- Hs 353 Brazil 5 credits**  
Development, under Portuguese and other influences, of the Brazilian nationality and culture to the present.

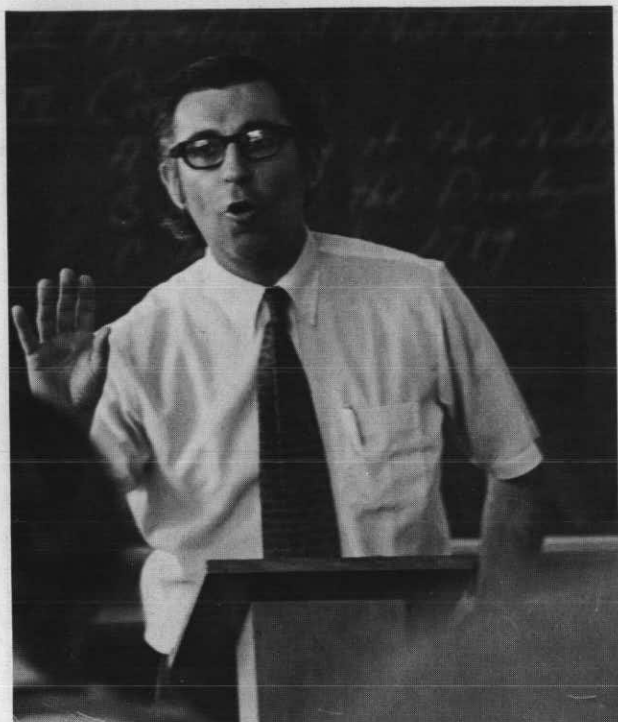


**54/ARTS AND SCIENCES**  
**History**

- Hs 355 Argentina and Chile 5 credits**  
History and culture of the southern South American republics from the first European settlements to the present.
- Hs 357 Central America and the Caribbean 5 credits**  
The strategic center of the Americas from the Columbian beginnings to the present cluster of colonies and republics.
- Hs 359 The Andean Republics 5 credits**  
History and culture of Peru, Bolivia, Ecuador and Colombia from the Spanish Conquest to the present.
- Hs 362 Tudor England 5 credits**  
Rule of the Tudor monarchs from Henry VII through Elizabeth I and the English Reformation. Prerequisite: Hs 102.
- Hs 363 Stuart England 5 credits**  
Rule of the Stuart Monarchs and the constitutional and religious crises of the 17th century. Prerequisite: Hs 102.
- Hs 365 Modern Britain 5 credits**  
History of the great island kingdom, from the 18th through the 20th centuries. Prerequisite: Hs 103.
- Hs 372 Early Russia 5 credits**  
Origins and development of Russia from the Kievan period through the era of Peter the Great. Prerequisite: Hs 102.
- Hs 373 Modern Russia 5 credits**  
History and culture of the Russian people in 19th and 20th centuries. Prerequisite: Hs 103.
- Hs 381 Chinese Civilization 5 credits**  
The development of Chinese culture, thought and institutions down to the late 19th century.
- Hs 383 China — 20th Century 5 credits**  
The Western impact and the Chinese Revolutions from the Opium War to the People's Republic.
- Hs 385 Traditional Japan 5 credits**  
The development of Japanese culture, thought and institutions to 1867.
- Hs 387 Modern Japan 5 credits**  
The transformation of Japan from Feudalism to Imperial power and industrial giant, 1867 to present.
- Hs 391 Special Topics 1-5 credits**  
**Hs 392 Special Topics 1-5 credits**  
**Hs 393 Special Topics 1-5 credits**  
Private work by arrangement with approval of department chairman.
- Hs 400 Historiography 5 credits**  
Historical study and writing and the philosophy of history from the earliest times to the present. Prerequisite: Hs 200.
- Hs 404 Studies in the Early Middle Ages 5 credits**  
Prerequisite: Hs 304.
- Hs 405 The 12th Century Renaissance 5 credits**  
Prerequisite: Hs 305.
- Hs 406 Studies in the Europe of the High Middle Ages 5 credits**  
Prerequisite: Hs 306.



- Hs 411 France: Ancien Regime 5 credits**  
Studies in the institutions and events of the century preludeing the fall of old France. Prerequisite: Hs 311.
- Hs 412 The French Revolution and Napoleon 5 credits**  
Studies in revolutionary thought and action. Prerequisite: Hs 311.
- Hs 414 Modern Germany 5 credits**  
Studies in German history and culture from Stein to Adenauer. Prerequisite: Hs 313 or 315.
- Hs 415 Western Christian Culture 5 credits**  
Studies centered around classical secondary literature investigating the rise and decline of the classical Christian synthesis. Prerequisite: Permission of instructor.
- Hs 431 The Westward Movement 5 credits**  
American frontier history from colonial times to the end of the 19th Century. Prerequisite: Hs 333 or 335.
- Hs 432 American Diplomacy I 5 credits**  
**Hs 433 American Diplomacy II 5 credits**  
I. Diplomatic history of the United States from Independence through the 19th Century. II. Diplomatic history of the United States during the 20th Century. Prerequisites: Hs 231 or 333 or 337 for 432; 231 or 337 or 339 for 433.
- Hs 434 American Revolution and Confederation 5 credits**  
Events and interpretations in the history of the Atlantic seaboard provinces from the end of the Great War for Empire through Independence and the Confederated United States. Prerequisite: Hs 331.



**Hs 435 American Civil War and Reconstruction 5 credits**  
Political, social and economic aspects of the American Civil War and Reconstruction.

**Hs 437 The Progressive Movement 5 credits**  
An American political and social phenomenon. Prerequisite: Hs 337.

**Hs 451 Pre-Columbian America 5 credits**  
Mayan, Aztec, Incan and other civilizations in subsequent Latin America. Prerequisite: Hs 351 or 353 or 355 or 357 or 359.

**Hs 453 Colonial Institutions in Latin America 5 credits**  
Various aspects, political, social, economic and religious. Prerequisite: Hs 351 or 353 or 355, 357 or 359.

**Hs 462 English Reformation 5 credits**  
Analysis of the many aspects of the Act of State from the King's "Great Matter" through the Elizabethan Settlement. Prerequisite: Hs 362.

**Hs 464 Puritans and Parliament - Men 5 credits**  
Crises of the 17th Century English church and state. Prerequisite: Hs 363.

**Hs 481 Modern Asian Revolutions 5 credits**  
Problems and forces in selected examples of Asian nations in the 20th Century, especially of circumstances, leaders, tactics and doctrines of revolutionary groups in China, Viet Nam and Indonesia.

**Hs 491 Special Topics 1-5 credits**  
**Hs 492 Special Topics 1-5 credits**  
**Hs 493 Special Topics 1-5 credits**

**Hs 494 Seminar 5 credits**  
**Hs 495 Seminar 5 credits**  
**Hs 496 Seminar 5 credits**

## ARTS AND SCIENCES/55 History

**Hs 497 Independent Study 1-5 credits**  
**Hs 498 Independent Study 1-5 credits**  
Private studies by arrangement with approval of department chairman. Prerequisite: Completion of 300-series courses in related areas.

**Hs 499 Senior Seminar 5 credits**  
Specially directed projects in research and composition. Limited to seniors in Arts and Sciences. Prerequisites: Hs 200 and at least one course in the 400 series.

### Graduate Courses

**Hs 500 Historical Methodology 5 credits**

**Hs 501 Historiography 5 credits**  
Analysis of the ideas and techniques of selected major historians, from Herodotus to contemporary writers.

**Hs 505 Medieval History 5 credits**  
Studies in Medieval history and culture.

**Hs 507 Renaissance and Reformation 5 credits**  
Studies in the cultural and religious history of Europe from the 14th through the 17th centuries.

**Hs 512 Early Modern Europe 5 credits**  
From the Renaissance through the Enlightenment.

**Hs 513 Revolutionary Europe 5 credits**  
Studies in continental revolutions at the end of the 18th and during the first half of the 19th centuries.

**Hs 531 United States — Colonial 5 credits**  
The British colonies in North America through the War for Independence.

**Hs 532 United States — National 5 credits**  
The new nation to the end of the Civil War.

**Hs 533 United States — Reconstruction, Populism and Progressivism 5 credits**  
The expanding nation to World War I.

**Hs 534 United States — 20th Century Domestic 5 credits**  
The contemporary nation from Wilson through Johnson.

**Hs 535 United States — World Relations 5 credits**  
Topics in the nation's diplomatic history.

**Hs 536 United States — Frontier America 5 credits**  
Studies in the nation's diplomatic history.

**Hs 551 Latin America — Colonial 5 credits**  
Spanish and Portuguese colonies to the Revolution.

**Hs 552 Latin America — National 5 credits**  
The 19th and 20th centuries.

**Hs 553 Mexico 5 credits**  
Topics in Mexican history from the Spanish explorations to the present.

**Hs 554 Brazil 5 credits**  
Topics in Brazilian history from the Portuguese explorers to the present.

**Hs 598 Special Topics 1-5 credits**

**Hs 599 Thesis 5 credits**





## Honors Program

Rosaleen Trainor, CSJ, Ph.D., Director

### Objectives

The Honors Program is a two-year program designed to produce students who can think, read, write and speak integratively across various university disciplines. For that reason it is historically conceived, beginning with the Ancient Near East and proceeding through the civilizations of the Hebrews, Greeks, Romans and Medieval Europeans to modern and contemporary areas of study. The various disciplines, thought, literature, history and science, are correlated to provide the student with the greatest possible depth in each period under examination. The program is conducted according to the dialog method in seminars. In addition, each quarter the student must write at least one paper in each course he is taking and be prepared to defend this written work in a tutorial session of five or six students and the instructor. Examinations are normally oral and cumulative and are given at the end of each quarter.

### Scholarships/Applications

Scholarships are granted on a one-year basis, renewable on proof of competence. Applicants are chosen on the basis of their previous record and evidence that they are willing to make the effort necessary to achieve genuine superiority in the intellectual pursuits. In addition to application to Seattle University, candidates must apply directly to the Honors Program.

### Program Requirements

When accepted in the Program, students complete each of the course sequences numbered Hu 101 through 233. Completion of the Honors Program satisfies University core requirements in philosophy, science, English, history and theology. En 220 and Pl 440 may be completed for additional credit in summer study or by special examination prior to entering the major field. Honors students, on completion of their two-year program, transfer into one of the departments of the University to fulfill the requirements for their major. After completing the Honors Program, students may elect to take Hu 398 or 499 while completing their major.

### Honors Program Courses

Hu 101	Humanities Seminar - Thought	5 credits
Hu 202	Humanities Seminar - Thought	5 credits
Hu 103	Humanities Seminar - Thought	5 credits

Three quarters of critical reading and discussion of the works which have most deeply influenced the development of the Western world, including the Old Testament, Pre-Socratics, Plato, Aristotle, Epictetus, New Testament, St. Augustine, St. Thomas.

Hu 111	Humanities Seminar - Literature	4 credits
Hu 112	Humanities Seminar - Literature	4 credits
Hu 113	Humanities Seminar - Literature	4 credits

Critical examination of those literary works which have most deeply influenced the development of the Western world, including the dramatic books of the Old Testament, Homer and the Greek playwrights, Virgil, St. Paul, St. Augustine, The Cid, Song of Roland, Dante and Chaucer.

Hu 121	Humanities Seminar - History	4 credits
Hu 122	Humanities Seminar - History	4 credits
Hu 123	Humanities Seminar - History	4 credits

Historical survey designed to furnish background discipline for humanities-thought and humanities-literature, covering Hebrew, Greek, Roman and Medieval Christian history.

Hu 131	Humanities Seminar - Science	2 credits
Hu 132	Humanities Seminar - Science	2 credits
Hu 133	Humanities Seminar - Science	2 credits

The history and nature of the physical sciences.

Hu 191*	Interdisciplinary Seminar	5-10 credits
Hu 192*	Interdisciplinary Seminar	5-10 credits

Hu 201	Humanities Seminar - Thought	5 credits
Hu 202	Humanities Seminar - Thought	5 credits
Hu 203	Humanities Seminar - Thought	5 credits

Three quarters of critical reading and discussion, including Descartes, Bacon, Hobbes, Locke, Spinoza, Leibniz, Rousseau, Hume, Kant, Hegel, J.S. Mill, Newman, Marx, Whitehead and the Existentialists.

Hu 211	Humanities Seminar - Literature	4 credits
Hu 212	Humanities Seminar - Literature	4 credits
Hu 213	Humanities Seminar - Literature	4 credits

Shakespeare, Donne, Moliere, Milton, Dryden, Pope, Goethe, the Romantics, Victorians, Russian novelists and modern plays through the Existentialists.

Hu 221	Humanities Seminar - History	4 credits
Hu 222	Humanities Seminar - History	4 credits
Hu 223	Humanities Seminar - History	4 credits

The Reformation to the present.

Hu 231	Humanities Seminar - Science	2 credits
Hu 232	Humanities Seminar - Science	2 credits
Hu 233	Humanities Seminar - Science	2 credits

The history and nature of the physical and life sciences.

Hu 291	Special Topics	1-5 credits
Hu 292	Special Topics	1-5 credits
Hu 293	Special Topics	1-5 credits

Hu 398	Humanities Special Topics	1-5 credits
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Private work by arrangement. Prerequisite: Approval of program director.

Hu 499	Humanities Senior Seminar	5 credits
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Reading and discussion of major synthetic secondary literature in the humanities on selected topics. Prerequisite: Approval of instructor.

\* Not an Honors Program course



## Journalism

**John R. Talevich, M.A., Chairman**

### Objectives

To the University's basic liberal studies program, journalism adds courses designed to give the student an awareness of the role of mass communications in society and the special knowledge and skills required for effective communication.

The journalism program is specifically directed toward editorial competence, the basis for careers in all areas of mass communications. It seeks to produce graduates who can become responsible professional journalists or who can undertake graduate study in specialized areas.

### Degree Offered

Bachelor of Arts

### General Program Requirements

Students in journalism must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. A student must have a minimum typing average of 40 words per minute to enroll in journalism writing courses.

During the freshman year the journalism student will be asked to specify an area of interest such as print or broadcast journalism, advertising or public relations, or graduate study. With his adviser he will then plan a sequence of courses, in journalism and in related areas, to meet his individual requirements.

Practical experience is an essential complement to the journalism student's course work. This experience may be gained through part-time work on off-campus media or as a staff member of a student publication.

### Departmental Requirements

Bachelor of Arts — 50 credits in journalism which must include Jr 100, 200, 210, 250, 330 and 25 credits in courses numbered 300 and above; 10 credits of English beyond core requirements numbered 200 or above; 5 additional credits of core social science; 10 credits of upper division United States history courses (or approved substitutes); 15 credits of language or fine arts and/or speech and drama courses.

Journalism-English Interdisciplinary Program — 60 credits which must include Jr 100, 200, 210, 250, 330 and 15 credits chosen from Jr 310, 350, 370 and 430; and 20 credits chosen from En 250, 305, 382, 406, 407, 488 and 490.

Undergraduate Minor — 30 credits which must include Jr 100, 200, 210, 250 and 10 credits of additional courses numbered 300 and above.

Undergraduate Minor (teaching) — 25 credits which must include Jr 100, 200, 210, 250 and 465 or approved substitute.

### Bachelor of Arts

#### Freshman year

English 100 and core option .....	10 credits
History 101-102 or 102-103 .....	10 credits
Journalism 100 .....	5 credits
Philosophy 110, 220 .....	10 credits
Social Science core options .....	10 credits

#### Sophomore year

Journalism 200, 210, 250 .....	15 credits
Modern Language, Fine Arts or Speech/Drama options .....	15 credits
Philosophy core option .....	5 credits
Social Science option .....	5 credits
Theology core options .....	5 credits

#### Junior year

English 200/300 options .....	10 credits
History 331 or 333 or 335 or 337 or 339 or 347 or 348 or approved substitutes ...	10 credits
Journalism 330 and 300/400 options .....	15 credits
Theology core option .....	5 credits
Electives .....	15 credits

#### Senior year

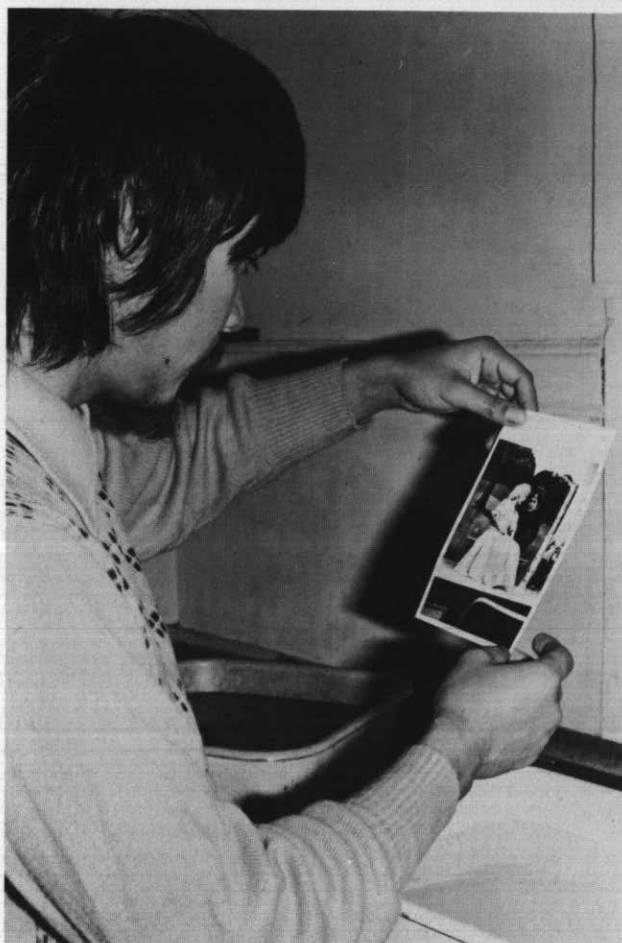
Journalism 300/400 options .....	15 credits
Mathematics/Science core options .....	10 credits
Electives .....	15 credits

Total . . . 180 credits

### Journalism Courses

<b>Jr 100</b>	<b>Introduction to Journalism</b>	<b>5 credits</b>
	Review of grammar for journalists. Introduction to journalistic style. Study of contemporary media content. Elements of media analysis. (fall)	
<b>Jr 200</b>	<b>Mass Communication and Society</b>	<b>5 credits</b>
	Historical press concepts; nature and functions of the mass media; social, political and economic roles; principles governing journalistic communication; responsibility of the reader. (fall)	





- Jr 210 Newswriting 5 credits**  
Elements of the news story; practice in gathering data for and writing news stories. Four classroom and one publication's laboratory session per week. Prerequisite: Jr 100 (winter)
- Jr 250 Newsediting 5 credits**  
Copy and proof editing procedures; headline writing, layout and makeup of the newspaper; photographic editing techniques. Four classroom and one publication's laboratory session per week. (spring)
- Jr 291 Special Topics 1-5 credits**  
**Jr 292 Special Topics 1-5 credits**  
**Jr 293 Special Topics 1-5 credits**
- Jr 310 Reporting Public Affairs 5 credits**  
Study of and practice in gathering and writing complex news stories based upon activities of government, judicial and community agencies. Prerequisite: Jr 210. (Biennially, fall)
- Jr 320 Photojournalism I 2 credits**  
**Jr 321 Photojournalism II 2 credits**  
Elementary principles of newsphotography, processing and picture editing. Photography for student publications. Prerequisite: Permission of department chairman. (Biennially, I-fall, II-winter)
- Jr 330) History of Journalism 5 credits**  
Study of the origins and growth of the American press from colonial to modern times. (Biennially)

- Jr 345 Law of the Press 3 credits**  
Constitutional guarantees and restrictions on freedom of information, with a study of significant cases; libel, copyright, privacy, postal regulations. (Biennially)
- Jr 350 Magazine and Feature Writing 5 credits**  
Elements of non-fiction articles for newspapers and magazines; actual writing for sale. (Biennially)
- Jr 355 Communications Graphics 5 credits**  
Basic typographic, layout and design concepts. Editing techniques for organizational publications. Planning and purchasing printing. (Biennially, winter)
- Jr 370 Editorial and Opinion Writing 5 credits**  
Nature, function and structure of persuasive writing; analysis of media editorials; practice in editorial writing. (Biennially, spring)
- Jr 380 Publication's I 1 credit**  
**Jr 381 Publication's II 1 credit**  
**Jr 382 Publication's III 1 credit**  
Supervised editorial work on The Spectator and The Aegis. Prerequisite: Permission of department chairman. (I-fall, II-winter, III-spring)
- Jr 430 Critical Writing 5 credits**  
Reading, discussion and writing of newspaper and magazine style reviews of books, movies, television and musical and theatrical presentations. (Biennially)
- Jr 440 Literature of Journalism 2 credits**  
Written and oral reports on selected works in journalism. Prerequisite: Permission of department chairman.
- Jr 460 Public Relations 5 credits**  
Public relations as a management function; policies, procedures and problems; program analysis and case study. (Biennially, spring)
- Jr 465 Publications' Advising 5 credits**  
Policies, techniques and problems in advising high school publications. (summer)
- Jr 480 Publications IV 1 credit**  
**Jr 481 Publications V 1 credit**  
**Jr 482 Publications VI 1 credit**  
Advanced, supervised editorial work on The Spectator and The Aegis. Prerequisite: Permission of department chairman. (IV-fall, V-winter, VI-spring)
- Jr 490 Journalism Ethics 3 credits**  
Seminar in contemporary ethical problems for journalists.
- Jr 491 Special Topics 1-5 credits**  
**Jr 492 Special Topics 1-5 credits**  
**Jr 493 Special Topics 1-5 credits**  
For journalism majors and minors only. Prerequisite: permission of department chairman.
- Jr 497 Independent Study 1-5 credits**  
**Jr 498 Independent Study 1-5 credits**  
**Jr 499 Independent Study 1-5 credits**  
Supervised research in communications; special projects; internships on media and affiliated agencies. For journalism students only. Prerequisite: Permission of department chairman.



## Military Science

Lt. Col. Archille O. Bourque, M.B.A., Chairman

### Objectives

The mission of the United States Army Detachment of Military Science is to train and ultimately commission as junior officers in the Army Reserve and Regular Army those students, male and female, who fulfill the academic and leadership requirements prescribed in the advanced program in conformance with the principles and educational aims of Seattle University. The program of instruction covers military fundamentals common to all branches of the service with particular emphasis on the application of the principles of leadership.

### Degree Offered

Bachelor of Science in Military Science

### General Program Requirements

Students in military science must satisfy core curriculum requirements of the University as given on page 24 of this bulletin. See programs of study for additional requirements.

### Programs

Three distinct programs are administered by the Military Science department: the basic course; the advanced course, through which the student may receive a commission in the army; and the degree program in military science.

**Basic Program** — The basic course is elective for all physically fit students at the University. The course consists of two hours of classroom instruction and one leadership laboratory of one hour per week for six academic quarters. Students may volunteer for the Army Reserve but will not be required to perform ready service training in excess of ROTC training. Participation in ROTC training alone is not creditable toward longevity for retirement or pay in the military service.

**Advanced Program** — The advanced program is elective for qualified students who have successfully completed the two-year basic course or who have successfully completed a summer camp of approximately six weeks in duration prior to their junior year. Applicants for the program are required to achieve a satisfactory grade on the ROTC qualifying ex-

amination, be eligible for graduation and commissioning prior to reaching their 28th birthday, fulfill the medical requirements of the Army physical examination and satisfy the academic requirements of the University in the major field they have selected. Final selection of candidates will be accomplished by a board of military staff officers. The advanced course consists of three hours of classroom instruction and one leadership laboratory per week for six academic quarters.

Students in the advanced program receive \$100 per month subsistence allowance during the two years in the program. Transfer students and other students who have not completed the basic program may be enrolled in the advanced course after successfully completing a summer camp of approximately six weeks in duration prior to their junior year. This camp will serve as a substitute for the two-year basic course.

Degree Programs — Requirements for the three degree programs in military science are listed below.

### Departmental Requirements

**Bachelor of Science in Military Science (Humanities and Social Science option)** — 40 credits of military science courses as listed below with a 25-credit minor concentration in humanities and/or social science.

**Bachelor of Science in Military Science (Science option)** — 40 credits of military science courses as listed below with a minor concentration in biology, chemistry, physics or psychology.

**Bachelor of Science in Military Science (Engineering option)** — 40 credits of military science courses with a concentration in engineering as listed below.

**Undergraduate Minor** — 40 credits for four-year students which must include MS 101, 102, 103, 201, 202, 203, 301, 302, 303, 304, 401, 402 and 403. Thirty-two credits for two-year ROTC program students which must include MS 204, 301, 302, 303, 304, 401, 402 and 403. In addition, attendance at seminars in map reading and military history while enrolled in 300 and 400 level courses is required in the two-year program.

**Leadership Laboratory** — Leadership development by learning the significance of military courtesy and discipline, customs and traditions of the service; development of leadership fundamentals through practical exercises and field training exercises; the function, duties, and responsibilities of junior leaders. The student will then learn to apply leadership principles, stressing responsibilities of the leadership and affording experience and developing potential through the planning and execution of military training and operations both in garrison and in the field. No formal examinations, observation and performance type evaluation.

One period per week and at least one weekend Field Training Exercise per quarter.

### Scholarships

Full tuition, fees and book scholarships for either one, two, three or four years are offered to selected students who desire a military career. In addition, scholarship students are paid \$100 per month. Further information concerning scholarships can be obtained by writing to Professor of Military Science, Seattle University.





### Bachelor of Science in Military Science Humanities and Social Sciences Option

#### Freshman year

English 100 and core option .....	10 credits
History core option .....	10 credits
Humanities/Social Science elective .....	5 credits
Military Science 101, 102, 103 .....	6 credits
Philosophy 110, 220 .....	10 credits

#### Sophomore year

Military Science 201, 202, 203 .....	6 credits
Modern Language 105, 106 .....	10 credits
Philosophy core option .....	5 credits
Political Science 160 and Social Science core option .....	10 credits
Theology core options .....	10 credits
Elective .....	5 credits

#### Junior year

Humanities/Social Science electives .....	10 credits
Mathematics 101 or 175 and 112 or 200 .....	10 credits
Mathematics/Science core option .....	5 credits
Military Science 301, 302, 303, 304 .....	16 credits
Political Science 418 .....	5 credits

#### Senior year

Humanities/Social Science electives .....	15 credits
Mathematics/Science core option .....	5 credits
Military Science 401, 402, 403 .....	12 credits
Electives .....	15 credits

Total . . . 180 credits

### Bachelor of Science in Military Science Science Option

#### Freshman year

English 100 and core option .....	10 credits
History core option .....	10 credits
Military Science 101, 102, 103 .....	6 credits
Philosophy 110, 220 .....	10 credits
Elective .....	5 credits

#### Sophomore year

Military Science 201, 202, 203 .....	6 credits
Modern Language 105, 106 .....	10 credits
Philosophy core option .....	5 credits
Political Science 160 and Social Science core option .....	10 credits
Theology core options .....	10 credits
Elective .....	5 credits

#### Junior year

Mathematics 101 or 175 and 112 or 200 .....	10 credits
Military Science 301, 302, 303, 304 .....	16 credits
Political Science 418 .....	5 credits
Science electives .....	15 credits

#### Senior year

Military Science 401, 402, 403 .....	12 credits
Science electives .....	25 credits
Electives .....	10 credits

Total . . . 180 credits

### Bachelor of Science in Military Science Engineering Option

#### Freshman year

English 100 and core option .....	10 credits
Mathematics 112 (or elective), 114, 134 .....	13 credits
Mechanical Engineering 102, 111, 112, 113 .....	12 credits
Military Science 101, 102, 103 .....	6 credits
Philosophy 110, 220 .....	10 credits

#### Sophomore year

History core option .....	10 credits
Mathematics 135, 136 .....	10 credits
Mechanical Engineering 281 .....	5 credits
Military Science 201, 202, 203 .....	6 credits
Physics 200, 201, 202 .....	15 credits

#### Junior year

Chemistry 114 .....	5 credits
Electrical Engineering 290 .....	5 credits
Military Science 301, 302, 303, 304 .....	16 credits
Philosophy core option .....	5 credits
Political Science 160 and Social Science core option .....	10 credits

#### Senior year

Engineering electives .....	15 credits
Military Science 401, 402, 403 .....	12 credits
Political Science 418 .....	5 credits
Theology core options .....	10 credits

Total . . . 180 credits

### Military Science Courses

#### MS 101 Preparation for Leadership 2 credits

Leadership and supervisory techniques. An analysis of leadership problems focusing on the leader, the led and the situation. Basic marksmanship and other selected military subjects. Two one-hour conferences and one leadership laboratory per week. (fall)

#### MS 102 Analysis of Conflict 2 credits

Definition and causes of war. The principles of warfare. Introduction to American military history focusing on its contribution to the development of the military art from the American Revolution to the conclusion of the Civil War. Two one-hour conferences and one leadership laboratory per week. (winter)



**MS 103 American Military History 2 credits**  
United States military history from 1865 to the present. A detailed study of the application of the military art in significant battles from the Indian Wars through the conflict in Viet Nam. Two one-hour conferences and one leadership laboratory per week. (spring)

**MS 201 Military Topographical Analysis 2 credits**  
Principles of land navigation, emphasizing terrain appreciation and evaluation, methods of orientation and aerial photography. Two one-hour conferences and one leadership laboratory per week. (fall)

**MS 202 Introduction to Tactical Training of the Individual Soldier 2 credits**  
Emphasis on combat formations and battle drill. An in-depth appraisal of the fire power and maneuverability of combat units, including mortars, artillery, tanks, anti-tank systems, air defense elements and helicopter support available to maneuver elements in tactical operations. Two one-hour conferences and one leadership laboratory per week. (winter)

**Ms 203 Concepts of Military Operations 2 credits**  
Small unit tactics oriented towards the responsibilities and duties of the leaders of squad size units. Study of principles of the offense, defense, and patrolling operations. Two one-hour conferences and one leadership laboratory per week. (spring)

**MS 204 Basic Summer Camp 4 credits**  
Map reading, United States arms and national security, military history and training in various military subjects. Six weeks during the summer at a military reservation designated by the Department of the Army. A substitute for the basic course for selected two-year program students. (summer)

**Ms 291 Special Topics 1-5 credits**  
**Ms 292 Special Topics 1-5 credits**  
**Ms 293 Special Topics 1-5 credits**

**Ms 301 Military Leadership and Teaching Principles 4 credits**  
Educational psychology as it pertains to the five stages of instructional techniques. Methods of instruction used in training, including preparation and

use of training aids. Branches of the Army and selected military subjects. Student presentations. Three one-hour conferences and one leadership laboratory per week. (fall)

**MS 302 Small Unit Tactics, Leadership and Communication 4 credits**  
Principles of offensive and defensive combat and their application to subordinate units of the infantry division. Insurgency and internal defense and development. Selected military subjects. Three one-hour conferences and one leadership laboratory per week. (winter)

**MS 303 Military Psychology and Leadership, Tactics 4 credits**  
Responsibilities and basic qualities of leadership, human behavior and adjustment to military life. Functions and special problems of military leadership. Preparation for advanced summer camp. Selected military subjects. Three one-hour conferences and one leadership laboratory per week. (spring)

**MS 304 Advanced Summer Camp 4 credits**  
Arms qualification; practical application of tactics; leadership training and practice. Six weeks during the summer at a military reservation designated by the Department of the Army. Prerequisite: MS 303. (summer)

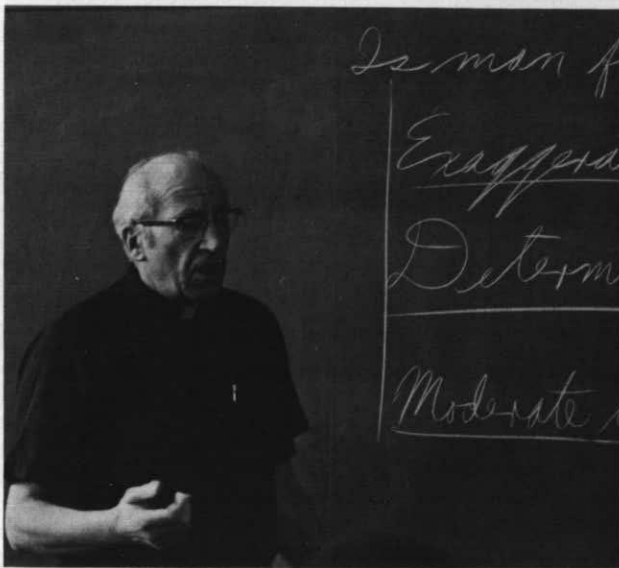
**MS 401 Theory & Dynamics of the Military Team 4 credits**  
Study of combat operations and the various military teams with emphasis on the planning and coordination necessary among command, staff, support elements and military intelligence. To include tactics and staff operations at battalion and division levels. Three one hour conferences and one leadership laboratory per week. (fall)

**MS 402 Military Law/Logistics and Management 4 credits**  
Provisions of the Uniform Code of Military Justice. Procedure prior to trial; apprehension and restraint; preferring action and investigating charges. Duties of the junior officer in the application of military justice and its role in military discipline. The Army logistical support system and management problems of the Military services. Three one hour conferences and one leadership laboratory per week. (winter)

**MS 403 The U.S. Role in World Affairs/Army Administration 4 credits**  
Analysis of the United States' interrelationship with other nations with emphasis on the military establishment. Role of the junior officer in unit administration and familiarization with Department of the Army publications. The Army Readiness Program. Pre-commissioning orientation. Three one hour conferences and one leadership laboratory per week. (spring)

**MS 404 Flight Training 4 credits**  
Consists of 36 hours ground school and 35½ hours flight instruction, dual and solo, conducted by FAA approved flight school. Costs paid by the Department of the Army. Private pilot's license may be obtained on completion of the course. Prerequisites: Must be enrolled as an MS IV in the Military Science program and meet physical requirements. Credit only when course is completed spring quarter. (fall, winter, spring)





## Philosophy

James B. Reichmann, SJ, Ph.D., Chairman

### Objectives

The task of philosophy is to study the world and man in terms of that which constitutes their inner-most unity and meaning. It seeks to discover those all-pervasive factors in the world which refuse to yield to the segregating tendencies of a fragmentary approach to knowledge and to truth. It strives to introduce the students to the language of universal communication whereby he might translate the complex manifold of human experience into relevant and creative meaning for himself and for society. It raises such searching questions as: What is the function of language? What is the meaning of knowing? What is change and is anything permanent? What does it mean to exist? What is the nature of value and can value be merely relative? What is man and his destiny? Can God's existence be rationally determined? What is the nature and origin of evil?

The philosophy taught at Seattle University strives to raise these and similarly significant questions in an atmosphere conducive to facilitating the student's search for truth. It unashamedly recognizes its debt to the past, particularly to those philosophers who have presented a realist view of man and his world compatible with the Judaeo-Christian vision of the universe. At the same time it realizes that to remain dynamically relevant to the contemporary age it must advance and grow and be ever open to new problems, new ideas, new contributions and new perspectives.

### Degree Offered

Bachelor of Arts  
Master of Arts

### General Program Requirements

Students in philosophy must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. In addition, students in philosophy must take 10 credits of language; 10 credits of fine arts; and 5 additional credits each of the following: English, history, mathematics/science, social science, theology and religious studies.

### Departmental Requirements

**Bachelor of Arts** — 55 credits of philosophy which must include PI 110, 220, 250 and 260 plus a program of seven upper division courses. These seven courses must include one from each of the following pairings: PI 340 or 350; 400 or 420; 460 or 465. Qualified students may substitute a written thesis for one of the required courses. Five credits are granted for the thesis which is written under the direction of a faculty member.

**Undergraduate Minor** — 35 credits of philosophy which must include PI 110, 220, 250, 260 and three upper division courses offered by the department.

**Master of Arts** — 45 credits of philosophy beyond the undergraduate major, which must include a 500 course in ancient, medieval, modern and contemporary philosophy (20 credit hours) and a written thesis (10 credits). In addition the student is required to take an elective associated with the thesis and a 5 credit 500 special topics reading course covering the period and/or problematic of the thesis. A reading knowledge of either French or German or of another language directly related to the subject matter of the thesis is required. Evidence of such proficiency must be given either through a written or oral examination prior to the beginning of the second quarter of graduate work, or three quarters (15 credits) of successfully completed language courses at the college level. A comprehensive written examination and an oral examination emphasizing the thesis and the period of the candidate's choice complete the program requirements.

### Bachelor of Arts

#### Freshman year

English 100 and core option .....	10 credits
History core option .....	10 credits
Philosophy 110, 220 .....	10 credits
Social Science core options .....	10 credits
Elective .....	5 credits

#### Sophomore year

English elective .....	5 credits
History elective .....	5 credits
Mathematics/Science core options .....	10 credits
Philosophy 250, 260 and seminar .....	15 credits
Theology core option .....	5 credits
Elective .....	5 credits

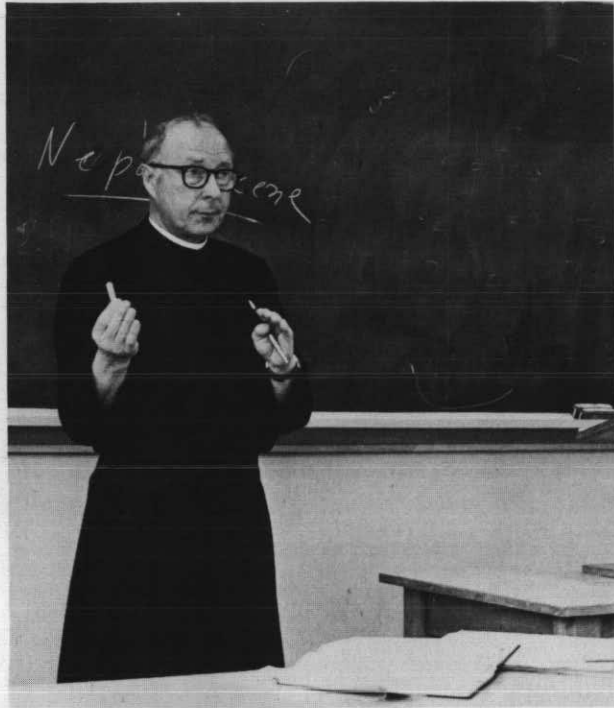
#### Junior year

Mathematics/Science elective .....	5 credits
Modern language 105, 106 .....	10 credits
Philosophy seminars .....	15 credits
Theology core option .....	5 credits
Electives .....	10 credits

#### Senior year

Fine Arts sequence .....	10 credits
Philosophy seminars .....	15 credits
Social Science elective .....	5 credits
Theology elective .....	5 credits
Electives .....	10 credits

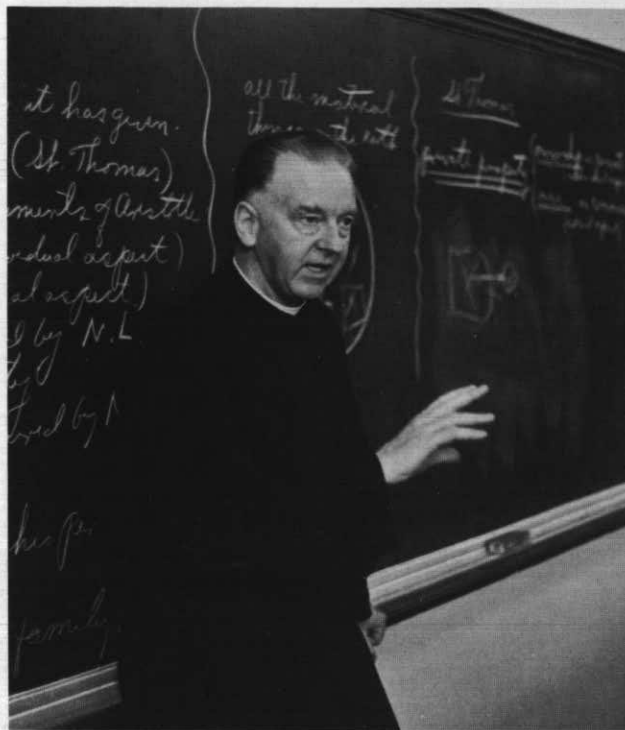
Total . . . 180 credits



### Philosophy Courses

	<p><b>PI 250 Ethics</b> <b>5 credits</b> General theory of moral behavior, ethics as a science, the purpose of human life and the means of attaining this goal. Applications of general ethical theory in specific instances. Prerequisite: PI 220.</p> <p><b>PI 252 Business Ethics</b> <b>5 credits</b> Application of general ethical theory to those problems directly related to the business world; employment practices, wages, advertising, honesty, strikes. Prerequisite: PI 220.</p> <p><b>PI 255 Medical Ethics</b> <b>5 credits</b> Application of general ethical theory to basic problems encountered in the medical profession; fees, professional secrecy, rights of patients, abortion, transplants, drugs. Prerequisite: PI 220.</p> <p><b>PI 260 Logic I</b> <b>5 credits</b> <b>PI 261 Logic II</b> <b>5 credits</b> I. Systematic treatment of traditional logic. The themes of communication and language, division and definition, propositions, syllogisms and the nature of science will be examined. II. Introduction to symbolic or mathematical logic from both an intuitive and formal standpoint. Elementary calculus of classes and relations and introduction to axiomatic set theory. Boolean algebra. For philosophy and mathematics majors.</p> <p><b>PI 280 19th Century Philosophy</b> <b>5 credits</b> Readings from source material of the 19th Century philosophers. Investigation of central topics, problems and teachings of selected authors from Hegel to Nietzsche. Prerequisite: PI 220.</p> <p><b>PI 285 20th Century Philosophy — The Analytic Tradition</b> <b>5 credits</b> Readings from source material from 20th Century analytic philosophers. Investigation of contemporary schools of logical positivism and linguistic analysis from Russell to Wittgenstein. Prerequisite: PI 220.</p> <p><b>PI 290 20th Century Philosophy — The Speculative Tradition</b> <b>5 credits</b> Readings from source material of 20th Century process philosophers from Bergson to Whitehead and of the phenomenological tradition from Husserl to Sartre. Prerequisite: PI 220.</p> <p><b>PI 291 Special Topics</b> <b>1-5 credits</b> <b>PI 292 Special Topics</b> <b>1-5 credits</b> <b>PI 293 Special Topics</b> <b>1-5 credits</b> Prerequisite: PI 220</p> <p><b>PI 295 Contemporary Philosophical Problems</b> <b>5 credits</b> In-depth study of one or more contemporary philosophical problems such as: language and meaning; knowledge and reality; body-mind; freedom and responsibility; God and evil; atheism.</p> <p><b>PI 300 Philosophy of Nature</b> <b>5 credits</b> Philosophical appraisal of the material universe, its nature, causes and activities, incorporating the mathematical and experimental findings into the philosophical account of the cosmos. Prerequisite: PI 220.</p> <p><b>PI 303 Philosophy of Science</b> <b>5 credits</b> Philosophical reflections on the historical development of scientific view of the cosmos. Readings from significant sources. Prerequisite: PI 220.</p>
<p><b>PI 110 Philosophical Problems — The World</b> <b>5 credits</b> Introduction to the nature of philosophic inquiry and its justification; examination of the basic metaphysical problems of language, logic, cause, movement, knowledge, reality, human existence and God. Presented within a global historical context by examining these problems as experienced by the pre-Socratics, Plato, Aristotle and selected medieval, modern and contemporary philosophers.</p> <p><b>PI 125 Introduction to Ancient Greek Philosophy</b> <b>5 credits</b> Readings from source material of the philosophy of the ancient Greeks. Investigation of the topics, problems and doctrines of the pre-Socratics, Plato and Aristotle.</p> <p><b>PI 150 Introduction to Medieval Philosophy</b> <b>5 credits</b> Synthesis of medieval philosophy in its historical perspective with a particular examination of the themes of Arabic, Scholastic and Nominalist metaphysics.</p> <p><b>PI 175 Introduction to Modern Philosophy</b> <b>5 credits</b> Readings from source material of the modern philosophers. Investigation of topics, problems and doctrines of selected authors from Descartes to Kant.</p> <p><b>PI 220 Philosophical Problems — Man</b> <b>5 credits</b> Systematic study of man, his nature and his powers. Special emphasis on the human knowing process and the problems of human freedom and personal responsibility. Prerequisite: PI 110.</p> <p><b>PI 230 Cognitional Analysis</b> <b>5 credits</b> Study of the dynamics of man's cognitional structure and of the implications of this dynamism for metaphysics and ethics based on Lonergan's "Insight" and related writings. Prerequisite: PI 220.</p>	





- PI 305 Philosophy of Science — The Behavioral Sciences** **5 credits**  
Study of the philosophical implications and presuppositions of the methodology and conceptual framework of the behavioral sciences; special emphasis on behavioral psychology and statistical analysis. Prerequisite: PI 220.
- PI 307 Philosophy of Science — The Life Sciences** **5 credits**  
Consideration of the basic problems concerning the meaning, origin, evolution and structure of organic life. Prerequisite: PI 220.
- PI 310 Contemporary Ethical Theory** **5 credits**  
Selected readings from contemporary moral philosophers such as Hare, Stevenson and Fletcher. Prerequisite: PI 220.
- PI 312 Contemporary Social Ethics** **5 credits**  
Moral problems facing urbanized man in his contemporary setting. Prerequisite: PI 220.
- PI 315 Value Theory** **5 credits**  
Survey and critique of various theories of value, including representatives of naturalism, utilitarianism, analysis, existentialism, formalism, moral sense. Prerequisite: PI 220.
- PI 320 19th Century Positivism — Comte and Mill** **5 credits**  
Intensive analysis of the positivist turn in philosophy from the viewpoint of Comte's "System of Positive Polity" and Mill's "A System of Logic" and "Principles of Political Economy." Prerequisite: PI 220.
- PI 325 Philosophy of Art** **5 credits**  
Philosophical reflection on the nature of art and its reality; beauty as a transcendental property of being and its relationship to art and the artist. Prerequisite: PI 220.

- PI 330 Philosophy of Education** **5 credits**  
Study of the nature of education, its significance for man and for society with emphasis on the several philosophies of education that have been influential in the American schools. Prerequisite: PI 220.
- PI 335 The Philosophy of History** **5 credits**  
Consideration of the aim and scope of history, the meaning of the historical event, the nature of historical explanation and the criterion for historical truth from the points of view of leading representatives of both the speculative and analytical schools. Prerequisite: PI 220.
- PI 338 Philosophy of Revolution** **5 credits**  
A philosophical analysis of the underlying meaning and causes of the social and political phenomenon of revolution with emphasis on ideological revolutionary developments since the 17th century. Prerequisite: PI 220.
- PI 339 Philosophy of Racial Conflict** **5 credits**  
A critical examination of the philosophical presuppositions of the historical phenomenon of racial conflict viewed as a derivative of cultural alienation. Prerequisite: PI 220.
- PI 340 Plato** **5 credits**  
Selected readings from Plato's "Dialogues." Prerequisite: PI 220.
- PI 350 Aristotle** **5 credits**  
Selected readings from the writings of Aristotle. Prerequisite: PI 220.
- PI 385 Epicureans, Stoics and Skeptics** **5 credits**  
Survey of Post-Aristotelian and Pre-Plotinian philosophy, with stress on the writings of the Epicureans, Stoics and Skeptics. Prerequisite: PI 220.
- PI 390 Plotinus** **5 credits**  
Selected readings from Plotinus' "Enneads." Prerequisite: PI 220.
- PI 400 St. Augustine** **5 credits**  
Readings from the important writings of St. Augustine, such as "The Confessions," "City of God." Prerequisite: PI 220.
- PI 410 Early Medieval Philosophy** **5 credits**  
Philosophy of the early medieval period from Augustine to Aquinas, including Scotus Erigena, the Arab and Jewish philosophers, Abelard, John of Salisbury, Roger Bacon, Anselm, Albert the Great and Bonaventure. Prerequisite: PI 220.
- PI 420 St. Thomas Aquinas** **5 credits**  
Selected readings from the writings of St. Thomas Aquinas. Prerequisite: PI 220.
- PI 440 Renaissance Philosophy** **5 credits**  
Survey of readings from important Renaissance philosophers and Humanists such as Nicholas of Cusa, Machiavelli, Erasmus, Thomas More, Ficino, Pomponazzi, Bruno. Prerequisite: PI 220.
- PI 450 Descartes** **5 credits**  
Consideration of his principal writings, discussion of clear and distinct ideas, the methodic doubt, the existence and attributes of God, the nature of the material world, the mind-body problem. Prerequisite: PI 220.

**ARTS AND SCIENCES/65**  
**Philosophy**

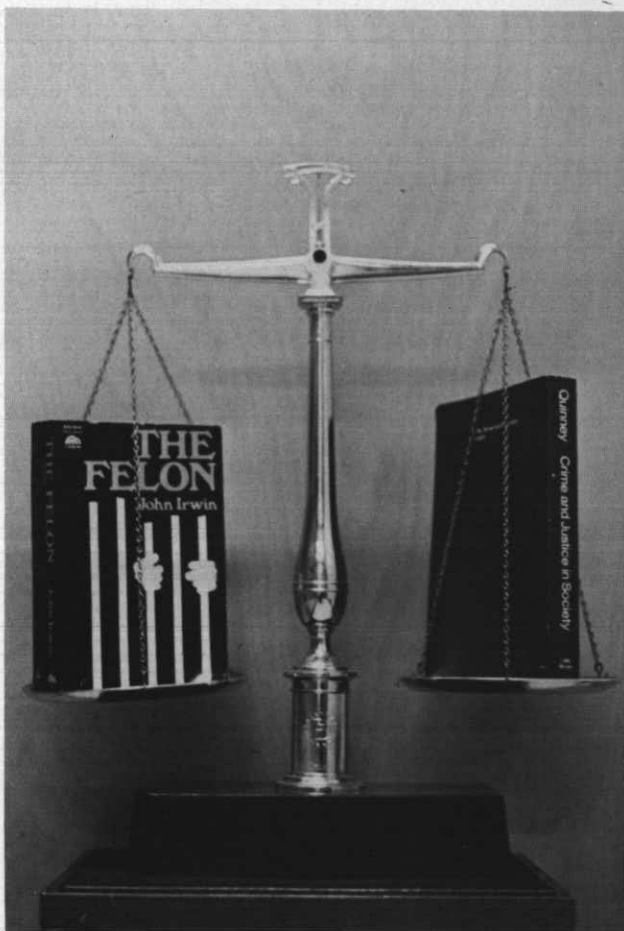
- PI 455 British Empiricism of the Seventeenth Century** 5 credits  
Study of British Empiricism with special emphasis on Locke, Berkeley and Hume. Prerequisite: PI 220.
- PI 456 17th Century Rationalism** 5 credits  
Philosophical systems of Spinoza and Leibnitz. Prerequisite: PI 220.
- PI 460 Kant** 5 credits  
Seminar in "The Critique of Pure Reason" with a brief supplementary discussion of the moral rationalism of Emmanuel Kant. Prerequisite: PI 220.
- PI 465 Hegel** 5 credits  
Philosophy of Hegel with emphasis on "The Phenomenology of Spirit" and "The Philosophy of History." Prerequisite: PI 220.
- PI 467 Philosophy of Communism** 5 credits  
Investigation of selected writings from such framers of the philosophy of communism as Marx, Engels, Feuerbach and Lenin. Prerequisite: PI 220.
- PI 468 Marx** 5 credits  
Introduction to the dialectical materialism of Karl Marx through a study of "Economic and Philosophical Manuscripts," "Das Kapital," and "The Communist Manifesto;" historical background and philosophical origins of Marxism; Prerequisite: PI 220.
- PI 470 Philosophy of Society** 5 credits  
Consideration of the social nature of man, purpose of society, social groups, the common good, subsidiarity, pluralism and authority. Prerequisite: PI 220.
- PI 475 Linguistic Analysis** 5 credits  
Representative readings from among Wittgenstein, Ayer, Ryle, Austin, Strawson, Hampshire, Hare. Prerequisite: PI 220.
- PI 478 Process Philosophy** 5 credits  
Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.
- PI 480 American Philosophy** 5 credits  
Survey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.
- PI 482 Husserl** 5 credits  
Study of his phenomenology from representative readings from the "Ideen," "Cartesian Meditations" and "Formal and Transcendental Logic." Prerequisite: PI 220.
- PI 483 Heidegger** 5 credits  
Investigation of his theory of being and its relation to man and to time, especially as seen in "Being and Time" and "The Introduction to Metaphysics." Prerequisites: PI 220, 460 and 465.
- PI 484 Merleau-Ponty** 5 credits  
His philosophy as set forth in "The Phenomenology of Perception" and "The Structure of Behavior." Prerequisite: PI 220.
- PI 485 Paul Ricoeur — Philosophy of Will** 5 credits  
Introduction into Ricoeur's methodology and phenomenology of will, especially as contained in his "Freedom and Nature." Prerequisite: PI 220.

- PI 487 Contemporary Atheism** 5 credits  
Selected readings from Feuerbach and Nietzsche and from such existentialists as Sartre and Camus. Prerequisite: PI 220.
- PI 488 Early Existentialism** 5 credits  
Philosophies of Kierkegaard, Nietzsche and Dostoevsky, with emphasis on their existentialist trends. Prerequisite: PI 220.
- PI 489 Existentialism** 5 credits  
Selected readings from contemporary existentialist figures including Sartre, Heidegger, de Beauvoir, Camus, Jaspers, Marcel and Tillich. Prerequisite: PI 220.
- PI 490 Jean-Paul Sartre** 5 credits  
Analysis of Sartre's phenomenological ontology of "Being and Nothingness" and its contribution to existential phenomenology. Prerequisite: PI 220.
- PI 491 Special Topics in Philosophy** 1-5 credits  
**PI 492 Special Topics in Philosophy** 1-5 credits  
**PI 493 Special Topics in Philosophy** 1-5 credits
- PI 494 Seminar** 5 credits  
**PI 495 Seminar** 5 credits  
**PI 496 Senior Seminar** 5 credits  
Specially directed projects in research. Limited to seniors in Arts and Sciences. Prerequisite: PI 220 and at least two other courses in the 300/400 series.
- PI 497 Independent Study** 1-5 credits  
**PI 498 Independent Study** 1-5 credits
- PI 499 Thesis** 1-5 credits  
Original philosophical investigation under the direction of a faculty member appointed by the chairman of the department. Prerequisite: PI 220.

**Graduate Courses**

- PI 510 Plato** 5 credits  
**PI 520 Aristotle** 5 credits  
**PI 525 Epicureans** 5 credits  
**PI 530 St. Augustine** 5 credits  
**PI 535 Early Medieval** 5 credits  
**PI 540 St. Thomas Aquinas** 5 credits  
**PI 550 Descartes** 5 credits  
**PI 552 British Empiricists** 5 credits  
**PI 554 17th Century Rationalism** 5 credits  
**PI 560 Kant** 5 credits  
**PI 565 Hegel** 5 credits  
**PI 570 American Philosophy** 5 credits  
**PI 580 Kierkegaard and Nietzsche** 5 credits  
**PI 583 Sartre** 5 credits  
**PI 584 Merleau-Ponty** 5 credits  
**PI 585 Heidegger** 5 credits  
**PI 586 Contemporary Ethical Theory** 5 credits  
**PI 587 Value Theory** 5 credits
- PI 591 Special Topics** 1-5 credits  
**PI 592 Special Topics** 1-5 credits  
**PI 593 Special Topics** 1-5 credits
- PI 595 Individual Research** 5 credits  
**PI 596 Individual Research** 5 credits  
**PI 597 Individual Research** 5 credits
- PI 599 Thesis** 10 credits





## Police Science and Administration

Eugene M. Corr, M.P.A., Director

### Objectives

The Police Science and Administration degree program seeks to offer academic preparation for professional performance in an expanding law enforcement role requiring a new scope of involvement and a spirit of inquiry; to provide an educational background in operational and managerial concepts and techniques in preparation for future positions of increasing responsibility in the management of police services; to provide students with a liberal arts education; and to contribute significantly to the improvement of the quality of police services.

Graduates of the program may qualify for careers in public and private law enforcement, criminal investigation, crime prevention, law enforcement training, education and planning, and other components of the criminal justice system.

### Degree Offered

Bachelor of Police Science and Administration

### General Program Requirements

Candidates must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. Because of the interdisciplinary nature of the

degree program, majors are required to take 15 credits in sociology; 15 credits in political science; 15 credits in psychology; and 10 credits in economics.

### Degree Requirements

Bachelor of Police Science and Administration — 55 credits in PSA which must include 20 credits in the Police sequence; 20 credits in the Administration sequence; and 15 credits selected by the degree candidate from either sequence.

### Bachelor of Police Science and Administration

#### Freshman and Sophomore years

English 100 and core option .....	10 credits
History core option .....	10 credits
Mathematics-Science core option .....	10 credits
Police Science Administration .....	5 credits
Philosophy option .....	15 credits
Theology option .....	10 credits
Economics .....	10 credits
Political Science .....	5 credits
Sociology .....	5 credits
Psychology .....	5 credits
Elective .....	5 credits

#### Junior year

Psychology .....	10 credits
Political Science .....	10 credits
Police Science and Administration .....	10 credits
Sociology .....	10 credits
Elective .....	5 credits

#### Senior year

Police Science and Administration .....	40 credits
(Police Sequence .....	20 credits)
(Administration Sequence .....	20 credits)
Elective .....	5 credits

Total . . . 180 credits

### Police Science and Administration Courses

PSA 291 Special Topics	1-5 credits
PSA 292 Special Topics	1-5 credits
PSA 293 Special Topics	1-5 credits

#### PSA 350 Police and the Community 5 credits

The role of police in the community; relationships with individuals, groups and community organizations. Analysis of ethnic, cultural and economic differences as factors in the administration of justice; causes of tension and conflict; positive and negative factors in the control of hostilities; community responsibility for the administration of justice.

#### PSA 352 Comparative Police Systems 5 credits

Comparative analysis of police systems in the United States and selected foreign countries. Emphasis on the administration and organizational aspects, functions and process at work in selected foreign police systems. The relationships of the police to the government and the people they serve will also be analyzed.

**PSA 354 Police Planning** 5 credits  
Survey of planning tools and techniques. Development of long and short range goals. Data collection, processing and analysis. Budgeting. Design of evaluation and monitoring systems. Calculation, interpretation and applicability of special techniques.

**PSA 355 Crime Prevention** 5 credits  
Nature and causes of crime and deviant behavior; analysis of theory and methods of prevention; planning for elimination of conditions conducive to crime; demographic and ecological factors in the incidence and distribution of crime and delinquency. Emphasis on methods of early pre-crime deterrence and diversionary techniques.

**PSA 356 Industrial Security** 5 credits  
Historical, philosophical and legal basis of private security. Role of security in modern industrial society. Administrative, personnel and physical aspects of the security field. Review of security and special problems, protective systems and measures taken by industry, retail stores and private police.

**PSA 360 Society and Justice** 5 credits  
Survey of criminal justice process from arrest through release; the relationship and respective responsibilities of the police, the prosecutor, the defense, the courts, the prisons and corrections, as each integrates into a system designed to reduce criminal behavior.

**PSA 362 Deviant Behavior** 5 credits  
An overview of what American society generally regards as deviant behavior. Emphasis is placed on the results of stigmatization and the acceptance of low self-esteem.

**PSA 365 Probation and Parole** 5 credits  
Examination of current trends in probation, parole, supervision, the legal aspects, research, prediction and personnel.

**PSA 366 Corrections** 5 credits  
Analysis of the various post-arrest treatment methods applied to offenders; examination of rehabilitative versus punishment theories; evaluation of psychiatric and psychological group treatment methods, reality therapy and other approaches to behavior modification; examination of the correctional institution and community-based corrections.

**PSA 378 Field Experience I** 1-5 credits

**PSA 379 Field Experience II** 1-5 credits  
Direct observation, supervised practical experience and academic study in a selected law enforcement agency of organization in the criminal justice system.

**PSA 491 Special Topics** 1-5 credits

**PSA 492 Special Topics** 1-5 credits

**PSA 493 Special Topics** 1-5 credits  
Prerequisite: Upper division standing and permission.

**PSA 497 Individual Research** 1-5 credits  
By arrangement, with professional supervision. Prerequisite: Upper division standing and permission.

**PSA 498 Independent Study** 1-5 credits  
Prerequisites: Upper division standing and permission.



## Political Science

Ben Cashman, Ph.D., Chairman

### Objectives

The curriculum in political science introduces the student to political values, trains him in political analysis and informs him of government processes at the international, national, state and local level. It prepares students for graduate study or for careers in government, research, teaching or private enterprise where either a knowledge of political science or a broad liberal arts background is required.

The Bachelor of Public Affairs program is designed to give the academic and professional background for beginning level staff, professional and research positions in departments and agencies of the city, county, state and national government. These positions would be on the junior management level and the expectation is that normal progression would lead to leadership roles.

### Degrees Offered

Bachelor of Arts  
Bachelor of Public Affairs

### General Program Requirements

Students in political science must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. Political science majors are strongly encouraged to take additional courses in English, history, philosophy and theology and religious studies and are advised to enroll in courses in economics, psychology, sociology, fine arts and languages. Students who plan to attend law school after graduating in political science should take accounting.

### Departmental Requirements

Bachelor of Arts — 60 credits of political science which must include PIs 150 and 160. Majors must select two courses in each of the four major subdivisions of the department and two additional in the area in which they intend to specialize. The four major subdivisions of the department and the applicable courses are: American Government and Politics — PIs 214, 280, 324, 325, 370, 371, 372, 374, 375, 418, 419.



**68/ARTS AND SCIENCES**  
**Political Science**

International Relations and Foreign Policy — Pls 249, 350, 360, 362, 385, 390, 391, 437, 438.

Comparative and Foreign Governments — Pls 200, 315, 330, 335, 340, 341, 342, 400, 402.

Political Thought and Theory — Pls 242, 351, 353, 354, 355 490.

**Bachelor of Public Affairs** — 60 credits of political science which must include Pls 150 and 160; one course from three of the departmental subdivisions; 6 to 15 credits in internship (Pls 488 or 489) in a public governmental agency; remaining credits in the area of specialization (American Government or International Relations). See Bachelor of Arts program above for departmental subdivisions and appropriate courses.

**Undergraduate Minor** — 30 credits which must include Pls 150 and 160 and one course from each of the four major subdivisions of the department.

**Bachelor of Arts**

**Freshman year**

English 100 and core option ..... 10 credits  
 History core options ..... 10 credits  
 Philosophy 110, 220 ..... 10 credits  
 Political Science 150, 160 ..... 10 credits  
 Social Science core option ..... 5 credits

**Sophomore year**

Philosophy core option ..... 5 credits  
 Political Science 200 series ..... 10 credits  
 Social Science core option ..... 5 credits  
 Theology core options ..... 10 credits  
 Electives ..... 15 credits

**Junior year**

Mathematics/Science core options ..... 10 credits  
 Political Science 300 series ..... 20 credits  
 Electives ..... 15 credits

**Senior year**

Political Science 400 series ..... 20 credits  
 Electives ..... 25 credits

Total . . . 180 credits

**Bachelor of Public Affairs**

**Freshman year**

English 100 and core option ..... 10 credits  
 History core option ..... 10 credits  
 Philosophy 110, 220 ..... 10 credits  
 Political Science 150, 160 ..... 10 credits  
 Psychology 100 or Sociology 101 ..... 5 credits

**Sophomore year**

Economics 271 ..... 5 credits  
 Philosophy core option ..... 5 credits  
 Political Science 200, 214 ..... 10 credits  
 Theology core options ..... 10 credits  
 Electives ..... 15 credits

**Junior year**

Mathematics/Science core options ..... 10 credits  
 Political Science 249, 324, 353, 370 ..... 20 credits  
 Electives ..... 15 credits

**Senior year**

Political Science 325 or 371 or 372 or 374  
 or 418 or 419 (any four) ..... 20 credits  
 Political Science 488 or 489 ..... 10 credits  
 Electives ..... 15 credits

Total . . . 180 credits



**Political Science Courses**

**Pls 150 Introduction to Political Science 5 credits**  
 Study of concepts and tools used by political science; foundations of politics; development of the state and political and legal institutions; comparisons of various forms of government; definitions of key terms.

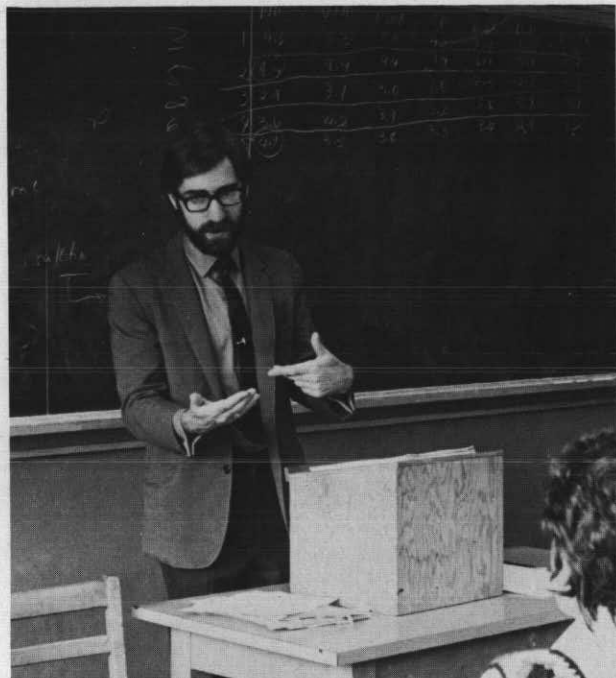
**Pls 160 American National Government 5 credits**  
 Study of the foundations, structures, functions of the executive, legislative and judicial branches of the national government and their inter-relations with the popular processes of government.

**Pls 200 Comparative European Democracies 5 credits**  
 Analysis of selected foreign democratic systems; constitutional and ideological principles, governmental forms, practices and problems.

**Pls 214 Government and the Economy 5 credits**  
 Government regulation and promotion of business, agricultural, labor and consumer interests. The regulatory agencies. Government corporations, anti-poverty programs, Government economic Stabilization policies, critique of American capitalism.

**Pls 242 American Political Thought 5 credits**  
 Study of American political traditions; Puritanism, revolutionary thought, federalism, Jeffersonianism, intellectual democracy, slavery, progressivism, pragmatism, social utilitarianism and political thought in law and literature.

**Pls 249 Introduction to International Politics 5 credits**  
 Analysis of the dynamic forces in international relations; power nationalism, sovereignty, colonialism, imperialism, theories of war and peace.



**Pls 280 The Judicial Process** 5 credits  
Overview of the role of the Supreme Court in American political life; the powers and limitations of the judiciary; individual rights in legal conflicts; study of selected key cases. Designed especially for non-majors.

**Pls 290 Parliamentary Procedure** 3 credits  
Parliamentary procedure based on the practice of Great Britain and the United States as summarized by leading authorities on parliamentary law. Practicum sessions, the writing and analyzing of Constitutions and the politics inherent in parliamentary procedure.

**Pls 291 Special Topics** 1-5 credits  
**Pls 292 Special Topics** 1-5 credits  
**Pls 293 Special Topics** 1-5 credits

**Pls 315 Comparative Totalitarian Systems** 5 credits  
Study of 20th Century totalitarian ideologies and their influence on governmental functions and processes. Comparative study of selected communist states, military dictatorships and nationalist-authoritarian states.

**Pls 324 Political Parties and Interest Groups** 5 credits  
Theories, organization, strategy and leadership of American political parties, campaigns and party leadership of American political parties, campaigns and party leadership. Role of agrarian, labor, professional, educational, business and ethnic groups in the American political process, their impact on institutions and processes of government.

**Pls 325 The Legislative Process** 3 credits  
Analysis of American state and national legislative processes; legislative politics; the role of the legislature in the political system; lobbying; theories of representation.

**Pls 330 Government of the Soviet Union** 5 credits  
Study of the ideological foundations of Soviet government, the functions of government, the role of the Party, the military and Soviet law.

**Pls 335 Government of Communist China** 5 credits  
Study of the structure, function and processes of contemporary Chinese government; the role of the Party and the military; government administration and the personalities of the top leadership.

**Pls 340 Comparative Politics of Asia** 5 credits  
Analysis of selected Asian systems; governmental forms and ideologies; problems of nation-building; inter-state relations in the area.

**Pls 341 Comparative African Systems** 5 credits  
Analysis of selected governments of Africa; constitutionalism, militarism, economic development and social change.

**Pls 342 Comparative Latin American Systems** 5 credits  
Analysis of selected governments of Latin America; nationalism, imperialism, revolutionary models and problems of economic development and social change.

**Pls 350 International Law** 5 credits  
Fundamentals of international law; states and international law; the individual in international law; creation; application and enforcement of international law.

**Pls 351 Political Thought: Ancient and Medieval** 5 credits  
Critical examination of political ideas from the pre-Socratics to 1400. Middle Eastern as well as Western Medieval ideas will be considered with emphasis on the reading of source materials.

**Pls 352 Political Thought from the Middle Ages to the Reformation** 5 credits  
Critical examination of the political ideas of the Church Fathers, the Church-State Controversies, Scholasticism, and the Renaissance and Reformation periods.

**Pls 353 Modern Political Thought** 5 credits  
Political ideas from Machiavelli through Hobbes, Locke, Montesquieu, Rousseau, the English Utilitarians, 19th Century non-Marxian Socialism.

**Pls 354 Comparative Marxist Political Theories** 5 credits  
Critical examination of the chief theories developed by Marx, Engels, Lenin, Mao Tse Tung, Tito, Braz and certain revisionists.

**Pls 355 Recent Political Theory** 5 credits  
Critical analysis of political theories from Marx to the present.

**Pls 360 Contemporary International Relations in Europe** 5 credits  
European diplomacy and international relations from World War I to the present; contemporary developments and prospects for the future.



**70/ARTS AND SCIENCES**  
**Political Science**

<p><b>Pls 361 Contemporary International Relations in Asia</b> <b>5 credits</b> Asian diplomacy and international relations from World War I to the present; the Western powers in Asia; the Far East in world politics.</p> <p><b>Pls 362 Contemporary International Relations in Africa</b> <b>5 credits</b> Role of Africa in world politics from World War I to the present; the Western Powers in Africa; African nations in the United Nations.</p> <p><b>Pls 370 Public Administration</b> <b>5 credits</b> Role of public administration in the political system; relationship of bureaucracy to the executive, judicial and legislative branches of government, the budgetary process, personnel administration, organization theory; control of the bureaucracy.</p> <p><b>Pls 371 State Government and Politics</b> <b>5 credits</b> Comparative analysis of American state governments including the executive, judicial and legislative branches of government, state party politics; policy outputs of state governments; state-local, interstate and state-national intergovernmental relations.</p> <p><b>Pls 372 Urban and Metropolitan Government and Politics</b> <b>5 credits</b> Problems of large American cities with special emphasis on transportation, housing, public safety and planning problems. Fiscal problems of American cities; analysis of the types of American city government; metropolitan government; public school politics.</p> <p><b>Pls 374 The American Presidency</b> <b>5 credits</b> Analysis of the powers of American presidents: relationship with Congress, bureaucracy, judiciary, public, private sector of the economy and with foreign governments. Emphasis on analysis of the activities of the incumbent president and his contemporaries.</p> <p><b>Pls 375 Minority Politics in the United States</b> <b>5 credits</b> Examinations of the non-white American in political and legal perspective and an analysis of alternatives for change. Consideration of Native Americans, Chicanos and Asian-Americans with special focus on the Black political experience. Prerequisite: Pls 160 or permission.</p> <p><b>Pls 385 Peace and The United Nations</b> <b>5 credits</b> Introduction to the history, theories and problems of international organizations; the league of Nations and the United Nations and the Specialized Agencies.</p> <p><b>Pls 390 Diplomatic and Consular Practices</b> <b>3 credits</b> Analysis of American foreign policy-making; the Constitutional framework; operations of the Department of State and overseas missions; diplomatic privileges of immunities.</p> <p><b>Pls 391 United States Foreign Policy</b> <b>5 credits</b> Constitutional framework; major factors in formulation and execution of foreign policy; American policy in Europe, the Near East, Africa, the Far East and in Latin America historically and current.</p> <p><b>Pls 400 Comparative Political Institutions</b> <b>5 credits</b> Comparative study of the nature, structure and function of the major institutions of government through</p>	<p>the use of recent approaches to politics, political culture, systems analysis and the developmental model. Prerequisites: Pls 200 and 315.</p> <p><b>Pls 402 Comparative Politics of the Middle East</b> <b>5 credits</b> Study of the nature of the political conflict between Israel and her Arab neighbors; special emphasis on the political institutions of Egypt and Israel.</p> <p><b>Pls 418 Constitutional Law</b> <b>5 credits</b> Growth, philosophy and development of the United States Constitution as reflected in decisions of the Supreme Court with emphasis on the role of the Court in contemporary America. Prerequisite: Junior or senior standing.</p> <p><b>Pls 419 The Supreme Court and the Bill of Rights</b> <b>5 credits</b> Interpretation of the Bill of Rights by the Supreme Court and the impact on the individual and the States. Prerequisite: Junior or senior standing.</p> <p><b>Pls 435 Politics of Developing Countries</b> <b>5 credits</b> Emergence of nationalism, resistance and conflict in the modernization process, economic modernization, patterns and problems of political development.</p> <p><b>Pls 437 Peace Movements and World Government</b> <b>5 credits</b> An analysis of the theoretical basis of regionalism and universalism as approaches to world peace. A study of current regional experiments; proposals for revision of the U.N. Charter; World Federalism and World State. Trends and prospects.</p> <p><b>Pls 438 Contemporary World Politics</b> <b>5 credits</b> An examination of the dominant political forces on today's international scene and the effects of these forces on international relations, international law and international organizations. Trends and prospects toward peace and war today.</p> <p><b>Pls 488 Internship — American Government</b> <b>2-15 credits</b> <b>Pls 489 Internship — International</b> <b>2-15 credits</b> On-the-job experience with an appropriate governmental agency required for the BPA degree. Students may register for two or more credits per quarter; however, no more than 15 total intern credits may be earned. No letter grade will be given, only credit/no credit will be granted.</p> <p><b>Pls 490 Scope and Methods of Political Science</b> <b>2-5 credits</b> Analysis of the history, methodology and focus of research in political science. Current state of the discipline. Prerequisite: Permission of instructor.</p> <p><b>Pls 491 Special Topics</b> <b>2-5 credits</b> <b>Pls 492 Special Topics</b> <b>2-5 credits</b> <b>Pls 493 Special Topics</b> <b>2-5 credits</b></p> <p><b>Pls 494 Seminars</b> <b>2-5 credits</b> <b>Pls 495 Seminars</b> <b>2-5 credits</b> <b>Pls 496 Seminars</b> <b>2-5 credits</b></p> <p><b>Pls 497 Independent Study</b> <b>2-5 credits</b> <b>Pls 498 Independent Study</b> <b>2-5 credits</b> <b>Pls 499 Independent Study</b> <b>2-5 credits</b> (During 1970-1971 academic year the following numbers were used for independent study: Pls 440, 441, 450, 460, 461 and 470.)</p>
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## Prelaw

Ben Cashman, Ph.D., Adviser  
Sr. Christopher Querin, SP, Ph.D., Adviser

### Program

The best preparation and a requirement for entrance to many law schools is the completion of a four-year program for the bachelor's degree. Only a few law schools will admit students who have completed three years of undergraduate work.

In advising prelaw students, Seattle University follows the recommendations of the Association of American Law Schools. These stress comprehension and expression in words, critical understanding of human institutions and values with which the law deals, and creative power in thinking. These capacities may be developed through study in any of a number of departmental majors.

Entering students interested in law must declare a major in the field in which they are most interested and for which they are best suited. Those unable to make such a determination upon entrance will be enrolled in the General Studies program. The program of study of each prelaw student must be approved by the departmental adviser and the prelaw adviser should be consulted quarterly. During their junior year, students must acquaint themselves with the entrance requirements of the law school they plan to attend and make arrangements to take the law school admissions test. The application form and the instruction booklet for this test may be obtained from the prelaw adviser.



## Psychology

Thomas W. Cunningham, Ph.D., Chairman

### Objectives

The curriculum is designed for students who plan to work as professional psychologists and thus need a sound preparation for graduate study; for students who plan a career in any field dealing primarily with people, such as nursing, teaching, social work, guidance and personnel; or for those who desire a well-rounded education and thus need a basic knowledge and understanding of human behavior. The specific and unique role of the Psychology department is to provide a solid knowledge of psychology as an empirical science.

### Degrees Offered

Bachelor of Arts  
Bachelor of Science

### General Program Requirements

Students in psychology must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. See programs of study below for additional requirements.

Psychology majors may choose any minor but are advised to take mathematics, biology or sociology. For social work, the recommended curriculum is a major in psychology and a minor in sociology. Premedical students may take a Bachelor of Science in psychology. All psychology majors must obtain a grade of C or higher in those courses listed below under departmental requirements, and must maintain a 2.00 grade point average in all other psychology courses.



## 72/ARTS AND SCIENCES

### Psychology

#### Departmental Requirements

Bachelor of Arts — 45 credits of psychology which must include Psy 100, 201, 301 and 401.

Bachelor of Science — 45 credits of psychology which must include Psy 100, 201, 202, 301, 330, 401, 402 and a minimum of 40 credits of mathematics and physical science.

Undergraduate Minor — 30 credits of psychology which must include Psy 100.

#### Bachelor of Arts

##### Freshman year

English 100.....	5 credits
History core option .....	10 credits
Mathematics/Science core option .....	5 credits
Psychology 100, 201 .....	10 credits
Electives .....	15 credits

##### Sophomore year

Mathematics/Science core option .....	5 credits
Philosophy 110, 220 .....	10 credits
Psychology elective .....	5 credits
Social Science core option .....	5 credits
Electives .....	20 credits

##### Junior year

English core option .....	5 credits
Psychology 301, 401 and electives .....	20 credits
Social Science core option .....	5 credits
Theology core options .....	10 credits
Elective .....	5 credits

##### Senior year

Philosophy core option .....	5 credits
Psychology electives .....	10 credits
Electives .....	30 credits

Total . . . . 180 credits

#### Bachelor of Science

##### Freshman year

English 100.....	5 credits
History core option .....	10 credits
Mathematics/Science electives .....	15 credits
Psychology 100 .....	5 credits
Electives .....	10 credits

##### Sophomore year

Mathematics/Science electives .....	10 credits
Philosophy 110, 220 .....	10 credits
Psychology 201, 202 and elective .....	12 credits
Social Science core option .....	5 credits
Electives .....	8 credits

##### Junior year

English core option .....	5 credits
Mathematics/Science electives .....	10 credits
Psychology 301, 330 and elective .....	15 credits
Social Science core option .....	5 credits
Theology core options.....	10 credits

##### Senior year

Mathematics/Science elective .....	5 credits
Philosophy core option .....	5 credits
Psychology 401, 402 and elective .....	15 credits
Electives .....	20 credits

Total . . . . 180 credits



#### Psychology Courses

##### Psy 100 Introductory Psychology 5 credits

General introduction to the data of scientific psychology, including its nature, scope and method; organic, environmental and personal factors that influence human behavior. (fall, winter, spring)

##### Psy 201 Statistics I 5 credits

##### Psy 202 Statistics II 2 credits

I. Basic descriptive methods; measures of central tendency, variability, correlation and regression; inferential statistics, hypothesis testing, binomial probability, t-tests, Chi-square, simple analysis of variance. II. More complex analyses; factorial designs and non-parametric statistics. Prerequisite: Psy 201 or 202. (I-fall, winter, spring, II-winter)

##### Psy 210 Personality Adjustment 5 credits

The normal personality; self-knowledge and self-actualization; personality adjustment problems; various inadequate reactions, escape and defense mechanisms; positive mental health. Prerequisite: Psy 100 (winter, spring)

##### Psy 291 Special Topics 1-5 credits

##### Psy 292 Special Topics 1-5 credits

##### Psy 293 Special Topics 1-5 credits

##### Psy 301 History and Schools of Psychology 5 credits

Survey of the history of psychology, including the classic periods of structuralism, functionalism, behaviorism, psychoanalytic schools and Gestalt. Prerequisite: Psy 100. (fall)

##### Psy 302 Contemporary Theories 5 credits

Critical examination of the major theories, issues and methodology in psychology since 1935; emphasis on personality, learning and perception. Prerequisite: Psy 301 or permission. (winter)

##### Psy 315 Abnormal Psychology 5 credits

Survey of abnormal mental and emotional life; symptoms, nature and causes of psychological disorders; abnormalities of specific functions; theories of etiology. Prerequisite: Psy 100. (fall)

##### Psy 322 Psychology of Growth and Development 5 credits

Development from infancy; formative aspects of childhood; puberty; characteristics and special problems of adolescents; emotional maturation. Prerequisite: Psy 100 or equivalent. (fall, winter, spring)

- Psy 330 Physiological Psychology** 5 credits  
Biological basis of behavior; cerebrospinal, autonomic and sensory systems; endocrine glands, relation of the brain to behavior. Prerequisites: Psy 100 and human physiology. (spring)
- Psy 380 Measurement in Psychology** 5 credits  
Principles of psychological measurement; nature, uses and limitations of psychological testing; reliability, validity. Prerequisite: Psy 201. (winter)
- Psy 381 Psychological Tests** 3 credits  
Survey of commonly used tests; aim, content, administration, scoring and interpretation. Prerequisite: Psy 380. (spring)
- Psy 390 Computer Research Methods** 3 credits  
Use of the electronic digital computer in behavioral science research. Laboratory session requires console technique and use of data processing equipment. Three lecture and three laboratory hours per week. Prerequisites: Psy 201. (winter)
- Psy 401 Experimental Laboratory Psychology I** 5 credits
- Psy 402 Experimental Laboratory Psychology II** 5 credits  
I. Nature and interpretation of experimentation, basic experimental design; psychophysical methods; sensory and perceptual processes. II. Learning, student experience with animal conditioning. Three lecture and four laboratory hours per week. Prerequisites: Psy 100 and 201 for 401; 401 for 402. (I-fall, spring, II-winter)
- Psy 409 The Psychology of School Adjustment** 3 credits  
Study of non-psychiatric personality dynamics from the mental health viewpoint and with particular reference to school adjustment. (winter)
- Psy 427 The Counseling Interview** 5 credits  
Basic theory, principles and dynamics of the counselor-client relationship and the counseling process. Prerequisite: Permission. (spring)
- Psy 460 Group Dynamics** 5 credits  
Survey of theories and empirical studies of the dynamics of group behavior; emphasis on means of more effective and productive group performance. Prerequisite: Psy 210 or equivalent. (fall, winter)
- Psy 490 Symposium on Alcoholism** 2-5 credits  
Psychological, educational, physiological, social, industrial, psychiatric, therapeutic and rehabilitation aspects of the problem of alcoholism. Prerequisite: Junior or senior standing in psychology, sociology, premedicine or nursing, or permission. (winter)
- Psy 491 Special Topics in Psychology** 2-5 credits
- Psy 492 Special Topics in Psychology** 2-5 credits
- Psy 493 Special Topics in Psychology** 2-5 credits  
By arrangement. Prerequisite: Permission.
- Psy 494 Seminar** 2-5 credits  
Prerequisite: Permission. (fall)
- Psy 497 Individual Research** 2-5 credits
- Psy 498 Individual Research** 2-5 credits
- Psy 499 Individual Research** 2-5 credits  
By arrangement. Prerequisite: Permission.



## Rehabilitation

Ekkehard J. Petring, Ph.D., Director

### Objectives

The Rehabilitation Services Program is designed to train students to become vocational rehabilitation professionals who work with mentally and/or physically disabled persons. As Rehabilitation Specialists, their goal will be to move disabled individuals from a status of dependence to the level of maximum functioning of which they are capable. Accordingly, Rehabilitation Specialists deal with clients, primarily on a one-to-one basis, who have disabilities preventing them from obtaining or retaining employment. Based on the level of rehabilitative readiness, some of the disability groups Rehabilitation Specialists might work with include alcoholics, blind, deaf and hard-of-hearing, drug addicts, industrially injured, mentally ill, mentally retarded, public assistance recipients, the severely disabled and parolees, to name a few.

The program prepares students who, upon graduation, might become employed in public and private human service settings such as state vocational rehabilitation agencies, federally sponsored human service agencies, county agencies, occupational skill training schools, social welfare agencies, poverty programs, prisons, evaluation centers, and health-related associations, as well as private agencies such as transitional workshops, rehabilitation centers, hospitals, speech and hearing centers, work activity centers (adult development centers) and others.

Emphasis is placed on actual supervised field experiences in a variety of rehabilitation related agencies (30 credits), in addition to giving the students knowledge in medical and psychological aspects of disability, the world of work or occupational information and community resources in rehabilitation.

### Degree Offered

Bachelor of Arts in Rehabilitation



### General Program Requirements

Students in rehabilitation must satisfy the core curriculum requirements of the University as indicated on page 24 of this bulletin plus additional credits in social sciences as outlined below.

### Degree Requirements

Bachelor of Arts — 55 credits in rehabilitation including Rhb 100, 200, 205, 210, 300, 305, 410, and 411; 25 credits in psychology and 10 credits in sociology.

#### Freshman year

English 100 and core option .....	10 credits
History core option .....	10 credits
Philosophy 110 .....	5 credits
Psychology 100 .....	5 credits
Rehabilitation 100 .....	5 credits
Sociology 101, and 260, 266, or 302 .....	10 credits

#### Sophomore year

Biology 200, 210, or 270, 271 .....	10 credits
Philosophy 220 .....	5 credits
Psychology 201 & 427 or Soc 376 .....	10 credits
Rehabilitation 200, 205, 210 .....	15 credits
Theology core option .....	5 credits

#### Junior year

Philosophy core option .....	5 credits
Psychology 315, 380 .....	10 credits
Rehabilitation 300, 305 .....	10 credits
Theology core option .....	5 credits
Electives .....	15 credits

#### Senior year

Rehabilitation 410 .....	10 credits
Rehabilitation 411 .....	15 credits
Electives .....	20 credits

Total . . . 180 credits

### Rehabilitation Courses

#### Rhb 100 Introduction to Rehabilitation 5 credits

Principles of vocational rehabilitation, the historical background, various community rehabilitation resources, the rehabilitation process, and the role and functions of the rehabilitation specialist within this process.

#### Rhb 200 Community Resources in Rehabilitation 5 credits

Familiarization with a variety of rehabilitation agencies and health facilities, their service delivery systems, inter-agency relationships, funding, referral procedures, and general agency characteristics.

#### Rhb 205 Occupational Information in Rehabilitation 5 credits

Nature and uses of occupational information in rehabilitation structure of the world of work and composition of the work force; methods of gathering, evaluating, classifying and using occupational information.

#### Rhb 210 Field Experience in Rehabilitation 5 credits

Actual experience in an agency or institutional setting within a rehabilitation framework. Integration and application of classroom knowledge with live experience in the field. Coordinating seminars are an integral part of each field experience course (one hour of seminar to eight hours of field experience).



#### Rhb 291 Special Topics 1-5 credits

#### Rhb 292 Special Topics 1-5 credits

#### Rhb 293 Special Topics 1-5 credits

By arrangement with the approval of department chairman.

#### Rhb 300 Psychological Aspects of Disability 5 credits

Psychological syndromes associated with disability and the individualized effect associated with specific disability groups; examination of the role of the rehabilitation specialist in working with disabled persons and families of the disabled; study of client evaluation from a medical, psychological, social and vocational basis.

#### Rhb 305 Medical Aspects of Disability 5 credits

Study of medical terminology and various disabling diseases and conditions for a basic understanding of general medical and specialist examinations; how disabling conditions affect a client's vocational life.

#### Rhb 310 Field Experience in Rehabilitation 5 credits

See course description for Rhb 210.

#### Rhb 391 Special Topics 1-5 credits

#### Rhb 392 Special Topics 1-5 credits

#### Rhb 393 Special Topics 1-5 credits

By arrangement with the approval of department chairman.

#### Rhb 410 Field Experience in Rehabilitation 5-15 credits

See course description for Rhb 210.

#### Rhb 411 Field Experience in Rehabilitation 5-15 credits

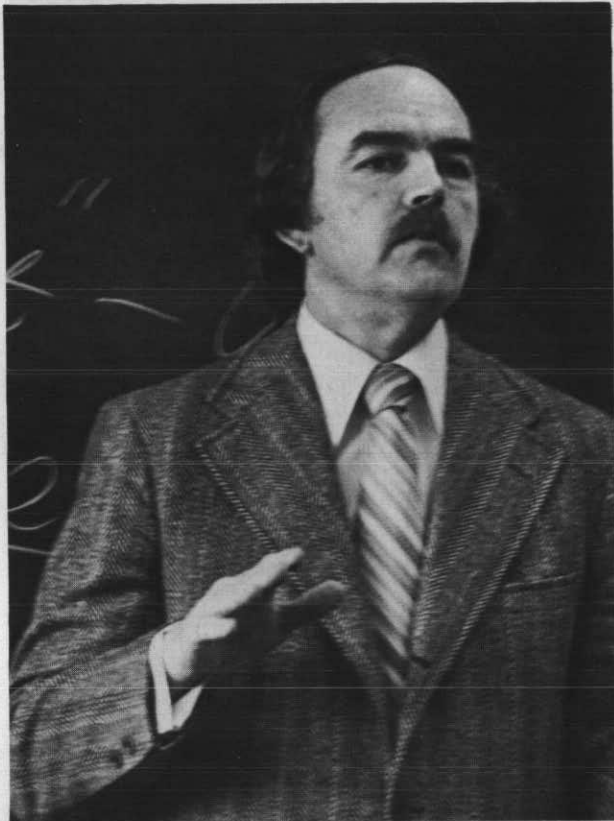
#### Rhb 412 Field Experience in Rehabilitation 5-15 credits

See course description for Rhb 210.

#### Rhb 497 Independent Study 1-5 credits

#### Rhb 498 Independent Study 1-5 credits

Individualized studies by arrangement with the approval of department chairman. Prerequisite: Completion of 300-series course in related area.



## Sociology

James P. Goodwin, SJ, M.A., Chairman

### Objectives

Sociology has the dual capacity of satisfying the need of students for a liberalizing discipline and of providing a sound basis for career preparation. Courses are designed to provide a systematic inquiry into the complex structure and dynamic function of modern society and to inquire into the product of social living, culture. These courses further investigate the social and cultural influences affecting the development of the human personality.

Students who major in sociology may be broadly classified into three groups: those interested in pursuing sociology as a career for teaching or for research; those interested in pursuing sociology as a preparation for a career in social work; and those interested in sociology for its liberalizing character, for its value in humane learning. Three programs terminating in the Bachelor of Arts degree are offered. Common to these is a series of required courses whose purpose is to give a proper grounding in the conceptual tools of analysis and to equip the student to appreciate the techniques by which an empirical body of knowledge is established.

### Degree Offered

Bachelor of Arts

### General Program Requirements

Students in sociology must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. In addition, 10 credits in a modern language and 15 credits in fine arts are required.

### Departmental Requirements

Bachelor of Arts — 55 credits are required for a major in sociology of which 25 credits are in basic courses, including Sc 101, 200, 201, 202, 380 and 381; and 30 credits are in the upper division courses of one of the following three programs: Preprofessional program for sociologists — 30 credits. Sc 497 is required. Students in this program are not permitted to take Sc 300, 376 or 377.

Preprofessional program for social workers — 30 credits. Sc 300, 376 and 377 are required. The remaining credits may be selected from any upper division sociology courses. Sc 260 and 262 are recommended.

Liberal sociology major — 30 credits. The student may take any upper division sociology course with the approval of his adviser. He may not take Sc 300, 376 or 377.

Undergraduate Minor — 30 credits which will include Sc 101, 201, 380 and 17 to 20 credits of upper division sociology courses.

### Bachelor of Arts

#### Freshman year

English 100 and core option .....	10 credits
Philosophy 110, 220 .....	10 credits
Psychology 100 .....	5 credits
Sociology 101, 201, 202 .....	10 credits
Electives .....	10 credits

#### Sophomore year

History core option .....	10 credits
Philosophy core option .....	5 credits
Political Science or	
Economics core option .....	5 credits
Sociology 200, 380, 381 .....	15 credits
Theology core options .....	10 credits
Elective .....	5 credits

#### Junior year

Mathematics/Science core options .....	10 credits
Modern Language 105, 106 .....	10 credits
Sociology electives .....	15 credits
Electives .....	10 credits

#### Senior year

Fine Arts 101, 102, 103 .....	15 credits
Sociology electives .....	10 credits
Electives .....	15 credits

Total . . . 180 credits

### Sociology Courses

<b>Sc 101</b>	<b>Fundamentals of Sociology</b>	<b>5 credits</b>
Nature of science as it applies to human social interrelationships; patterns of human relations in the formation of groups, the development of culture and the impact of these in the formation of the human person; ways in which interaction patterns emerge, become normative and result in integrated social structures. Stress is on analysis of interpersonal relations. Analysis of demographic and ecological principles as a basis for consideration of major institutional structures in human society, such as religious, economic, educational, political, and familial; social change and deviant behavior.		





**Sc 200 Perspectives in Social Psychology 5 credits**  
Consideration of theories and methods in contemporary explanations of the behavior of individuals in social contexts and social situations. Prerequisites: Sc 101 and Psy 100 recommended. Exceptions with permission of Professor.

**Sc 201 Social Statistics I 3 credits**

**Sc 202 Social Statistics II 2 credits**  
I. Basic principles and methods for compiling and interpreting data statistically: graphs, frequency distributions, central tendencies, measures of association; II. Analysis of variance, Chi square, regression correlations, meaning and application of non-parametric statistics. Prerequisite: Sc 201 for 202.

**Sc 256 Criminology 5 credits**  
Theoretical overview of the conceptualizations of criminal behavior; sociological analysis of criminal interactions, their systemic structures and functions. Prerequisite: Upper division standing or permission of instructor.

**Sc 257 Juvenile Delinquency 5 credits**  
Analysis of deviations and delinquencies of juveniles as distinct from those of adult offenders, and sociological explanations of these behaviors within contemporary conceptual models. Prerequisite: Upper division standing or permission of instructor.

**Sc 260 Sociology of Family 5 credits**  
Explanation of family as a social system with structure and function; differential analysis of the family system as a group and as an institution; utilization of modern sociological frames of reference to interpret the position of the American family in an era of social change. Prerequisite: Upper division standing or permission of instructor.

**Sc 262 Socialization 5 credits**  
Sociological analysis of the process by which one is inducted into his socio-cultural systems, and a review of the effectiveness of the process in American society. Prerequisite: Upper division standing or permission of instructor.

**Sc 266 Interracial and Interethnic Relations 5 credits**  
Concept of race and ethnic group; analysis of the factors in interracial and interethnic tensions; examinations of the programs advocated for reducing tension and producing solidarity. Prerequisite: Upper division standing or permission of instructor.

**Sc 280 Urban Community 5 credits**  
Study of urban community structures and institutions; historic city types; the process of urbanization; world cities; aspects of American urban communities. Prerequisite: Upper division standing or permission of instructor.

**Sc 291 Special Topics in Sociology 1-5 credits**

**Sc 292 Special Topics in Sociology 1-5 credits**

**Sc 293 Special Topics in Sociology 1-5 credits**

**Sc 300 Introduction to Social Work 5 credits**  
**(Cs 300)** Historical development, structure and function of social welfare services and institutions with emphasis upon the philosophy and methods utilized by professional social work in meeting human needs. Prerequisite: Upper division standing or permission of instructor.

**Sc 302 The Black People's Social Movement 5 credits**  
Theory of social movements applied to the black people's struggle for equality in America. Types of movements, stages of development, style of leadership in each. The aim is to understand the unfolding of a specific social movement and to test certain derivative hypotheses.

**Sc 340 Advanced Social Psychology 5 credits**  
Analysis with specific socio-psychological conceptual models; tests of propositions derived from these models; Prerequisite: Upper division standing or permission of instructor.

**Sc 350 Small Groups 5 credits**  
Sociological models and methods for analyzing small, interpersonal interactional systems of behavior, their dynamics and structures, as well as their potentials for change and growth.

**Sc 351 Police and the Community 5 credits**  
**(PSA 350)** The role of police in the community; relationships with individuals, groups and community organizations. Analysis of ethnic, cultural and economic differences as factors in the administration of justice; causes of tension and conflict; positive and negative factors in the control of hostilities; community responsibility for the administration of justice.

**Sc 352 Society and Justice 5 credits**  
**(PSA 360)** The criminal justice process from arrest through release; the relationship and respective responsibilities of the police, the prosecutor, the defense, the courts, the prisons and corrections, as each integrates into a system designed to reduce criminal behavior.

**Sc 360 Complex Organizations 5 credits**  
Sociological analysis of large, complex social organizations, the kinds of modern organization as structures, and the relationships among organizations and to the larger social environment historically and currently.

**Sc 363 Population 5 credits**  
Analysis of population trends, problems and policies. Explanations of relationships demonstrated to exist between demographic and sociological variables. Prerequisite: Upper division standing.



**Sc 365 Probation and Parole 5 credits**  
(PSA 366) Examination of current trends in probations, parole, supervision, the legal aspects, research, prediction and personnel.

**Sc 366 Corrections 5 credits**  
(PSA 366) Analysis of the various post-arrest treatment methods applied to offenders; examination of rehabilitative versus punishment theories; evaluation of psychiatric and psychological group treatment methods, reality therapy and other approaches to behavior modification; examination of the correctional institution and community-based corrections. Prerequisite: Upper division standing or permission of instructor.

**Sc 376 Factors of Interviewing 5 credits**  
(CS 376) The interview as one of the major methods of helping people; study of factors of knowledge and method in proficient interviewing to provide a basis for future development. Prerequisite: Sc 300 or permission.

**Sc 377 Supervised Field Experience 5 credits**  
(Cs 377) Direct observation and academic study in a selected community agency with stress placed upon the agency's clientele, its services and its function in the community. Prerequisite: Sc 300 and 376.

**Sc 380 Methods of Sociological Research I 5 credits**

**Sc 381 Methods of Sociological Research II 5 credits**  
I. Logical structure and general procedure of science, analysis of specific techniques of data gathering applied to sociology; observation, questionnaire, interview and case study; problems of measurement, including qualitative and quantitative techniques such as scaling; problem of data analysis, including test of hypotheses through statistical techniques. II. Application of methods learned in Sc 380 to the design and execution of a research project by the student. Prerequisites: Upper division standing or Sc 201, 202 for 380; 380 for 381.

**Sc 400 Sociology of Religion 5 credits**  
Investigation of the religious institutions in society in terms of their structure, function and change. Prerequisite: Upper division standing or permission of instructor.

**Sc 410 Social Stratification 5 credits**  
Social differentiation with emphasis upon institutionalized aspects of power, privilege and prestige. Generalizations drawn from available studies of status, rank, mobility and social classes. Prerequisite: Upper division standing or permission of instructor.

**Sc 420 Mass Communication 5 credits**  
Consideration of message-formation and message-dissemination on the societal level with reference to social structures, social power and social change. Prerequisite: Upper division standing or permission of instructor.

**Sc 430 Social Change 5 credits**  
Critical review of attempts to explain transitions within a specific social system and large scale transitions from one societal form to another; discussion of concepts which may relate the two types of change in one general theory of social change. Prerequisite: Upper division standing or permission of instructor.

**Sc 457 Institute or Workshop 5 credits**  
Special topics of current relevance in the nation or local community treated from a sociological perspective as a community service. Prerequisite: Upper division standing.

**Sc 480 Sociology of Work 5 credits**  
Study of the industrial enterprise as a social system and the social and socio-psychological aspects of the individual's position in the industrial organization; relationship of these phenomena to a theory of work. Prerequisite: Upper division standing or permission of instructor.

**Sc 491 Special Topics in Sociology 1-5 credits**

**Sc 492 Special Topics in Sociology 1-5 credits**

**Sc 493 Special Topics in Sociology 1-5 credits**

**Sc 494 History of Sociological Thought 5 credits**  
Historical survey and evaluation of selected leading figures in the rise and development of sociology as an independent discipline. Sociological thought from Comte through the social Darwinists and the analytical sociologists of Europe to major contemporary thinkers. Prerequisite: Upper division standing or permission of instructor.

**Sc 497 Individual Research 3-5 credits**  
Required of all sociology majors who are in the scientific program in preparation for graduate study in sociology. Each student must design and execute his own research project under the supervision of a member of the sociology staff.

**Sc 498 Directed Reading in Sociology I 1-5 credits**

**Sc 499 Directed Reading in Sociology II 1-5 credits**  
Sociological reading at an advanced undergraduate level in a tutorial relationship with one professor. Prerequisite: Upper division standing.



## Speech

Albert R. Haven, S.J., M.A., Adviser

### Objectives

The Speech program offers background and practice in the skills of oral delivery. It aims at uniting both speakers and auditors into a speech community which shares the highest contemporary standards of both written and oral expression. To accomplish this purpose effectively, the program provides in disciplined fashion opportunities for creative composition and vocal interpretation, as well as for their testing in an atmosphere of friendly and knowledgeable criticism.

### Program

Speech courses are a valuable adjunct to other degree programs in the general fields of the humanities and social sciences. Students interested in speech should include sequences of speech courses among their electives.

### Speech Courses

- |  |                    |
|--|--------------------|
| <b>Sph 100 Fundamentals in Speech</b>  | <b>5 credits</b>   |
| Basics involved in speech preparation and standard skills in speech delivery. Elementary introduction to group communication.  |                    |
| <b>Sph 110 Speech Organization</b>   | <b>5 credits</b>   |
| Theory and organization of material.   |                    |
| <b>Sph 202 Introduction to Oral Interpretation</b>   | <b>5 credits</b>   |
| Historical and basic notions of interpreting the written word; practice in interpreting the written word; practice in interpreting prose, poetry and drama.  |                    |
| <b>Sph 204 Methods of Debate</b>   | <b>5 credits</b>   |
| Introduction to debate; principles involved in rational and effective argumentation; practice in important forms.  |                    |
| <b>Sph 291 Special Topics</b>  | <b>1-5 credits</b> |
| <b>Sph 292 Special Topics</b>  | <b>1-5 credits</b> |
| <b>Sph 293 Special Topics</b>  | <b>1-5 credits</b> |
| <b>Sph 310 The American Speaker</b>  | <b>5 credits</b>   |
| Theory and practice in the composition and delivery of standard types of contemporary American speech; exercises in visual, auricular and articulatory rapport with the American audience. Prerequisite: Sph 100 or permission.  |                    |
| <b>Sph 320 Speech for the Classroom Teacher</b>  | <b>4 credits</b>   |
| Emphasis on the prospective teacher's own competence as a speaker and the understanding and practice of speech activities useful in teaching; methods of utilizing public speaking. Discussion, story telling, oral reading, dramatics and speech correction procedures in the teaching situation. |                    |
| <b>Sph 491 Special Topics</b>  | <b>2-5 credits</b> |
| Prerequisite: Permission of instructor.  |                    |



## Theology and Religious Studies

William F. LeRoux, S.J., S.T.D., Chairman

### Objectives

Theology and Religious Studies has the same fundamental purpose as the other disciplines in the University: intellectual training, the formation of a mature intellect. Within this general framework the department serves a two-fold purpose. It provides the theology and religious studies sequence of the core curriculum and it offers a program of courses leading to a Bachelor of Arts degree in theology and religious studies.

### Degrees Offered

Bachelor of Arts  
Master of Religious Education

### General Program Requirements

Students in theology and religious studies must satisfy core curriculum requirements of the University as given on page 24 of this bulletin. In addition to the core curriculum, students in theology and religious studies must take an added five credits in social science and five credits in philosophy.

### Departmental Requirements

Bachelor of Arts — 50 credits in theology and religious studies beyond the 10 credits required in the core. The student majoring in theology and religious studies is required to take the following courses: RS 200 and any two other Scripture courses; RS 320 and any two courses from among the following: RS 330, 335, 340, 344, 350, 420; RS 355, 357, 358 sequence; any three 400 numbered courses. The student who is majoring in theology and religious studies and who wishes to be recommended by the department for graduate studies in theology must demonstrate a reading proficiency in either Latin or Greek and in either French or German. Normally, this requirement will be met by three reading courses in these various languages.

Undergraduate minor — 30 credits in theology and religious studies which must include RS 200 and one other Scripture course; RS 320 and any other three 300 or 400 courses.

## **Bachelor of Arts**

### **Freshman year**

English 100 and core option .....	10 credits
History core option .....	10 credits
Philosophy 110, 220 .....	10 credits
Social Science core options .....	10 credits
Theology 200 .....	5 credits

### **Sophomore year**

Philosophy core option .....	5 credits
Social Science elective .....	5 credits
Theology core option and major .....	15 credits
Electives .....	20 credits

### **Junior year**

Mathematics/Science core options .....	10 credits
Philosophy elective .....	5 credits
Theology 355, 357, 358 .....	15 credits
Electives .....	15 credits

### **Senior year**

Theology and religious studies electives .....	25 credits
Electives .....	20 credits

Total . . . . 180 credits

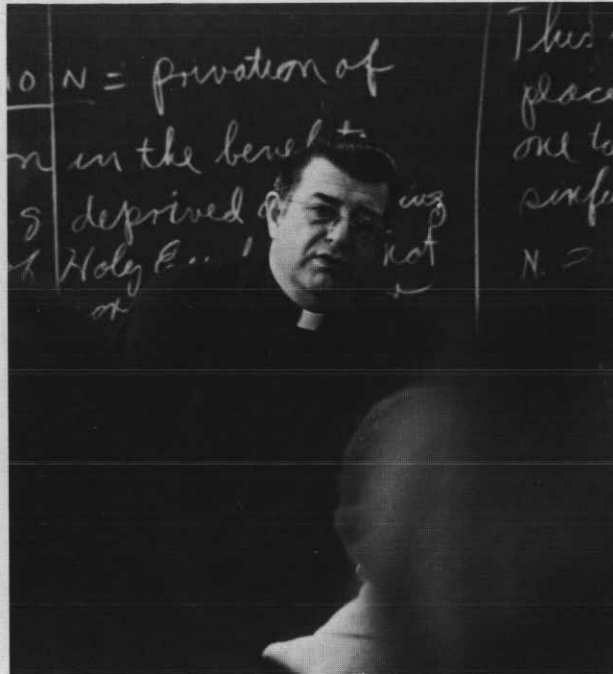
## **Religious Studies Center**

Religious Studies Center designates an agency established under the cooperative auspices of Seattle University and the Archdiocesan Office of Religious Education, committed to planning and providing programs in continuing religious formation for adults, professional and lay. Religious Studies Center courses are a continuing education service; credit for these courses are not applicable toward meeting the undergraduate elective, core, or other baccalaureate degree requirements. Courses offered through the Religious Studies Center are RS 201, 202, 203, 204, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 400, 401, 402, 404, 407, 408, 409, 410, 411, 412.

## **Master of Religious Education**

**For Admission** — a Bachelor of Arts degree or equivalent; 20 quarter credits or 16 semester credits of theology; grade point average of 3.00 for regular standing; no transfer credits accepted; no language requirements; preference given to those now active in religious education between the ages of 25 and 45 (exceptions only with further information).

**For Degree Conferral** — 42 credits of course work completed over three eight-week summer sessions with adequate graduate achievement; all core subjects required; final written comprehensive examination; a 3 credit practicum research thesis. At the discretion of the director of the program, the Chairman of the Theology Department and the Dean of the Graduate School, six quarter hours of graduate credits in areas related to religious education may be substituted for the practicum research thesis. A student permitted to make this substitution would complete 45 credit hours for the degree. These substituted credits may be earned only after attendance at the first two summer sessions. The substitution of these credits may be made from any college or university offering a graduate program in the areas



related to religious education. Courses such as the communication workshops and communication seminars are non-credit, but are required core courses for all. Students must live on campus; all degree work must be completed within six years of the initial summer.

## **Theology Courses**

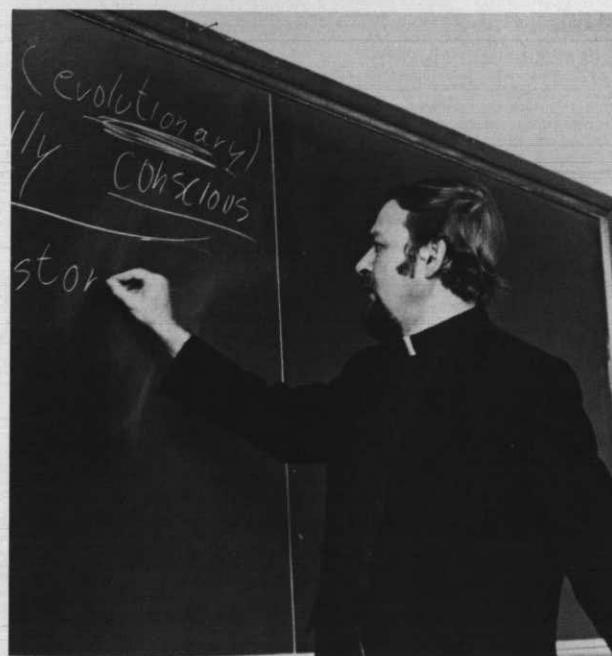
<b>RS 200</b>	<b>Judaean-Christian Origins</b>	<b>5 credits</b>
	Survey of key books of the Bible and/or themes of the Scriptural tradition and its development. For students with a minimal previous background in biblical studies.	
<b>RS 201*</b>	<b>Old Testament: Meaning and Values for Today</b>	<b>2 credits</b>
	A study of the Old Testament, with a view to understanding its meaning and message for persons of faith in our time.	
<b>RS 202*</b>	<b>New Testament: Meaning and Values for Today</b>	<b>2 credits</b>
	A study of the New Testament, with a view to understanding its meaning and message for persons of faith in our time.	
<b>RS 203*</b>	<b>The Scriptures: Special Topics (Old Testament)</b>	<b>2-3 credits</b>
<b>RS 204*</b>	<b>The Scriptures: Special Topics (New Testament)</b>	<b>2-3 credits</b>
<b>RS 210</b>	<b>Synoptic Gospels</b>	<b>5 credits</b>
	Investigation of the Gospels of Matthew, Mark and Luke.	

\*Offered through the Archdiocesan Office of Religious Education and Seattle University; not open to regular students.



**80/ARTS AND SCIENCES**  
Theology and Religious Studies

- RS 215 Johannine Theology** 5 credits  
Study of John's theological reflections on the Christ-event, given witness in his gospel, epistles and the Apocalypse.
- RS 220 Pauline Theology** 5 credits  
Study of Paul's theological development analyzed in his epistles.
- RS 240 Prophetic and Wisdom Literature of the Old Testament** 5 credits  
Study of prophecy in the Ancient Near East and its role in the development of Judaism. Rise of wisdom literature in the Ancient Near East, its expression in Judaism and its role in the Judaic community.
- RS 289 Comparative Religion** 5 credits  
Investigation and contrast of the major world religions: Pantheism, Buddhism, Hinduism, Judaism, Christianity and Islamism.
- RS 290 Religious Experience East and West** 5 credits  
Anthropological, sociological and psychological perspectives on the phenomenon of religious experience in human history as these reveal the nature and meaning of this experience within human existence.
- RS 291 Special Topics** 3-5 credits  
**RS 292 Special Topics** 3-5 credits  
**RS 293 Special Topics** 3-5 credits
- RS 300\* The Faith Experience of Modern Man** 2 credits  
The event of divine revelation in man's life, and the signs by which man comes to recognize God's presence in a secular world; man's personal response in faith to the manifestation of God in his life, as this can be understood through a study of the Scriptures, modern philosophy and reflection on human experience.
- RS 301\* Theology of Person: Man and God in Contemporary Thought** 2 credits  
Study of contemporary man as interpreted by psychology, anthropology, philosophy, theology, and reflected in literature; contemporary concepts of God, as these arise out of man's personal experience and self-understanding.
- RS 302\* Theology of Production: Divine Creation and Human Technology** 2 credits  
Man as creature in his multiple relationships of dependence on God and interdependence to his environment; how man exercises his human, creative power to overcome evil and improve his world; man's role and responsibility for technology and the future of society.
- RS 303\* The Contemporary Jesus: Person or Movement?** 2 credits  
The person of Jesus Christ in his historical, redemptive role as a basis for understanding Jesus Christ today; how Jesus relates to man today, both individually and within the community; the search for Jesus as a dimension of modern man's search for meaning.
- RS 304\* Contemporary Morality: Freedom and the Christian Conscience** 2 credits  
Basic principles of the Christian moral life framed in the context of lived morality today; Christian freedom as it informs the process of ethical decision-making and conscience formation.



- RS 305\* Life and Death: Moral Issues and Alternatives** 2 credits  
Study of the complex issues related to man's right to life; essential human values that are normative in addressing problems raised by medical technology today, e.g., euthanasia, genetic engineering, environmental control.
- RS 306\* Social Justice: Moral Issues and Alternatives** 2 credits  
Christian response to questions posed by conditions of society today; interrelationship between ethical perspectives and social structure as shown in the American experience.
- RS 307\* The Church and Christian Mission** 2 credits  
Socio-theological study of the Church, as sign and sacrament of Christ's saving presence among men; and as the historic community of faith exercising its priestly and prophetic nature through continuing dialog with all sectors of the society.
- RS 308\* Sacraments and Religious Experience** 2 credits  
The meaning and role of Christian sacraments in the religion of modern man; understanding how the sacraments in their psychological and social dimensions both create and express the Christian community while celebrating key moments in the religious experience of that community.
- RS 309\* Prayer and Worship: Person and Community Before God** 2 credits  
The spirit and function of prayer in Judaeo-Christian experience; the forms in which the prayer life of individuals and groups takes expression; and the qualities of prayer as it facilitates and enriches the growth toward Christian fulfillment.

\*Offered through the Archdiocesan Office of Religious Education and Seattle University; not open to regular students.

**ARTS AND SCIENCES/81**  
**Theology and Religious Studies**

**RS 320 Fundamental Themes in Theology 5 credits**  
Speculative investigation into the reasonableness of revealed truths as accepted in Faith; the Incarnation, Redemption and their effects in man.

**RS 330 The Problem of God 5 credits**  
The reality of God for contemporary man; what of reason's affirmation of God's existence and atheism; man's sense of God's presence and the growing feeling of God's absence, man's personal experience of God in the Bible and the theological reflection on who the God-who-is-with-us is?

**RS 335 Christ and Modern Man 5 credits**  
Biblical foundation for the Christian affirmation of the human and divine in Jesus, and a further investigation and analysis of the Christian community's deepening understanding of this mystery — first as it related to the person of Jesus himself, then in its consequences for man and all human values.

**RS 340 Theology of Man 5 credits**  
Study of the pre-biblical and biblical notions of man; the development of early Christian and scholastic theology of man as redeemed and graced; contemporary man as related to this background.

**RS 344 The Church as Community 5 credits**  
Central biblical themes bearing on the nature and structure of the Christian Community; study of the further insights into, and expressions of the self-understanding of that Community in its dynamic, historical process of growth; the theological ferment concerning current issues such as authority and freedom, institutionalism and personalism, tradition and change.

**RS 347 Black Religious Experience 5 credits**  
Black religion is a theology of freedom, of proclamation, of power of hope. Of course, each must be developed to show its convergence with religion in general, yet its divergence into Black Religion in particular. Black Religion, the Black Church, in its concrete existence is its own truth about God, and the observer who would chronicle this truth must start where the Church starts and end where the Church ends.

**RS 350 Perspective of Christian Hope 5 credits**  
Christian perspective with respect to the future of man and the cosmos based upon the Christian's faith in the Resurrection and Glorification of Jesus Christ; a view of history that arises out of a Christian eschatology and a theology of hope that confronts modern secularism.

**RS 355 Early Christian Theology 5 credits**  
Study of the development of Christian doctrine during the first five centuries of Christianity: theological, historical and literary analysis of the writings of St. Justin, Irenaeus, Tertullian, Origen, St. Athanasius, the Cappadocian Fathers, St. Augustine and St. Cyril of Alexandria. Prerequisite: RS 200.

**RS 357 Scholastic Theology 5 credits**  
Seminar: the origin and main lines of scholastic theology, its spirit and aim formulated by St. Anselm, Abelard, St. Bernard, Alexander of Hales, St. Albert, St. Bonaventure, Duns Scotus, William of Occam, St. Thomas Aquinas. Prerequisite: RS 355.

**RS 358 Reformation Theology 5 credits**  
The theological dispute of the Reformation on justification by faith alone; total depravity, irresistible

grace, controversies among Catholics, Lutherans, Calvinists and Jansenists; the Enlightenment and Vatican Council I. Vatican Council II and some modern theologians in relationship to these theological disputes. Prerequisite: RS 357.

**RS 400\* Theology of Liberation: Christian Hope 2 credits**  
Christian hope as the power of the future that assists man in understanding sources of social and political problems, and directs him in creating alternatives for liberating persons from forms of injustice.

**RS 401\* Theology of Liberation: Faith and Secularity 2 credits**  
The phenomenon of secularization in our time; the historical factors that account for it, and present conditions that favor it: implications of secularization for Christian living, as the Christian message confronts the reality of the world today; how does secularization serve the ends of gospel liberation?

**RS 402\* Theology of Liberation: Christian Praxis 2 credits**  
Theology as it not only interprets the world, but mobilizes men to change it; the responsibility of Christians to be agents of social change; and critique of some of the means through which humanizing social change is effected.

**RS 404\* Fundamentals of Religious Education 2 credits**  
Basic elements of education, as these apply to religious education; history of catechetics, psychology of education, experiential catechesis methodology.

**RS 407\* Christianity and Culture 2 credits**  
Various views held by Christians toward the culture in which they live; observation of the American scene and the role of the Church both in encouraging notions of America as an especially chosen people and in challenging such assumptions. What the future role of the Church might be in preparing Americans to live more cooperatively on the "spaceship earth."

**RS 408\* Religion and Technology 2 credits**  
The effects of technological society upon the environment, the production and consumption of goods and the human spirit, and of the resources within the Judaeo-Christian tradition which are relevant to the task of humanizing technology.

**RS 409\* Environmental Ethics 2 credits**  
Ethical dimensions of the environmental crises, based on interdisciplinary sources of understanding; e.g., value assumptions of our own present society and the need to raise new value questions; and role of government in resolving the environmental crises.

**RS 420 Christian Sacraments 5 credits**  
Dynamism of the sacraments of Christian life; the doctrinal, moral and liturgical aspects of the sacraments in the perspective of public worship and the Christian community.

\*Offered through the Archdiocesan Office of Religious Education and Seattle University; not open to regular students.



**82/ARTS AND SCIENCES**  
**Theology and Religious Studies**

**RS 433 Theology of Human Sexuality and of Marriage 5 credits**

Meaning of the human love experience, its expression in human sexuality, the conditions within which this value is experienced; the relationship of human sexuality and marriage; marriage as the sign of the unity among men with God.

**RS 443 Vatican II and the Future 5 credits**

Spirit and relevance of the Second Vatican Council as seen in the Council itself and the formation of its documents and its relationship to the present and the future in terms of the changing life of the Church.

**RS 450 Theology of Liberation 5 credits**

Foundation will be given in those passages of Old and New Testament which describe Yahweh or Jesus as liberating men; a consideration of the medieval synthesis which placed this Christ as the end of all creation. This leads to a theology of hope in which Christ is viewed as the terminus of all cosmic and human evolutionary development. Liberation, finally, will be treated according to contemporary theologies of socio-economic and political liberation.

**RS 475 Contemporary Christian Morality 5 credits**

Dynamics of Christian living and the moral implications of the Christian commitment; formulation of the principles of a Christian ethic; contemporary approaches to decisionmaking in matters of morality; problems encountered by the Christian conscience in today's world.

**RS 476 Social Theology 5 credits**

Evaluation of the growing socialization of human life and a study of major social issues in the 20th Century in the light of the Vatican II document "The Church in the Modern World" and the encyclicals "Peace on Earth" and "Development of Peoples" and of contemporary Protestant social statements.

**RS 477 Christian Response to Some Socio-Legal Problems 5 credits**

Traditional Christian reverence for life. Contemporary moral and legal problems such as eugenic engineering, artificial insemination, genetic surgery, compulsory sterilization and abortion. Recommended for students majoring in nursing, premedicine and prelaw.

**RS 478 Survey of Jewish History 5 credits**

Survey of Jewish history up to the contemporary period with special emphasis on the Second Commonwealth and Talmudic Period.

**RS 479 Survey of Jewish Theology 5 credits**

Study of monotheism versus paganism, sacrifice, reward and punishment, sabbath and holidays, dietary laws, morals and ethics, traced from the biblical period to the present.

**RS 481 Psalms and the Community of Israel 5 credits**

Analysis and dating of key Psalms according to literary types; influence of Israelite cultic life upon the composition of the psalms; Psalms as a reflection of the deepening religious life of the Old Testament.



**RS 485 Theological Horizons of Modern Literature 5 credits**

Study of selected literary works in terms of their theological implications and religious insights.

**RS 486 Catechesis: Vision and Tactics 3-5 credits**

Historical background and development of rationales and methodologies in religious education related to Vatican II; implication of Council statements on the "faith-formation" goal of catechesis and the consequent application of pedagogical insights from related social sciences to the formation of a knowledgeable faith.

**RS 487 Modern Protestant Theology 5 credits**

Theological position, history and trends of the major Protestant denominations; principal leaders of modern Protestant thought and their tenets; Bultman, Tillich, Niebuhr. Prerequisite: Approval of department chairman.

**RS 488 Methodology 5 credits**

Introduction to the history, methodology and sources of research in theology; the conditions for theological development; evaluating this development in terms of doctrinal evidence; and the continuing Christian response in its magisterial and credal functions.

**RS 490 Special Topics—Core 3-5 credits**

Under this number, from time to time, there will be provided various courses that are not otherwise available in the core curriculum. Ordinarily the prerequisite will be RS 200 or the approval of the department chairman.

**RS 491 Special Topics 3-5 credits**

**RS 492 Special Topics 3-5 credits**

**RS 493 Special Topics 3-5 credits**

**RS 494 Special Topics 3-5 credits**

**RS 496 Directed Readings in Theology 2-5 credits**

**RS 497 Individual Research 2-5 credits**

**RS 498 Independent Study 2-5 credits**

**Graduate Courses**

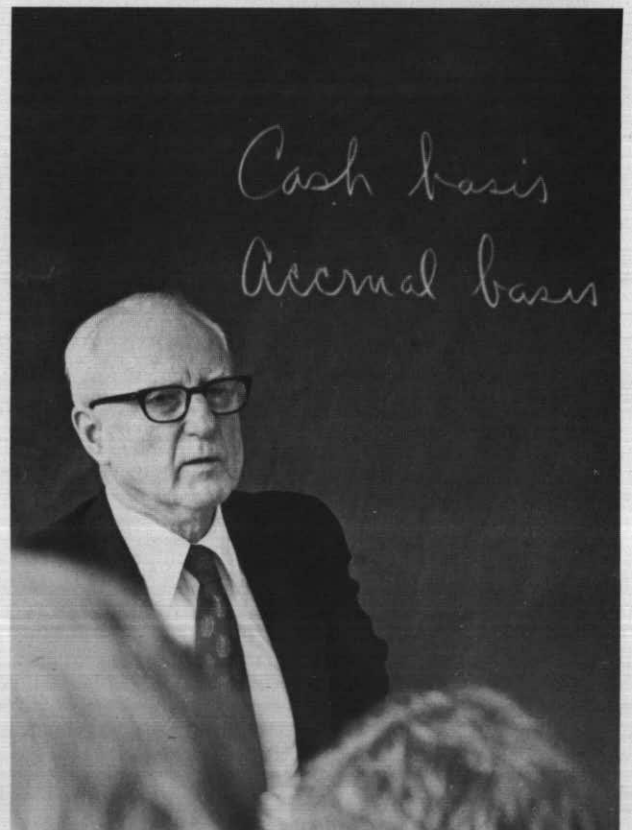
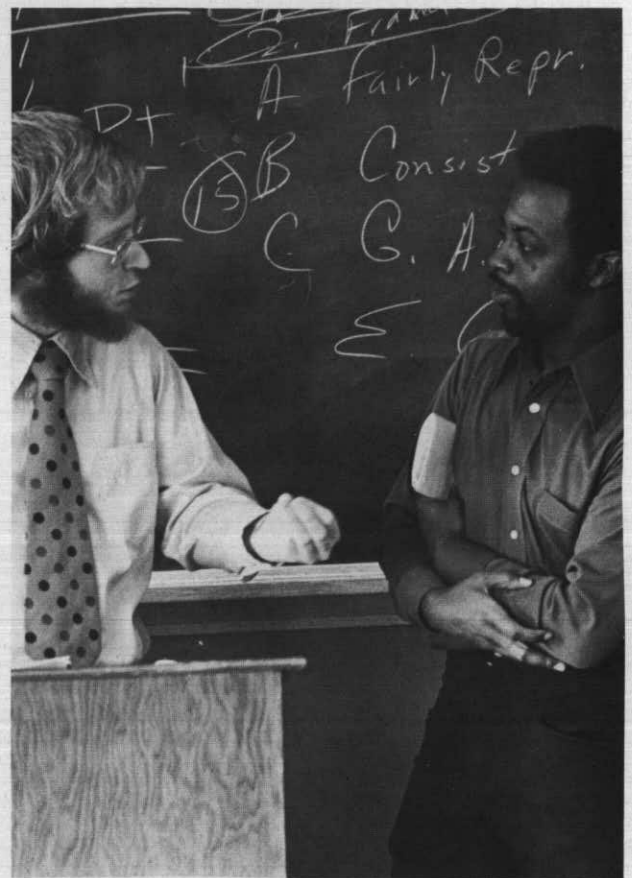
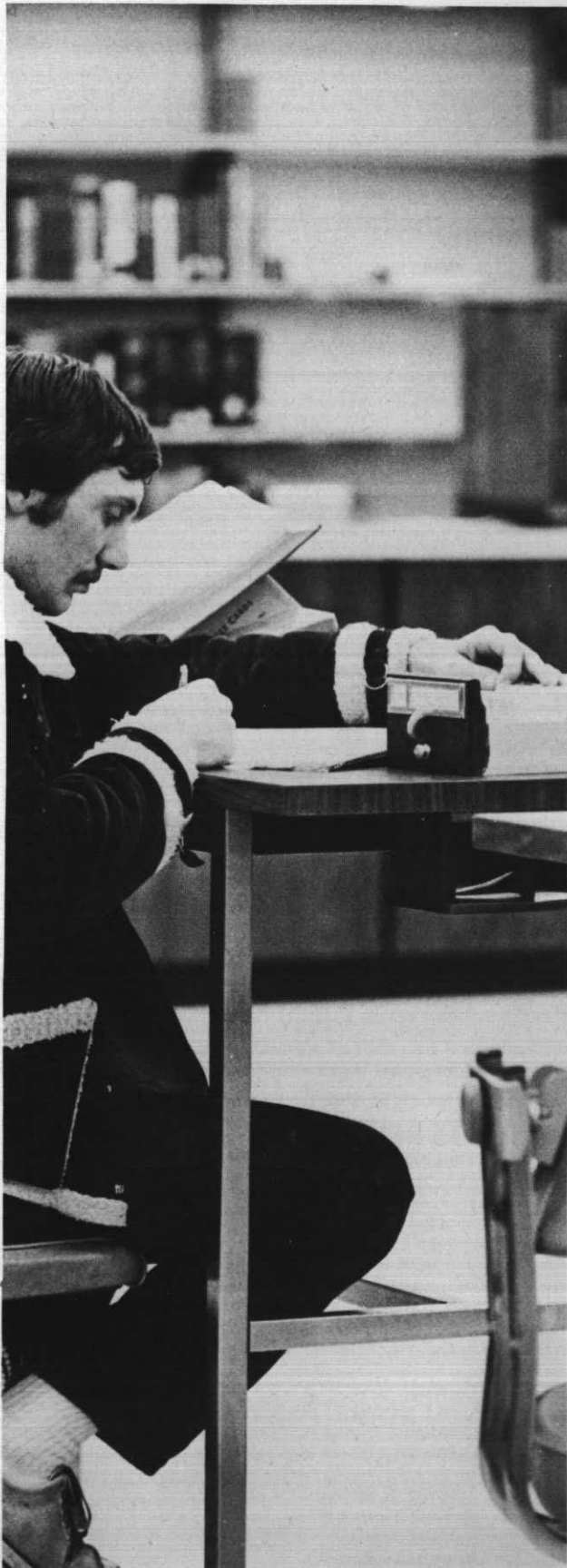
- RS 500 Communication Workshop and Seminar** **0 credits**  
Communication groups aim at helping the individual enter more deeply into himself to uncover the obstacles and defenses that keep him from expressing his ideas and himself more deeply and honestly with others. Required SUMORE core course.
- RS 502 Religious Perspectives in Psychology** **2 credits**  
Transition and growth in faith from the religion of youth to the religion of maturity; understanding of faith in this process of growth; catechetical implications of religious instruction; natural liturgical response of men in their faith realized; problems associated with the learning, living and transmission of the Christian message.
- RS 505 Sacramental Theology** **3 credits**  
Explanation of membership in the worshipping community; use of the conceptual model of religious belonging and its application by Christianity past and present; deeper understanding of sacrament from historical perspective as well as the experience of living in a faith community entering into dialogue with God through the sacraments.
- RS 510 Theologies of the New Testament** **3 credits**  
The nature of revelation, inspiration as human and divine process. The historical backgrounds of the community and its writers, the sacramental and catechetical situations which produced the literary genres of the early gospel tradition. Redaction criticism of the various gospels, Pauline Theology, formation of the New Testament canon.
- RS 511 Modern Trends in Catechetics** **2 credits**  
Catechetics will deal with the problem of faith communication and education, integrate the summer's course in the context of catechetics and develop modern trends in the difficult field of religious education. Required SUMORE core course.
- RS 515 Liturgical Worship and Contemporary Prayer** **2 credits**  
An introduction to the nature and historical forms of liturgy, present directives and contemporary theology of worship. The characteristics of good liturgy. Also some theology on the nature of prayer and particular aspects of traditional prayer which must meet the contemporary scene.
- RS 520 Philosophy of Religion** **3 credits**  
Religion in essence and manifestation in the religious subject and object and their reciprocal operation. The unique contribution of Chardinian concepts in the contemporary world.
- RS 525 Religious Perspectives in Sociology** **3 credits**  
Systematic inquiry into the complex structure and dynamic function of modern society with emphasis on the religious dimension of culture and its reciprocal relationships.
- RS 530 Christ in the Gospel and Tradition** **5 credits**  
The development of Christology in the primitive Church, culminating in the theologies of the Synoptics, John and Paul. The Church's growing understanding of these doctrines through controversy and conciliar definition. The development of dogma. Contemporary theologies of Jesus the Christ.

- RS 532 Pauline Theology** **3 credits**  
An advanced study of the development of Paul's thought as traced mainly in the great epistles. Certain Pauline themes and motifs will be selected for special study.
- RS 535 The Church's Mission to the World** **3 credits**  
The Gospel as leaven within and for the world. The Church's developing understanding of her role in the christianization of world process. Contemporary socio-economic problems of America and the world; poverty, underdevelopment, prejudice, alienation, revolution and counter-culture.
- RS 540 Christian Self-Image** **3 credits**  
Analysis of contemporary philosophical systems as the intellectual environment in which the Christian message is translated. Influence of philosophers from Kierkegaard through Marcel with consideration of linguistic analysts such as Van Buren.
- RS 545 The Church as Historically Developing Community** **3 credits**  
How the Church arose in the first century by divine-human processes. What the New Testament says is central to the Church and what is conditioned by the times. The development of the Church throughout history, especially as this is affected by diverse political systems, thought processes and economic conditions of the ambient world.
- RS 550 Religious Perspectives in Anthropology** **3 credits**  
Man as the creator of culture and the object of the culture created. Religion as a human phenomenon in different times and cultures and the implications of this for Catholicism. Anthropological analysis of the different cultures to which the religious educator directs the gospel message.
- RS 555 Modern Moral Problems** **3 credits**  
Exploration of the basic premises of law and authority in the moral dimensions of the Church; situation ethics and other moral concerns of man in the 20th Century; understanding the theological posture needed for personal and social morality.
- RS 560 Sacraments: Their Existential Character** **2 credits**
- RS 561 Adolescent Psychology** **2 credits**
- RS 562 Theology of Hope** **2 credits**
- RS 563 Mass Media** **2 credits**
- RS 564 Theology of Change** **2 credits**
- RS 565 Man Without God: Belief and Unbelief in the Contemporary World** **2 credits**
- RS 566 Study of the Person in Society** **2 credits**
- RS 567 Parables Emphasized in Luke** **2 credits**
- RS 568 Theory of Transactional Analysis** **2 credits**
- RS 569 Processive Character of Revelation** **2 credits**
- RS 570 Seminar** **2 credits**
- RS 571 Seminar** **2 credits**
- RS 572 Seminar** **2 credits**
- RS 580 Practicum Research Thesis** **3 credits**
- RS 590 Special Topics** **3-5 credits**
- RS 591 Special Topics** **3-5 credits**
- RS 592 Special Topics** **3-5 credits**

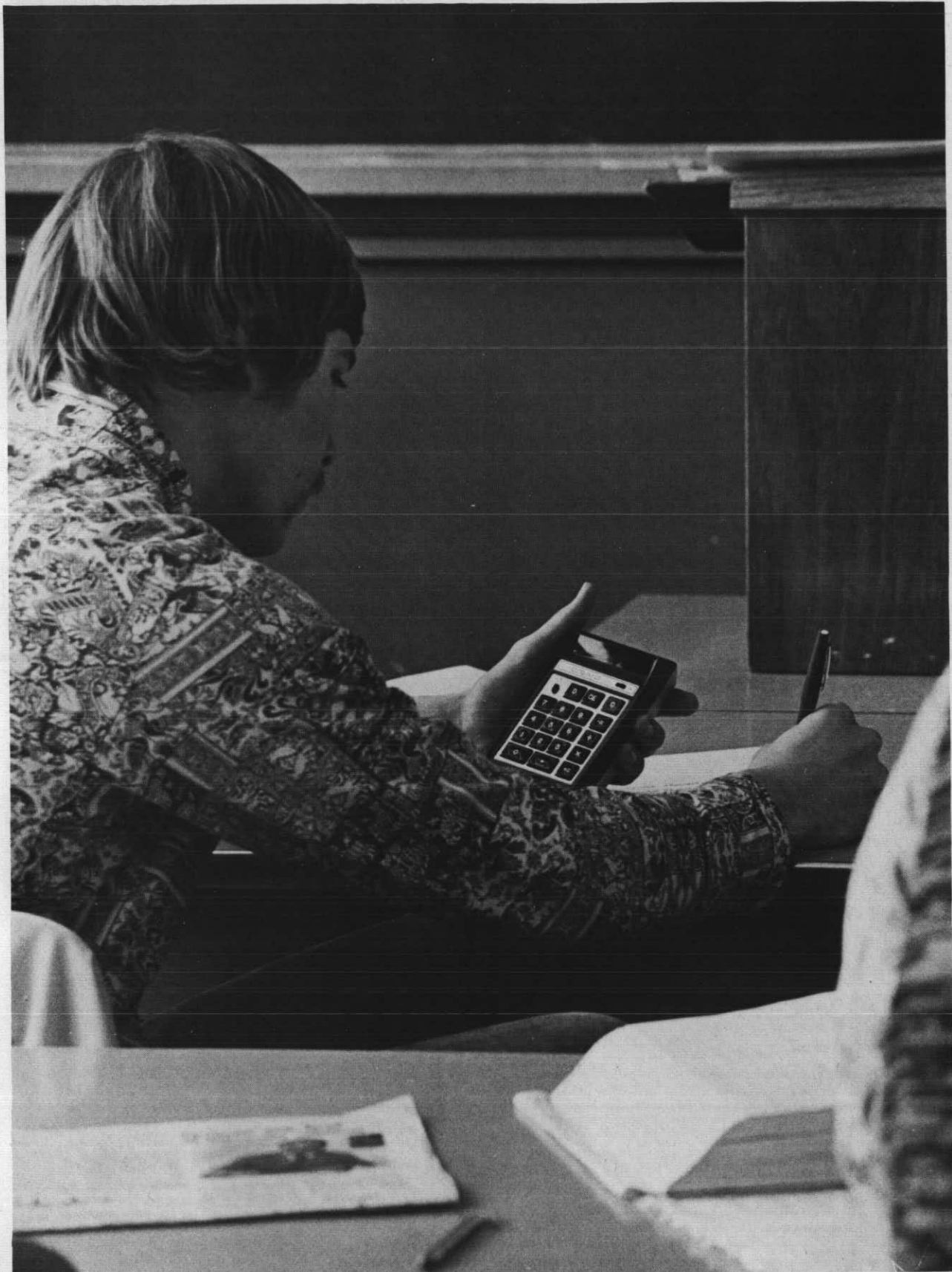


# School of Business

Gerald L. Cleveland, Ph.D., Dean



**J.W. McLelland, M.A., Associate Dean**







## School of Business

### Objectives

Collegiate education for business should prepare students for business careers, not simply for job-finding. A broad, liberal education, comparable to university studies in other professional fields, will not replace practical business experience, but will provide a sound base for development of managerial talents.

The programs of the School of Business implement the purpose of the University by providing professional guidance and instruction for developing those qualities which lead to competent leadership and service in the various fields of economic endeavor. The School seeks to prepare graduates capable of assuming responsible roles in the economic development of the Pacific Northwest, as well as national and international sectors, and in both private enterprise and government.

### Accreditation

American Assembly of Collegiate Schools of Business.

### Organization

The School of Business has two principal divisions, undergraduate and graduate studies. Undergraduate majors are offered in five business fields: accounting, finance, general business, management and marketing. In addition, the School contains the Economics department which offers a bachelor's degree program and an undergraduate minor.

### Admission Requirements

Admission to undergraduate programs is granted to applicants who have specified an interest in business or economics and who meet the University's entrance requirements described in the admissions section of this bulletin.

Students seeking entrance to graduate studies in business should communicate with the Director of the Master of Business Administration program.

### Degrees Offered

Bachelor of Arts in Business Administration  
Bachelor of Arts in Economics  
Master of Business Administration (evening classes only)

### Curriculum

The program of required study for the bachelor's degree in business has three principal components: the arts and sciences, the business core and an area of specialization. All students in the baccalaureate degree program fulfill requirements in English, mathematics, philosophy, a natural science, social sciences and theology and religious studies. The business core includes courses in accounting, administrative processes, economics, finance, information systems, legal environment, management, marketing and statistics. Specialization in one of the five major fields is required.

### General Program Requirements

A minimum of 180 credits is required for bachelors' degrees in business or economics. See the degree requirements below for specific course requirements.

### Degree Requirements

Bachelor of Arts in Business Administration — Students seeking this degree complete a program with the following components:

1. Requirements in arts and sciences....75 credits
    - English 100 and one of the following English courses: 132, 133, 134, 220, 230, 240 or 383; Mathematics 118, 130 and 214; Philosophy 110, 220 and a five-credit philosophy elective; social sciences, 10 credits (Psychology 100 and Sociology 101 recommended); ten credits in theology selected from two different areas; five credits in natural science; and ten credits chosen with the direction of an adviser.
  2. Business core requirements.....60 credits
    - Business 170 or Economics 100; Business 211, 230, 231, 270, 310, 340, 350, 380, 482; Economics 271, 272.
  3. Specialization in a major area of concentration .....20 credits
    - Accounting, finance, general business, management or marketing.
  4. Electives from any undergraduate offerings of the University.....25 credits
- Total . . . . 180 credits

### Graduate Program

Master of Business Administration — The degree requires 45 graduate credits beyond the foundation in business and economics courses. A research paper must be completed in an area of concentration. The program is designed to accommodate those with baccalaureate degrees in business and other fields, including engineering, arts and sciences and education. Graduate school information appears in another section of this bulletin.



### Bachelor of Arts in Business Administration

#### Freshman year

Business 170 or Economics 100 .....	5 credits
English 100 and 132 or 133 or 134 or 220 or 230 or 240 .....	10 credits
Mathematics 118, 130 .....	10 credits
Natural Science .....	5 credits
Philosophy 110 .....	5 credits
Social Sciences (Psychology 100 and Sociology 101) .....	10 credits

#### Sophomore year

Business 211, 230, 231, 270 .....	20 credits
Economics 271, 272 .....	10 credits
Mathematics 214 .....	5 credits
Philosophy 220 .....	5 credits
Theology .....	5 credits

#### Junior year

Business 310, 340, 350, 380 .....	20 credits
Business major (300-499) .....	10 credits
Theology .....	5 credits
Electives other than business and economics .....	10 credits

#### Senior year

Business 482 .....	5 credits
Business major (300-499) .....	10 credits
Philosophy .....	5 credits
Electives .....	25 credits

Total . . . . 180 credits

### Accounting

Virginia L. Parks, Ph.D., C.P.A., Adviser

#### Objectives

The work of the accountant is firmly established as an indispensable service in the world of business. Professionally trained accountants serve in many areas of private business and government, such as cost determination, financial accounting, budgetary planning and auditing. By passing state examinations the accountant may pursue a career as a certified public accountant.

Minimum requirements for the accounting major are: Bus 330, 332, 333 and 431. Students who wish to prepare for the certified public accountant examination are advised to complete Bus 336, 370, 432, 433, 435 and 436.

### Finance

Khalil Dibee, Ph.D., Adviser

#### Objectives

The finance curriculum is designed to afford an understanding of the financial functions in business and the managements of assets for financial institutions and individuals.

Requirements for the finance major are: Bus 341, 343, 441 and Ec 372 or 473. Ec 472 is strongly recommended.

### General Business

Hildegard R. Hendrickson, Ph.D., Adviser

#### Objectives

The general business major provides the opportunity for a broad survey of business subjects. It is designed for students who intend to operate their own business enterprises, those who expect to attain greater specialization through on-the-job programs, or those who plan later to study in a specific area.

General business majors must complete at least 20 credits selected from: Bus 341, 344, 352, 370, 375, 381, 383; Ec 372, 471, 472, 476.

### Management

Harriet B. Stephenson, Ph.D., Adviser

#### Objectives

The general area of management is concerned with the administration of private business or public enterprise. It includes relating the goals of an enterprise with the goals of those individuals and groups of individuals who make the enterprise a continuing process. The management major is designed for students seeking careers in administration, personnel or industrial relations in business or government.

Requirements for the management majors are: Bus 381, 383 and at least 10 credits from Bus 370, 375; Ec 372, 472, 476.

### Marketing

Woodrow R. Clevinger, Ph.D., Adviser

#### Objectives

Marketing is the study of the flow of goods and services to ultimate consumers and users. Career opportunities in marketing are found in manufacturing, wholesaling and retailing, marketing research and in the promotional areas of advertising and personal selling.

The requirements for the marketing major are: Bus 352, 353, 451 and 452. Ec 472 is strongly recommended.



**Business Courses**

**Bus 170 Economic and Social Environment** 5 credits  
Survey of the significance and effect of economic and social environmental factors on the business sector; role and responsibilities of business in modern society; career opportunities in business; inter-relationships of major functional areas of business.

**Bus 211 Business Statistics** 5 credits  
Basic statistics, probability concepts, probability distributions, expectation, sampling, estimation, hypothesis testing, index numbers and introduction to simple linear models. Prerequisite: Mt 130. (fall, winter, spring)

**Bus 230 Principles of Accounting I** 5 credits

**Bus 231 Principles of Accounting II** 5 credits  
I. Introduction to the accounting cycle; accounts and financial statements of a single proprietorship with emphasis on the merchandising business; sales, purchases, notes and interest, receivables, inventories, plant assets, payroll accounting and elements of manufacturing costs. II. Accounting concepts and principles with emphasis on partnerships and corporations; long-term debt, investments, financial statement analysis, funds flow; introduction to managerial uses of accounting data and tax considerations in business decisions. Prerequisite: Bus 230 for 231. (fall, winter, spring)

**Bus 270 Law and Business** 5 credits  
Nature and development of law, structure and functions of the courts; civil and criminal procedure; the jury system; role of attorneys and other legal personnel. (fall, winter, spring)

**Bus 291 Special Topics** 1-5 credits

**Bus 292 Special Topics** 1-5 credits

**Bus 293 Special Topics** 1-5 credits

**Bus 310 Computer-Based Management Information Systems** 5 credits  
Data processing applications for business. Introduction to information systems. Planning, designing and implementing commercial systems. Development of computer-based management information systems and consideration of associated problems. Prerequisite: Mt 214.

**Bus 330 Cost Accounting** 5 credits  
Determination of manufacturing costs in job order, process and standard cost systems; introduction to methods of cost control. Prerequisite: Bus 231.

**Bus 332 Intermediate Accounting I** 5 credits

**Bus 333 Intermediate Accounting II** 5 credits  
I. Study of generally accepted accounting principles and concepts with special attention to cash, receivables, inventories, current liabilities, plant equipment, depreciation and intangible assets. II. Theory and problems related to long-term investments, long-term liabilities, allocation of income taxes, stockholders' equity. Statements from incomplete records, analysis of financial statements and funds flow. Prerequisites: Bus 231 for 332; 332 for 333. (I-fall, II-winter)

**Bus 336 Federal Income Tax I** 5 credits  
Tax returns of individuals; gross income and deductions; use of a tax service and research in tax problems. Prerequisite: Bus 332.

**Bus 340 Business Finance** 5 credits  
Study of the financial policies and practices of business firms; planning, control and acquisition of short-term and long-term funds; management of assets; evaluation of alternative uses of funds; capital structure of the firm; cost of capital; financing growth and expansion of business firms. Prerequisites: Ec 271, Bus 231. (fall, winter, spring)

**Bus 341 Investment and Security Analysis** 5 credits  
Principles, policies and practices of investing. Analysis of public and private industries and securities, individual and institutional viewpoints. Prerequisite: Bus 340.

**Bus 343 Financial Institutions and Markets** 5 credits  
Nature and function of bank and non-bank financial institutions and markets and their relationships and interdependence. Prerequisites: Ec 271, Bus 231.

**Bus 350 Introduction to Marketing** 5 credits  
Survey of institutions and essential functions in the marketing system. Analysis of the marketing mix; product, place, promotion and price strategies. Prerequisites: Junior standing, permission. (fall, winter, spring)

**Bus 352 Marketing Communication** 5 credits  
Business firms' methods of communications to their markets and publics. Analysis of the promotional mix; personal selling, advertising, sales promotion and publicity. Promotion strategies. Prerequisite: Bus 350.

**Bus 353 Price Practices and Policies** 5 credits  
Methods of price determination and administration of price policies by manufacturers, wholesalers and retailers. Legal aspects of pricing under anti-trust laws. Prerequisites: Bus 211, 350.

**Bus 370 Advanced Law and Business** 5 credits  
Commercial law, including contracts, business structures and property relationships; legal aspects of government and business, including credit and environmental legislation. Prerequisite: Bus 270.

**Bus 375 Economics of Profit Sharing** 5 credits  
Survey of the philosophy, economics and law in the field of profit sharing; analysis of profit sharing plans in use by industry today. Prerequisites: Bus 231, Ec 271.

**Bus 380 Management Practices** 5 credits  
Survey of quantitative and behavioral concepts of management; case studies relating the concepts of management practices. Prerequisite: Bus 231. (fall, winter, spring)

**Bus 381 Organization Theory** 5 credits  
Administrative setting and roles of supervisory personnel as determinates of the scope and techniques of management functions involving interpersonal relations, communication, leadership, organization structure, individual behavior and motivation. Prerequisite: Bus 380.

**Bus 383 Personnel Management** 5 credits  
Management of human resources to achieve the goals of the personnel of the firm and of the firm in times of change in technology and personal preferences. Prerequisite: Bus 380.

**Bus 431 Advanced Accounting I** 5 credits

**Bus 432 Advanced Accounting II** 5 credits  
I. Partnerships; formation, dissolution and liquidation; joint ventures; installment sales; consignment sales; home office and branch accounting; actuarial science. II. Accounting for business combinations; consolidated balance sheets and income statements; survey of accounting for governmental and non-profit organizations. Prerequisite: Bus 333. (I-fall, II-winter)

**Bus 433 Seminar in Accounting Theory** 5 credits  
Critical examination of accounting theories; concepts, postulates and principles related to income measurement, assets, liabilities and equities. Prerequisite: Bus 333.

**Bus 435 Auditing** 5 credits  
Purpose and scope of audits and examinations; auditing standards; audit procedures for cash, receivables, inventories and other areas. Practical application through an illustrative audit case. Prerequisite: Bus 333.

**Bus 436 Federal Income Tax II** 3 credits  
Tax returns of partnerships and corporations; problems related to installment sales, cash basis and accrual basis. Prerequisite: Bus 336.

**Bus 441 Case Problems in Finance** 5 credits  
Variables relevant to financial problems; skill, techniques and judgment necessary to make financial decisions. Prerequisite: Bus 340.

**Bus 451 Marketing Research** 5 credits  
Purpose, methods and techniques of marketing research. Prerequisites: Bus 211, 352, 353.

**Bus 452 Marketing Management** 5 credits  
Case studies of corporate problems and decision-making within marketing departments. Student participation in various roles of marketing, executive action involving organization planning, execution and control of marketing programs. Prerequisites: Bus 231 and 451. Seniors only.

**Bus 482 Business Policy and Organization** 5 credits  
Case studies of formation of policy and administration of business enterprise; intellectual discipline which permits the understanding of a problem, the planning of a program of action and the progression to execution and constant review; original work in analysis and policy decisions. Prerequisite: Senior standing. (fall, winter, spring)

**Bus 491 Special Topics** 2-5 credits

**Bus 499 Independent Study** 1-5 credits  
Supervised individual research. Open to senior business majors with the approval of the student's adviser.

## Graduate Courses

**Bus 501 Descriptive and Analytical Statistics** 3 credits  
Basic statistics, probability concepts, probability distributions, expectations, sampling, estimation, hypothesis testing, index numbers, introduction to simple linear models.

**Bus 502 Financial Accounting** 3 credits  
Concepts and principles underlying accounting with special attention to income determination and measurement of assets and equities. Analysis of business performance from accounting viewpoints.

**Bus 503 Corporate Financial Theory** 3 credits  
Theory and practice of business finance with emphasis on asset management, capital structure, cost of capital and capital budgeting. Prerequisite: Bus 502.

**Bus 504 Marketing Principles** 3 credits  
Introduction to marketing and its functions. Examination of contemporary problems and issues in marketing of goods and services.

**Bus 505 Legal Environment** 3 credits  
Examination of objectives of American legal system, its structure and procedures, as well as the dynamics of courts and regulatory commissions. Relationship of law to social change and preservation of society's values; limits of the law's ability to produce change. Contract, anti-trust and manufacturer's liability law.

**Bus 506 Macroeconomics** 3 credits  
Determinants of the aggregate level of income, employment and prices. Stabilization problems and policies.

**Bus 507 Administrative Practices** 3 credits  
Analysis of traditional processes of management: planning, organizing, directing, coordinating and controlling. Emphasis on analytical skills needed by the manager and the integration of individuals within organizations.

**Bus 509 Introduction to Information Systems** 3 credits  
Planning, designing and implementing commercial systems. Use of programming concepts for problem solving. Development of computer-based management information systems and associated problems.

**Bus 510 Survey of Quantitative Methods** 3 credits  
Survey of statistical techniques used in business decision making. Sampling, time series analysis, analysis of variance, linear programming, inventory models, quality control and other selected topics. For students not intending to pursue the quantitative area. Prerequisite: Bus 501.

**Bus 511 Advanced Statistical Analysis** 3 credits  
Probability distributions, sampling, analysis of variance, multiple correlation and regression, time series analysis, non-parametric statistics and introduction to linear programming. Prerequisite: Bus 501.





**Bus 512 Operations Research** **3 credits**  
Philosophy and methodology of operations research, linear programming, inventory models, simulation, queuing theory, game theory and introduction to dynamic programming. Prerequisite: Bus 511.

**Bus 513 Operations Analysis** **3 credits**  
Applications of operations research and statistical techniques to solutions of business problems in finance, marketing, logistics, production, computer systems and management decision making; opportunity for field research problems. Prerequisite: Bus 511.

**Bus 519 Research in Quantitative Methods** **3 credits**  
Prerequisite: Permission of adviser.

**Bus 530 Managerial Accounting** **3 credits**  
Concepts of managerial accounting; attention-directing and problem-solving functions of accounting in current planning and control; evaluation of performance; special decisions and long-range planning. Emphasis on cost analysis rather than on cost record keeping. Prerequisite: Bus 502.

**Bus 531 Management Control Systems** **3 credits**  
Study of the nature, structure and processes of management control systems considering such problems as organization structure, performance measurement, and budgeting and performance analysis in both profit and non-profit organizations. Prerequisite: Bus 530.

**Bus 533 Contemporary Accounting and its Environment** **3 credits**  
Case studies in the role of accounting in society; essentials of accounting measurement; formulation of accounting concepts, interaction of accounting with other disciplines with which it has the greatest interplay—economics, law, mathematics, information systems, communication theory and behavioral sciences. Prerequisite: Bus 502.

**Bus 534 Seminar in Accounting** **3 credits**  
Analysis of the development of accounting principles, postulates and general accounting theory. Current research activities of the accounting profession. Study of the changes which affect the future practice of accounting and accounting education. International accounting; behavioral accounting; accounting for social costs. Prerequisite: Permission of adviser.

**Bus 539 Research in Accounting** **3 credits**  
Prerequisite: Permission of adviser.

**Bus 540 Managerial Finance** **3 credits**  
Cases in business finance that develop students' skill for identifying problems, acquiring relevant factual material and using appropriate financial theory for making decisions in simulated business settings. Prerequisite: Bus 503.

**Bus 542 Investments** **3 credits**  
Principles and practices of investments, security analysis and valuation, portfolio management and elements of the investment process. Prerequisite: Bus 540.

**Bus 543 Advanced Financial Theory** **3 credits**  
Examination of advanced current topics and issues in financial theory using a seminar approach. The course involves readings, discussions and short papers on selected topics. Prerequisite: Bus 540.

**Bus 544 Money and Capital Markets** **3 credits**  
Structure of US money and capital markets, the impact of monetary and fiscal policies on the funds flows and interest rates in these markets and the policies of financial institutions participating in these markets. Prerequisite: Bus 506.

**Bus 549 Research in Finance** **3 credits**  
Prerequisite: Permission of adviser.

**Bus 550 Marketing Policy** **3 credits**  
Managerial approach to the study of various policy areas in marketing through the use of case studies. Prerequisite: Bus 504.

**Bus 552 Marketing Research** **3 credits**  
Purpose, methods and techniques of marketing research and description of marketing information systems. Prerequisite: Bus 550.

**Bus 554 International Marketing** **3 credits**  
Growing importance of international marketing; differences in economic, cultural and political factors between countries, feasibility of using American techniques in performing marketing functions abroad. Prerequisite: Bus 550.



**Bus 555 Management of Marketing Communication** **3 credits**

Role of promotion in marketing: functions of personal selling, advertising, sales promotion and publicity and their coordination into an effective promotional mix, evaluation and control of promotion. Prerequisite: Bus 550.

**Bus 559 Research in Marketing** **3 credits**  
Prerequisite: Permission of adviser

**Bus 570 Economic Analysis of the Firm** **3 credits**  
Theory of the consumer, the firm, and the industry, with emphasis on applications to business decision making. Prerequisite: Bus 506.

**Bus 574 Managerial Economics** **3 credits**  
Application of economic theory and methodology to business administration practice, using tools and techniques of economic analysis to solve business problems. Prerequisite: Bus 570.

**Bus 575 International Trade and Development** **3 credits**  
Economic fundamentals of international trade including the working of the foreign exchange market. National policies and international institutions. Foreign branches and subsidiaries. Multinational corporations. Centrally planned economies. Developing nations. Prerequisite: Bus 506.

**Bus 576 International Finance and Investment** **3 credits**  
Balance of payments. International investment. Exchange controls. Liquidity and adjustment problems. I.M.F. and possible developments. American payment problems. Special drawing rights. Proposals for international payments systems. Eurodollar market. Prerequisite: Bus 506; 575 recommended.

**Bus 578 Legal Influences on Business** **3 credits**  
Survey of business related legal topics including manufacturer's liability, consumer protection, contracts, labor law, planning and zoning and anti-trust law. Use of a law library. Prerequisite: Bus 505.

**Bus 579 Research in the Environmental Area** **3 credits**  
Prerequisite: Permission of adviser.

**Bus 580 Organizational Structure and Behavior** **3 credits**  
Conceptual understanding of organization structure and functioning. Provides examination of various forces operating in an organization. Examines research studies from various disciplines to understand the organizational functional and dysfunctional aspects. Explores introduction of change. Prerequisite: Bus 507.

**Bus 581 Administrative Social Communication** **3 credits**  
Analysis of socio-psychological theory and research, decision making, group structure, dynamics and leadership and how these influence social communication in small groups and the formal organization. Emphasis is on the understanding of theory and the practice of communication skills in class. Prerequisite: Bus 580.

**Bus 582 Decision Theory** **3 credits**  
Study, analysis and discussion of the total decision making process. Particular emphasis is accorded the interdisciplinary aspect of decision making and the concept of rational decisions. Prerequisite: Bus 510, 580.

**Bus 583 Management Philosophy** **3 credits**  
Review, analysis and discussion of managerial values, ideology, motivation and objectives. The power of managers and their social responsibilities are examined through the evolution of management thought and the theories of technological "determinism". Prerequisite: Bus 580.

**Bus 584 Comparative Administration** **3 credits**  
Examination of differences which exist in managing various types of organizations and institutions. Analysis of different managerial approaches to public issues affecting business. Prerequisite: Bus 580.

**Bus 585 Management of Change** **3 credits**  
Analysis of the process of social change in American society, its impact on the public and organizations, especially the corporation. Problems of technology and culture, ecological awareness, poverty, consumer law, new life styles and new attitudes toward work. Prerequisite: Bus 580

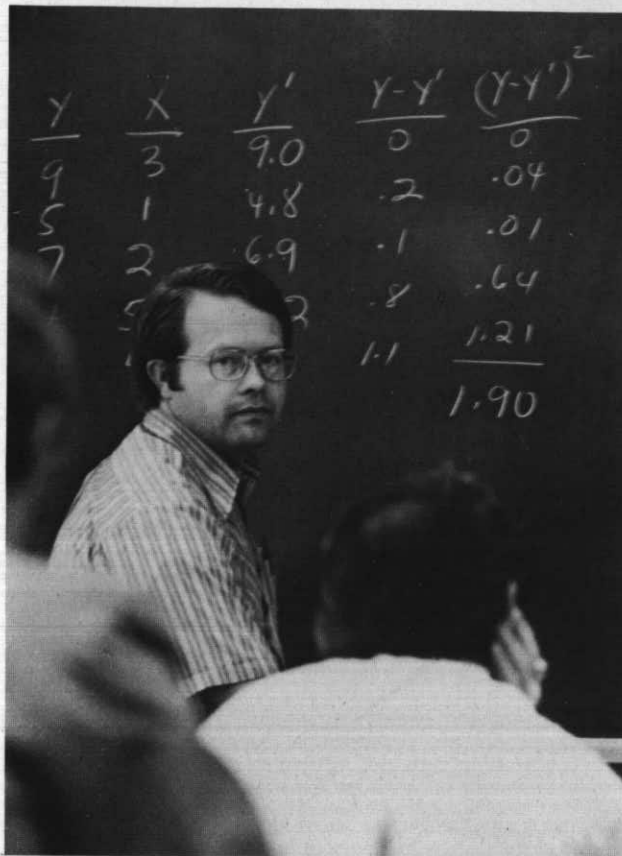
**Bus 586 Small Business Management** **3 credits**  
Procedures and problems in starting and operating a successful small business enterprise. Prerequisite: Bus 530, 540, 550, 580.

**Bus 589 Research in the Behavioral Area** **3 credits**  
Prerequisite: Permission of adviser.

**Bus 590 Special Topics** **1-3 credits**  
Prerequisite: Permission of adviser.

**Bus 599 Research** **1-3 credits**  
Prerequisite: Permission of adviser.





## Economics

John D. Eshelman, Ph.D., Adviser

### Objectives

The courses in economics are designed to acquaint the student with the economy in which he lives and to provide for the application of these courses to all other social sciences. The tools of analysis necessary to solve such problems as income distribution, domestic and international finance, economic fluctuations and business organizations are acquired and opportunity is given to apply the various methods of solution. Students who prove especially able in economics courses are encouraged to pursue graduate work in preparation for professional status as economists in government, industry or the academic world.

### Degree Offered

Bachelor of Arts in Economics

### General Program Requirements

Students in economics must satisfy the core curriculum of the University on page 24 of this bulletin. In fulfilling the core, Pls 160, Mt 118 and 130 are required. In addition, students who do not elect Ec 273 as part of their major program must substitute Hs 231 for one of the history core courses.

### Departmental Requirements

Bachelor of Arts — 55 credits of economics which must include Ec 271, 272, 372, 374, 479 and six additional economics courses (Bus 343 may be substituted for one); Bus 211 and 230.

Undergraduate Minor — 30 credits of economics which must include: Ec 271, 272, 372, 374 and any two courses in economics selected with the assistance of an adviser.

### Bachelor of Arts in Economics

#### Freshman year

English 100 and core option .....	10 credits
History 231 and core option .....	10 credits
Mathematics 118, 130 .....	10 credits
Philosophy 110 .....	5 credits
Political Science 160 .....	5 credits
Elective .....	5 credits

#### Sophomore year

Business 211, 230 .....	10 credits
Economics 271, 272 .....	10 credits
Philosophy 220 .....	5 credits
Social Science core option .....	5 credits
Electives .....	15 credits

#### Junior year

Economics 372, 374 and electives .....	20 credits
Philosophy core option .....	5 credits
Theology core options .....	10 credits
Electives .....	10 credits

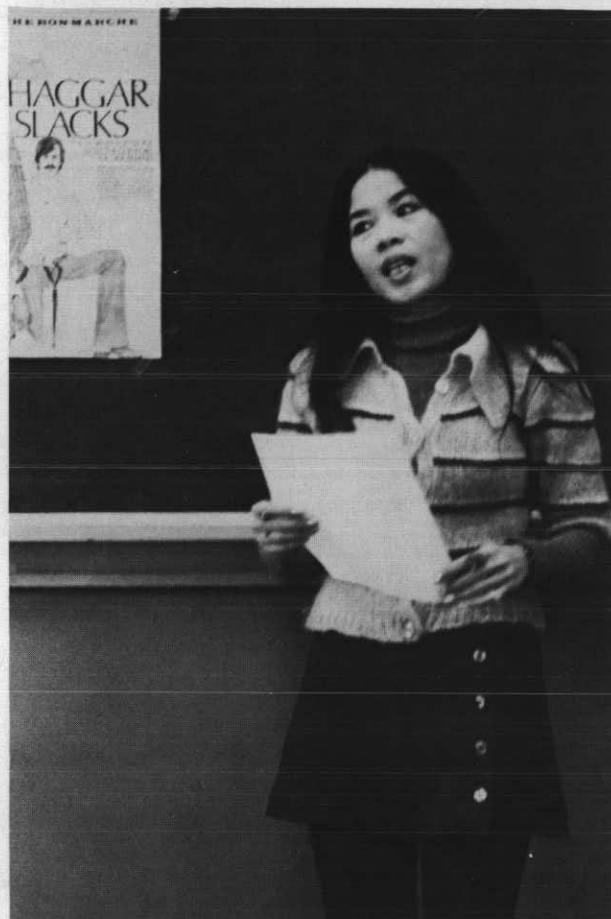
#### Senior year

Economics 479 and electives .....	25 credits
Electives .....	20 credits

Total . . . . 180 credits

### Economics Courses

<b>Ec 100</b>	<b>Nature of Economic Society</b>	<b>5 credits</b>
	Evolution of economic institutions, with emphasis on market capitalism, its critics and problems, past and present. Changing roles and responsibilities of government and the private sector.	
<b>Ec 271</b>	<b>Principles of Economics - Macro</b>	<b>5 credits</b>
	Organization, operation and control of the American economy in its historical and socio-political settings; problems of inflation, unemployment, taxation, the public debt, money and banking, growth.	
<b>Ec 272</b>	<b>Principles of Economics - Micro</b>	<b>5 credits</b>
	Operation of the American economy with emphasis on prices, wages, production and distribution of income and wealth; problems of the world economy.	
<b>Ec 273</b>	<b>American Economic History</b>	<b>5 credits</b>
	Economic growth of the United States in the light of the political and social trends of the times. Stresses the historical background of contemporary problems.	



**Ec 274 History of Economic Thought 5 credits**  
Major historical developments in economic thought from ancient to contemporary times. Christian influence on economic thought; mercantilism and laissez faire; German and Austrian schools, Marx and the various socialists; Keynes and neo-Keynesian analysis.

**Ec 291 Special Topics 1-5 credits**  
**Ec 292 Special Topics 1-5 credits**  
**Ec 293 Special Topics 1-5 credits**

**Ec 372 Aggregate Income Analysis 5 credits**  
Determination of levels of national income, employment and prices. Problems of unemployment and inflation. Policies for stabilization and growth. Prerequisite: Ec 271.

**Ec 374 Intermediate Price Theory 5 credits**  
Demand, supply, costs and market prices, under competitive and imperfectly competitive market conditions. Relationships between price and costs; income and its functional distributions in a capitalistic society. Prerequisite: Ec 272.

**Ec 377 Government and Business 5 credits**  
Development in the United States of public policy with respect to business. Government regulation and control of industry and commerce and its application to mergers, business concentration and restrictive business practices, regulation of public utilities. Prerequisite: Ec 272.

**Ec 379 Environmental Economics 5 credits**  
Economic analysis of man's effect on his physical environment; problems of pollution, maintenance of the ecological balance and conservation of natural resources. Prerequisite: Ec 272.

**Ec 471 Government Finance 5 credits**  
Revenues, expenditures and debts of federal, state and local governments; economic theories; constitutional limitations; government finance as means for social reform; shifting and incidence of taxes. Prerequisites: Ec 271, 272.

**Ec 472 International Economics 5 credits**  
Foreign trade theory and practice; foreign exchange; tariffs and quotas; G.A.T.T.; common markets and free trade areas; balance of payments; international payments systems; gold standard; foreign investment and adjustment; reserve currencies; special drawing rights; developing nations. Prerequisite: Ec 271.

**Ec 473 Business Cycles 5 credits**  
Basic variations affecting general business conditions as a background for business and investment decisions; appraisal of proposals for controlling the business cycle and of forecasting techniques. Prerequisite: Ec 271; 372 recommended.

**Ec 476 Labor Economics 5 credits**  
Survey of the economics of industrial relations; effects of industrial changes on labor; hours and wages; employment and unemployment; trade unionism and labor legislation. Prerequisite: Ec 272.

**Ec 477 Economic Development 5 credits**  
Requirements for economic growth; growth theory; application to the development of industrial nations; employment prospects and the effect of automation; development of agricultural economies; planning for growth and industrialization; rich nations and poor nations; growth of authoritarian socialist societies. Prerequisite: Ec 271.

**Ec 478 Comparative Economic Systems 5 credits**  
Types of economic systems — capitalist, democratic socialist, totalitarian socialist, fascist, mixed types. Common factors and problems. Differences in structure and operation. Comparative performance. Marxian philosophy and economics. Prerequisites: Ec 271, 272.

**Ec 479 Senior Seminar 5 credits**  
An advanced course providing the opportunity for students to pursue topics in breadth and depth and apply the tools of economic analysis to current issues in national and international economic policy. Prerequisite: Permission of instructor.

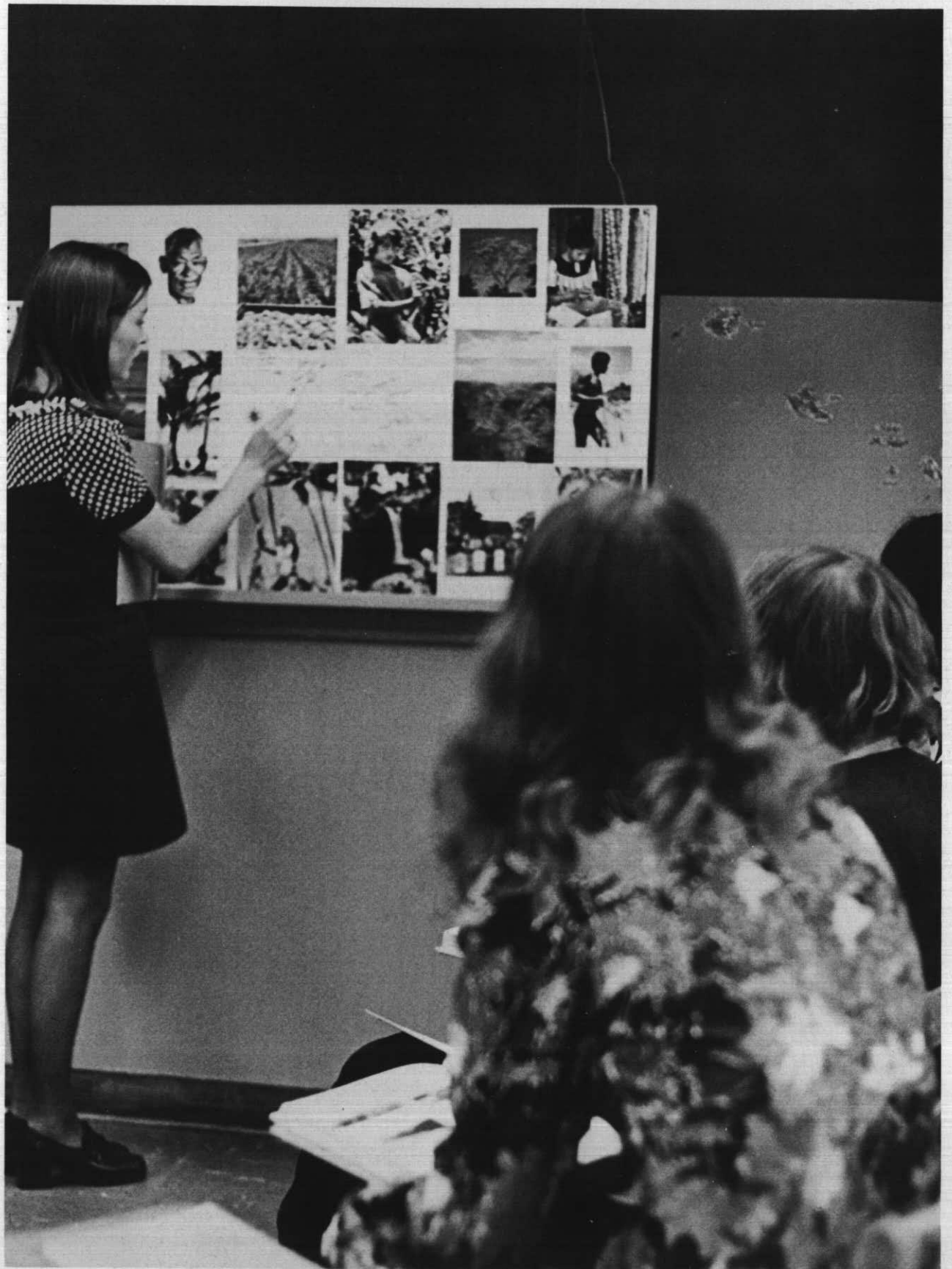
**Ec 491 Special Topics 2-5 credits**

**Ec 499 Independent Study 2-5 credits**  
Supervised individual research. Open to senior economics majors with the approval of the departmental advisers.



# School of Education

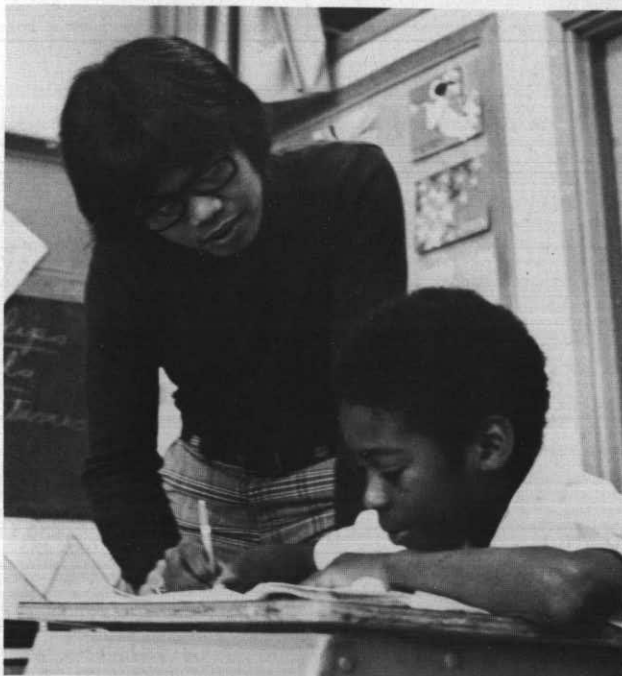
John A. Morford, Ed.D., Dean



**Ralph K. O'Brien, Ed.D., Associate Dean**







## School of Education

### Objectives

Within the framework of the University's philosophy and principles, the School of Education has as its objectives the attainment of a liberal and humane education, the formation of men and women dedicated to the art of teaching and knowledgeable of its sciences, and a sound preparation in fields or areas of learning applicable to the curriculum of the elementary and secondary school.

The School offers programs leading to the Washington provisional teaching certificate, standard teaching certificate, provisional principal's credential, standard principal's credential and school counselor's certificates. Also available is a program to train Montessori school teachers.

Through reciprocal agreements School of Education graduates also qualify for certification in most other states.

### Accreditation

The School is accredited by the Northwest Association of Higher Education and the National Council for Accreditation of Teacher Education and approved by the Washington State Board of Education.

### Organization

The School of Education has two major divisions, undergraduate studies and graduate studies and one department, Health and Physical Education. Close cooperation exists among all departments, schools and colleges of the University in working out a program of preparation for the individual student.

### Degrees Offered

Bachelor of Arts in Education  
Bachelor of Education  
Master of Arts in Education  
Master of Education

## Undergraduate Program

### Admission Requirements

All entering freshmen and undergraduate transfer students from accredited institutions of higher learning who aspire to become teachers may be admitted to the School of Education for lower division courses if they meet the University's regular admission standards.

### Criteria and Procedure for Admission into Upper-Division Candidacy in the Teacher Training Programs

Requirements for entrance into upper-division candidacy in the teacher training program are higher than those for graduation. Therefore, students must make application for and be accepted into the program prior to registration in Ed 200 and 325, or 436, 437 or 442.

For undergraduates, this application will usually be made during the quarter in which Ed 322 is taken, usually in the sophomore year. Transfer students must complete one quarter at Seattle University before applying for entrance into upper-division candidacy. Students entering initially as post-bachelor students are evaluated at the time of admission and need not make a separate application for entrance into upper-division candidacy. An interview with a School of Education adviser is required of all applicants, and a plan for completion of upper-division work must be approved by the adviser and submitted with the application.

Applicants for teacher training are evaluated by the School of Education on the following bases: 1) recommendation of the teaching major department, or adviser in the case of elementary or "undecided" students; 2) academic record; 3) physical qualifications; 4) emotional health; and 5) evidence of interest in teaching as a career.

The School will place each applicant into one of four categories:

1. Accepted — may begin upper-division work toward teaching certificate. Criteria are:  
Unconditional recommendation from major department or adviser; Cumulative grade point average of 2.5, and for secondary candidates a 2.5 grade point average in the major or teaching field; physical ability and appearance necessary for teaching; good moral character and evidence of interest in teaching as a career.
2. Accepted conditionally — may begin work toward teaching certification provided the conditions set forth are met. Conditions most commonly, but not always, relate to the achievement or maintenance of certain grades or grade point averages. The Undergraduate Studies Executive Committee retains the right to refuse to accept conditional students in teaching fields in which an extreme surplus of teachers exists.

Criteria are: (Any one is sufficient reason for conditional acceptance.)

Conditional recommendation from major department or adviser; grade point averages below 2.5 but above 2.0 in both cases; a physical defect that makes a teaching career questionable, but not impossible; symptoms of emotional problems or immaturity which make a career in teaching questionable but are currently of a minor nature; evidence of insufficient interest in a career in teaching.

3. Deferred without prejudice — may not begin or continue upper division professional work toward teaching certification but may apply at a later date if certain conditions set forth in the deferral are met.

Criteria are: (Any one is sufficient cause for deferral.)

A recommendation that this be done from the major department or adviser; a grade point average below 2.0 overall or in teaching major; a physical defect which currently would make a teaching career impossible but which is correctable; evidence of an emotional problem or immaturity which may be overcome by time.

4. Rejected — may not begin or continue work toward teaching certification. Ordinarily, rejected applicants will not be reconsidered at a later date.

Criteria are: (Any one is sufficient cause for rejection.)

A recommendation that this be done from the major department or adviser; physical defect making a career in teaching impossible; evidence of lack of the moral character needed for teaching; evidence of emotional and/or mental immaturity or disorder of a type which is not likely to be changed by time and which makes the applicant unsuited for teaching.

Applicants may appeal the classification by the Dean to the Undergraduate Studies Executive Committee. Appeals must be made in writing within one week of notification of classification.

The status of any student is reviewed automatically if the student receives a grade of D or lower in a professional course, drops below the required grade point average or the adviser so recommends.

### Admission to Student Teaching

Acceptance into upper-division candidacy in the teacher training program and completion of prerequisite courses does not guarantee admittance into student teaching. An application must be submitted to the Dean by the end of the fifth week of the quarter prior to the one in which the student wishes to fulfill the student teaching requirement. Specific dates during which forms may be obtained and submitted are announced each quarter.

Categories and criteria for acceptance are the same as those listed above except, recommendation from the faculty in the School of Education is also considered, and the student must have a grade point average of 2.5 in three areas: cumulative, in the teaching field (secondary), and in professional education courses.



### Curriculum

The teacher preparation curriculum at Seattle University encompasses three components:

The liberal core of arts and sciences offered at Seattle University comprises about 35 per cent of the prospective teacher's curriculum. Forty per cent of the program is utilized in gaining a depth of knowledge in a teaching major for the secondary school teacher or two teaching areas for the elementary school teacher. The remaining 25 per cent of the 190 quarter hour basic teaching preparation is received in professional courses in foundations of education, psychology of child and adolescent development and learning, the principles, materials and technology of teaching, and closely supervised and assisted student teaching and appropriate laboratory experience in schools throughout the area.

### General Program Requirements

Bachelor of Arts in Education (middle school, junior high school, or senior high school teaching) — 1) All University core requirements as found on page 24: 60 credits. 2) A teaching major of at least 45 credits in any subject commonly taught in secondary schools. (See departmental sections of the bulletin for exact requirements in each teaching major). 3) Professional education courses: 45 credits. 4) Electives: 40 credits. Students are advised to use electives to complete additional teaching fields.

Ten of the 190 credits required for the degree and provisional certification also count toward the standard certificate teachers must earn once they begin teaching.



## Bachelor of Arts in Education Secondary

### Freshman year

English core options .....	10 credits
History core options .....	10 credits
Philosophy core options .....	5 credits
Social Science core option .....	5 credits
Major or electives .....	15 credits

### Sophomore year

Education 322 .....	5 credits
Mathematics/Science core options .....	10 credits
Philosophy core options .....	10 credits
Theology core options .....	10 credits
Major or electives .....	10 credits

### Junior year

Education 200, 325, 330, 337 .....	20 credits
Physical Education .....	5 credits
Major or electives (including course in teaching of major) .....	25 credits

### Senior year

Student Teaching .....	15 credits
Major and electives .....	35 credits

Total . . . 190 credits

Bachelor of Education (elementary, middle school, junior high school or Montessori school teaching — 1)

All University core requirements: 60 credits. The B.Ed. requires certain specific core courses as shown in the program outline. See page 24 for remaining core requirements. 2) Common courses: 25 credits. Includes work in art, music, geography, literature, speech and physical education needed by all elementary and middle school teachers. 3) A teaching major of at least 25 credits and a teaching minor of at least 20 credits in subjects or areas commonly taught in elementary or junior high schools. Junior high candidates must take the 25 hour teaching major in a specific subject taught at the junior high level. 4) Professional education courses: 50 credits. 5) Electives: 10 credits.

Ten of the 190 credits required for the degree and provisional certification also count toward the standard certificate teachers must earn once they begin teaching.

Montessori teaching candidates may substitute certain Montessori oriented work for some of the courses listed in the elementary program. Students interested in Montessori teaching should confer with the Montessori Program Director early in their studies.

## Bachelor of Education Elementary

### Freshman year

English core (include American Literature) .....	10 credits
History core (include U.S. History) .....	10 credits
Philosophy core option .....	5 credits
Social Science core option .....	5 credits
Teaching subject or supporting area .....	15 credits

### Sophomore year

Art 370, Music 114 .....	10 credits
Biology 303, 304; Mathematics 200 .....	10 credits
Education 322 .....	5 credits
Philosophy core options .....	10 credits
Theology core options .....	10 credits

### Junior year

Education 200, 325 .....	10 credits
Physical Education .....	5 credits
Education 330, 336, 340 .....	15 credits
Teaching subject and electives .....	20 credits

### Senior year

Student teaching .....	15 credits
History 341 or Speech 320 or Education 372, 374 or 420 (any three) .....	15 credits
Teaching subject and supporting area and electives .....	20 credits

Total . . . 190 credits

## Special Non-Degree Programs

A number of programs may be taken in addition to or separately from degree requirements:

For bachelor's degree holders **without** teacher training: (at least 30 hours must be completed at Seattle University in these programs to receive our recommendation.)

- Elementary teaching provisional certification,
- Secondary teaching provisional certification,
- Montessori teaching certification.

For bachelor's or master's degree holders with teacher certification or its equivalent:

- Standard certification (fifth-year); may be either a non-degree program or combined with a master's degree.
- Provisional principal's credential.  
Candidates must receive State of Washington Board of Education approval to enter administrative preparation leading to the credential. Requirements for the principal's credential include: completion of requirements for a standard teaching certificate; 54 credits of course work beyond the bachelor's degree, of which at least 24 credits are to be in an approved program, including administrative internship; and at least three years of successful teaching at the time the credential is requested. At least one year of successful teaching must have been completed at the time the candidate begins the credential program. Acceptance in Graduate School as a credential candidate is a prerequisite.
- Standard principal's credential.  
Candidates for the standard principal's credential must have the provisional principal's credential, have completed 12 credits of applicable study since receiving the provisional credential, have a master's degree and have completed three successful years as a school principal. For detailed programs and instructions consult the Coordinator of Education Administration Programs.

Both principal's credential programs may be combined with the master's degree in Education Administration described below.

- School counselor's certification.  
These certification programs also are commonly combined with the master's degree in counseling described below. See the Coordinator of Counseling and Guidance Programs for details.



## Graduate Programs

At the graduate level the School of Education offers M.Ed. and M.A. degrees with the following majors:

**Curriculum and Instruction** — for those planning a career as professional teachers, as instructional leaders, or curriculum specialists.

**Administration** — designed for those desiring to qualify for principalships and other supervisory positions.

**Guidance and Counseling** — prepares professionals for counseling in both school and non-school settings.

**Adult Education** — for those whose orientation is education in community college, technical school, businesses, or other adult settings.

In addition to graduate degree programs we offer post-bachelor and fifth year programs leading to provisional or standard teaching certificates **and** post-masters programs designed to upgrade in-service educators and to lead to principal, supervisor, or counselor credentials.

Several other masters programs are available at Seattle University outside the School of Education including English, History, Religious Education, Business and Science. Teachers wishing to combine some courses from graduate fields offered by Seattle University along with selected professional education courses should pursue the major in Curriculum and Instruction which permits such a combination.

### Admission Requirements

1. Relevant work experience, usually at least one year, is required for all programs. The work must be in the type of institution or agency in which the student plans to utilize the graduate training.

2. For School Administration or Curriculum and Instruction majors, academic background equivalent to that required for a teaching certificate is necessary.
3. For Guidance and Counseling majors the equivalent of an undergraduate major in any **one** of the following is needed: Education, Psychology, Sociology, Social Work or Community Service.
4. Students meeting the above standards who have at least a 2.75 cumulative or upper-division grade point average are acceptable as regular degree applicants. Those below a 2.75 but above a 2.30 grade point average may be accepted as probationary degree applicants. Those accepted on probation must remove all conditions of probation before completing over 15 hours of degree work at Seattle University.

### General Format of Degree Studies

Below are typical programs for each major field. While details vary from program to program, all Education graduate degree programs contain the following components:

1. Admission — as degree "applicant." (See above.)
2. Initial course work — 15 hours of course work to include Ed 500, Introduction to Research and Graduate Studies, plus the designated first course in the major field and other courses designated at admission or by your program adviser.
3. Candidacy — admission to degree Candidate status, is based on these criteria:
  - a) A 3.00 (B) average in the first 15 hours.
  - b) Submission of Graduate Record Examination scores or their equivalent.
  - c) Recommendation of your on-the-job supervisor. (We will request this from your supervisor.)
  - d) Recommendation of your major program coordinator.
  - e) Submission of a planned program of studies approved by your adviser.
4. Advanced course work:
  - a) Completion of major field course work. The amount varies from program to program and student to student. See below for typical programs for each major.
  - b) Complete core and approved electives to bring the total to at least 45 hours. One course in foundations must be included by all. M.Ed. candidates must include a 3-credit graduate project, while M.A. candidates must include the 10-credit thesis. (In special cases and with advance approval of the adviser and dean, M.Ed. candidates may substitute 6 credits of course work for the project, for a total of 48 credits.)
5. Comprehensive exam — satisfactorily complete a written comprehensive exam covering the major area of study. The exam **may** be taken as soon as all major area course work is completed and **must** be taken immediately once all degree course work is completed. The examination is offered at least three times each year.



### Some Details of Interest

1. **Transfer credit.** A student may transfer 10 quarter hours to Seattle University as part of a masters program provided:
  - a) student shows evidence that it was true graduate credit acceptable toward a graduate degree at the accredited university where it was taken;
  - b) the work fits within applicable time limits, normally within six years prior to the completion of the degree;
  - c) it is approved by the adviser and the deans;
  - d) grades must be B or above.
 Majors in Curriculum and Instruction may exceed the 10-hour limit with advance approval of the adviser and deans when a group of electives exceeding 10 hours is desirable but not available at Seattle University.
2. **Time limit.** All degree work must ordinarily be completed within six years. This limit includes transfer credit.
3. **Residency requirement.** At least one full quarter must be spent in full-time study, preferably the first summer quarter. Remaining work may be done either full-time or on a part-time basis during summers or in late afternoon and evening sessions during the year or both. Eight hours or more per quarter constitutes full graduate study.
4. **Enrollment limits for fully employed students.** Anyone holding full-time employment is ordinarily limited to six hours per quarter. (This may be exceeded when added courses are an integrated part of the working day, e.g., internship, certain independent study courses, and certain graduate projects.)
5. **A 3.00 grade point average** must be maintained during graduate study.
6. **Combining degree work and certification programs:** By careful planning the student may combine degree work with a program leading to the standard teaching certificate, the provisional principal's credential, or a counselor's credential.

(Please note: Students who choose to pursue a fifth year toward the provisional or standard teaching certificate but **not** the masters degree shall not enroll in the Graduate School but should enroll directly in the School of Education as "Fifth-Year" students. Such students develop a planned program with an adviser from courses numbered 100-499. A few introductory 500-level courses may be included with advance approval of the adviser and dean.)

### Masters Program in Education Administration

Winfield S. Fountain, Ed.D., Coordinator

#### Typical Program — 45-Hour Plan Required Courses:

1. Ed 500 — Introduction to Research and Graduate Studies
2. **One of:** Ed 501 — Philosophy of Education  
Ed 502 — History of Education  
Ed 503 — Comparative Education
3. **One of:** Ed 581 — Elementary Administration  
Ed 582 — Secondary Administration



#### Typical Major Courses:

4. Ed 583 — School Finance
5. Ed 584 — School Law
6. Ed 586 — School Personnel
7. Ed 598 — Administrative Field Study
8. Ed 596 — Administrative Graduate Project
9. Ed 591 — Administrative Internship I
10. Ed 592 — Administrative Internship II
11. Ed 593 — Administrative Internship III

**Typical Electives** (Normally 12 to 15 credits from such courses as the following and will vary greatly from student to student.)

- Ed 505 — Use of the Computer in Education
- Ed 510 — Introduction to Guidance
- Ed 541 or 542 — Curriculum Seminar
- Ed 536 — Supervision of Instruction
- Ed 572 — Foundations of Adult Education
- Ed 580 — Administration Problems Seminar
- Ed 587 — School Public Relations
- Ed 597 — Independent Study in Educational Administration

### Masters Program in Adult Education

Charles A. Yackulic, M.A., Coordinator

#### Typical Program — 45-Hour Plan Required Courses:

1. Ed 500 — Introduction to Research and Graduate Studies
2. **One of:** Ed 501 — Philosophy of Education  
Ed 502 — History of Education  
Ed 503 — Comparative Education
3. Ed 572 — Foundations in Adult Education

#### Typical Major Courses:

4. Ed 573 — Special Problems of Adult Learner
5. Ed 574 — Administration of Adult Education Programs
6. Ed 575 — Course Development and Instructional Resources
7. Ed 579 — Adult Education Graduate Project

**Typical Electives:**

8. Ed 576 — Job and Task Analysis
9. Sc 491 — Sociology of Work
10. Ed 513 — Principles of Counseling
11. Ed 578 — Adult Education Practicum
12. Psy 426 — Psychology of Occupations and Careers
13. Psy 465 — Industrial Psychology
14. Ed 506 — Educational Statistics
15. Ed 540 — Fundamentals of Curriculum Development

## Masters Program in Counseling and Guidance

Marylou Wyse, Ph.D., Coordinator

### Typical Program — 45-Hour Plan Required Courses:

1. Ed 500 — Introduction to Research and Graduate Studies
2. One of: Ed 501 — Philosophy of Education  
Ed 502 — History of Education  
Ed 503 — Comparative Education
3. Ed 510 — Introduction to Guidance

### Typical Major Courses:

4. Ed 512 — Informational Services in Guidance
5. Ed 513 — Principles and Practices in Counseling
6. Ed 527 — Measurement in Psychology and Education
7. Ed 528 — Psychological Tests
8. Ed 551 — Counseling Practicum
9. Ed 558 — Field Practice in Guidance
10. Ed 559 — Guidance Graduate Project

### Typical Electives:

11. Ed 519 — Group Counseling
12. PE 497 — The Drug Scene
13. Psy 494 — Behavior Modification
14. Ed 506 — Educational Statistics
15. Ed 515 — Guidance and Multicultures

## Masters Program in Curriculum and Instruction

Margaret Haggerty, Ph.D., Coordinator

### Typical Program — 45-Hour Plan Required Courses:

1. Ed 500 — Introduction to Research and Graduate Studies
2. One of: Ed 501 — Philosophy of Education  
Ed 502 — History of Education  
Ed 503 — Comparative Education
3. Ed 540 — Fundamentals of Curriculum Development

### Typical Major Courses:

4. Ed 530 or 531 — Seminar in Curriculum Design
5. Ed 536 — Supervision of Instruction
6. Ed 537 — Curriculum Independent Study
7. Ed 541, 542 or 543 — Curriculum Seminar
8. Ed 538 — Curriculum Field Study
9. Ed 539 — Curriculum Graduate Project



### Electives: (approximately 18 hours)

There is an unlimited choice of electives in this flexible program. Examples of types of elective choices include:

- a. An academic area such as English, foreign language (French aboard with intern teaching), history, business, art, physical education. Courses must be 400-level or above.
- b. Courses from other graduate Education majors: Administration, Guidance, Adult Education.
- c. Specialty areas such as reading and learning disabilities, special education, Montessori education, elementary methods, psychology, new media (If the desired, approved courses are not available at Seattle University they may be taken elsewhere.)
- d. Student desiring the M.A. rather than M.Ed. write a 10-hour thesis which would reduce elective course hours to about 11 hours.

### Education Courses

Ed 101	College Study Skill Development I	5 credits
Ed 102	College Study Skill Development II	5 credits
Ed 103	College Study Skill Development III	5 credits
Sequential development of essential college skills emphasizing reading comprehension, retention and vocabulary building, effective study plans and correlation with the basic university curriculum. Prerequisite: Permission of instructor. (I. fall, II. winter, III. spring)		
Ed 200	Foundations of American Education	5 credits
Foundation study of the philosophy, sociology and history of public, private and Catholic education in the United States; field experience to support classroom theory and laboratory work. Prerequisite: Ed 322; corequisite: Ed 325. (fall, winter, spring, summer)		
Ed 291	Special Topics	1-5 credits
Ed 292	Special Topics	1-5 credits
Ed 293	Special Topics	1-5 credits
Ed 304	Multi-Culture — Rural and Urban Education	3 credits
The nature, problems and status of education in the minority culture.		
Ed 322	Psychology of Development	5 credits
Developmental changes in the normal human being with emphasis on application to the school age years. Includes observations in the field. (fall, winter, spring, summer)		



<p><b>Ed 323 Child Psychology 5 credits</b> Development from birth through the sensitive stages to adolescence, emphasizing the growth of the total child — emotional, intellectual, physical, psychological and spiritual (character). (winter)</p> <p><b>Ed 324 Psychology of Adolescence 3 credits</b> Principles, factors, stages and problems in the development of the adolescent from puberty to adulthood.</p> <p><b>Ed 325 Psychology of Learning 5 credits</b> Study of human learning in the classroom; theories of learning; organization and retention of knowledge; statistical measuring and evaluation of mental processes; factors in the economy of learning. Two to four weeks field experience. Prerequisite: Ed 322; corequisite: Ed 200. (fall, winter, spring, summer)</p> <p><b>Ed 328 Montessori Orientation 5 credits</b> Basic philosophy, principles and procedures of environmental learning within a "prepared environment." Perceptual-motor education as utilized by everyday living and learning experiences of the young child.</p> <p><b>Ed 329 Sensorial Education 5 credits</b> Experience with the education of the senses in isolation. Also a study of the acquisition of practical skills within the child through his absorptive and imitative tendencies which lead gradually to abstraction.</p> <p><b>Ed 330 General Methods, Media and Materials 5 credits</b> Application of psychological principles of learning and development to the practical requirements of preparing, organizing and presenting learning units and materials to the students. Two to four weeks field experience. Prerequisites: Ed 322, 325; corequisites: Ed 336 and 340 or 337. (fall, winter, spring)</p> <p><b>Ed 335 Early Childhood — Kindergarten 3 credits</b> Principles, organization and methods of teaching. (spring, summer)</p> <p><b>Ed 336 Fundamentals of Reading Instruction — Elementary 3-5 credits</b> Nature of the reading process, sequence of skills K-6, recommended practices, materials, methods of diagnosis and evaluation. Two to four weeks field experience. Prerequisites: Ed 322, 325; corequisite: Ed 330. (3 credits without field experience component.) (fall, winter, spring)</p> <p><b>Ed 337 Fundamentals of Reading Instruction — Secondary 3-5 credits</b> Development of reading and study skills; reading in content areas; methods of diagnosis and evaluation and study and special reading programs. Two to four weeks field experience. Prerequisites: Ed 322, 325; corequisite: Ed 330. (3 credits without field experience component.) (fall, winter, spring)</p> <p><b>Ed 338 Reading Skill Analysis 3 credits</b> Analysis of and remedial techniques for reading problems. Prerequisite: Ed 325.</p> <p><b>Ed 340 Fundamentals of Mathematics Instruction — Elementary I 5 credits</b> Study of number systems including basic operations and properties of numbers; principles of teaching these concepts in kindergarten through grade 6; application in a two to four week field experience. Prerequisite: Mt 200.</p>	<p><b>Ed 342 Pacific Science Center Internship 3 credits</b> Laboratory experience working with a teaching team in mathematics or science, grades 2-8. Prerequisites: Ed 340 and selective interview by Science Center staff prior to quarter.</p> <p><b>Ed 372 Teaching Geography and Social Studies 5 credits</b> Survey of modes, methods, media and materials for instruction in a Social Studies program with basic concepts from geography as the core.</p> <p><b>Ed 373 Story Telling — Primary 3 credits</b> Selection and interpretation of kindergarten-primary grade literature. For Kindergarten-primary grade teachers and elementary school librarians.</p> <p><b>Ed 374 Literature for Children 5 credits</b> Selection, introduction and student use of literature for preschool, kindergarten, primary and intermediate grades. (winter)</p> <p><b>Ed 375 Literature for Early Childhood 3 credits</b> Survey of the present field of literature for early childhood and primary education. (spring, summer)</p> <p><b>Ed 376 Literature for Youth 3 credits</b> Survey of junior books and an analysis of adult books suitable for intermediate grade children and early adolescence. (summer)</p> <p><b>Ed 378 Literature for Later Childhood 3 credits</b> Survey of literature for children in grades 4-8.</p> <p><b>Ed 401 Workshop in Elementary School Methods (summer) 3 credits</b></p> <p><b>Ed 404 Workshop in Elementary School Curriculum (summer) 3 credits</b></p> <p><b>Ed 405 Workshop in Secondary School Curriculum (summer) 3 credits</b></p> <p><b>Ed 406 Workshop in Audio-Visual Methods (summer) 3 credits</b></p> <p><b>Ed 407 Workshop in Television Teaching 3 credits</b></p> <p><b>Ed 412 Library Reference Materials 3 credits</b> The school librarian's services related to information for classroom teachers; examination of the major reference sources such as encyclopedias, dictionaries, indexes, atlases and instructional aid files.</p> <p><b>Ed 415 Library Administration 3 credits</b> Organization of the school library; study of standards, utilization, plans, selection of materials, equipment and personnel.</p> <p><b>Ed 420 Teaching Elementary School Subjects 5 credits</b> General methods of teaching in specific subjects, areas and levels of the elementary school to include the total curriculum. Prerequisite: Ed 330. (fall, winter, spring)</p> <p><b>Ed 424 Introduction to Learning Disabilities 3 credits</b> History and current practices in diagnosis and remediation of learning disabilities.</p> <p><b>Ed 425 Psychology of the Exceptional Child 3 credits</b> Study of the atypical child who deviates from the normal to well above or below the average; tests for evaluation; consideration of remedial techniques. Prerequisite: Ed 322 or permission of instructor.</p>
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- Ed 426 Special Education — Teaching Trainables 3 credits**  
Materials and techniques for educating the severely retarded child. (summer)
- Ed 427 Special Education — Teaching Educables 3 credits**  
Materials and techniques for educating the moderately retarded child. (summer)
- Ed 430 Teaching Secondary School Subjects 5 credits**  
General methods of teaching in specific subjects, areas and levels of the secondary school. Prerequisite: Ed 330; corequisite: Ed 445.
- Ed 436 Montessori Mathematics and Language 5 credits**  
From the beginning of language development, vocabulary expansion to self expression and a knowledge of syntax and full enjoyment of reading and writing skills. The emergence of the mathematical mind, its use of geometrical space relationships, the growing ability to calculate in the basic mathematical operations — first in the concrete, finally in the abstract. (winter)
- Ed 437 Comparative and Observational Study of Early Education 5 credits**  
Current trends of Open Classroom structures will be compared and related to the Montessori approach to learning. British Infant and Integrated Day, Free School, Individualized systems. Observation — 30 clock hours.
- Ed 438 Laboratory Experience — Elementary 1-6 credits**  
(fall, winter, spring)
- Ed 439 Laboratory Experience — Secondary 1-6 credits**  
(fall, winter, spring)
- Ed 440 Student Teaching — Elementary 12-15 credits**  
One quarter of full-day supervised teaching experience on the elementary school level. Prerequisite: Ed 330 and related teaching experience. (fall, winter, spring)
- Ed 441 Montessori/Public School Student Teaching 15 credits**  
Supervised teaching within a Montessori preschool and public school (if needed for certificate). Student teaching is done for a half day (daily) session in an approved or credentialed school under an experienced Montessori teacher. (5 credits each quarter.)
- Ed 442 Cosmic Environmental Learning 5 credits**  
Study of the world, past and present, its flora, fauna and inhabitants, emerging through time lines and other concrete materials made by that student in social studies, geography and cultural history. (spring)
- Ed 445 Student Teaching — Secondary 12-15 credits**  
One quarter of full-day supervised teaching experience on the secondary school level. Prerequisite: Ed 330 and related teaching experience. (fall, winter, spring)
- Ed 460 Speech Correction 3 credits**  
Analysis of common speech problems of the classroom and demonstration of remedial techniques.

- Ed 471 Geography of the Pacific Northwest 3 credits**  
Regional survey emphasizing natural resources, their use and role in urban and rural developments. (summer)
- Ed 472 Geography of the Western Hemisphere 3 credits**  
Natural resources of the Western hemisphere and their effect upon world trade and international relations. (summer)
- Ed 491 Special Topics 1-5 credits**  
**Ed 492 Special Topics 1-5 credits**  
**Ed 493 Special Topics 1-5 credits**
- Ed 497 Independent Study 1-5 credits**  
**Ed 498 Independent Study 1-5 credits**  
**Ed 499 Independent Study 1-5 credits**

### Graduate Courses

- Ed 500 Introduction to Research and Graduate Study 3 credits**  
Introduction to research skills and literature in students' fields. Includes an orientation to graduate studies. Ordinarily taken as first graduate course. (fall, winter, spring, summer)
- Ed 501 Philosophy of Education 3 credits**  
Philosophical foundations of education. (winter, summer)
- Ed 502 History of Education 3 credits**  
Great educators, theories and systems from the Hebrews, Greeks and Romans to the present. (fall, summer)
- Ed 503 Comparative Education 3 credits**  
Investigation and comparison of the leading national and cultural systems of education of the world. (spring, summer)
- Ed 505 Fundamentals of Research Design 3 credits**  
Statistical techniques used in research design, measurement and evaluation. Emphasis on utilizing the computer in solving research problems.
- Ed 506 Educational Statistics 3 credits**  
Specialized utilization of statistical data analysis and application to research. (winter, summer)
- Ed 510 Introduction to Guidance 3 credits**  
Overview of the philosophy, principles and services of guidance for beginning guidance workers. (fall, summer)
- Ed 511 Organization and Administration of Guidance Services 3 credits**  
Consideration of the various guidance services offered in schools with particular reference to their organization and administration as well as the ethics and legality involved. Prerequisite: Ed 510. (fall, summer)





- Ed 512 Informational Services in Guidance 3 credits**  
Study of the occupational development; sources of information necessary for effective guidance. Prerequisite: Ed 510. (spring, summer)
- Ed 513 Principles and Practices in Counseling 3 credits**  
Theories of counseling with opportunities for in-class practice in simulated counseling interview situations. Prerequisite: Ed 510. (fall, summer)
- Ed 514 Contemporary Issues in Counseling 3 credits**  
Critical exploration of current controversial concerns in the field of counseling conducted in seminar style. Prerequisite: Ed 513. (winter, summer)
- Ed 515 Guidance and Multicultures 3 credits**  
Examination of Chicano, Indian, Black and Asian cultures and their relationship with the impact on helping professions. (winter, summer)
- Ed 519 Group Counseling — Theory and Procedures 3 credits**  
Emphasis on the theory and practice of group counseling. Opportunities for group experience will be provided to integrate theory with procedures. Graduate students only. Prerequisite: Permission of instructor. (winter, summer)
- Ed 520 Counseling Internship I 3 credits**  
**Ed 521 Counseling Internship II 3 credits**  
Supervised experiences in a school or agency. Prerequisites: Course work in guidance and permission two quarters prior to the internship.
- Ed 522 Child Psychology Seminar 3 credits**  
Investigation of and experimentation with various theories of child development. Prerequisite: Ed 322 or 323.

- Ed 523 Adolescent Psychology Seminar 3 credits**  
Investigation and reporting on original studies in adolescent psychology, including a personal report on an investigation of some specific phase or problem. Prerequisite: Ed 322 or 324.
- Ed 525 Psychology of Learning Seminar 3 credits**  
Investigation, analysis and reporting on original studies in the field of learning; includes a report on an investigation of some specific phase or problem. Prerequisite: Ed 325.
- Ed 527 Measurement in Psychology and Education 3 credits**  
Theoretical foundations of modern measurement practices in education and related fields; taught with the cooperation of the Psychology department for prospective guidance specialists. Prerequisite: Ed 506. (winter, summer)
- Ed 528 Psychological Tests 3 credits**  
Application of principles of psychological measurement in the critical examination of representative standardized tests used in schools with opportunities for scoring and interpretive practice. Prerequisite: Ed 527. (spring, summer)
- Ed 529 Teaching Values in American Schools 3 credits**  
Psychological foundations of character development, will-training, values, nature of morality, the relation of character to education and studies in character education. Prerequisite: Ed 325.
- Ed 530 Seminar: Curriculum Design in Elementary Education 3 credits**  
Provides an opportunity for experienced workers in elementary education to pursue individual studies in curriculum, teaching methods and related fields. (spring, summer)
- Ed 531 Seminar: Curriculum Design in Secondary Education 3 credits**  
Provides an opportunity for experienced workers in secondary education to pursue individual studies in curriculum, teaching methods and related fields. (spring, summer)
- Ed 532 Field Practicum in Reading 3-6 credits**  
Supervised field experience in diagnosis and teaching of reading.
- Ed 533 Reading Diagnosis and Evaluation 3 credits**  
Diagnosis of reading difficulties; tests, reading inventories, classroom techniques and materials; clinical programs and approaches. Prerequisite: Ed 336 or 337 or equivalent or permission of instructor. (summer)
- Ed 534 Seminar in Teaching of Reading 3 credits**  
Development of reading skills at all levels; examination and evaluation of current reading practices and programs.
- Ed 535 Reading in Content Fields 3 credits**  
Decoding and vocabulary analysis, comprehension reading, rote, study skills and reading interests as related to specific content fields. Prerequisite: Ed 336 or 337 or equivalent or permission of instructor. (summer)
- Ed 536 Supervision of Instruction 3 credits**  
Improvement of instruction through supervisory leadership. (spring, summer)

**Ed 537 Curriculum Independent Study 3 credits**  
Intensive library research in curriculum. Approximately 30 hours of reading and allied assignments for each credit. Completion reports will include analysis and critical appraisal of materials read. Prerequisite: Permission of adviser. Graduate students only. (fall, winter, spring, summer)

**Ed 538 Curriculum Field Study 3 credits**  
Scholarly study and reporting of a curriculum field problem. Emphasis on application of completed research and design to an actual situation. Prerequisite: Approval of Coordinator. (fall, winter, spring, summer)

**Ed 539 Curriculum Graduate Project 3 credits**  
Scholarly graduate project designed to improve some aspect of education. For non-thesis degrees. Prerequisites: Graduate core requirements and approval of Coordinator. (fall, winter, spring, summer)

**Ed 540 Fundamentals of Curriculum Development 3 credits**  
Historical, philosophical foundations, principles, types and methods of curriculum development and organization. (fall, summer)

**Ed 541 Elementary Curriculum Seminar 3 credits**  
Investigation and analysis of changes and trends, including a personal intensive report on some phase of curriculum on the elementary school level. Prerequisite: Ed 540. (winter, summer)

**Ed 542 Junior High School/Middle School Curriculum Seminar 3 credits**  
Investigation and analysis of changes and trends, including a personal intensive report on some phase of curriculum on the junior high school and middle school levels. Prerequisite: Ed 540. (winter, summer)

**Ed 543 Secondary Curriculum Seminar 3 credits**  
Investigation and analysis of changes and trends, including a personal intensive report on some phase of curriculum on the senior high school level. Prerequisite: Ed 540. (spring, summer)

**Ed 544 Advanced Workshop in Curriculum Methods 3 credits**  
Provides an opportunity for experienced workers in elementary/secondary education to pursue individual studies in curriculum, teaching methods and related fields.

**Ed 546 Special Education Seminar 3 credits**  
Investigation, analysis and reporting on original studies and trends in education of the mentally retarded.

**Ed 547 Learning Disabilities: Diagnosis 3 credits**  
Comparison of various methods used in the diagnosis of learning problems. Selection, administration, and analysis of tests.

**Ed 548 Seminar in Educational Technology 3 credits**  
Analysis and evaluation of existing educational technological media and programs. An in-depth application of selected media to the graduate student's field of specialization. Prerequisite: Ed 330 or permission.



**Ed 549 Organization of Learning Resource Centers 3 credits**  
Theory, objectives, design and administration of learning resource centers. Individualized application to specific school settings. Prerequisite: Ed 330 or permission.

**Ed 550 Practicum in Group Processes 3 credits**  
Supervised off-campus experience with youth in a group dynamics situation. Offered spring quarter with limited enrollment approved by practicum supervisor. Prerequisite: Ed 512, 551. Graduate students only. (spring)

**Ed 551 Counseling Practicum 3-6 credits**  
Supervised counseling experience wherein the counselor candidate is responsible for actual counseling cases. With supervision. Prerequisite: Ed 513. Graduate students only. (fall, winter, summer)

**Ed 552 Learning Disabilities: Special Methods 3 credits**  
Focus is on methods of instruction of children with extreme learning problems including diagnosis and prescriptive teaching, multisensory systems, phonic systems, language development systems. Diagnostic and prescriptive teaching with children who have learning disabilities. A laboratory course.

**Ed 553 Adult Education Practicum 3 credits**  
Practical experience in instructing adults in the area of the candidate's competence. Graduate students only. (fall, winter, spring, summer)

**Ed 554 Seminar in Learning Disabilities 3 credits**  
Emphasis on curriculum for the learning disabled child with major focus on adapted language, math and science, speech, music, art, physical education. Evaluation of new techniques, approaches and materials.

**Ed 555 Practicum: Learning Disabilities 3-6 credits**  
Diagnostic and prescriptive teaching with children who have learning disabilities. A laboratory course.

**Ed 557 Guidance Independent Study 1-3 credits**  
Intensive library research in guidance. Approximately 30 hours of reading and allied assignments for each credit. Completion reports will include analysis and critical appraisal of materials read. Prerequisite: Permission of adviser. Graduate students only. (fall, winter, spring, summer)



- Ed 558 Guidance Field Study 3 credits**  
Scholarly study and reporting of a guidance field program. Emphasis on application of completed research and design to an actual situation. Prerequisite: Approval of Coordinator. Graduate students only.
- Ed 559 Guidance Graduate Project 3 credits**  
Scholarly graduate project designed to improve some aspect of guidance. For non-thesis degrees. Prerequisites: graduate core requirements and approval of Coordinator. Graduate students only. (fall, winter, spring, summer)
- Ed 561 Special Topics 3 credits**  
**Ed 562 Special Topics 3 credits**  
**Ed 563 Special Topics 3 credits**
- Ed 567 Seminar in On the Job Training 3 credits**  
Opportunity is provided to discuss the computer analysis of Task Inventories to decide whether the task can be learned more effectively in OJT, formal education, after graduation. Development of job related performance standards and models for validating the results.
- Ed 568 Adult Education Field Practicum 3 credits**  
Problem centered practicum in a service delivery setting with clients. Joint university and employer supervision and seminar evaluations.
- Ed 569 Seminar in Community Development 3 credits**  
Basic concepts related to community service delivery systems with emphasis on psychosocial and cultural factors related to user participation. Data gathering techniques, education and public relations are used as the instruments of planned change.
- Ed 570 Seminar on the American Community College 3 credits**  
Consideration of the college parallel, vocational, technical and community service roles; history, status and projected development of community colleges; staffing needs and qualifications. (summer)
- Ed 571 Seminar on Community College Instructional Problems 3 credits**  
Identification of instructional programs pertinent to the community college; contrasts with and similarities to problems associated with senior institutions; trends in curricula, personnel and selection. (summer)
- Ed 572 Foundations in Adult Education 3 credits**  
Place of adult or continuing education in the total spectrum of American education. Required of the candidate for the M.Ed. in Adult Education Administration. (fall, summer)
- Ed 573 Special Problems of the Adult Learner 3 credits**  
Characteristics of various adult groups and related instructional problems with suggested approaches. Skill acquisition, transfer of training principles, alcohol and other addictions are studied. (winter, summer)
- Ed 574 Administration of Adult Education Programs 3 credits**  
Problems relating to the development, financing, staffing, supervision and evaluation of instructional programs for adults. (spring, summer)



- Ed 575 Course Development and Instructional Resources 3 credits**  
Organizing a course of instruction for adults in the candidate's area of competence; collecting and editing supplementary materials; compiling a bibliography and proposing an evaluation design. (fall, winter, spring, summer)
- Ed 576 Job and Task Analysis 3 credits**  
Study of Job and Task Analysis as it applies to occupational classification, selection and promotion in industry and government. Construction and review of Task Inventories. Implications for career ladders, career counseling, curriculum development, personnel selection tests, job related standards and task data banks are discussed.
- Ed 577 Adult Education Independent Study 3 credits**  
Intensive library research in adult or vocational education. Approximately 30 hours of reading and allied assignments for each credit. Completion reports will include analysis and critical appraisal of materials read. Prerequisite: Prospectus must be approved prior to registration. (fall, winter, spring, summer)
- Ed 578 Adult Education Field Internship 3-6 credits**  
Field internship in the specialty area of the graduate student seeking a degree in Adult Education. At least 30 hours of pre-arranged experience is required for each hour of credit.
- Ed 579 Adult Education Graduate Project 3 credits**  
Scholarly graduate project designed to improve some aspect of education. For non-thesis degrees. Prerequisites: graduate core requirements and approval of Coordinator. (fall, winter, spring, summer)
- Ed 580 Seminar in School Administration 3 credits**  
Contemporary problems and trends; analysis and evaluation. Graduate students only. (summer)

- Ed 581 Seminar in Elementary School Administration** **3 credits**  
Duties of administrators; criteria; administrative process; case studies. (winter, summer)
- Ed 582 Seminar in Secondary School Administration** **3 credits**  
Duties of administrators; criteria; administrative process; case studies. (winter, summer)
- Ed 583 School Finance** **3 credits**  
Historical development; balanced taxation; school support program; problems and controversies. Graduate students only. (spring, summer)
- Ed 584 School Law** **3 credits**  
Federal and state laws regarding education; liability and protection of schools; legal status of personnel; case precedents. (spring, summer)
- Ed 585 School Plant Planning** **3 credits**  
Plant requirement projections; site selections; staff and patron planning; leadership of principal. Graduate students only. (biennially)
- Ed 586 School Personnel** **3 credits**  
Recruitment, selection, orientation, induction and retention of certificated and non-certificated personnel; evaluation of performance; professional negotiations. (summer)
- Ed 587 School Public Relations** **3 credits**  
Purposes and media for informing the general public and school patrons about school programs and needs; public relations roles of teacher and administrative officers. (fall, summer)
- Ed 590 Administrative Internship I** **3 credits**  
**Ed 591 Administrative Internship II** **3 credits**  
**Ed 592 Administrative Internship III** **3 credits**  
Supervised experiences in the administration of a school. Prerequisites: Course work in school administration and permission the spring prior to year of internship. Required for credentials. Graduate students only. (fall, winter, spring)
- Ed 596 Administrative Graduate Project** **3 credits**  
Scholarly graduate project designed to improve some aspect of education. For non-thesis degrees. Prerequisites: Graduate core requirements and approval of Coordinator. (fall, winter, spring, summer)
- Ed 597 Administrative Independent Study** **3 credits**  
Intensive library research. Approximately 30 hours of reading and allied assignments of each credit. Completion reports will include analysis and critical appraisal of materials read. Prerequisite: Permission of adviser. (fall, winter, spring, summer)
- Ed 598 Administrative Field Study** **3 credits**  
Scholarly study and reporting of an educational field problem. Emphasis on application of completed research and design to an actual situation. Prerequisite: Approval of Coordinator. Graduate students only. (fall, winter, spring, summer)
- Ed 599 Thesis** **10 credits**  
Contribution to the body of essential knowledge in the fields of teaching and specialized education. Required of Master of Arts in Education candidates; optional for others. Prerequisites: Graduate core requirements and approval of preliminary application by the graduate adviser and the Dean of the Graduate School. (fall, winter, spring, summer)



## Health and Physical Education

Joseph T. Page, Ph.D., Chairman

### Objectives

The Health and Physical Education department has as its prime objectives the physical and neuromuscular skill development and the recreational welfare of all students. The department fulfills two major functions at Seattle University. These are:

The professional preparation of young men and women as teachers of health and physical education.

The sponsorship of a broad range of physical education instructional service programs designed to meet the physical activity needs of college men and women.

### Degree Offered

Bachelor of Arts in Education

### General Degree Requirements

Students in the fields of health and physical education must satisfy University core curriculum requirements as given on page 24 of this bulletin and those of the School of Education.

All students planning to receive a teaching certificate must be accepted by the School of Education but such acceptance does not imply that the student will be permitted to pursue this teaching field. Students may indicate their interest in this area at the time of application for admission to the School of Education. During the succeeding months their aptitude and promise for the field of physical education will be evaluated. Counseling, designed to assist the student to develop in ways requisite for successful teaching and leadership in the field, will be offered. Candidates must demonstrate superior physical skills, intellectual competency, and desirable personality and character traits before they will be accepted.

Candidates for teaching certificates will complete the required courses in teacher education. Upon graduation, certified teachers will have, in addition to the general and professional education requirements, a total major area of 55 credits or for the minor, 25 credits in health and physical education.



**108/EDUCATION**  
**Health and Physical Education**

**Departmental Requirements**

Bachelor of Arts in Education (Health and Physical Education) — 55 credits in health and physical education courses which must include: PE 200, 210, 220, 230, 350, 460; 15 credits in selected major activities and 12 credits of approved area electives.

Undergraduate Teaching Minor (Health and Physical Education) — 25 credits which must include PE 220, 230, 350, 460 and 7 credits in approved activities.

**Bachelor of Arts in Education**

**Freshman year**

English 100 and core option .....	10 credits
History core option .....	10 credits
Major, minor or electives .....	21 credits
Mathematics/Science core option .....	5 credits
Social Science core option .....	5 credits

**Sophomore year**

Education .....	10 credits
Major, minor or electives .....	20 credits
Mathematics/Science core option .....	5 credits
Philosophy 110, 220 .....	10 credits

**Junior year**

Education .....	15 credits
Major, minor or electives .....	29 credits
Philosophy core option .....	5 credits

**Senior year**

Education 445 .....	15 credits
Major, minor or electives .....	20 credits
Theology core options .....	10 credits

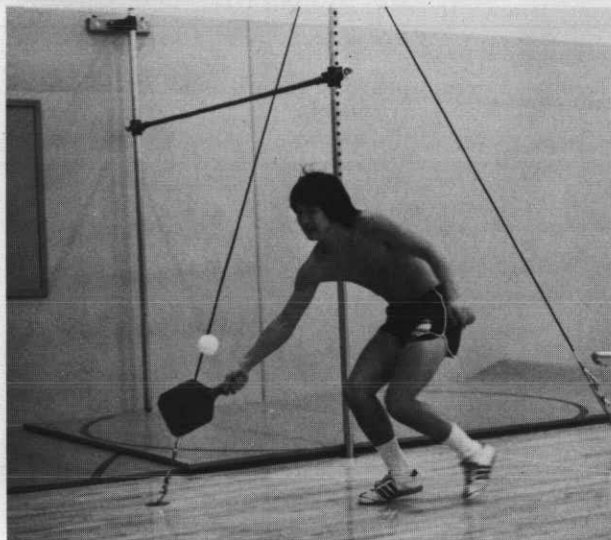
Total . . . 190 credits

**Health and Physical Education Courses**

<b>PE 120 Badminton</b>	<b>1 credit</b>
(winter, spring)	
<b>PE 122 Bowling</b>	<b>1 credit</b>
(fall, winter)	
<b>PE 122 Golf</b>	<b>1 credit</b>
(spring, summer)	
<b>PE 123 Gymnastics</b>	<b>1 credit</b>
(fall)	
<b>PE 124 Swimming</b>	<b>1 credit</b>
(fall, winter, spring, summer)	
<b>PE 125 Tennis</b>	<b>1 credit</b>
(spring, summer)	
<b>PE 126 Volleyball</b>	<b>1 credit</b>
(fall)	
<b>PE 129 Skiing</b>	<b>1 credit</b>
(winter)	
<b>PE 130 Paddle Sports</b>	<b>1 credit</b>
(winter, spring, summer)	



<b>PE 131 Archery</b>	<b>1 credit</b>
(spring)	
<b>PE 132 Handball — Squash</b>	<b>1 credit</b>
(fall, winter; spring, summer)	
<b>PE 135 Fencing</b>	<b>1 credit</b>
(winter)	
<b>PE 138 Conditioning — Women</b>	<b>1 credit</b>
(winter)	
<b>PE 139 Basketball — Men</b>	<b>1 credit</b>
(winter)	
<b>PE 140 Soccer — Men</b>	<b>1 credit</b>
(spring)	
<b>PE 142 Developmental Physical Education — Men</b>	<b>1 credit</b>
(spring, summer)	
<b>PE 143 Modern Dance</b>	<b>1 credit</b>
(fall)	
<b>PE 146 Scuba Diving</b>	<b>1 credit</b>
<b>PE 147 Folk-Square Dance</b>	<b>1 credit</b>
Basic instructional courses in activities indicated designed to meet the physical and recreational needs of college men and women.	
<b>PE 148 Self-Defense — Men and Women</b>	<b>1 credit</b>
<b>PE 149 Synchronized Swimming</b>	<b>1 credit</b>
<b>PE 152 Golf-Intermediate and Advanced</b>	<b>1 credit</b>
<b>PE 153 Gymnastics — Intermediate and Advanced</b>	<b>1 credit</b>
<b>PE 154 Swimming — Intermediate and Advanced</b>	<b>1 credit</b>
<b>PE 155 Fencing — Intermediate and Advanced</b>	<b>1 credit</b>
<b>PE 200 Personal and Community Health</b>	<b>5 credits</b>
Comprehensive course covering all basic aspects of health education; personal health problems; school health programs; community health agencies and problems. (spring)	



- PE 210 Anatomy and Kinesiology 5 credits**  
Foundation science course combining structure with function. Emphasis on muscular, circulatory and cardio-respiratory bodily systems. (spring)
- PE 220 Physiology of Exercise 5 credits**  
Study of physical changes as the result of muscular activity; the muscular, circulatory and cardio-respiratory systems. Prerequisite: BI 200. (winter)
- PE 230 First Aid-Standard-Advanced Instructor 3 credits**  
Skills, knowledge, teaching methods. American Red Cross standards and certification. (winter)

**Major Activities:** Concentrated study of skills, techniques, and teaching methodologies pertinent to elementary and secondary physical education activities.

- PE 250 Major Activities I 5 credits**  
Badminton, Volleyball, Golf and Tennis
- PE 251 Major Activities II 5 credits**  
Movement Exploration Gymnastics
- PE 252 Major Activities III 5 credits**  
Track, Soccer, Football and Speedball
- PE 253 Major Activities IV 5 credits**  
Wrestling and Weight Training, Baseball, Basketball
- PE 254 Major Activities V 5 credits**  
Folk-Square Dancing, Bowling and Archery
- PE 255 Major Activities VI 5 credits**  
Swimming, Life Saving, WSI
- PE 256 Major Activities VII 5 credits**  
Basketball - Women, Track and Field
- PE 257 Major Activities VIII 5 credits**  
Recreational Games
- PE 258 Major Activities IX 5 credits**  
Field Sports - Women
- PE 291 Special Topics 1-5 credits**
- PE 292 Special Topics 1-5 credits**
- PE 293 Special Topics 1-5 credits**

- PE 308 Coaching and Officiating of Women's Sports — Women 5 credits**  
Philosophy and techniques applicable to girls' and women's sports in schools and colleges. (fall)
- PE 309 Psychology of Coaching — Men 5 credits**  
Principles and practices applicable to the coaching of sports on any level of learning. Empirical theories resulting from observations of coaches in the handling of youth who are qualifying for school teams. (fall, summer)
- PE 320 Care and Prevention of Athletic Injuries 4 credits**  
Common athletic injuries and problems with emphasis on prevention. Includes pre and post injury care, such as taping and conditioning. (spring)
- PE 330 Test and Measurements in Physical Education 3 credits**  
Utilization of available testing procedures in physical education; evaluation of student achievement in terms of objectives. Includes statistical analysis of data. (winter)
- PE 350 Principles and Practices in Physical Education 5 credits**  
Concentrated analysis and study of the foundational principles of physical education. Application of these principles to problems in curriculum, methodology, administration and evaluation. (fall)
- PE 352 Orientation to Health and Physical Education — Elementary 3 credits**  
Curriculum purposes, procedures and techniques, includes legal liability, evaluation. Required of all elementary education majors. (fall, winter, spring, summer)
- PE 353 Orientation to Health and Physical Education — Secondary 3 credits**  
Objectives, content services and relationship to the total school program. Required of secondary education majors. (fall, winter, spring, summer)
- PE 398 Modern Dance 2 credits**  
Activity courses for physical education majors only. (winter)
- PE 410 Perceptual Motor Development 5 credits**  
Principles of perceptual motor development and their application in the education of the exceptional child. (spring)
- PE 420 Elementary Physical Education Workshop 5 credits**  
Improving the classroom teacher's background in physical education through basic movement skills and rhythmic activities. (summer)
- PE 460 Organization and Administration of Physical Education 5 credits**  
Summary professional course in physical education; includes service, intramural and inter-scholastic programs; stresses curriculum, scheduling, facilities. Prerequisites: Upper division standing and departmental approval. (fall)
- PE 491 Special Topics 1-5 credits**  
(fall, winter, spring, summer)
- PE 498 Independent Study 1-5 credits**



# School of Nursing

Eileen M. Ridgway, Ph.D., Dean









## School of Nursing

### Objectives

The aim of Seattle University's School of Nursing is to provide the educational preparation for the professional nurse who appreciates both the heritage and responsibilities in nursing and her role in the community; is able to apply to patient care the basic facts and principles of the humanities, the natural and social sciences; upholds the ethical principles of Christianity; and is able to assume nursing responsibility for the promotion, maintenance and restoration of health.

### Accreditation

National League for Nursing  
Washington State Board for Nursing

### Organization

The School of Nursing is formally organized within the University structure and is under the direction of its own dean and has a separate faculty. The School is a distinct and independent degree recommending unit responsible directly to the Academic Vice President of the University.

### Admission Requirements

All entering freshmen, transfer students from accredited institutions of higher learning and registered nurses who wish to complete requirements for the Bachelor of Science degree in Nursing must meet University entrance requirements described in the admissions section of this bulletin. Chemistry is the required laboratory science for entering freshmen. Additional requirements for registered nurses are:

Graduation from an approved school of professional nursing.

Current nursing licensure in the State of Washington

Report of complete physical examination within six months before entrance

Recommendation from the Director of the Nursing Program and from previous employer

### Degree Offered

Bachelor of Science in Nursing

### Curriculum

The baccalaureate degree program is designed for high school graduates, transfer students and registered nurses who wish to complete requirements for the degree. The program is planned to provide the student with a foundation in the liberal arts and nursing, to stimulate students to assume responsibility for self-directed education and professional development, and as a basis for graduate education and research.

Clinical experience is provided through cooperating teaching units which include Children's Orthopedic Hospital and Medical Center; Group Health Cooperative; Northgate Clinics, the Mason Clinic, Northwest Hospital, Overlake Memorial Hospital, Providence Hospital, Seattle King County Health Department, United States Public Health Service Hospital and Veterans Administration Hospital and selected health agencies. The professional portion of the curriculum includes study in the four major areas of clinical nursing, which are: medical-surgical, maternal-child, psychiatric and community health nursing.

### General Program Requirements

Students in the School of Nursing must satisfy core curriculum requirements of the University given on page 24 of this bulletin. For additional required sequences see the program of study which follows.

A student in the School of Nursing must have achieved a cumulative grade point average of 2.50 or above by the end of the sophomore year, and a 2.0 in the Basic Nursing courses, for approval to proceed into the upper division nursing courses. The academic and clinical performances of each nursing student are evaluated at the end of each year to determine progression in program.

Students are responsible for the expenses of the annual physical examination and health assessment, uniforms, and transportation costs to, from and while in cooperating teaching units. A current driver's license and car covered by insurance as prescribed by state law are recommended for all clinical courses. Professional liability insurance is required for clinical nursing courses.

### Bachelor of Science in Nursing

#### Freshman year

Chemistry 101, 102 .....	10 credits
English 100 and core option .....	10 credits
History core option .....	10 credits
Philosophy 110 .....	5 credits
Psychology 100 .....	5 credits
Sociology 101 .....	5 credits

**Sophomore year**

Biology 200, 210, 220 .....	15 credits
Theology core option .....	5 credits
Philosophy 220 .....	5 credits
Nursing 205, 206, 207, 300 .....	15 credits
Psychology 322 .....	5 credits

**Junior year**

Nursing 318, 319, 320, 330, 332, 335, 337, 340, 341 .....	45 credits
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**Senior year**

Nursing 406, 407, 426, 427, 478 .....	25 credits
Philosophy core option .....	5 credits
Theology core option .....	5 credits
Electives .....	10 credits

Total . . . 180 credits

**Nursing Courses**

<b>N 205</b>	<b>Basic Nursing I</b>	<b>5 credits</b>
<b>N 206</b>	<b>Basic Nursing II</b>	<b>3 credits</b>
	Sequential courses in the beginning study of the role of the nurse in a variety of settings; concepts of nursing, interpersonal relationships, wellness-illness, comfort-discomfort and mobility-immobility. Supervised experience provides an opportunity to begin application of concepts and performance of skills.	
<b>N 207</b>	<b>Elementary Pharmacology</b>	<b>2 credits</b>
	Study of basic concepts and principles related to pharmacology and drug therapy in nursing. Prototypes of drugs basic to a wide variety of circumstances are discussed.	
<b>N 291</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>N 292</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>N 293</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>N 300</b>	<b>Pathophysiology</b>	<b>5 credits</b>
	Study of the functional changes of the body which accompany illness and form the basis for nursing intervention.	
<b>N 318</b>	<b>Behavioral Concepts in Nursing Practice...The Individual</b>	<b>3 credits</b>
	Study of selected behavioral concepts and their application of nursing care of adults and children. The major ideas are drawn from the social sciences. These concepts include self-understanding in relation to the therapeutic roles, crisis as it relates to demands upon individuals currently receiving health care. Weekly conferences are correlated with students' clinical experiences.	
<b>N 319</b>	<b>Behavioral Concepts in Nursing Practice...Families and Small Groups</b>	<b>3 credits</b>
	The study analysis of selected behavioral concepts related to man's responses to health and illness, and the nursing requirements of individuals and their families. An examination of interaction in small groups is included. Weekly conferences are correlated with students' clinical experiences.	
<b>N 320</b>	<b>Trends and Issues in Nursing Practice</b>	<b>3 credits</b>
	A study of the major trends and issues confronting the nurse practitioner and the profession. Questions	

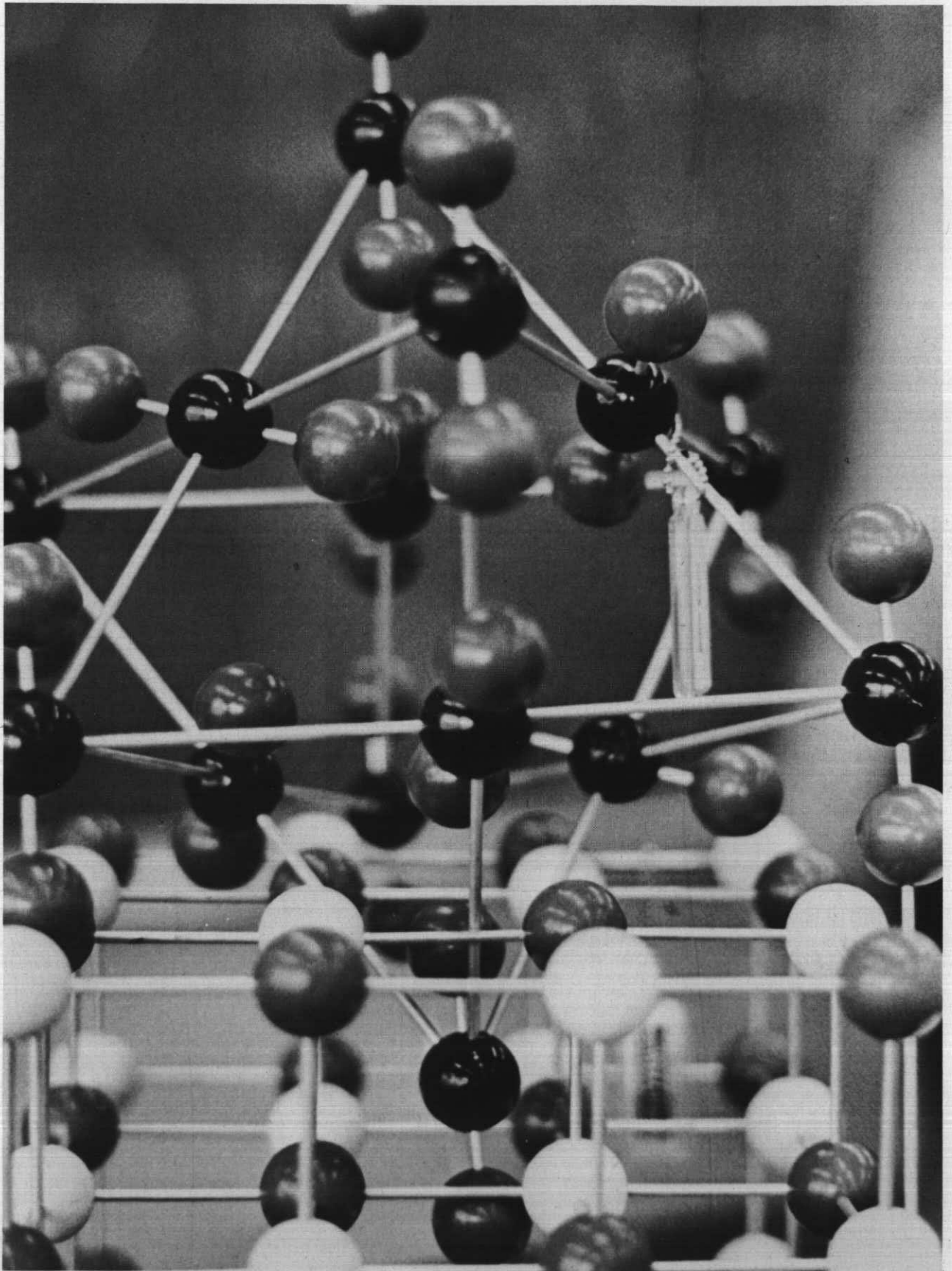
concerning new roles and responsibilities and ethical and legal decisions are examined in light of community health needs. The major themes and related questions set the focus for weekly seminars. Students have an opportunity to participate as discussion leaders as well as participants.

<b>N 330</b>	<b>Medical — Surgical Nursing I</b>	<b>4 credits</b>
<b>N 332</b>	<b>Medical — Surgical Nursing II</b>	<b>4 credits</b>
	Study of Nursing problems commonly experienced by adults and children requiring medical or surgical therapy.	
<b>N 335</b>	<b>Nursing of Children</b>	<b>8 credits</b>
	Directed clinical experience in the study of nursing problems commonly experienced by children.	
<b>N 337</b>	<b>Nursing of Adults</b>	<b>8 credits</b>
	Directed clinical experience in the study of nursing problems commonly experienced by adults.	
<b>N 340</b>	<b>Maternal-Child Nursing I</b>	<b>4 credits</b>
<b>N 341</b>	<b>Practicum in Maternal-Child Nursing I</b>	<b>8 credits</b>
	Study of the family in all phases of the reproductive cycle incorporating the growth and development continuum to include mothers, infants and well-children. Health supervision is emphasized. Selected experience in observing and caring for mothers, infants and well-children in a variety of settings, including hospital maternity services, clinics and community agencies serving families.	
<b>N 406</b>	<b>Psychiatric Nursing</b>	<b>4 credits</b>
<b>N 407</b>	<b>Practicum in Psychiatric Nursing</b>	<b>6 credits</b>
	Study of psychological and psychiatric nursing principles which can be applied to the nursing care of emotionally disturbed individuals in a variety of settings. The emphasis is on the promotion of mental health as well as the provision for nursing care of the mentally ill, both acute and chronic. Clinical practice is planned to promote the application of these concepts in a manner which facilitates growth and constructive problem solving in both patient and student.	
<b>N 426</b>	<b>Community Nursing</b>	<b>5 credits</b>
<b>N 427</b>	<b>Practicum in Community Nursing</b>	<b>8 credits</b>
	Study of the dynamics of individual families and the larger social system. Includes an emphasis on the helping process with people who are experiencing predicaments in living. Each student involves self with one or two families from the community and with a group of patients from either an acute care or extended care facility. In all settings skill in working with patients and collaborating with other health personnel is stressed. A community assessment is expected from one of the clinical experiences.	
<b>N 428</b>	<b>Leadership and Management in Nursing</b>	<b>2 credits</b>
	The study of theories and function of management and of leadership roles in providing nursing care for groups of patients in a variety of settings.	
<b>N 490</b>	<b>Independent Study</b>	<b>2-5 credits</b>
	Prerequisite: Senior status and permission required.	
<b>N 492</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>N 493</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>N 499</b>	<b>Independent Study</b>	<b>2-5 credits</b>



# School of Science and Engineering

Gary A. Zimmerman, Ph.D., Dean









## School of Science and Engineering

### Objectives

The programs of the School of Science and Engineering seek to combine a liberal education with preparation for a professional career or graduate school in one of the sciences, mathematics or engineering. More generalized programs are offered for those students who wish a strong scientific or engineering background as part of a liberal education.

### Accreditation

Northwest Association of Secondary and Higher Schools

American Chemical Society

Engineering Council for Professional Development

American Medical Association

American Society of Clinical Pathologists

American Medical Record Association

### Organization

The School of Science and Engineering offers programs in Biology, Chemistry, Clinical Chemistry, Environmental Studies, General Science, Health Information Services, Mathematics, Medical Technology, Physics, and in Civil, Electrical and Mechanical Engineering. Premedical and predoctoral students may also enroll in the school and will be guided through suitable programs.

### Admission Requirements

Students entering the School must satisfy all entrance requirements for the University as outlined in the Admission section of this bulletin. In addition, some departments list further requirements for admission into specific major programs.

### Degrees Offered

Bachelor of Arts with a major in Biology, Chemistry, Mathematics or Physics

Bachelor of Science in Biology, Chemistry, Clinical Chemistry, General Science, Mathematics, Medical Technology, Natural Science or Physics

Bachelor of Health Information Services

Bachelor of Engineering

Bachelor of Civil Engineering

Bachelor of Electrical Engineering

Bachelor of Mechanical Engineering

Master of Science in Natural Science (summer only restricted to high school science teachers)

### Co-Operative Work Study Program

Engineering students in good standing may elect to enter the co-operative work study program. Such students will take a reduced academic schedule each quarter, but will attend school eleven months a year (all regular quarters plus summer quarter). The University will assist such students in finding suitable paid industrial employment on an approximately half-time basis. The employment is selected for its educational value as well as financial remuneration.

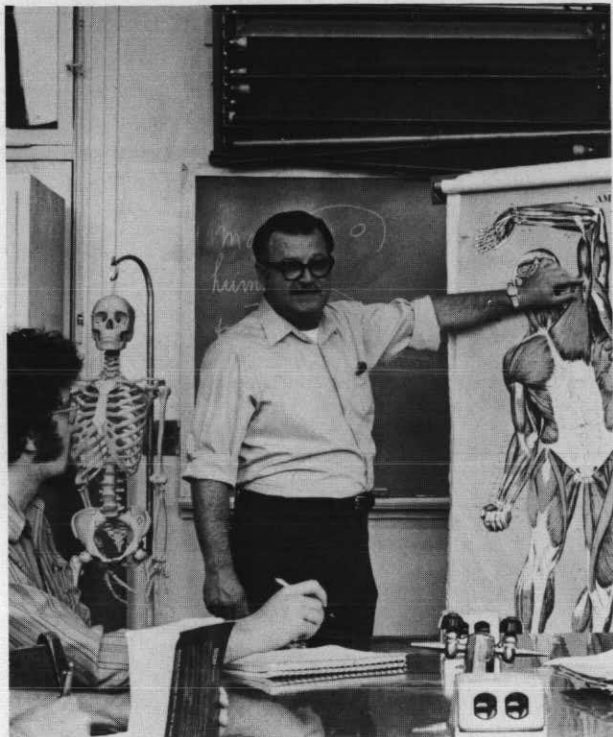
Students who enter the program at the earliest possible point (summer after the freshman year) and follow it regularly will graduate at the same time as if they had not taken the program, but will have over one year of industrial experience upon graduation.

### Engineering Executive Program

A combined five-year program leading to the Bachelor's Degree in Engineering and a Master's Degree in Business Administration is available.

### General Program Requirements

Students seeking the Bachelor's degrees in the School of Science and Engineering must complete 180 credits, including the University core requirements shown on pages 24-25 of this bulletin. They must also complete the programs shown in this bulletin for their particular degree.



## Biology

Lewis E. Aldrich, Jr., Ph.D., Program Director

### Objectives

The programs in the department are designed to provide a liberal education and to prepare a student for graduate studies or for professional work in basic and applied biology.

### Degrees Offered

Bachelor of Arts  
Bachelor of Science  
Bachelor of Science in Biology

### General Program Requirements

Students in biology must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin.

### Departmental Requirements

**Bachelor of Arts** — 50 credits of biology which must include BI 150, 160 and 170 with additional credits, which must include at least one credit of Seminar (three credits is the maximum that can be applied toward the degree), selected in consultation with the biology adviser; and 25 credits of chemistry. A year of physics and a course in calculus are recommended.

**Bachelor of Science** — 60 credits of biology which must include BI 150, 160, and 170 and at least one seminar credit; 30 credits of mathematics or science electives.

**Bachelor of Science in Biology** — 60 credits of biology which must include BI 150, 160 and 170; at least 10 credits of biology courses at the 400-499 level; additional credits in consultation with the biology adviser, which must include at least one credit of Seminar (three credits is the maximum

that can be applied toward the degree). Also required are 25 credits of chemistry; 15 credits of physics; reading knowledge of a modern language (equivalent to 106 as determined by examination); Psy 100 and Mt 112. Additional courses in biology, calculus, biochemistry and statistics are recommended. Students with 3 units of high school chemistry may elect to begin their chemistry sequence during the freshman year.

**Teaching Major (School of Education) — Secondary:** 45 credits in biology which must include BI 150, 160, 170 and 30 credits of approved electives. **Elementary:** 25 credits in biology which must include BI 150, 160, 170, 370, 371 and 275.

**Undergraduate Minor** — 30 credits of biology selected at direction of a biology adviser.

### Bachelor of Arts

#### Freshman year

Biology 150, 160, 170 .....	15 credits
English 100 and core option .....	10 credits
Mathematics 112 .....	5 credits
Philosophy 110, 220 .....	10 credits
Psychology 100 .....	5 credits

#### Sophomore year

Biology electives .....	15 credits
Chemistry 114, 115, 116 .....	15 credits
History or Social Science core options .....	10 credits
Philosophy core option .....	5 credits

#### Junior year

Biology electives .....	10 credits
Chemistry 235-236 .....	10 credits
Social Science or History core option .....	5 credits
Theology core options .....	10 credits
Electives .....	10 credits

#### Senior year

Biology electives .....	10 credits
Electives .....	35 credits

Total . . . 180 credits

### Bachelor of Science

#### Freshman year

Biology 150, 160, 170 .....	15 credits
English 100 and core option .....	10 credits
Philosophy 110, 220 .....	10 credits
Mathematics or science electives .....	10 credits

#### Sophomore year

Biology electives .....	15 credits
History or Social Science core options .....	15 credits
Science or mathematics electives .....	10 credits
Philosophy elective .....	5 credits

#### Junior year

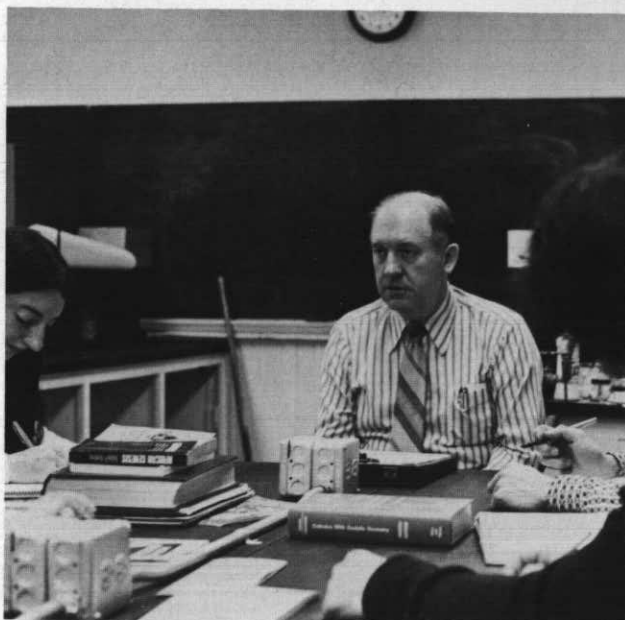
Biology electives .....	15 credits
Science or mathematics electives .....	10 credits
Theology core options .....	10 credits
Electives .....	10 credits

#### Senior year

Biology electives .....	15 credits
Electives .....	30 credits

Total . . . 180 credits





### Bachelor of Science in Biology

#### Freshman year

Biology 150, 160, 170 .....	15 credits
English 100 and core option .....	10 credits
Mathematics 112 .....	5 credits
Modern Language 105, 106 .....	10 credits
Electives .....	5 credits

#### Sophomore year

Biology electives .....	15 credits
Chemistry 114, 115, 116 .....	15 credits
History or Social Science core options .....	10 credits
Psychology 100 .....	5 credits

#### Junior year

Biology electives .....	15 credits
Chemistry 235-236 .....	10 credits
PHilosophy 110, 220 and core option .....	15 credits
Theology core option .....	5 credits

#### Senior year

Biology electives .....	15 credits
Physics 105, 106, 107 .....	15 credits
Theology core option .....	5 credits
Electives .....	10 credits

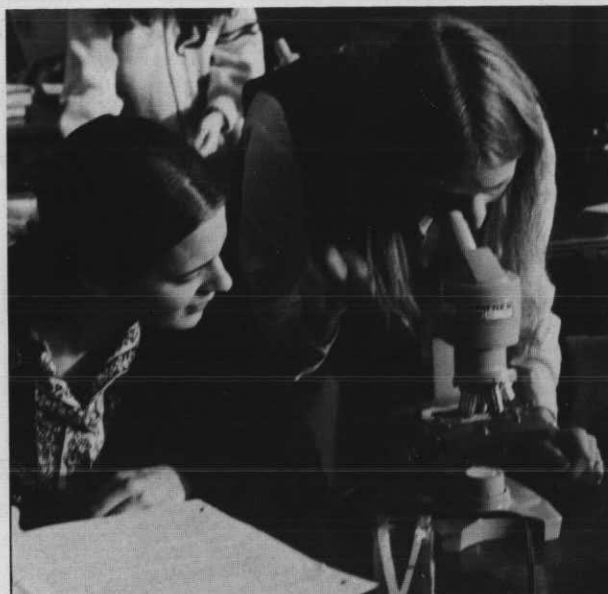
Total . . . 180 credits

### Biology Courses

- BI 101 Life Science 5 credits**  
Important areas of biology, beginning at the cellular level and culminating with a consideration of interactions and changes in natural populations. Five lecture hours per week. Not open for credit to students who have taken BI 150.
- BI 150 Biological Principles 5 credits**  
Principles of biology common to both botany and zoology, such as cell anatomy and physiology, metabolism, mitosis, meiosis, genetics, ecology and evolution. Four lecture and two laboratory hours per week.

- BI 160 General Botany 5 credits**  
Structure, function, taxonomy and ecology of animals. Three lecture and four laboratory hours per week. Prerequisite: BI 150. (spring)
- BI 170 General Zoology 5 credits**  
Structure, function, taxonomy and ecology of plants. Three lecture and four laboratory hours per week. Prerequisite: BI 150. (winter)
- BI 180 Human Genetics 5 credits**  
The pattern of biological inheritance in man. Credits not applicable for biology major. (summer)
- BI 200 Anatomy 5 credits**  
Structure of the human organism. Credits not applicable for biology major. Three lecture and four laboratory hours per week. (fall)
- BI 210 Physiology 5 credits**  
Functions of the human organism. Three lecture and four laboratory hours per week. Credits not applicable for biology major. Prerequisite: BI 200. (winter)
- BI 220 Microbiology 5 credits**  
Introduction to medical microbiology. Three lecture and four laboratory hours per week. Credits not applicable for biology major. (spring)
- BI 231 Anatomy, Morphology and Taxonomy of the Invertebrates 5 credits**  
Three lecture and four laboratory hours per week. Prerequisite: BI 170. (fall)
- BI 232 Natural History and Ecology of the Invertebrates 5 credits**  
Three lecture and four laboratory hours per week. Prerequisite: BI 160; recommended: BI 231. (winter)
- BI 241 Vertebrate Zoology 5 credits**  
Structure, physiology, ecology and behavior of Hemichordata and Chordata. Three lecture and four laboratory hours per week. Prerequisite: BI 170. (fall)
- BI 251 Plant Morphology 5 credits**  
Study of plant form, structure and development. Three lecture and four laboratory hours per week. Prerequisite: BI 160.
- BI 252 Taxonomy of Flowering Plants 5 credits**  
Native flora as an introduction to taxonomy, involving the principal orders and families of flower-plants. Three lecture and four laboratory hours per week. Prerequisite: BI 160 or 251.
- BI 270 Human Structure and Function I 5 credits**  
**BI 271 Human Structure and Function II 5 credits**  
I. Integrated study of the microscopic and gross structure and of the functions of the human organism; basic tissues, skeletal, muscular, nervous, circulatory and respiratory systems. (fall) II. Digestion and metabolism, the excretory, endocrine and reproductive systems. Introduction to regional anatomy. Prerequisites: BI 101, or 150, Ch 101, 102 for 270; 270 for 271. Students with credit in BI 200 and 210 may not receive credit for 270 and 271. (winter)
- BI 275 General Physiology 5 credits**  
Chemical and physical processes inherent in living organisms. Three lecture and four laboratory hours per week. Prerequisite: BI 170 or permission. (fall)

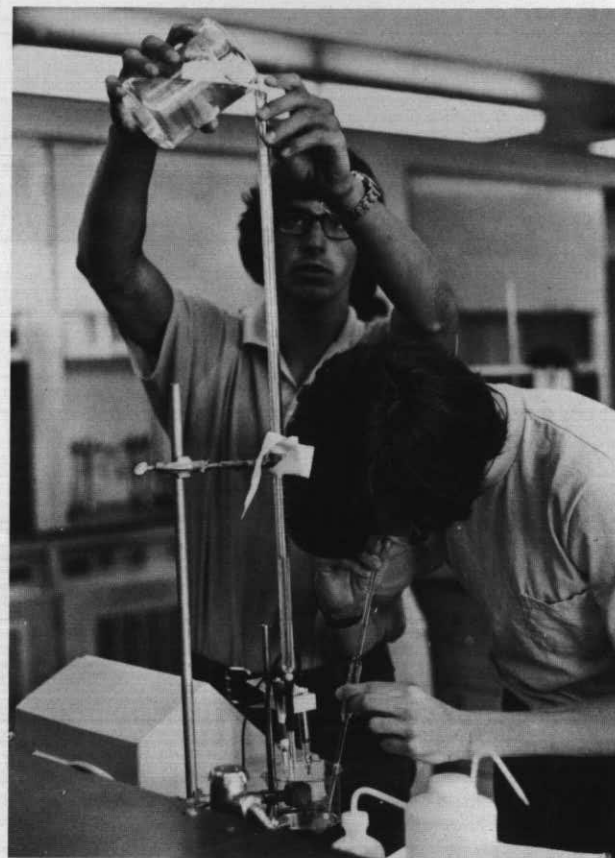
- BI 280 Cell Physiology** **5 credits**  
Fundamental life processes in plant and animal cells. Three lecture and four laboratory hours per week. Prerequisite: BI 275. (winter)
- BI 291 Special Topics in Biology** **1-5 credits**  
**BI 292 Special Topics in Biology** **1-5 credits**  
**BI 293 Special Topics in Biology** **1-5 credits**  
Directed reading and/or lectures and/or laboratories on topics at the lower division level. Prerequisite: Permission of instructor. (fall, winter, spring)
- BI 300 Microbiology** **5 credits**  
Morphology, physiology and distribution of microorganisms. Three lecture and four laboratory hours per week. Prerequisite: Permission of instructor. (winter)
- BI 301 Modern Biology for Teachers** **5 credits**  
Principles and concepts in modern biology structured to fit the classroom environment for teachers, grades 1 through 12. Lectures and demonstrations geared to the everyday problems of the classroom teacher. (summer)
- BI 303 Biophysical Principles** **3 credits**  
Interdependence of selected biosystems such as nervous, muscular, respiratory and physical; principles of matter and energy including sound, heat, light and electricity. For elementary level science teachers. Credits not applicable for biology major. Three lectures per week. (fall, winter, spring, summer)
- BI 304 Biophysical Laboratory** **2 credits**  
Simplified series of experiments and demonstrations designed to implement the principles in BI 303. Credits not applicable for biology major. Four laboratory hours per week. (fall, winter, spring, summer)
- BI 310 Comparative Vertebrate Embryology** **5 credits**  
Early development of the frog and chick with consideration of the early development of the human. Three lecture and four laboratory hours per week. Prerequisites: BI 241 or permission of instructor. (fall)
- BI 315 Bioethics** **5 credits**  
Indepth look at the problems created by a vast and highly complex technological society. Directed toward questions for which solutions are currently being sought. Lectures, discussions and directed readings. (summer)
- BI 321 Vertebrate Natural History** **5 credits**  
Ecology, behavior, life history and taxonomy of vertebrate animals, with emphasis on those in the Pacific Northwest. Three lecture and four laboratory hours per week. Prerequisite: BI 170.
- BI 325 History of Biology** **5 credits**  
Consideration of the development of biology from its philosophical origins to the present systems of scientific technologies. Human development, historical relationships of biology and man.



- BI 326 Comparative Anatomy of the Vertebrates I** **5 credits**
- BI 327 Comparative Anatomy of the Vertebrates II** **5 credits**  
I. Comparative study of the skin, skeletal system and muscular systems of selected vertebrates. II. Comparative study of the digestive system, respiratory system, excretory and reproductive systems, circulatory system, nervous system and sense organs of selected vertebrates. Three lecture and four laboratory hours per week. Prerequisite: BI 170; BI 241 recommended. (I-winter, II-spring)
- BI 330 Comparative Vertebrate Histology** **5 credits**  
Study of fundamental body tissues. Three lecture and four laboratory hours per week. Prerequisite: BI 150 and permission of instructor. (spring)
- BI 340 Microtechnique** **3 credits**  
Preparation of slides of animal tissue by the paraffin method; techniques of staining procedures. One lecture and four laboratory hours per week. Prerequisite: BI 330 or concurrently.
- BI 350 Genetics** **5 credits**  
Classical and molecular principles of heredity. Four lecture and two laboratory hours per week. Prerequisite: BI 150 (winter)
- BI 360 Parasitology** **5 credits**  
Study of parasitic protozoa, helminths and arthropods. Three lecture and four laboratory hours per week. Prerequisite: BI 231; Recommended: BI 232. (spring)
- BI 370 Population Biology: Ecology** **3 credits**  
Study of ecology and evolution with emphasis on population ecology. Three lecture hours per week. Prerequisites: BI 150 and permission of instructor. (winter)
- BI 371 Field Ecology** **2 credits**  
Techniques used in ecological research and analysis. Three weekend field trips. Prerequisite: Permission of instructor. Corequisite: BI 150. (spring)



- BI 375 Marine Biology** **5 credits**  
Study of the marine environment and the animals and plants inhabiting it. Three lecture and four laboratory hours per week. Prerequisites: BI 231, 232. (spring)
- BI 430 Endocrinology** **4 credits**  
Structure and function of the glands of internal secretion of vertebrates. Prerequisite: Advanced standing in biology and Ch 236. (fall)
- BI 435 Comparative Neurology** **4 credits**  
Study of the phylogenetic history of the central nervous systems. Prerequisite: BI 310 or 326.
- BI 440 Neurobiology** **5 credits**  
Principal pathways of the vertebrate nervous system including a gross and microscopic study of the human brain and spinal cord. Three lecture and four laboratory hours per week. Prerequisites: BI 200, 210 or 270, 271 or 310 or 326. (fall)
- BI 450 Advanced Invertebrate Zoology** **5 credits**  
Advanced studies of the invertebrate phyla. Three lecture and four laboratory hours per week. Prerequisites: BI 231, 232.
- BI 455 Biochemistry** **5 credits**  
Composition and metabolism of carbohydrates, lipids, proteins, enzymes and body fluids. Prerequisite: Ch 236. (spring)
- BI 460 Limnology** **5 credits**  
Study of freshwater systems and the plants and animals inhabiting them, with emphasis on the invertebrate animals. Three lecture and four laboratory hours per week. Prerequisite: BI 170; recommended: BI 470 and/or 231 and/or 232. (fall)
- BI 465 Population Biology: Evolution** **4 credits**  
Study of ecology, population genetics and evolution, with emphasis on evolution. Four lecture hours per week. Prerequisite: BI 150; recommended: BI 350. (spring)
- BI 470 Entomology** **5 credits**  
Structure, function, classification, ecology, behavior and economic importance of insects. Three lecture and four laboratory hours per week. Prerequisite: BI 150; recommended: BI 170. (fall)
- BI 491 Special Topics in Biology** **1-5 credits**  
**BI 492 Special Topics in Biology** **1-5 credits**  
**BI 493 Special Topics in Biology** **1-5 credits**  
Directed reading and/or lectures and/or laboratories on topics at the advanced undergraduate level. Prerequisite: Permission of instructor. (fall, winter, spring)
- BI 494 Seminar** **1 credit**  
**BI 495 Seminar** **1 credit**  
**BI 496 Seminar** **1 credit**  
Problems in modern biology. Prerequisite: Permission of instructor. (fall, winter, spring)
- BI 497 Research** **1-5 credits**  
**BI 498 Research** **1-5 credits**  
**BI 499 Research** **1-5 credits**  
Literature and laboratory investigation of a basic research problem. Preparation of a written report. Prerequisite: Permission of instructor. (fall, winter, spring)



## Chemistry

Vincent S. Podbielancik, Ph.D., Program Director

### Objectives

Programs offered by the Chemistry department are designed to prepare the student for professional work in the various fields of basic and applied chemistry. The Bachelor of Science in Chemistry degree program is recommended to students who wish to prepare themselves for graduate studies in chemistry. By completion of 11 additional credits in chemistry, beyond the minimum requirements for this degree, the student may receive certification of the degree by the Committee on Professional Training of the American Chemical Society.

The Clinical Chemistry degree program is suited to those students interested in a career in the rapidly developing field of clinical chemistry. This degree may also provide adequate preparation for graduate studies in clinical chemistry, biochemistry, or (with additional biology) medicine, or dentistry.

The Bachelor of Arts degree is recommended for those desiring a solid foundation in chemistry but with greater freedom of choice for elective courses from programs such as education, business, engineering or other fields within the University.

### Degrees Offered

Bachelor of Arts  
Bachelor of Science in Chemistry  
Bachelor of Science in Clinical Chemistry  
Master of Science in Natural Science (summer only - restricted to high school science teachers)

### General Program Requirements

Students in chemistry must satisfy the core requirements of the University given on page 24 of this Bulletin. The programs for the Bachelor of Science in Chemistry and Clinical Chemistry degrees require a mathematics sequence which must include calculus and computer programming (Mt 114). The history and social science requirements of the core for the Bachelor of Science in Chemistry and the Clinical Chemistry degrees may be satisfied by any combination of 15 credits of these two disciplines. The program for the Bachelor of Arts degree requires the full University core and a mathematics sequence. A mathematics placement test will indicate the beginning course for which the student should register. Students who intend to pursue graduate studies, particularly at the doctoral level, should seriously consider completion of a language sequence before making application for graduate work.

### Departments Requirements

**Bachelor of Arts** — 45 credits of chemistry which must include Ch 114, 115, 116, 219, 235, 236 and 352 plus electives from the following: Ch 237, 238, 291, 292, 293, 355, 356, 357, 415, 436, 455, 461, 491, 492, 493, 497, 498 and 499. For students interested in biochemistry, the following courses are recommended: BI 150, 170, 275 and 300.

**Bachelor of Science in Chemistry** — 60 credits in chemistry which must include Ch 114, 115, 116, 219, 235, 236, 237, 326, 355, 356, 357, one year of calculus (Mt 134, 135, 136) and computer programming (Mt 114). A student is eligible for certification of his degree by the American Chemical Society if an additional 11 credits of chemistry is completed, including Ch 415, 497, 498 and 499. This certification is recommended for students planning graduate work.

**Bachelor of Science in Clinical Chemistry** — 65 credits in chemistry which must include Ch 114, 115, 116, 219, 235, 236, 355, 356, 455, 470, 471, 472, 475, 476, 481, 482, 483 and 18 credits in mathematics which must include two quarters of calculus and Mt 114. Recommended electives: Ch 237, 238, 357; BI 280, 300, 330 and 350.

**Teaching major (School of Education)** — Secondary: 45 hours of chemistry are required which must include Ch 114, 115, 116, 219, 235, 236 and 352. Additional courses in physics (Ph 105, 106, 107) a year of college mathematics and courses in biology are highly recommended.

**Master of Science in Natural Science** — 45 credits of courses numbered 400 or higher which may include the following: Ch 411, 419, 425, 435, 495, 511, 519, 555, 560, 590 or selections from the corresponding programs in physics or mathematics.

### Bachelor of Arts

#### Freshman year

Chemistry 114, 115, 116 .....15 credits  
English 100 and core option .....10 credits  
Philosophy 110 ..... 5 credits  
Electives .....15 credits

#### Sophomore year

Chemistry 219, 235, 236 .....15 credits  
Mathematics 112, 134, 135 .....15 credits  
Philosophy 220 and core option .....10 credits  
Theology core option ..... 5 credits

### Junior year

Chemistry 352 and elective .....10 credits  
History core options .....10 credits  
Physics 105, 106, 107 .....15 credits  
Theology core option ..... 5 credits  
Social Science core option ..... 5 credits

### Senior year

Chemistry elective ..... 5 credits  
Social Science core option ..... 5 credits  
Electives .....35 credits

Total . . . 180 credits

### Bachelor of Science in Chemistry

#### Freshman year

Chemistry 114, 115, 116 .....15 credits  
English 100 and core option .....10 credits  
Mathematics 134, 135, 136 .....15 credits  
Physics 200 ..... 5 credits

#### Sophomore year

Chemistry 219, 235, 236, 237 .....18 credits  
Mathematics 114 ..... 3 credits  
Philosophy 110 ..... 5 credits  
Physics 201, 202 .....10 credits  
Electives ..... 9 credits

### Junior year

Chemistry 326, 355, 356, 357 .....20 credits  
Philosophy 220 ..... 5 credits  
Social Science core option ..... 5 credits  
Theology core options .....10 credits  
Electives ..... 5 credits

### Senior year

Chemistry electives ..... 7 credits  
Philosophy core option ..... 5 credits  
Social Science core option ..... 5 credits  
Electives .....28 credits

### Bachelor of Science in Clinical Chemistry

#### Freshman year

Biology ..... 5 credits  
Chemistry 114, 115, 116 .....15 credits  
English 100 and core option .....10 credits  
Mathematics 134, 135, 136 .....15 credits

#### Sophomore year

Chemistry 235, 236, 455 .....15 credits  
Physics 105, 106, 107 .....15 credits  
Philosophy 110, 220 .....10 credits  
Mathematics 114 ..... 3 credits  
Elective ..... 2 credits

### Junior year

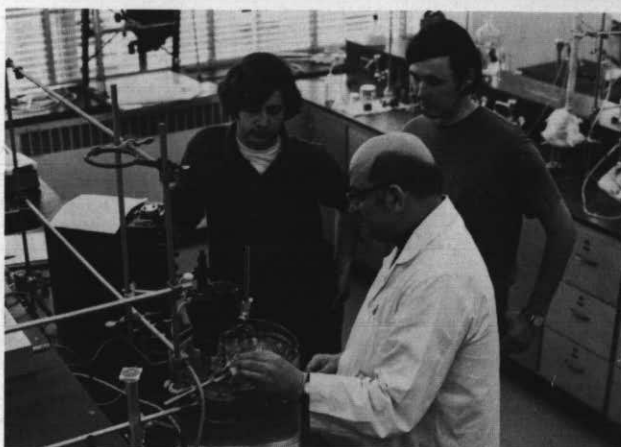
Biology 270, 271 .....10 credits  
Chemistry 355, 356, 219 .....15 credits  
Humanities elective ..... 5 credits  
Physics 290 ..... 5 credits  
Theology core options .....10 credits

### Senior year

Chemistry 456, 461, 470, 471, 475, 476, 481, 482, 483 .....20 credits  
Humanities elective .....10 credits  
Philosophy elective ..... 5 credits  
Electives .....10 credits

Total . . . 180 credits





### Chemistry Courses

**Ch 100 Science, Technology and the Quality of Life** **5 credits**  
Study of selected scientific information and the opportunities and responsibilities its generation and application place on m/nG selected facts, laws, principles and theories of chemistry and physics that relate to a general understanding of scientific activity; scientific information and technologies that demonstrate the need for public involvement in the conduct of science and technology. Five lectures per week; seminars, papers, individual or group projects. (fall, spring, summer)

**Ch 101 Introductory General Chemistry** **5 credits**  
Survey of inorganic chemistry treating the basic principles and descriptive material relevant to the health sciences. Four lecture and three laboratory hours per week. (fall)

**Ch 102 Introductory Organic Chemistry** **5 credits**  
Survey of organic and biological chemistry treating the basic principles and descriptive material relevant to the health sciences. Four lecture and three laboratory hours per week. Prerequisite: Ch 101. (winter)

**Ch 114 General Inorganic Chemistry I** **5 credits**

**Ch 115 General Inorganic Chemistry II** **5 credits**

**Ch 116 General Inorganic Chemistry III** **5 credits**  
I. Atomic structure, weight relationships, states of matter, solutions. II. Kinetics, chemical equilibrium, electrochemistry, hydrogen, oxygen, water and the nontransition metals. III. Transition metals, carbon compounds and an introduction to the principles of reactions in ionized systems. The laboratory covers elementary qualitative analysis. Three lecture, one quiz and one three-hour laboratory sessions per week for 114 and 115. Four lecture and four laboratory hours per week for 116. Prerequisites: High School chemistry or permission for 114; 114 for 115; 115 for 116. (114, fall, winter; 115, winter, spring; 116, spring)

**Ch 219 Quantitative Analysis** **5 credits**  
Theory, methods and techniques of gravimetric and volumetric procedures in quantitative analysis. Three lecture and six laboratory hours per week. Prerequisite: Ch 116. (spring)

**Ch 231 Organic Chemistry I** **4 credits**  
Structure, properties and elementary reactions of organic compounds, including biopolymers; stereochemistry. Ten lecture hours per week for the first session of summer school.

**Ch 232 Organic Chemistry I Laboratory** **1 credit**  
Laboratory for above course. Six laboratory hours per week for the first session of summer school only.

**Ch 233 Organic Chemistry II** **4 credits**  
Elementary thermodynamics, aromatic substitution, reactions involving formation and breaking carbon-to-carbon bonds. Mechanisms of reactions of biological interest. Applications of organic chemistry in enzyme catalysis. Ten lecture hours per week for the second session of summer school.

**Ch 234 Organic Chemistry II Laboratory** **1 credit**  
Laboratory for above course. Six laboratory hours per week for the second session of summer school only.

**Ch 235 Organic Chemistry I** **5 credits**  
Structural theory; functional groups; nomenclature; structure, properties and reactions of monofunctional organic compounds; stereochemistry; thermodynamic and kinetic aspects of reactions of selected groups; organic reaction mechanisms; theory and practice of laboratory techniques. Four lecture and three laboratory hours per week. Prerequisite: Ch 115. (fall)

**Ch 236 Organic Chemistry II** **5 credits**  
Properties, reactions and applications of polyfunctional compounds with emphasis on those of biochemical interest—natural products, biopolymers, enzyme chemistry; introduction to organic synthesis; introduction to the literature; laboratory work in functional group reactions, synthesis and thermodynamic and kinetic investigations. Four lecture and three laboratory hours per week. Prerequisite: Ch 235. (winter)

**Ch 237 Organic Chemistry III** **3 credits**  
Synthesis of organic compounds; synthetic polymers; advanced mechanistic and theoretical concepts; polynuclear aromatic compounds; ultraviolet, visible, infra-red and nuclear magnetic resonance spectra; laboratory work in problem-oriented, literature-based investigations; practical applications of spectroscopy in laboratory work. Two lecture and three laboratory hours per week. Prerequisite: Ch 236. (spring)

**Ch 238 Qualitative Organic Analysis** **3 credits**  
Methods of identification of organic compounds as simple and mixed unknowns; preparation of derivatives; discussion and use of modern spectroscopic methods. Six laboratory hours per week, plus discussion of principles. Prerequisite: Ch 236.

**Ch 291 Special Topics** **1-5 credits**

**Ch 292 Special Topics** **1-5 credits**

**Ch 293 Special Topics** **1-5 credits**  
Directed reading and/or lectures at a lower division level. Prerequisite: Permission of instructor.

**Ch 324 Analytical Chemistry I** **3 credits**

**Ch 325 Analytical Chemistry II** **5 credits**  
I. A laboratory course designed to give additional applications of the theory, prediction and control of

reactions in ionized systems. Application of these principles to a variety of qualitative analysis problems. Two three-hour laboratory sessions per week. II. Principles and practice of modern methods of quantitative analysis including gravimetric procedures. Three lecture and two three-hour laboratory sessions per week. Prerequisite: Ch 116.

**Ch 326 Instrumental Analysis** **5 credits**  
Theory and techniques of instrumental methods representative of spectrophotometric, electroanalytical and chromatographic techniques. Two four-hour laboratory periods including discussion of principles. Prerequisite: Ch 219 or 315.

**Ch 352 Biophysical Chemistry** **5 credits**  
Application of the principles of physical chemistry, thermodynamics, kinetics, structure and radioactivity, to such topics of biological interest as: caloric value of foods, osmosis and dialysis, Donnan equilibrium, high energy bonds, amino acids, biological oxidation-reduction, enzyme catalysis, and surface chemistry and colloids. Four lectures and three laboratory hours per week. Prerequisite: Ch 219, or permission of instructor.

**Ch 355 Physical Chemistry I** **5 credits**

**Ch 356 Physical Chemistry II** **5 credits**

**Ch 357 Physical Chemistry III** **5 credits**  
I. Application of physical principles to chemistry with theoretical mathematical treatment; gases, laws of thermodynamics, thermochemistry, one-component systems, solutions. II. Chemical equilibria, phase equilibria, kinetic theory, chemical kinetics, electrochemistry, ionic equilibria. III. Quantum theory, molecular structure, spectroscopy, statistical mechanics, surface chemistry, crystals, photochemistry and nuclear chemistry. Four lecture and three laboratory hours per week. Prerequisites: Mt 134 and one year of college physics for 355; 355 for 356; 356 for 357. (Offered in sequence: fall, winter, spring)

**Ch 411\* Principles of Inorganic Chemistry** **6 credits**  
Review of basic principles of reactions in ion-systems, electrochemistry, thermochemistry and elementary thermodynamics. Descriptive chemistry of the periodic table in terms of electronic configuration, bonding orbitals, ionization potentials, kinetics, equilibrium, complex ion, and thermodynamics. Prerequisites: One year of college inorganic chemistry or permission. Corequisite: Mt 400.

**Ch 415 Advanced Inorganic Chemistry** **3 credits**  
Advanced topics in inorganic chemistry, with particular reference to contributions of atomic and molecular structural studies, thermodynamics and kinetics. Directed reading and/or lectures. Prerequisite: Ch 351 or 357.

**Ch 425\* The Structure and Relevancy of Science** **3 credits**  
Analysis of the nature, limitations, values and impact of scientific thought: significant historical and philosophical scientific developments selected from the natural sciences; the impact of scientific knowledge on man's condition; potential of the scientific and technological revolution. Three lecture-dialogue sessions per week. Prerequisite: Ch 411 or permission.

**Ch 435\* Organic Chemistry** **6 credits**  
Brief survey of functional groups and of type reactions involved in biopolymer formation and in catabolism, natural products, reactions of carbonyl and carboxyl derivatives, oxidation and its relation to biochemical energetics, enzymes. Five lectures, one problem session, three laboratory hours per week. Prerequisite: Ch 411 or permission.

**Ch 436 Advanced Organic Chemistry** **3 credits**  
Spectrometric identification of organic compounds: mass spectrometry; nuclear magnetic resonance; infrared; ultraviolet and visible; physical organic treatment of factors influencing evaluation and significance of thermodynamic variables. Directed reading and/or lectures. Prerequisite: Ch 237, 351 or 356.

**Ch 455 Biochemistry** **5 credits**  
Composition and metabolism of carbohydrates, lipids, proteins, enzymes and body fluids. Four lecture and three laboratory hours per week. Prerequisite: Ch 236 (spring)

**Ch 460 Advanced Physical Chemistry** **3 credits**  
Quantum chemistry, vibrational and rotational energies, absorption and emission of radiation, molecular symmetry, group theory, electronic spectra. Prerequisite: Ch 357.

**Ch 461 Radiochemistry** **3 credits**  
Theory of radioactivity, use of radioisotopes in studying chemical reactions and structure. Two lecture and four laboratory hours per week. Prerequisite: Ch 352 or 357.

**Ch 470 Clinical Chemistry I** **3 credits**

**Ch 471 Clinical Chemistry II** **3 credits**

**Ch 472 Clinical Chemistry III** **3 credits**  
I. Statistics and normal values in the clinical laboratory; theory and techniques of spectrophotometry, atomic absorption spectroscopy, flame photometry, fluorimetry and infrared analyses; electrophoretic techniques and densitometry; protein diffusion and immunological techniques. II. Automated analyses in clinical laboratory use; critical comparison of analytical methodologies for carbohydrates, lipids, electrolytes, enzymes, hemoglobins and porphyrins, with emphasis on the biosynthesis, metabolism, analytical methods of importance, normal ranges and pathological conditions leading to abnormalities. III. Toxicology, steroids, catecholamines, radioimmunoassay techniques, renal function testing, hepatic function testing, cerebrospinal fluid. Three lecture hours per week. Prerequisite: Ch 356 or permission of instructor. (Offered in sequence: fall, winter, spring)

**Ch 475 Clinical Chemistry Laboratory I** **1 credit**

**Ch 476 Clinical Chemistry Laboratory II** **1 credit**

Practical experience in instrumental techniques and analytical methodologies of importance to the clinical chemist, including colorimetry, atomic absorption, gas chromatography, infrared, enzymatic assays and statistical treatment of data. Three laboratory hours per week. Prerequisite: Simultaneous enrollment in Ch 470 or Ch 471. (Offered in sequence: fall, winter)

\*Offered summer only for high school teachers in the master's degree program in natural science.



**124/SCIENCE AND ENGINEERING  
Engineering Programs**

**Ch 481 Clinical Practice 2 credits**  
**Ch 482 Clinical Practice 2 credits**  
**Ch 483 Clinical Practice 2 credits**  
 Practical experience in approved hospital clinical laboratory. Six laboratory hours per week. Prerequisite: Permission of instructor.

**Ch 491 Special Topics 2-5 credits**  
**Ch 492 Special Topics 2-5 credits**  
**Ch 493 Special Topics 2-5 credits**  
 Directed reading and/or lectures at an advanced level. Prerequisite: Permission of the instructor.

**Ch 497 Undergraduate Research 2 credits**  
**Ch 498 Undergraduate Research 2 credits**  
**Ch 499 Undergraduate Research 2 credits**  
 Literature and laboratory investigation of a basic research problem. Six laboratory hours per week. Prerequisite: Permission of department chairman.

**Graduate Courses**

**Ch 511\* The Chemical Bond 6 credits**  
 Historical development of quantum theory; introduction to wave mechanics; atomic structure; valence bond and molecular orbital approaches; group theory and symmetry; bonding in diatomic molecules, polyatomic molecules, transition metal complexes and rare gas compounds. Five lecture hours and one seminar period per week. Prerequisite: Ch 411 or permission.

**Ch 512 Chemical Periodicity 6 credits**  
 Treatment of periodic table in terms of electronic configuration, bonding orbitals, ionization potentials, kinetics, equilibrium, complex ions. Five lecture hours and one seminar period per week. Prerequisite: Ch 411.

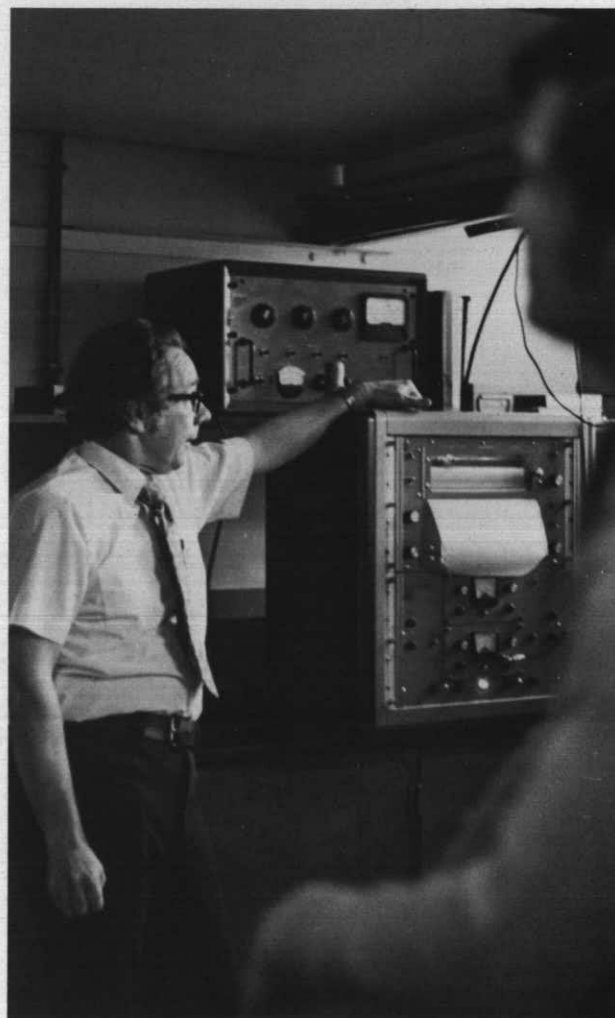
**Ch 519\* Advanced Analytical Chemistry 6 credits**  
 Designed to acquaint graduate students with newer instrumental techniques, e.g. IR, NMR, ESR, QNR and mass spectroscopy with emphasis on the organic analytical field; in the inorganic field techniques such as atomic absorption, emission spectroscopy, and specific ion electrodes are treated. Five lecture and six laboratory hours per week. Prerequisite: Ch 411 or permission of instructor.

**Ch 555\* Chemical Thermodynamics 6 credits**  
 Foundation of theory of thermodynamics, enthalpy, internal energy, free energy, entropy, work function. Application to states of matter, equilibrium and electrochemistry. Five lectures and one seminar per week. Prerequisite: Ch 411 or permission.

**Ch 560\* Radiochemistry 3 credits**  
 Theory of radioactivity; nuclear radiations, detection of radiation, radiological safety, rates of radioactive processes, radiochemical separations. Two lectures and two three-hour laboratory sessions per week. Prerequisite: Ch 411.

**Ch 590\* Research 6-12 credits**  
 Literature and laboratory investigation of a basic research problem. Preparation of a written report. Three hours per credit per week. Prerequisite: Permission of instructor.

\*Offered summer only for high school teachers in the master's degree program in natural science.



**Engineering Programs**

**Bachelor of Engineering** — Students seeking a Bachelor of Engineering degree must complete 180 credits including the core requirements for engineering students shown on of this bulletin. They must take a minimum of 55 credits of engineering subjects, 23 credits of mathematics and a total of at least 90 credits in engineering, physics, chemistry and biology.

**Bachelor of Civil, Electrical or Mechanical Engineering** — Students wishing to receive the degree of Bachelor of Civil Engineering, Bachelor of Electrical Engineering or Bachelor of Mechanical Engineering must follow the program outlined in the respective sections of this bulletin.

**Bachelor of Engineering**

**Freshman year**

English 100 and core option .....10 credits  
 Mathematics 112, 114, 134 .....13 credits  
 Mechanical Engineering 102, 111,  
 112, 113 .....12 credits  
 Philosophy 110, 220 .....10 credits



#### Sophomore year

Chemistry 114, 115 .....	10 credits
Electrical Engineering 231, 290 .....	10 credits
Mathematics 135, 136 .....	10 credits
Mechanical Engineering 281 .....	5 credits
Physics 200, 201 .....	10 credits

#### Junior year

Engineering electives .....	15 credits
Philosophy core option .....	5 credits
Science electives .....	15 credits
Theology core options .....	10 credits

#### Senior year

Engineering electives .....	15 credits
Humanities electives .....	10 credits
Electives .....	20 credits

Total . . . . 180 credits

#### Community College Transfer Students

Students who transfer from a community college with 90 credits, including three quarters of calculus, three quarters of engineering physics, engineering problems, engineering drawing, statics and dynamics, and appropriate humanities electives, can enter the junior year at Seattle University and expect to graduate in two additional years. (Civil and Mechanical Engineering candidates should also take two quarters of chemistry). All students are urged to take a course in computer programming at their community college.



## Civil Engineering

Richard T. Schwaegler, Ph.D., Program Director

#### Objectives

The principal objectives of the Civil Engineering department are to provide trained engineers to work in the various areas of the civil engineering profession and to provide a firm foundation for graduate study.

To accomplish these ends, analysis and design courses in the fields of hydraulic, structural, transportation and sanitary engineering are offered in addition to preparatory courses in sciences and basic mechanics. A broad base of theory is provided along with sufficient quantity of current practices of the profession.

#### Degree Offered

Bachelor of Civil Engineering

#### General Program Requirements

Students in Civil Engineering must satisfy core curriculum requirements of the University as modified for the School of Science and Engineering.

#### Departmental Requirements

Bachelor of Civil Engineering — In this degree program a minimum of 180 credits are required. In special cases qualified students, with the approval of their adviser, may substitute equivalent or more advanced courses for those listed. A set of options in the senior year permits students to begin specialization in their choice of transportation, sanitary engineering or structures.



## Bachelor of Civil Engineering

### Freshman year

English 100 and core option .....	10 credits
Mathematics 114, 134, 135 .....	13 credits
Mechanical Engineering 102, 111, 112, 113 .....	12 credits
Philosophy 110, 220 .....	10 credits

### Sophomore year

Chemistry 114 .....	5 credits
Civil Engineering 211, 210 (or Electrical Engineering 290), 231 (or Mathe- matics or Science elective) .....	15 credits
Mathematics 136, 233 .....	10 credits
Mechanical Engineering 281 .....	5 credits
Physics 200, 201 .....	10 credits

### Junior year

Civil Engineering 321, 323, 331, 335, 337, 351, 353, 381 .....	31 credits
Philosophy elective .....	5 credits
Theology electives .....	10 credits

### Senior year

Civil Engineering 401, 402, 492, 496, 497, 498 and electives .....	24-34 credits
Engineering or Science electives .....	0-10 credits
Humanities electives .....	10 credits

Total . . . . 180 credits

## Civil Engineering Courses

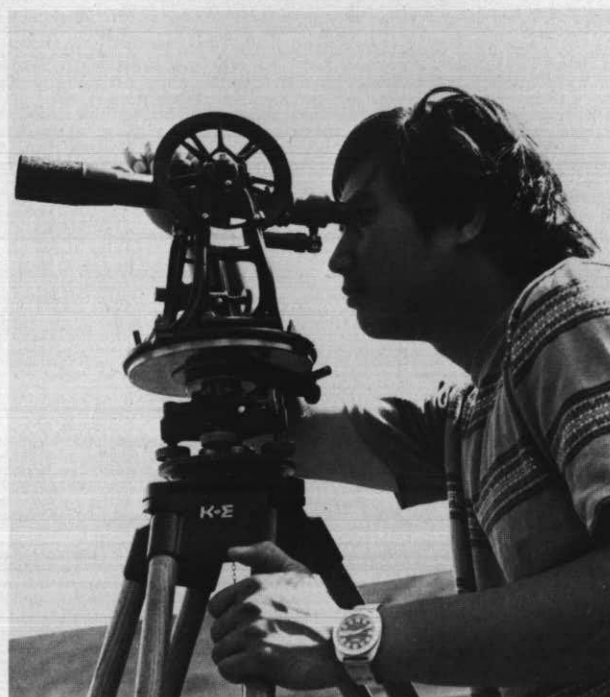
**CE 200 Cooperative Work Study Assignment 0 credits**  
Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education to the student.

**CE 210 Man and His Environment 5 credits**  
Study of the relationship of man to his environment with particular emphasis on the role of technology in the deterioration of the environment and in its restoration. Prerequisite: One year laboratory science in high school or two quarters of science in college or permission. (spring)

**CE 211 Engineering Measurements 5 credits**  
Engineering measurements as applied to civil engineering projects. Planning for surveys. Introduction to photogrammetry and extent of its use. U.S. Public Land and State Plane Coordinate Systems. Prerequisite: Sophomore standing. Four lecture and three laboratory periods per week. (spring)

**CE 231 Engineering Analysis 5 credits**  
Approximation techniques; error minimization; discrete representations of continuous processes; moment methods; numerical integration and differentiation; computation techniques for linear algebra and eigenvalue problems. Four lectures and one three-hour computational laboratory per week. Prerequisite: Mt. 136. (spring)

**CE 291 Special Topics 1-5 credits**  
**CE 292 Special Topics 1-5 credits**  
**CE 293 Special Topics 1-5 credits**



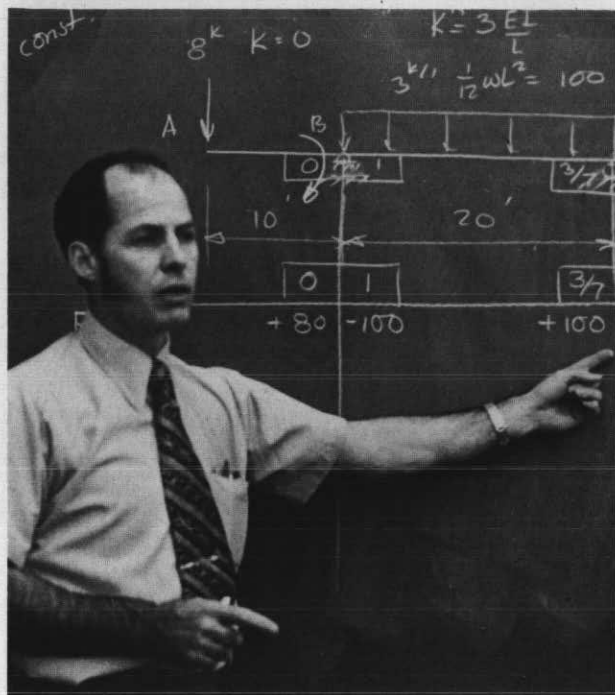
**CE 300 Cooperative Work Study Assignment 0 credits**  
Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education of the student.

**CE 321 Strength of Materials I 5 credits**  
Introduction to the mechanics of solid deformable bodies covering the relationships that exist between the external forces acting on elastic bodies and the stresses and deformations produced. Members subjected to tension, compression, flexure and torsion are studied. Four lecture and one laboratory period per week. Prerequisite: ME 113, Ph 200. (fall)

**CE 323 Strength of Materials II 5 credits**  
Continuation of the mechanics of solid deformable bodies. Additional beam topics, stability of columns, combined stresses and strains, fatigue and energy relationships are considered. Four lecture and one laboratory period per week. Prerequisite: CE 321. (winter)

**CE 331 Fluid Mechanics 5 credits**  
Introduction to fluid mechanics, including fluid properties, the continuity equation, stream functions and stream lines; Euler's equation for an ideal fluid, rotational and irrotational flow concepts; development and application of the Navier-Stokes equations, the energy and momentum equations; laminar and turbulent flow and an introduction to boundary layer theory, similarity parameters and dimensional analysis; vector and Cartesian tensor notation. Prerequisites: ME 281, Mt 136. (fall)

**CE 335 Applied Hydraulics 3 credits**  
Weekly student projects in the field of incompressible flow; pump design, hydrographic studies, graphical analysis of overflow or spillway design, model studies, varying flow analysis, economic design of pipeline projects. Prerequisite: CE 331. (winter)



**CE 337 Fluids Laboratory 2 credits**  
Experimental calibration of various flow meters, loss coefficients, and pipe friction factors. Experimental verification of various principles of fluid mechanics. One lecture and one four-hour laboratory per week. Prerequisite: CE 331. (spring)

**CE 351 Engineering Geology 3 credits**  
Elementary study of the material structure and internal condition of the earth and of the physical and chemical processes at work upon and within it. Three lecture hours per week. Prerequisite: Sophomore standing. (winter)

**CE 353 Soil Mechanics and Foundations 5 credits**  
Soil as a structural material; physical properties, bearing capacity and current theories of stress distribution of different types of soil; compaction and behavior under short and long duration loading. Four lecture and one laboratory session per week. Prerequisites: CE 323, 351. (spring)

**CE 381 Elements of Water Supply 3 credits**  
History, current status, legal considerations and projected problems of water supply. Water requirements based on population, industrial, commercial and agricultural use. Development of surface and ground water supplies. Transportation and distribution of water. Prerequisite: CE 331. (spring)

**CE 400 Cooperative Work Study Assignment 0 credits**  
Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education of the student.

**CE 401 Contracts and Specifications 3 credits**  
Elements of estimating; types and elements of contracts; specifications for material and construction. (winter)

**CE 402 Engineering Economy 3 credits**  
Elements of immediate and long-term economy of design and maintenance; interest rates, present rates, present worth and prospective return on investment; depreciation and replacement studies. Introduction to critical path method of project scheduling. (spring)

**CE 445 Structural Mechanics 5 credits**  
Classical and matrix methods in structural mechanics. Basic structural theory in both classical and matrix notation. Development of basic matrix force (flexibility) and displacement (stiffness) methods of structural analysis. Prerequisite: CE 323. (fall)

**CE 447 Structural Design I 5 credits**

**CE 449 Structural Design II 5 credits**  
I. Introduction to the design of wood, steel and concrete members and connections. Familiarization with various building codes governing structural design. II. Design of structural systems of buildings, including roofs, floors, walls, columns, and foundations. Basic design for earthquake forces and the fundamentals of prestressed concrete design. Four hours of lecture and one 3-hour laboratory per week. Prerequisites: CE 445 for 447; 447 for 449. (I. winter, II. spring)

**CE 485 Sanitary Engineering I 5 credits**

**CE 486 Sanitary Engineering II 5 credits**  
I. Examination of water and waste. Physical treatment processes. Laboratory experiments in microbial, bacteriological and chemical examination of water and wastes. Chemical and biological treatment, sludge disposal, disinfection, reuse of water, comprehensive planning. Four lectures and one laboratory per week. II. Stream pollution and self-purification. Analysis of industrial wastes. Four lectures per week plus selected field trips. Prerequisites: Ch 114 for 485; 485 for 486. (I-fall, II-spring)

**CE 492 Transportation Systems 3 credits**  
Development of transportation systems and social and economic effects. Planning present and future systems. Methods of public and private financing. (fall)

**CE 495 Advanced Studies 2-5 credits**  
Independent study or research under the direction of a member of the faculty, to be carried out in one specific area of civil engineering: H — fluid mechanics; ST — structures; S — soils; R — highways; W — sanitary engineering. Prerequisite: Senior standing.

**CE 496 Seminar I 2 credits**

**CE 497 Seminar II 2 credits**

**CE 498 Seminar III 2 credits**  
Development of oral and written communication skills through preparation and presentation of a technical paper. Prerequisite: Senior standing (I-fall, II-winter, III-spring)

**CE 499 Thesis 1-5 credits**  
Problem in analysis or design at the level of undergraduate research. Prerequisite: Senior standing.





## Electrical Engineering

Francis P. Wood, SJ, M.S., Program Director

### Objectives

Electrical engineering deals with the applications of electricity to the generation, transmission, distribution and utilization of electric power, to measurement, to control, to computation and to communication by wire and electromagnetic waves.

The specific objective of the department does not provide for undergraduate specialization in various fields but strives to provide a broad foundation based on mathematical and scientific principles that will prepare the graduate to take his place in any of the various fields of study.

The curriculum includes material in networks, electronics, radio, communication, and power apparatus and systems. Hence the student interested in electronics, in automatic control, or in any other specialty is given adequate scientific training in a well-balanced educational program.

### Degree Offered

Bachelor of Electrical Engineering

### General Program Requirements

Students in electrical engineering must satisfy the specific core curriculum requirements of the University as modified for the School of Science and Engineering.

### Departmental Requirements

Bachelor of Electrical Engineering — 180 credits as listed in the following outline. In special cases, qualified students, with the approval of the department, may substitute advanced courses in nuclear physics for regular electrical engineering courses.

### Bachelor of Electrical Engineering

#### Freshman year

English 100 and core option .....	10 credits
Mathematics 114, 134, 135, 136 .....	18 credits
Mechanical Engineering 102, 111, 112, 113 .....	12 credits
Physics 200 .....	5 credits

#### Sophomore year

Electrical Engineering 231, 290 .....	10 credits
Mathematics 233 .....	5 credits
Mechanical Engineering 281 or Physics 310 .....	5 credits
Philosophy 110, 220 and core option .....	15 credits
Physics 201, 202 .....	10 credits

#### Junior year

Electrical Engineering 301, 303, 311, 321 .....	15 credits
Physics 330, 360, 361 .....	15 credits
Theology core options .....	10 credits
Humanities elective .....	5 credits

#### Senior year

Electrical Engineering 411, 435, 441, 443, 445, 446, 451, 461, 485 and electives .....	40 credits
Humanities elective .....	5 credits

Total . . . 180 credits

### Electrical Engineering Courses

<b>EE 200</b>	<b>Cooperative Work Study Assignment</b>	<b>0 credits</b>
	Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education of the student.	
<b>EE 231</b>	<b>Engineering Analysis</b>	<b>5 credits</b>
	Approximation techniques; error minimization; discrete representations of continuous processes; moment methods; numerical integration and differentiation; computation techniques for linear algebra and eigenvalue problems. Four lectures and one three-hour computational laboratory per week. Prerequisite: Mt 136. (spring)	
<b>EE 290</b>	<b>Measurement and Instrumentation Fundamentals</b>	<b>5 credits</b>
	Principles of measurement of quantities such as flow, position, strain, radiation, velocity, current, power, temperature, voltage. Conversion by transducers into electrical signals and processing for recording, observation or control. Recognition and interpretation of physical data. Four lectures and one three-hour problem/laboratory per week. Prerequisites: Mt 134 and Ph 106 or 201. (With permission of instructor, Ph 106 or 201 may be co-requisite.) (fall and spring)	

**SCIENCE AND ENGINEERING/129**  
**Electrical Engineering**

- EE 291 Special Topics 1-5 credits**  
**EE 292 Special Topics 1-5 credits**  
**EE 293 Special Topics 1-5 credits**

**EE 300 Cooperative Work Study Assignment 0 credits**  
 Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education of the student.

- EE 301 Electrical Circuits I 5 credits**  
**EE 303 Electrical Circuits II 5 credits**

Fundamental concepts and units; energy and power; Kirchhoff's laws, nodal and mesh analysis; steady-state solutions; coupled circuits and transformers; Fourier series and integral; transient response and Laplace transformation; polyphase circuits. I. Four lectures and one two-hour quiz per week. II. Four lectures and one four-hour laboratory per week. Prerequisites: Ph 201 for 301, 301 for 303. (I-fall, II-winter)

**EE 311 Seminar 0 credits**  
 Attendance required for junior year Electrical Engineering students. (winter)

**EE 321 Linear Analysis 5 credits**  
 Laplace transform techniques; functions in the complex frequency plane; analytic functions; the inversion integral; expansion of functions in series; inversion integral evaluation by residues; conformal field mapping. Application of frequency plane analysis to electronic networks; introduction to non-linear analysis and to network synthesis. Prerequisite: EE 303. (spring)

**EE 361 Special Studies in Electrical Engineering 1-3 credits**  
 Special studies for qualified students, under the direction of a faculty member. A written report will be required. By arrangement with the department. (fall, winter, spring)

**EE 400 Cooperative Work Study Assignment 0 credits**  
 Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education of the student.

**EE 411 Seminar 2 credits**  
 Each student is required to prepare a technical paper and to present it orally to the class. Prerequisite: Senior standing in Electrical Engineering. (winter)

**EE 435 Electromechanics 5 credits**  
 Electromechanical energy conversion principles; transformers, rotating machines, electromechanical energy conversion devices such as electromagnets, loud speakers. Four lectures and one four-hour laboratory per week. Prerequisite: EE 321. (fall)

**EE 441 Semiconductor Circuits I 5 credits**  
 Linear equivalent circuit models of solid state and vacuum circuit elements. Elementary amplifiers; biasing techniques, thermal stability, s-plane frequency characteristics, frequency compensation,

coupling and bypassing circuits. Cascaded amplifier circuits; gain-frequency characteristics and bandwidth control. Prerequisite: EE 321. (fall)

**EE 443 Semiconductor Circuits II 5 credits**  
 Linear power amplifiers; push-pull, complementary symmetry and load coupling circuits. Feedback amplifiers; gain-frequency characteristics and frequency compensation. Class AB, C and C amplifiers and tuned amplifiers. Oscillators; various basic forms and their frequency and amplitude stability characteristics. Prerequisite: EE 441. (winter)

**EE 445 Digital Systems 5 credits**  
 Boolean algebra, logical reduction of combinatorial and sequential circuits, Vetch diagrams, Karnaugh maps; number systems and codes; logical circuits, basic-counting, timing and authentic circuits; wave shaping, limiting, clipping, gating and dc-restoring circuits; memory devices. Prerequisite: EE 321. (spring)

**EE 446 Electronics Laboratory 2 credits**  
 Laboratory problems based on characteristics of electron devices; amplifier, rectifier, and digital circuits. One lecture and one four-hour laboratory per week. Prerequisite: EE 443. (spring)

**EE 451 Distributed Systems 5 credits**  
 Analysis of distributed systems by circuit and field methods; steady-state and transient behavior of lossless transmission systems; propagation on dissipative systems. Four lectures and one four-hour laboratory per week. Prerequisites: Ph 330 and EE 303. (winter)

**EE 461 Control Systems 5 credits**  
 Fundamentals of classical and modern system theory; analysis and design of closed-loop systems with emphasis on stability and transient response using Nyquist, Bode, s-plane and state-space techniques. Prerequisite: EE 321. (fall)

**EE 462 Systems Laboratory 2 credits**  
 Comprehensive systems laboratory utilizing components from electronics, energy conversion devices, filters and magnetics; emphasis on integration of components into a complete system. One lecture and one four-hour laboratory per week. Prerequisite: EE 461 (arranged).

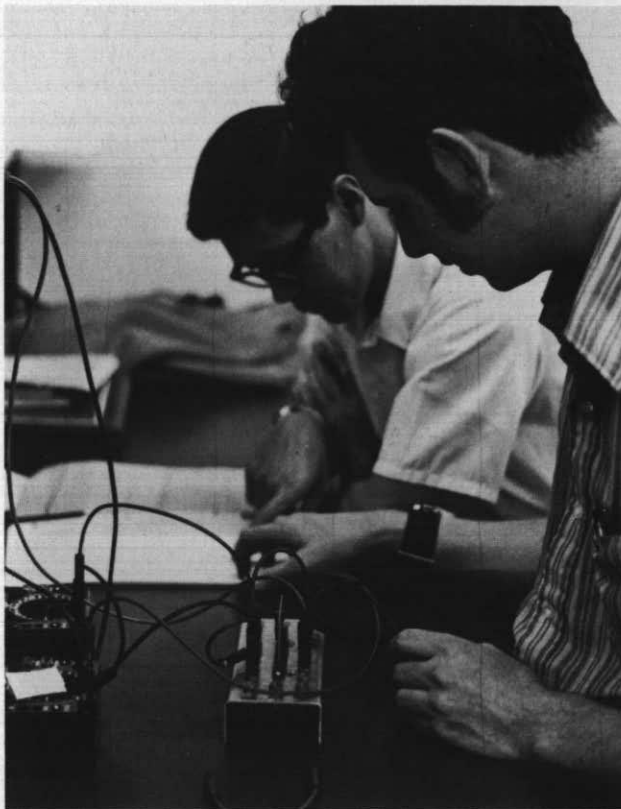
**EE 481 Solid State Theory 5 credits**  
 Review of elementary quantum physics; energy bands and carrier statistics; theory of junction devices; periodic structures and energy bands; transport theory; semiconductor parameters. Prerequisite: EE 441 (arranged)

**EE 485 Modulation and Noise 3 credits**  
 Signal transmission through electrical networks; amplitude modulation; phase modulation; frequency modulation; periodic sampling and pulse modulation; characterization of noise; noise sources; effects of noise on electronic systems; comparative analysis of information transmission systems. Prerequisite: EE 321. (winter)

**EE 489 Special Topics 1-5 credits**

**EE 490 Special Topics 1-3 credits**  
 Current topics in Electrical Engineering not normally covered in the undergraduate curriculum. Prerequisite: Senior standing. (arranged)





## Mechanical Engineering

Harry Majors, Jr., M.S., Program Director

### Objectives

The mechanical engineer is concerned with the fundamental properties of solids, liquids and gases related to the creative design and manufacture of machines, heat engines, electro-mechanical devices and control systems. He is concerned with the broad area of energy conversion as related to the design of machines. This requires working with the processes of combustion, nuclear and chemical reactions, solar radiations, propulsion systems for sea, land and space and all types of materials under a vast array of conditions.

A mechanical engineer may enter positions in research and development, design engineering, salesmanship, and, with experience, executive positions in industry.

### Degree Offered

Bachelor of Mechanical Engineering

### General Program Requirements

Students in mechanical engineering must satisfy core curriculum requirements of the University as modified for the School of Science and Engineering.

### Departmental Requirements

Bachelor of Mechanical Engineering — 180 credits are required for the degree. In special cases, qualified students with the approval of the major department may substitute equivalent or more advanced courses for those listed in the curriculum.

## Bachelor of Mechanical Engineering

### Freshman year

English 100 and core option .....	10 credits
Mathematics 114, 134, 135, 136 .....	18 credits
Mechanical Engineering 102, 111, 112, 113 .....	12 credits
Physics 200 .....	5 credits

### Sophomore year

Chemistry 114 .....	5 credits
Electrical Engineering 290 .....	5 credits
Mathematics 233 .....	5 credits
Mechanical Engineering 281 and 231 (or Mathematics elective) .....	10 credits
Philosophy 110, 220 .....	10 credits
Physics 201 .....	5 credits
Physics 202 or Chemistry 115 .....	5 credits

### Junior year

Civil Engineering 321, 323, 331, 337 .....	17 credits
Mechanical Engineering 321, 371 or Chemistry 355, 380, and 398 .....	13 credits
Philosophy core option .....	5 credits
Theology electives .....	10 credits

### Senior year

Civil Engineering 402 .....	3 credits
Engineering elective .....	5 credits
Humanities electives .....	10 credits
Mechanical Engineering 425, 426, 472, 473, 485, 496, 497, 498 .....	27 credits

Total . . . 180 credits

## Mechanical Engineering Courses

### ME 102 Engineering Computations 2 credits

Review of exponents and logarithms. Separate sections on slide rule and logarithmic computation. Students must attend these sessions until they are able to pass examinations on the subjects concerned. Introduction to desk top computers. Hours arranged. (fall)

### ME 111 Engineering Drawing 3 credits

Use of instruments, lettering, orthographics, isometrics, free-hand sketching, dimensioning. Introduction to descriptive geometry. Three two-hour sessions per week. (winter)

### ME 112 Engineering Graphics and Design 2 credits

Graphical calculus. AVS diagrams; graphs and diagrams; nomograms. Two two-hour lecture periods per week.

### ME 113 Engineering Problems 5 credits

Presentation of engineering papers. Dimensional analysis. Handling of data. Vector algebra. Free body diagrams; static equilibrium. Engineering reports. Four lectures and a one-hour problem session per week.

### ME 200 Cooperative Work Study Assignment 0 credits

Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education of the student.

**ME 231 Engineering Analysis 5 credits**  
Approximation techniques; error minimization; discrete representations of continuous processes; moment methods; numerical integration and differentiation; computation techniques for linear algebra and eigenvalue problems. Four lectures and one three-hour computations laboratory per week. Prerequisite: Mt 136. (spring)

**ME 269 Production Processes I 1 credit**

**ME 270 Production Processes II 1 credit**  
Study of the processes used in forming and shaping engineering materials; lectures, demonstrations and laboratory work on machining processes. One lecture and three laboratory hours per week. Prerequisite: Sophomore standing, ME 269 for 270. (I-fall, II-winter)

**ME 281 Mechanics II, Dynamics 5 credits**  
Principles of dynamics; kinematics and kinetics of a particle, system of particles and rigid bodies; relative motion, the equations of motion, impulse-momentum and work-energy; conservative force fields and potential energy; the inertia tensor, principal axes and moments of inertia; Euler's equations of motion of a rigid body, Euler's angles, Lagrange's equations; methods of vector calculus. Applications drawn from mechanical vibrations, planetary and satellite motion, rocket and jet propulsion and the symmetrical gyroscope. Prerequisite: ME 113. (winter)

**ME 291 Special Topics 1-5 credits**

**ME 292 Special Topics 1-5 credits**

**ME 293 Special Topics 1-5 credits**

**ME 300 Cooperative Work Study Assignment 0 credits**  
Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education of the student.

**ME 321 Engineering Thermodynamics I 5 credits**

**ME 322 Engineering Thermodynamics II 5 credits**  
I. Heat, work, the laws of thermodynamics; entropy and absolute temperature; properties of liquids, vapors, perfect gases and mixtures of gases and vapors; application to heat cycles. II. Equations of state, thermodynamic relations, study of processes and cycles; flow of fluids, heat transfer, chemical reactions, combustion, equilibrium. Prerequisites: Ph 201 for 321; 321 or Ch 355 for 322.

**ME 371 Machine Design I 3 credits**

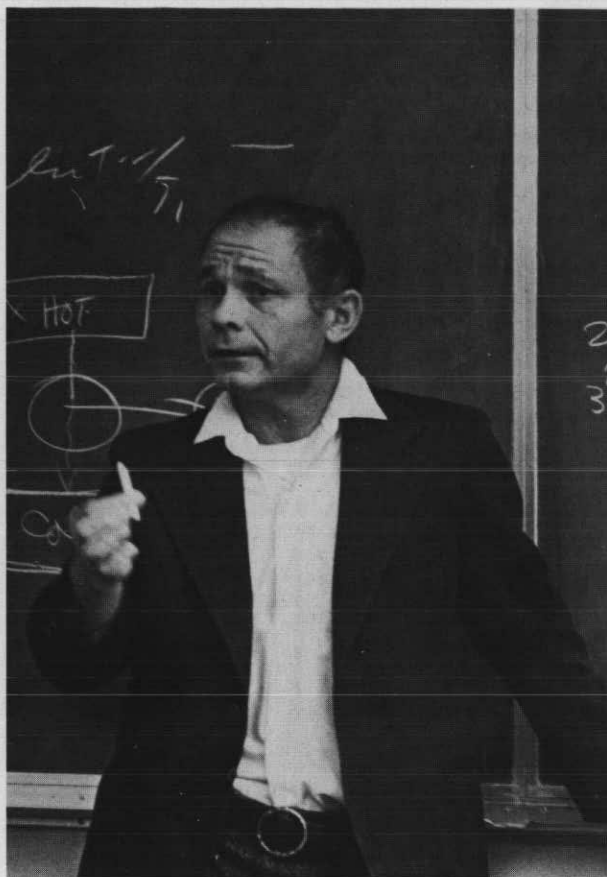
Relation of engineering fundamentals and properties of materials to the design, layout and details of specific machines; computation techniques and use of digital and analogue computers. Prerequisites: ME 281, CE 323, 331. (spring)

**ME 380 Heat and Mass Transfer I 5 credits**

Introduction to the theory of heat flow by conduction; convection and radiation; dimensional analysis. Four lectures and one four-hour laboratory per week. Prerequisites: ME 321 or CH 355, CE 331. (spring)

**ME 398 Seminar 0 credit**

Students will attend. Seminar papers will be presented by the seniors. (winter)



**ME 400 Cooperative Work Study Assignment 0 credits**

Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education of the student.

**ME 425 Power Plants I 5 credits**

**ME 426 Power Plants II 5 credits**

**ME 427 Power Plants III 5 credits**

I. Application of thermodynamic theory and heat transfer to the economic design of modern central station power plants and auxiliaries. II. Thermodynamic analysis of internal combustion engines and rotating machinery. III. Propulsion systems. Four lecture and four laboratory periods per week. Prerequisites: ME 322, 380 for 425; 426 for 427. (I-fall, II-winter, III-spring)

**ME 428 Environmental Engineering 4 credits**

Man-machine systems; psychological and physiological principles of the interrelation between a human and his surroundings; environmental requirements for equipment and human habitation; engineer's approach to the multi-disciplinary aspects of environmental control. Three lecture and four laboratory hours per week. Prerequisite: ME 426

**ME 472 Machine Design II 3 credits**

**ME 473 Machine Design III 3 credits**

**ME 474 Machine Design IV 1-5 credits**

II. Philosophy of design, a creative approach, and a comprehensive design project; planning, organizing and leading an engineering project; exercising judgment



ment and considering economic factors. III. Instruction and experience in the integrated aspects of creative design and analysis; case studies; design of a novel device or system; electro-mechanical, hydraulic and pneumatic systems; energy conversion. IV. Project work. Prerequisites: Me 371 for 472; 472 for 473; 473 for 474. (II-fall, III-winter)

**ME 477 Experimental Mechanics 1-5 credits**  
Study of experimental methods; instrumentation; use of sensing devices; measurements by means of mechanical, electrical, magnetic and optical methods; control systems; vibrations; shock and impact measurements; emphasis on the interpretation of results. Arranged. Prerequisites: CE 337, ME 371.

**ME 478 Compressible Flow I 5 credits**  
Review of concepts of fluid dynamics and thermodynamics; introduction to the concepts of compressible flow; one-dimensional gas dynamics including flow in nozzles and diffusers, normal shocks, frictional flows and flows with heat transfer and energy release. Prerequisite: CE 331, ME 322.

**ME 479 Theoretical Hydrodynamics 5 credits**  
Ideal fluid motions; Euler's equation of motion and continuity equation, boundary conditions. Potential flow; velocity potential stream function, Laplace equation, hydrodynamic singularities, two and three dimensional flow examples. Conformal transformation; complex potential, complex velocity, Blasius theorem, flow about cylinders and air foils. Free streamline flow; Schwartz-Christoffel theorem. Vortex motion. Prerequisite: Permission of instructor.

**ME 481 Heat and Mass Transfer II 5 credits**  
Use of analogue and digital computer; numerical methods; mass transfer; diffusion. Four lecture and four laboratory hours per week. Prerequisite: ME 380. (fall)

**ME 484 Linear Systems Analysis 5 credits**  
Application of Laplace transforms to linear systems. Four lecture and four laboratory hours per week. Prerequisites: ME 322, 371, CE 333. (winter)

**ME 485 Control Systems I 5 credits**  
Analysis and design of linear control systems with emphasis on transient and frequency response. Four lecture and four laboratory hours per week. Prerequisite: ME 484. (spring)

**ME 491 Special Studies 2-5 credits**

**ME 492 Special Studies 2-5 credits**

**ME 493 Special Studies 2-5 credits**

Selected subjects of current interest in mechanical engineering. Assigned reading and/or experiments will be arranged on an individual basis in consultation with the instructor. Written report and oral delivery are required. Prerequisite: Senior standing.

**ME 496 Seminar 2 credits**

**ME 497 Seminar 2 credits**

**ME 498 Seminar 2 credits**

Prerequisite: Senior standing. (fall, winter, spring)

**ME 499 Thesis 2 credits**

In special cases a thesis may be substituted in place of seminar with the approval of the department chairman. Prerequisite: Senior standing.



## Environmental Studies

The solution of problems relating to man's environment will depend, among other things, upon the enlightened application of science and technology. This task will require people from a wide spectrum of educational backgrounds and professional interests, from attorneys to nuclear physicists. One thing will be common to all who are really effective in the environmental field: they will have an education broad enough to understand the problem and deep enough in some area to have an impact. Students interested in the environmental field may:

1. Choose a Bachelor of Science in Biology, Chemistry or Physics degree program, or a Bachelor of Civil Engineering program and choose electives and seminar courses to broaden their knowledge of environmental problems.

2. Choose the Bachelor of Science in General Science degree and include in it a variety of courses in biology, chemistry and engineering which are relevant environmental problems.

3. Choose the more general Bachelor of Science or Bachelor of Engineering programs to gain expertise in one field and use the greater number of electives permitted in these programs to get breadth in other field of environmental interest.

4. Choose a Bachelor of Arts degree program which will provide a strong background in one field and leave ample room for such fields as economics, political science, psychology and sociology.

Courses especially recommended for persons interested in environmental problems are: Biology 101, 150, 370, 371; Chemistry 100; Mathematics 114, 116; Physics 101, 110, 475; Civil Engineering 210, 351; Sociology 101; Psychology 100; Economics 271 and Political Science 150.

The Student will be advised by the department in which he plans to take the most courses. See sample programs of study below for specific course requirements. See also General Science section of this bulletin.

### **Environmental Studies**

#### **Bachelor of Science**

##### **Freshman year**

Biology 150 .....	5 credits
Chemistry 114, 115, 116 .....	15 credits
English 100 and core option .....	10 credits
Mathematics 112, 134 .....	10 credits
Philosophy 110 .....	5 credits

##### **Sophomore year**

Biology 170, 370, 371 .....	10 credits
Chemistry 235, 236 .....	10 credits
Philosophy 220 and core option .....	10 credits
Physics 105, 106, 107 or 200, 201, 202 .....	15 credits

##### **Junior year**

Chemistry 324, 325, 355, 356, 357, and electives .....	30 credits
Civil Engineering 210, 351 .....	10 credits
Theology core options .....	5 credits

##### **Senior year**

Chemistry elective .....	5 credits
History/Social Science core option .....	15 credits
Theology core option .....	5 credits
Electives .....	20 credits

Total . . . 180 credits

### **Environmental Studies**

#### **Bachelor of Engineering**

##### **Freshman year**

English 100 and core option .....	10 credits
Mathematics 112, 114, 134 .....	13 credits
Mechanical Engineering 102, 111, 112, 113 .....	12 credits
Philosophy 110, 220 .....	10 credits

##### **Sophomore year**

Biology 150 .....	5 credits
Chemistry 114, 115 .....	10 credits
Civil Engineering 210 .....	5 credits
Mathematics 135, 136 .....	10 credits
Physics 200, 201, 202 .....	15 credits

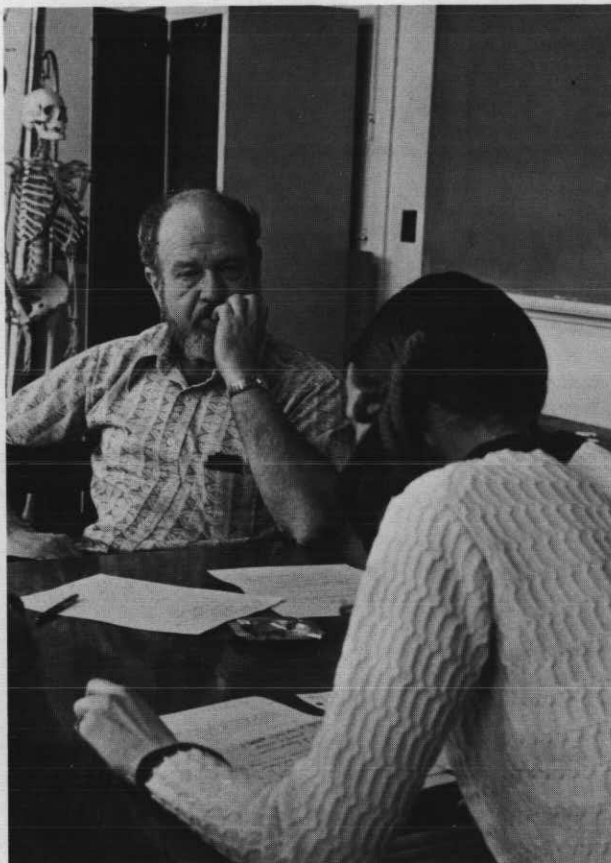
##### **Junior year**

Biology 170, 370, 371 .....	10 credits
Civil Engineering 351 .....	5 credits
Chemistry 355 or Mechanical Engineering 321 .....	5 credits
Engineering electives .....	20 credits
Philosophy core option .....	5 credits

##### **Senior year**

Civil Engineering 485, 486 .....	10 credits
Economics 271 .....	5 credits
Engineering electives .....	15 credits
Political Science 160 .....	5 credits
Theology core electives .....	10 credits

Total . . . 180 credits



### **General Science**

**Jerry A. Riehl, Ph.D., Program Director**

#### **Objective**

The objective of the program in general science is to offer the student a liberal education with sufficient background in science to enable the graduate to work in easy liaison with scientists and engineers in industry or government. Judicious use of elective hours permits the student to specialize in other technical areas or in business. A concentration in engineering and one in environmental studies is shown below, but other choices are possible according to the need of the student. These choices are governed by the General Program Requirements.

#### **Degree Offered**

Bachelor of Science in General Science

#### **General Program Requirements**

Students in general science must satisfy the core curriculum for science majors shown on pages 24-25 of this bulletin. Also required are 90 credits chosen from the following fields: biology, chemistry, mathematics, physics, psychology and engineering. For this purpose all engineering courses are considered as being in one field. At least 30 credits must be in one of these fields and 20 credits in a second field. Four of the fields must be represented by at least one course. See sample programs below for specific course requirements.



**Bachelor of Science in General Science**  
**Environmental Studies**

**Freshman year**

Biology 150 .....	5 credits
Chemistry 114, 115, 116 .....	15 credits
English 100 and core option .....	10 credits
Mathematics 112, 134 .....	10 credits
Philosophy 110 .....	5 credits

**Sophomore year**

Biology 170, 370, 371 .....	10 credits
Chemistry 235, 236 .....	10 credits
Philosophy 220 and core option .....	10 credits
Physics 105, 106, 107 or 200, 201, 202 .....	15 credits

**Junior year**

Chemistry elective .....	5 credits
Civil Engineering 210, 351 .....	10 credits
Biology or Physics elective .....	5 credits
Theology core options .....	10 credits
Electives .....	15 credits

**Senior year**

Science, Mathematics or Engineering electives .....	10 credits
Humanities/Social Science electives .....	15 credits
Electives .....	20 credits

Total . . . 180 credits

**Bachelor of Science in General Science**  
**Engineering Concentration**

**Freshman year**

English 100 and core option .....	10 credits
Mathematics 112, 114, 134 .....	13 credits
Mechanical engineering 102, 111, 112, 113 .....	12 credits
Philosophy 110 .....	5 credits
Physics 200 .....	5 credits

**Sophomore year**

Chemistry 114, 115 .....	10 credits
Civil Engineering 210 .....	5 credits
Electrical Engineering 290 .....	5 credits
Mathematics 135, 136 .....	10 credits
Philosophy 220 .....	5 credits
Physics 201, 202 .....	10 credits

**Junior year**

Chemistry or Physics electives .....	10 credits
Engineering electives .....	10 credits
Philosophy core option .....	5 credits
Theology core options .....	10 credits
Electives .....	10 credits

**Senior year**

Humanities/Social Science electives .....	15 credits
Electives .....	30 credits

Total . . . 180 credits



**Health Information Services**

Mary Alice Hanken, R.R.A., Program Director

**Objectives**

The Health Information Services program is designed to prepare the student for a career in an administrative health care profession by providing a comprehensive four-year program of liberal arts and science. In the fourth year emphasis is on professional activities and interaction with the health care industry. Students who complete the program are eligible for registration with the American Medical Record Association.

**Degree Offered**

Bachelor of Health Information Services

**General Program Requirements**

Candidates must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin.

**Departmental Requirements**

Bachelor of Health Information Services — 20 credits of science and mathematics beyond the core requirement; 10 credits of social science and 15 credits of business courses.

**Bachelor of Health Information Services**

**Freshman year**

Chemistry 100 .....	5 credits
English 100 and core option .....	10 credits
History 102-103 .....	10 credits
Mathematics 101 or elective .....	5 credits
Philosophy 110 .....	5 credits
Psychology 100 .....	5 credits
Elective .....	5 credits



#### Sophomore year

Biology 150 .....	5 credits
Business 270 .....	5 credits
Economics 100 .....	5 credits
Health Information Services 430 .....	5 credits
Mathematics 114, 116, or 214 .....	5 credits
Philosophy 220 .....	5 credits
Theology core options .....	10 credits
Elective .....	5 credits

#### Junior year

Biology 270, 271 and 220 or 300 .....	15 credits
Business 310, 380 .....	10 credits
Health Information Services 401 .....	5 credits
Philosophy core option .....	5 credits
Psychology or Sociology 201 .....	5 credits
Elective .....	5 credits

#### Senior year

Health Information Services 402, 403, 422, 425, 426, 440, 450, 455, 470, 494 and 495 and electives .....	45 credits
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Total . . . 180 credits

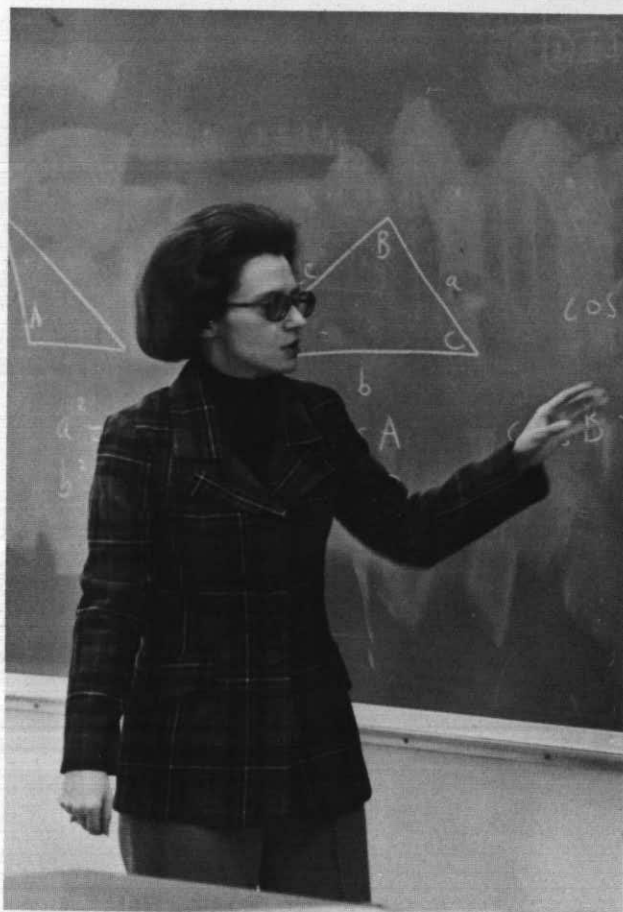
#### Health Information Services Courses

<b>HI 401</b>	<b>Introduction to Health Records</b>	<b>5 credits</b>
	Introduction to the development, present scope and future direction of health records and the health record profession. Initial development of the skills of record analysis and control, compilation of medical statistics, record retrieval and disease coding. (fall, spring)	
<b>HI 402</b>	<b>Analysis, Design and Implementation of Health Record Systems</b>	<b>5 credits</b>
	Application of health record science and management skills in the coordination of record systems and information centers in health facilities. Prerequisites: HI 401 and 450. (winter)	
<b>HI 403</b>	<b>Professional and Governmental Influences on Health Record Administration</b>	<b>5 credits</b>
	Study of the standards designed by JCAH, AMA, HEW and other agencies to raise the level of health care with analysis of the effects on health record administration. Prerequisites: HI 402. (spring)	

#### SCIENCE AND ENGINEERING/135 Health Information Services

<b>HI 422</b>	<b>Medical Terminology</b>	<b>3 credits</b>
	(fall)	
<b>HI 425</b>	<b>Medical Science I</b>	<b>3 credits</b>
<b>HI 426</b>	<b>Medical Science II</b>	<b>3 credits</b>
	I. The problem-oriented approach to nature and cause, treatment and management of patients covering circulatory, respiratory, hemic and lymphatic, musculoskeletal, integumentary, urogenital and female reproductive systems. II. Diseases of endocrine and nervous systems, special senses, psychobiologic units, treatment of disease including drugs, laboratory tests and anesthesia. (I. fall II. spring)	
<b>HI 430</b>	<b>Health Care Delivery System</b>	<b>5 credits</b>
	Study of the organization, delivery and financing of health care in the United States. Interdisciplinary exploration of the relationships of personnel, facilities and organizations in the health field. (fall, spring)	
<b>HI 440</b>	<b>Practicum</b>	<b>1-5 credits</b>
<b>HI 441</b>	<b>Practicum</b>	<b>1-5 credits</b>
	Practicum is designed to help students develop themselves through utilizing opportunities to participate in current health information activities with professional medical record administrators and other professionals in the health field. (fall, winter, spring)	
<b>HI 450</b>	<b>Development of Management Resources</b>	<b>3 credits</b>
	Utilization of management methods and resources in the effective direction of a department, system or function with emphasis on budget, layout, work simplification, job analysis and equipment selection. (fall or winter)	
<b>HI 455</b>	<b>Comprehensive Communication Skills</b>	<b>3 credits</b>
	Study and development of skills needed to select and use communications media in effective leadership. Areas of particular study will include personnel selection and evaluation, educational and training programs for health personnel or related groups, skill in relating information to a wide range of individuals or groups. (spring)	
<b>HI 470</b>	<b>Legal Concepts for Health Fields</b>	<b>3 credits</b>
	Principles of law as applied to the health field, with particular reference to all phases of medical record practice.	
<b>HI 475</b>	<b>Data Processing</b>	<b>3 credits</b>
	Data processing systems and the application of newer techniques in handling information in medical institutions.	
<b>HI 491</b>	<b>Special Topics</b>	<b>2-5 credits</b>
<b>HI 492</b>	<b>Special Topics</b>	<b>2-5 credits</b>
<b>HI 494</b>	<b>Current Topics — Seminar</b>	<b>2 credits</b>
	Organizational patterns in health facilities and their role in the community, career opportunities. (winter)	
<b>HI 495</b>	<b>Problem Solving and Decision Making — Seminar</b>	<b>2 credits</b>
	(spring)	
<b>HI 497</b>	<b>Independent Study</b>	<b>1-6 credits</b>
	Prerequisites: Senior standing; permission. (fall, winter, spring)	





## Mathematics

Andre L. Yandl, Ph.D., Program Director

### Objectives

The Mathematics department offers three structured undergraduate programs. The first, leading to the Bachelor of Science in Mathematics degree, is designed to prepare the student for advanced study and professional work in mathematics. The other two, for students wishing more flexible programs which provide for a concentration of work in a secondary field, lead to the Bachelor of Arts degree or the Bachelor of Science degree.

### Degrees Offered

Bachelor of Arts  
Bachelor of Science  
Bachelor of Science in Mathematics  
Master of Science in Natural Science

### General Program Requirements

Students in mathematics must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin. Either French or German may be taken to fulfill the language requirement. A minimum grade of C is required in all mathematics courses applied toward the major. See programs of study below for additional requirements.

### Advanced Placement in Calculus

Students who have completed a college level course in calculus in high school and have taken the Advanced

Placement test in calculus of the College Entrance Examination Board may petition the department for placement on the basis of their test results. Advanced placement and credit may be granted to students whose test scores are 3 or above. Advanced placement may also be obtained through departmental testing.

### Honors Work in Mathematics

For superior students the department offers honors work consisting of a year of independent study under the supervision of a senior faculty member. Normally the work will be done during the senior year at a level beyond that of the regular undergraduate courses and will culminate in the writing of a term paper or senior thesis. Students who wish to undertake this program will be encouraged to take Mt 315 or 381 in the sophomore year and a 400-level series in their junior year in order to have the background sufficient to conduct their independent study. The independent study is an addition to the regular course requirements for the Bachelor of Science in Mathematics degree. No special distinction will be made in the degree earned by students completing the program.

### Departmental Requirements

Bachelor of Arts — 50 credits in mathematics which must include Mt 134, 135, 136, 233, 234, 315 or 381, 411 or 431 and 15 additional credits of approved upper division mathematics. General physics and the fine arts sequence are recommended.

Bachelor of Science — 60 credits of mathematics and 30 credits of physical science, psychology or economics.

Bachelor of Science in Mathematics — 70 credits in mathematics which must include Mt 134, 135, 136, 233, 234, 411, 412, 413, 431, 432, 433; 15 additional credits in upper division mathematics; and 15 credits of physics. In certain circumstances, with the approval of the program director, 15 credits of upper division work in a physical science may be substituted for 15 credits in mathematics. Students in this program must maintain a cumulative grade point average and a mathematics grade point average of 2.50. The fine arts sequence is recommended.

Undergraduate Minor — 30 credits in mathematics which must include Mt 134, 135, 136 and 15 credits of approved electives beyond college algebra.

Teaching Major (School of Education) — 45 credits in mathematics which must include Mt 134, 135, 136, 233, 300, 321 or 322 and 15 credits of approved electives beyond college algebra (Mt 114 and 116 are included among approved electives).

Master of Science in Natural Science — 45 credits of courses numbered 400 or higher which may include the following: Mt 405, 410, 415, 420, 425, 435, 450, 460, 470, 480, 491, 499; 20 credits selected from corresponding programs in chemistry or physics.

### Bachelor of Arts

#### Freshman year

English 100 and core option .....	10 credits
History core option .....	10 credits
Mathematics 134, 135, 136 .....	15 credits
Philosophy 110 .....	5 credits
Social Science core option .....	5 credits

#### Sophomore year

Mathematics 233, 234 and elective .....	15 credits
Philosophy 220 and core option .....	10 credits
Physical or Biological Science, Psychology or Economics .....	15 credits
Social Science core option .....	5 credits

#### Junior year

French or German 105, 106 .....	10 credits
Mathematics 315 or 381 and electives .....	15 credits
Theology core options .....	10 credits
Electives .....	10 credits

#### Senior year

Mathematics 411 or 431 .....	5 credits
Electives .....	40 credits

Total . . . 180 credits

### Bachelor of Science

#### Freshman year

Mathematics .....	15 credits
English 100 and core option .....	10 credits
Philosophy 110 and 220 .....	10 credits
Physical Science, Psychology or Economics .....	10 credits

#### Sophomore year

Mathematics .....	15 credits
History or Social Science core option .....	15 credits
Physical Science, Psychology or Economics .....	10 credits
Philosophy core option .....	5 credits

#### Junior year

Mathematics .....	15 credits
Physical Science, Psychology or Economics .....	10 credits
Theology core options .....	10 credits
Electives .....	10 credits

#### Senior year

Mathematics .....	15 credits
Electives .....	30 credits

Total . . . 180 credits

### Bachelor of Science in Mathematics

#### Freshman year

English 100 and core option .....	10 credits
History/Social Science core options .....	15 credits
Mathematics 134, 135 136 .....	15 credits
Philosophy 110 .....	5 credits

#### Sophomore year

Mathematics 233, 234, and 315 or 381 .....	15 credits
Philosophy 220 and core option .....	10 credits
Physics 200 .....	5 credits
Electives .....	15 credits



#### Junior year

French or German 105, 106 .....	10 credits
Mathematics 411, 412, 413 or 431, 432, 433 .....	15 credits
Physics 201, 202 .....	10 credits
Electives .....	10 credits

#### Senior year

Mathematics 431-432-433 or 411-412-413 and electives .....	25 credits
Electives .....	20 credits

Total . . . 180 credits

### Mathematics Courses

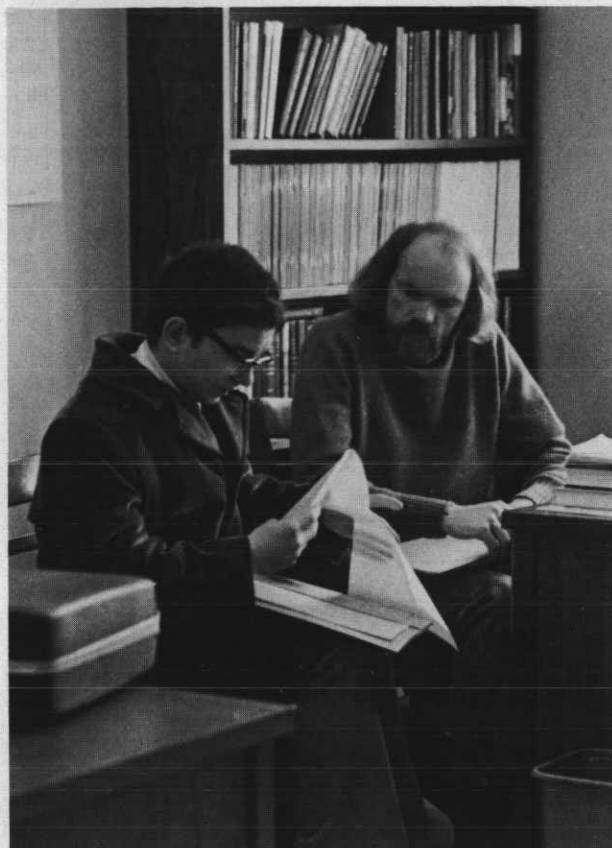
<b>Mt 101</b>	<b>Intermediate Algebra</b>	<b>5 credits</b>
Introduction to elementary logic and sets. Review of the fundamental operations of algebra; laws of exponents; linear and quadratic equations; inequalities; systems of equations. Prerequisite: one unit each of high school algebra and geometry. (fall, winter, spring)		
<b>Mt 112</b>	<b>College Algebra and Trigonometry</b>	<b>5 credits</b>
Sets; functions and relations; complex numbers; the algebra of functions; exponential functions; trigonometric and inverse trigonometric functions; identities; trigonometric equations; graphs of trigonometric functions. Prerequisite: Mt 101 or one-and-one-half units of high school algebra. (fall, winter, spring)		
<b>Mt 114</b>	<b>Elementary Electronic Computer Programming</b>	<b>3 credits</b>
Fundamentals of digital computing. FORTRAN language basic instruction; flow charts, loops, sub-routines. Operation of the computer and supporting equipment of the University Computer Center. One two-hour laboratory period per week. Prerequisite: Mt 101 or equivalent. (winter, spring)		
<b>Mt 116</b>	<b>Computer Applications</b>	<b>2 credits</b>
Techniques for problem solving; implementation of various formulas of mathematics, statistics, and the sciences; documentation techniques. Assignments will require use of Computer Center equipment. Corequisite: Mt 114. (winter, spring)		



**138/SCIENCE AND ENGINEERING**  
**Mathematics**

<p><b>Mt 118 College Algebra for Business</b> <b>5 credits</b> Sets, subsets; real numbers; permutations and combinations; systems of linear algebraic equations; matrices; inequalities and linear programming. Prerequisite: Mt 101 or qualifying examination. (fall, winter, spring)</p> <p><b>Mt 130 Elements of Calculus for Business</b> <b>5 credits</b> Relations and functions; polynomial and other functions; rate of change; derivative, basic differentiation formulas, applications of the theory of extrema; area under a curve; limits of sequences; the definite integral and applications. Prerequisite: Mt 118. (fall, winter, spring)</p> <p><b>Mt 134 Calculus and Analytic Geometry I</b> <b>5 credits</b> <b>Mt 135 Calculus and Analytic Geometry II</b> <b>5 credits</b> <b>Mt 136 Calculus and Analytic Geometry III</b> <b>5 credits</b> I. Introduction to analytic geometry. Limits and derivatives and some applications of limits and derivatives; the definite integral and the fundamental theorem of calculus. II. Differentiation and integration of trigonometric, exponential and logarithm functions. Techniques of integration; applications of integration; polar coordinates and parametric representations. III. Indeterminate forms and improper integrals; infinite series and Taylor's theorem; solid analytical geometry and partial differentiation. Prerequisites: Mt 112 or qualifying examination for 134; 134 for 135; 135 for 136. (All three offered fall, winter, spring)</p> <p><b>Mt 175 Mathematics for the Liberal Arts Student</b> <b>5 credits</b> Flow charts and elementary operations; rational numbers; linear polynomials and equations; the computer; non-linear relationships; approximations; introduction to geometry, statistics and probability. (fall, winter, spring)</p> <p><b>Mt 200 Theory of Arithmetic</b> <b>5 credits</b> Systems of numeration; sets; relations, equivalence relations, equivalence classes; number systems and the integration of these concepts. Prerequisite: Mt 101 or 175, or equivalent (fall, winter, spring)</p> <p><b>Mt 214 Principles of Digital Computers and Coding</b> <b>5 credits</b> Fundamentals of commercial and scientific computer programming including flowcharting, problem solving and file management. Laboratory assignments will require the use of computer Center equipment. Prerequisite: Mt 101 or equivalent. (fall, winter, spring)</p> <p><b>Mt 233 Multivariable Calculus and Linear Algebra</b> <b>5 credits</b> Line integrals; multiple integrals and applications; linear algebra, vectors and eigen value problems. Prerequisite: Mt 136. (fall, winter, spring)</p> <p><b>Mt 234 Vector Calculus and Differential Equations</b> <b>5 credits</b> Vector functions; line and surface integrals; linear differential equations, systems and power series solutions of differential equations. Prerequisite: Mt 233. (winter, spring)</p>	<p><b>Mt 291 Special Topics</b> <b>1-5 credits</b> <b>Mt 292 Special Topics</b> <b>1-5 credits</b> <b>Mt 293 Special Topics</b> <b>1-5 credits</b></p> <p><b>Mt 300 Methods for Secondary School Mathematics</b> <b>5 credits</b> Special topics in mathematics relevant to the high school curriculum; emphasis on basic concepts and procedures for teaching them. Prerequisite: Mt 136 or permission of instructor. (winter)</p> <p><b>Mt 315 Number Theory</b> <b>5 credits</b> Divisibility and the Euclidean algorithm; the Euler Phi-function; congruences; quadratic reciprocity law; numerical functions; the Mobius inversion formula. Prerequisite: Mt 135. (spring)</p> <p><b>Mt 321 Foundations of Euclidean Geometry</b> <b>5 credits</b> Introduction to the axiomatic foundations of Euclidean geometry; ruler and compass constructions and the famous problems of antiquity; the 5th postulate and non-Euclidean geometries. Prerequisite: Mt 135.</p> <p><b>Mt 322 Topics in Geometry</b> <b>5 credits</b> Selected topics from among convexity, applications of geometry, geometry in other subjects and transformation groups from the geometric viewpoint. May be repeated for credit with permission. Prerequisite: Mt 233 or permission. (winter)</p> <p><b>Mt 351 Probability</b> <b>5 credits</b> Basic concepts and theorems in probability theory; the binomial, Poisson, normal and other fundamental probability distributions; moments; limit theorems. Prerequisite: Mt 233. (fall)</p> <p><b>Mt 371 Introduction to Numerical Methods</b> <b>5 credits</b> Approximation and errors; Newton's and Lagrange's formulas; finite differences and operators; numerical integration; numerical solution of differential equations. Three lecture and two laboratory hours per week. Assignments will require use of the Computer Center equipment. Prerequisites: Mt 114 and 136 or permission.</p> <p><b>Mt 381 Elementary Topology</b> <b>5 credits</b> Set theory; topology of the real line; topological spaces; compactness; connectedness; product spaces; metric spaces. Prerequisite: Mt 233.</p> <p><b>Mt 400* Topics in Applied Calculus</b> <b>4 credits</b> Selected topics from calculus involving elementary applications to the physical and biological sciences. Five lecture and two problem sessions per week. Prerequisite: One year of calculus.</p> <p><b>Mt 405* Fundamental Concepts of Analysis</b> <b>5 credits</b> The Peano axioms and the construction of the real number system; the complex number system; the limit concept in analysis. Prerequisite: One year of calculus.</p>
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**SCIENCE AND ENGINEERING/139**  
**Mathematics**



**Mt 410\* Survey of Modern Algebra 5 credits**  
Number systems, congruences, equivalence relations, groups, rings, integral domains and fields; stress on the logic of postulational mathematics and its pertinence to the teaching of algebra. Prerequisite: One year of calculus.

**Mt 411 Introduction to Abstract Algebra I 5 credits**  
**Mt 412 Introduction to Abstract Algebra II 5 credits**  
**Mt 413 Introduction to Abstract Algebra III 5 credits**  
Theory of groups, rings, fields and field extensions; vector spaces and linear transformations; special topics. Prerequisites: Permission for 411; 411 for 412; 412 for 413.

**Mt 415\* Linear Algebra and Matrix Theory 5 credits**  
Introduction to the theory of matrices and determinants, vector spaces, linear transformations. Prerequisite: One year of calculus.

**Mt 420\* Survey of Geometric Theories 5 credits**  
Selected topics in finite geometry, projective geometry and non-Euclidean geometry. Prerequisite: One year of calculus.

**Mt 425\* Foundations of Geometry 5 credits**  
Study of the axiomatic nature of geometry with particular attention to the meaning and role of undefined terms, definitions, axioms, and proofs. Prerequisite: One year of calculus.

**Mt 430\* Introduction to Higher Analysis 5 credits**  
Concepts of function, limits and continuity, derivative and anti-derivative, the Riemann integral. Prerequisites: Calculus and one upper division course in modern mathematics.

**Mt 431 Introduction to Real Analysis I 5 credits**  
**Mt 432 Introduction to Real Analysis II 5 credits**  
**Mt 433 Introduction to Real Analysis III 5 credits**

Rigorous introduction to real analysis; limits, continuity, differentiation of real functions; functions on metric spaces; applications of compactness and connectedness; Riemann-Stieltjes integrals; sequences and series of functions; elements of Lebesgue theory. Prerequisites: Permission for 431; 431 for 432; 432 for 433. Offered in sequence: fall, winter, spring)

**Mt 435\* Introduction to Complex Variables 5 credits**  
Covers the same topics as Mt 437. For high school teacher. Prerequisite: Mt 234 or 430 or 460 or equivalents.

**Mt 437 Introduction to Complex Variables 5 credits**  
The complex number system, analytic functions, integrations, series, residues, conformal mapping. Prerequisite: Mt 234.

**Mt 450\* Probability and Statistics 5 credits**  
Truth tables, sets, combinatorial algebra; compound and conditional probability, random variables and distribution functions; elements of statistical inference. Prerequisite: One year of calculus.

**Mt 460\* Topics in Applied Mathematics 5 credits**  
Introduction to differential equations and vector analysis; application to simple problems of rates, trajectories, harmonic motion, electrical circuits and related topics. Prerequisite: One year of calculus.

**Mt 470\* Computer Programming and Numerical Analysis 5 credits**  
Introduction to numerical methods and algorithms; approximations and errors; introduction to computer programming and FORTRAN and its use to implement numerical techniques under study. Prerequisite: One year of calculus.

**Mt 471 Numerical Analysis 5 credits**  
Matrix inversion; systems of linear equations; a fixed point theorem and its applications; initial and boundary value problems; methods of Runge-Kutta and Hermite; finite differences.

**Mt 480\* Elementary Topology 5 credits**  
Set theory; topology of the real line; topological spaces; metric spaces; compactness, connectedness; product topology; the fixed point property and applications. Prerequisite: One upper division course in algebra and analysis.

**Mt 491 Special Topics in Mathematics 2-5 credits**  
**Mt 492 Special Topics in Mathematics 2-5 credits**  
**Mt 493 Special Topics in Mathematics 2-5 credits**  
May be repeated for a maximum of 12 credits. Prerequisite: Permission.

**Mt 497 Independent Study 1-5 credits**  
**Mt 498 Independent Study 1-5 credits**  
**Mt 499 Independent Study 1-5 credits**  
May be repeated for a maximum of 10 credits. Prerequisite: Permission.

\*Offered summer only for high school teachers in the master's degree program in natural science.





## Medical Technology

George D. Davis, M.S., Adviser

### Objectives

The Medical Technology program is designed to prepare the student for a professional career as a medical technologist or as a laboratory assistant in a biological research laboratory. Although there is a heavy concentration in basic sciences, the program is also designed to provide a liberal arts education.

### Degree Offered

Bachelor of Science in Medical Technology

### General Program Requirements

Students in this program must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin.

### Degree Requirements

Three years must be spent in academic work on campus and a fourth year of internship in an approved hospital. Those who successfully complete the year of internship will be granted only 45 credits toward a degree from Seattle University and are eligible for certification by the Registry of Medical Technologists. The 45 credits for internship will be granted to those who have spent at least one full year on campus prior to interning. Such credits are not granted to students who have interned from some other school and come to Seattle University to complete their degree.

Current requirements for medical technology stipulated by hospitals in the area strongly recommend the completion of the bachelor's degree before beginning the internship program. It is recommended that the student in medical technology complete the Bachelor of Arts in Biology or Bachelor of Science in Biology or Chemistry in order to meet the expectations of the local clinical schools. The Bachelor of Science in Physics is recommended for the nuclear option. This would mean that the clinical internship would be taken as a fifth year prior to the examination for certification.

## Bachelor of Science in Medical Technology

### Freshman year

Biology 150, 170 and elective .....	15 credits
English 100 .....	5 credits
History/Social Science core options .....	10 credits
Mathematics 112, 134 .....	10 credits
Philosophy 110 .....	5 credits

### Sophomore year

Biology 275, 280 and 330 or 270, 271 and option .....	15 credits
Chemistry 114, 115, 116 .....	15 credits
Philosophy 220 and core option .....	10 credits
Theology core option .....	5 credits

### Junior year

Biology 300 and electives .....	15 credits
Chemistry 235, 236, 325 .....	15 credits
English core option .....	5 credits
History/Social Science core option .....	5 credits
Theology core option .....	5 credits

### Senior year

Internship .....	45 credits
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Total . . . 180 credits

## Bachelor of Science in Medical Technology Nuclear Option

### Freshman year

Biology 150 .....	5 credits
English 100 and core option .....	10 credits
Mathematics 112, 134, 135 .....	15 credits
Physics 105, 106, 107 .....	15 credits

### Sophomore year

Biology electives .....	15 credits
Chemistry 114, 115, 116 .....	15 credits
Philosophy 110, 220 and core option .....	15 credits

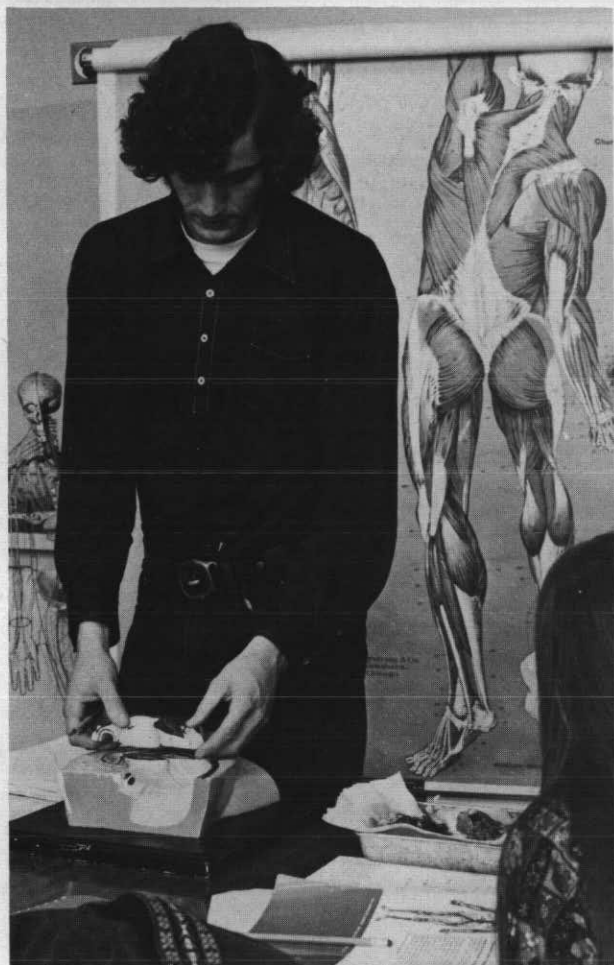
### Junior year

Biology electives .....	10 credits
Chemistry 235, 236 .....	10 credits
Physics 375 or Chemistry 461 and Physics elective .....	10 credits
Theology core option .....	10 credits
Electives .....	5 credits

### Senior year

Internship .....	45 credits
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Total . . . 180 credits



### Bachelor of Science in Medical Technology Cytotechnology Option

#### Freshman year

Biology 150, 170 and elective .....	15 credits
English 100 .....	5 credits
History/Social Science core options .....	10 credits
Mathematics 112, 134 .....	10 credits
Philosophy 110 .....	5 credits

#### Sophomore year

Biology 275, 280, 330 or 270, 271 and elective .....	15 credits
Chemistry 114, 115, 116 .....	15 credits
Philosophy 220 and core option .....	10 credits
Theology core option .....	5 credits

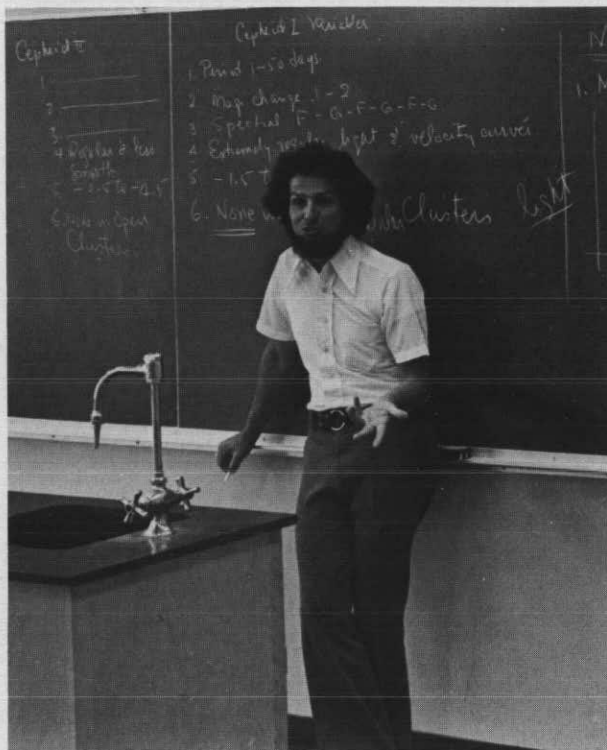
#### Junior year

Internship .....	45 credits
The certification examination for C.T. (A.S.C.P.) may be taken at the end of a full year of internship. Further training will be required for a Medical Technology certificate.	

#### Senior year

Biology 300 and electives .....	15 credits
Chemistry 235, 236, 325 .....	15 credits
English core option .....	5 credits
History/Social Science core option .....	5 credits
Theology core option .....	5 credits

Total . . . 180 credits



## Physics

Jerry A. Riehl, Ph.D., Program Director

### Objectives

The Physics department offers four programs leading to degrees. For those who wish a career in physics, the Bachelor of Science in Physics program takes the student from classical mechanics through quantum mechanics, with the inclusion of advanced laboratory courses emphasizing nuclear and nuclear reactor physics. This curriculum is designed to prepare students for advanced work in the field or for graduate school. For those who wish a broader training in the sciences in addition to a rigorous program in physics, the Bachelor of Science program offers the flexibility that is required. The Bachelor of Arts program is ideal for those who desire a solid background in physics along with a broad liberal arts education. The Master of Science in Natural Science program is offered only during the summer for high school teachers attending the National Science Foundation Summer Institute.

### Degrees Offered

Bachelor of Arts  
Bachelor of Science  
Bachelor of Science in Physics  
Master of Science in Natural Science (summer only—restricted to high school science teachers)

### General Program Requirements

Students in physics must satisfy the core curriculum requirements for science students as given on pages 24-25 of this bulletin. The departmental requirements are given below.

Bachelor of Arts — 45 credits in physics which must include Ph 200, 201, 202, 290, 310, 330, 360, 361 and 375. A minimum of 15 additional credits in a related science is required.



Bachelor of Science — 60 credits in physics which must include Ph 200, 201, 202; 30 credits in mathematics or science electives.

Bachelor of Science in Physics — 70 credits in physics which must include Ph 200, 201, 202, 290, 310, 311, 330, 331, 360, 361, 375, 470, 481 and 475 or 485. Mathematics 134, 135, 136; 233 and 234 are required.

Master of Science in Natural Science — 45 credits of courses numbered 400 or higher which may include Ph 412, 432, 533, 552, 562, 563 and 572 or selections from corresponding programs in chemistry or mathematics.

Teaching Major (School of Education) — 45 credits in physics and mathematics; 30 credits in physics which must include Ph 105, 106, 107, 110, and 10 elective credits. Ph 290 and 375 are recommended electives, and Ph 200, 201, 202 may be taken in place of 105, 106, 107 for those students who desire a more rigorous background in general physics. The required 15 credits in mathematics must include 10 credits in calculus and computer. (Mt. 114, 116, 134).

### Bachelor of Arts

#### Freshman year

English 100 and core option .....	10 credits
History core options .....	10 credits
Mathematics 112, 134, 135 .....	15 credits
Physics 200 .....	5 credits
Elective .....	5 credits

#### Sophomore year

Mathematics 136, elective .....	10 credits
Physics 201, 202, 290 .....	15 credits
Philosophy 110, 220 .....	10 credits
Theology core option .....	5 credits
Elective .....	5 credits

#### Junior year

Philosophy core option .....	5 credits
Physics 310, 375 .....	10 credits
Social Science core option .....	10 credits
Theology core option .....	5 credits
Electives .....	15 credits

#### Senior year

Physics 330, 360, 361 .....	15 credits
Science electives .....	15 credits
Electives .....	15 credits

Total . . . . 180 credits

### Bachelor of Science

#### Freshman year

English 100 and core option .....	10 credits
Mathematics or Science electives .....	15 credits
Philosophy 110, 220 .....	10 credits
Physics 200 .....	5 credits
Elective .....	5 credits

#### Sophomore year

History or Social Science core options .....	15 credits
Mathematics or Science electives .....	10 credits
Physics 201, 202 and electives .....	20 credits

#### Junior year

Mathematics or Science electives .....	5 credits
Philosophy core option .....	5 credits
Physics electives .....	20 credits
Theology core options .....	10 credits
Elective .....	5 credits

#### Senior year

Physics elective .....	15 credits
Electives .....	30 credits

Total . . . . 180 credits

### Bachelor of Science in Physics

#### Freshman year

English 100 and core option .....	10 credits
History/Social Science core option .....	15 credits
Mathematics 134, 135, 136 .....	15 credits
Physics 200 .....	5 credits

#### Sophomore year

Mathematics 233, 234 .....	10 credits
Physics 201, 202, 310, 311 .....	20 credits
Theology core option .....	5 credits
Philosophy 110, 220 .....	10 credits

#### Junior year

Philosophy core option .....	5 credits
Physics 290, 330, 331, 360, 361 .....	25 credits
Theology core option .....	5 credits
Electives .....	10 credits

#### Senior year

Physics 375, 470, 481, 475 or 485 .....	20 credits
Electives .....	25 credits

Total . . . . 180 credits

### Physics Courses

#### Ph 100 Modern Physical Science 5 credits

Twentieth Century Principles of physics. Emphasis on the microscopic world of atomic and nuclear phenomena: the Bohr theory of the atom, the discovery of the nucleus by Rutherford, modern models for the nucleus and the discovery of elementary sub-nuclear particles. Core science option.

#### Ph 105 Mechanics and Sound 5 credits

Uniform motion, accelerated motion, rotational motion, energy, statics, harmonic motion, wave motion and sound. Four lectures and one three-hour laboratory per week. Prerequisite: Mt 112 or equivalent. (fall)

#### Ph 106 Electricity and Magnetism 5 credits

Electric charge, magnetism, current and resistance, electric cells, electromagnetism, inductance and capacitance, alternating currents, thermoelectricity and elementary theory of electronics. Four lectures and one three-hour laboratory per week. Prerequisite: Ph 105. (winter)

#### Ph 107 Survey of Modern Physics 5 credits

Introduction to thermodynamics, light interference, diffraction, optical instruments, radiation, atomic and nuclear physics and biophysics. The relation of physics to the other sciences. Four lectures and one three-hour laboratory per week. (spring)

#### Ph 110 Fundamentals of Astronomy 5 credits

Introductory course in the tools and methods of modern astronomy and its historical development from the invention of the telescope to the use of satellites. Celestial bodies, constellation and nebulae are studied in detail with the help of slide presentations from the world's greatest observatories and with occasional sightings through a reflection telescope. Core science option.

**SCIENCE AND ENGINEERING/143**  
**Physics**

<b>Ph 200</b>	<b>Mechanics</b>	<b>5 credits</b>
Kinematics, relative motion, dynamics of a particle, of a system of particles and of a rigid body, work and energy, momentum and collisions. Four lectures and one three-hour laboratory per week. Prerequisites: Mt 134 or permission. (spring)		
<b>Ph 201</b>	<b>Waves, Electricity and Magnetism</b>	<b>5 credits</b>
Electric and magnetic field currents, Ohm's law; Kirkoff's law, electric potential and Gauss' law; oscillatory motion and waves. Four lectures and one three-hour laboratory per week. Prerequisites: Ph 200, Mt 135 or permission. (fall)		
<b>Ph 202</b>	<b>Light and Modern Physics</b>	<b>5 credits</b>
Introduction to light, reflection, refraction, dispersion, interference and polarization. Heat, blackbody radiation, thermodynamics, photoelectric and Compton effects, Rutherford scattering, atomic physics, nuclear physics. Four lectures and one three-hour laboratory per week. Prerequisite: Ph 201. (winter)		
<b>Ph 290</b>	<b>Measurement and Instrumentation Fundamentals</b>	<b>5 credits</b>
Principles of measurement of quantities such as flow, position, strain radiation, velocity, current, power, temperature, voltage. Conversion by transducers into electrical signals and processing for recording observation or control. Recognition and interpretation of physical data. Four lectures and one three hour problem/laboratory session per week. Prerequisite: Mt 134 and Ph 106 or 201. (With permission of instructor, Ph 106 or 201 may be co-requisite.) (spring)		
<b>Ph 291</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Ph 292</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Ph 293</b>	<b>Special Topics</b>	<b>1-5 credits</b>
Directed reading and/or lectures at a lower division level. Prerequisite: Permission of instructor.		
<b>Ph 310</b>	<b>Mechanics (Intermediate Physics) I</b>	<b>5 credits</b>
<b>Ph 311</b>	<b>Mechanics (Intermediate Physics) II</b>	<b>5 credits</b>
I. Statics, equilibrium of systems under the influence of plane forces; kinematics, dynamics, motion of particles and frames of reference in a plane; motion of rigid bodies parallel to a plane; impulse and collision. II. Scalar and Vector product and moment of vectors; kinematics and dynamics of particles and rigid bodies in space; Lagrange and Hamilton equations, theory of vibrations, special theory of relativity. Prerequisites: Ph 200 for 310; 310 for 311. Corequisites: Mt 233 for 310; 234 for 311. (offered in sequence: winter, spring)		
<b>Ph 330</b>	<b>Electricity and Magnetism I</b>	<b>5 credits</b>
<b>Ph 331</b>	<b>Electricity and Magnetism II</b>	<b>5 credits</b>
I. Conductors and dielectrics; d.c. currents; induced emf and magnetic flux properties of capacitors and inductors; a.c. circuit problems; conduction in gases. II. Electrostatics; electric potential properties of dielectrics and capacitors; electromagnetic effects; Ampere's and Faraday's laws; magnetic properties of matter; ferromagnetism; transformers; electromagnetic waves. Prerequisites: Ph 201, 311 and Mt 241 for 330; 330 for 331. (fall, 330; winter, 331)		
<b>Ph 360</b>	<b>Modern Physics I</b>	<b>5 credits</b>
<b>Ph 361</b>	<b>Modern Physics II</b>	<b>5 credits</b>
Basic areas of physics from elementary solid state phenomena to a description of the physics of solid		

state devices of particular interest to students of electrical engineering. Prerequisite: Ph 202, Mt 136 for 360; 360 for 361. (winter, 360; spring, 361)		
<b>Ph 375</b>	<b>Nuclear Instrumentation</b>	<b>5 credits</b>
Laboratory course dealing with radioactivity, alpha, beta and gamma decay, interaction of radiation and matter, nuclear models, reactions and forces. Prerequisites: Ph 107 or 202. (fall)		
<b>Ph 391</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Ph 392</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Ph 393</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Ph 412*</b>	<b>Principles of Mechanics</b>	<b>6 credits</b>
Introduction to vector analysis, statics, Newton's Laws of Motion, work energy, impulse and momentum, circular motion, moment of inertia, elasticity, harmonic motion. Five lectures, one laboratory period, one problem session per week. Prerequisite: College physics. Corequisite: Mt 400.		
<b>Ph 432*</b>	<b>Principles of Electricity and Magnetism</b>	<b>6 credits</b>
The electric field, direct current circuits, chemical thermal electromotive force, properties of dielectrics, the magnetic field, the magnetic field of a moving charge, induced electromotive force, inductance, magnetic properties of matter, alternating currents and electromagnetic waves. Five lectures, one laboratory period, one problem session per week. Prerequisite: Ph 412.		
<b>Ph 470</b>	<b>Nuclear Physics</b>	<b>5 credits</b>
Nuclear structure and models, nuclear processes, properties of nucleons, mesons and other unstable elementary particles. Prerequisite: Ph 360.		
<b>Ph 475</b>	<b>Nuclear Reactor</b>	<b>5 credits</b>
Basic physics and engineering problems involving operation of a reactor. One laboratory per week. Prerequisites: Ph 202 and junior standing.		
<b>Ph 481</b>	<b>Theoretical physics</b>	<b>5 credits</b>
Introduction to mathematical physics. Transformation theory, matrix and tensor analysis, orthogonal functions, boundary value problems, field theory and the use of Green's function, and relativity. Prerequisites: Ph 311, Mt 234.		
<b>Ph 485</b>	<b>Quantum Mechanics</b>	<b>5 credits</b>
Introduction to quantum mechanics. The state function, the Uncertainty Principle, the Schrodinger equation, the square well and one dimensional solutions, wave packets, semi-classical approximation methods, and motion in three dimensions. Prerequisite: Ph 481.		
<b>Ph 485</b>	<b>Quantum Mechanics</b>	<b>5 credits</b>
Introduction to quantum mechanics. The state function, the Uncertainty Principle, the Schrodinger equation, the square well and one dimensional solutions, wave packets, semi-classical approximation methods, and motion in three dimensions. Prerequisite: Ph 481.		
<b>Ph 491</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Ph 492</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Ph 493</b>	<b>Special Topics</b>	<b>1-5 credits</b>
<b>Ph 497</b>	<b>Undergraduate Research</b>	<b>1-5 credits</b>
<b>Ph 498</b>	<b>Undergraduate Research</b>	<b>1-5 credits</b>
<b>Ph 499</b>	<b>Undergraduate Research</b>	<b>1-5 credits</b>

\*Offered summer only for high school teachers in the master's degree program in natural science.





### Graduate Courses

**Ph 533\* Electronics — Theory and Practice 6 credits**

Electronic principles, basic circuits and components, servo systems, operational amplifiers, feedback control, digital circuits. Four lectures, two laboratory periods per week. Prerequisite: Ph 432.

**Ph 552\* Principles of Wave Motion and Light 6 credits**

Wave motion and sound waves; sources and properties of light, including propagation through refractive media, dispersion, line and continuous spectra, interference and diffraction phenomena. Five lectures, one laboratory period and one problem session per week. Prerequisite: Ph 432.

**Ph 562\* Principles of Modern Physics 6 credits**

Introduction to the theories and experiments of physical phenomena involving atomic and molecular structure and spectra. Quantum mechanics and relativity with applications to microscopic physical phenomena. Five lecture and one problem session per week. Prerequisite: Ph 412 or equivalent.

**Ph 563\* Principles of Nuclear Physics 3 credits**

Introduction to modern nuclear physics; basic nuclear properties, binding energy, current nuclear models, interaction of radiation with matter, radioactivity, alpha decay, beta decay, gamma emission, nuclear fission and fusion, nuclear forces and elementary particles will be covered. Three lectures per week. Prerequisite: Ph 412.

**Ph 572\* Principles of Nuclear Instrumentation and Reactor Physics 3 credits**

Lecture-laboratory course dealing with basic nuclear measurements, techniques, and modern instrumentation: principles of health physics, survey meters, geiger tubes, proportional counters, solid and liquid scintillation systems, pulse height analysis, multi-channel analyzers, solidstate detectors, neutron detectors and basic reactor physics will be covered. Two lectures and two three-hour laboratories per week. Prerequisite: Ph 412.

**Ph 599\* Research 2-6 credits**

\*Offered summer only for high school teachers in the masters degree program in natural science.

## Premedical and Predental

George A. Santisteban, Ph.D., Adviser

Preprofessional programs in dentistry and medicine are not fields of concentration, they are career choices. The best preparation for these careers, and the one preferred by professional schools, is a complete four-year undergraduate program leading to a bachelor's degree.

### Program

Incoming students who choose a career in medicine or dentistry should consult the premedical/predental adviser before they register for the first time, and as needed thereafter. They may undertake any major field, but their program must allow them to finish in good time the science courses which are required for admission to professional school and which also prepare them for the medical and dental college aptitude tests. In general these are one or two years of biology, two years of chemistry and one year of physics. Most professional schools also recommend calculus. The recommendation of the Association of American Medical Colleges for electives in the humanities and social and behavioral sciences is met by the Seattle University core curriculum.

The normal sequence provides for completion of the science courses in the junior year and for taking the aptitude tests in the spring of that year. (Information and application forms for these tests are available from the premedical/predental adviser.) The student should apply to the professional school during the summer or fall of the senior year. The Committee for Premedical and Predental Studies interviews the student in the fall and prepares a composite recommendation.

## Preoptometry

Jerry A. Riehl, Ph.D., Adviser

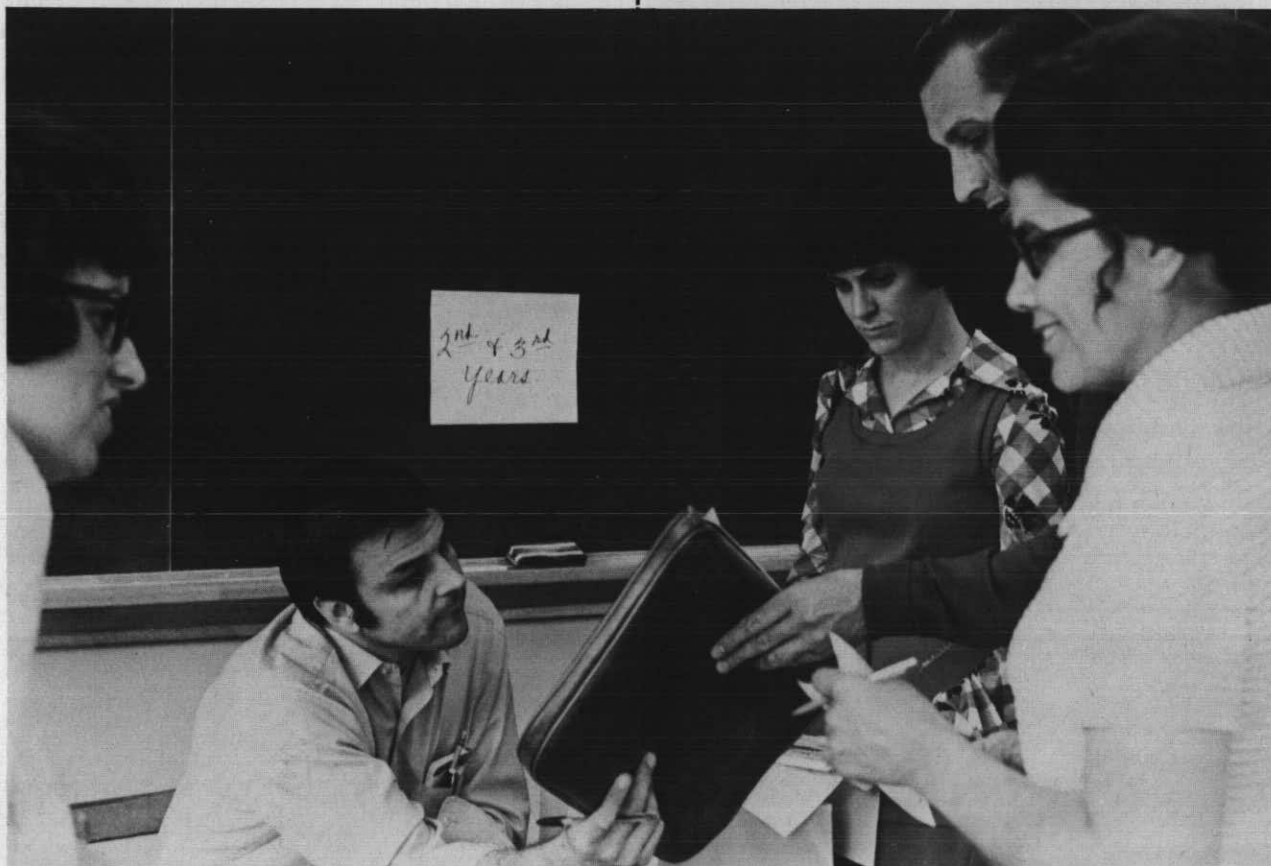
Preoptometry is a preparatory program for a career in optometry and is not a field of concentration. The basic requirement of the American Optometric Association is a two-year program, although the best preparation, and the one preferred by most professional schools, is a four-year undergraduate program leading to a bachelor's degree in one of the basic sciences.

### Program

All students who desire a career in optometry should consult with the preoptometry adviser before their first registration in the program and as needed thereafter. There are several choices of fields open to the students, but in general, a broad background in biology, chemistry, mathematics and physics is required. Typically, 10 to 15 hours in each of these fields is desirable, with more emphasis placed on biology and physics. Should the student desire a bachelor's degree prior to pursuing the professional training, any of these fields would be acceptable if certain electives are taken, although the Bachelor of Science in General Science offers the best combination of courses. For a typical example of two-year preoptometry schedule see the General Science section of this bulletin.

# Graduate School

James J. Cowgill, SJ, Ph.D., Dean







## Graduate School

Graduate studies directed toward the master's degree were first offered at Seattle University in 1901 in a division of its College of Arts and Sciences. In 1935 graduate courses became an integral part of the University's teaching education program.

### Objectives

Graduate School programs are not merely more courses in undergraduate study; they involve courses advancing by gradation into greater complexity and profundity. The content of graduate courses is of a more advanced nature, the requirements in terms of bibliography, quantity and quality of thinking and writing are higher, and the degree of initiative, the organizing ability and originality expected is greater. Only a limited number of undergraduate courses may be accepted for credit. Graduate students should not consider the mere literal fulfillment of requirements as conferring the right upon them to continued registration. Academic advancement and eligibility for degrees are contingent also upon recommendation and approval of the Graduate Council.

### Organization

Administration of the Graduate School and supervision of all programs leading to the master's degree lies with the Dean of the Graduate School and the Graduate Council. The Dean of the Graduate School and his Council establish and maintain requirements for degrees according to the recommendations of the Graduate Committee of each school of the University.

The component schools and various departments provide courses of instruction for graduate students, direct their studies, conduct examinations, maintain requirements and make recommendations. Academic transactions involving admission, registration and awarding of degrees are supervised by the University's Registrar. Actual admission to graduate study is granted through the Dean of the Graduate School in consultation with the appropriate department chairman involved in the counseling of the applicant.

## Classification of Students

A graduate student is one who has been admitted to the Graduate School to pursue a program of study leading to a specific master's degree. Graduate students are classified as regular, on probation or visiting. A student admitted on probation must demonstrate in his first quarter ability to do work of graduate quality. A visiting graduate student may take graduate courses for a single quarter only. In special circumstances, an undergraduate senior or fifth year student may be allowed to enroll in a graduate course with prior approval of the director of the graduate program in the area of the course in question or of the Dean of the College or School in which the course is taught.

Students pursuing course work beyond the bachelor's degree, who are not admitted to the Graduate School for a specific advanced degree are granted status as fifth year students and are under the jurisdiction of the dean of the college in which they are taking courses. A student pursuing certification in education is not a graduate student unless in addition to this study supervised by the School of Education he has been accepted by the Graduate School in a master's degree program.

## Admission Requirements

Admission to the degree program is granted to applicants who have received the bachelor's degree from an approved college or professional school, and whose scholarship records and credentials indicate ability to pursue graduate work. An undergraduate major and an undergraduate minor or their fair equivalents are required in the same departments or areas from which the student selects his graduate work.

Application for admission should be submitted as early as possible before the opening of the term in which the student wishes to begin his work. Prospective students must file an official application form and fee with the Office of Admissions. In addition, two official transcripts of academic credits from the institution granting the bachelor's degree and all schools attended since the undergraduate degree was granted are to be sent directly to Seattle University by each institution. Failure to file complete records of previous school attendance renders the student liable to dismissal or cancellation of credit. A student is not regarded as a duly qualified graduate student until he has received a letter of acceptance from the Dean of the Graduate School. For specific degree requirements, consult the graduate publications of the department concerned.

Foreign students who meet admission requirements, can demonstrate their English proficiency and are in the United States on a permanent visa will be considered for admission since no I-20 form is necessary.

Some students are admitted to the Graduate School on probation. This designation may be used when (1) the previous academic record is marginal or when there is a lack of adequate prerequisite course work in the chosen field or (2) when the applicant has majored in another area with a satisfactory record, but there is some doubt about his ability to pursue the program in question. A program to correct these deficiencies will be designed by the department and the student is expected to become qualified within a specified time limit. When all conditions have been fulfilled the department may recommend that the student be advanced to



regular graduate status. Students who are unable to qualify for admission to regular graduate status will either be considered for another graduate program or dismissed.

### Admission to Candidacy

Application for admission to candidacy should be filed after the student has completed from 10 to 20 credits in courses applicable to the graduate program of the department, with a grade point average of no less than B in these courses. At this time he must file the complete Program of Studies and Candidacy form.

### Degrees Offered

Graduate degrees offered by the University are:  
**ARTS AND SCIENCES**

- Master of Arts — English
- Master of Arts — History
- Master of Arts — Philosophy
- Master of Arts in Teaching — English
- Master of Religious Education (summer only)

### BUSINESS

- Master of Business Administration

### EDUCATION

- Master of Arts in Education
  - Master of Education
- These two degrees may be earned with specialization in the following areas: administration, curriculum and instruction, guidance and counseling and adult education administration.

### SCIENCE AND ENGINEERING

- Master of Science in Natural Science — A degree with no required research, especially designed for and restricted to high school teachers of science and mathematics (summer only).

### General Program Requirements

The candidate for the master's degree must present a minimum of 35 credits beyond the bachelor's degree. He must satisfy any additional requirements imposed by the major department and the Graduate Council.

All work must be of distinctly advanced character but, with the approval of the department and the Graduate Council, 15 credits in programs requiring only the minimum of 35 credits and 20 credits in those requiring 40 or more credits may be earned in courses numbered 300 to 499, if the subjects are suitable to the student's program. An exception to this rule is in the Master of Science in Natural Science degree which is a terminal degree program where no 300 numbered courses are acceptable, but the program may be made up of courses numbered 400 or above. A maximum of 10 credits may be transferred from another institution if they are earned with a grade of "A" or "B" and approved by the department and Dean of the Graduate School.

Distribution of course work will be according to a program recommended by the Dean of the Graduate School.

Every candidate for a master's degree must take a comprehensive examination in the major field of study. This examination shall be written and/or oral at the judgment of the department and the approval of the Graduate Council. A "B" average is required for work done toward the master's degree.

The student may be required to complete a thesis on a topic approved by his major department and the Graduate Council. For this work, no more than 10 credits are granted. The thesis is not necessarily a work of original research but it must, however, demonstrate the candidate's ability to collect facts, interpret them in a critical manner and organize and express them in an original, lucid way.

The topic of the thesis is to be approved by the student's mentor, graduate program adviser and the Dean of the Graduate School and filed with the Graduate School when 30 credits of the graduate program have been completed.

All thesis work must be done under the direct supervision of an assigned adviser.

Four unbound copies of the approved thesis are to be filed in the office of the dean four weeks before the date of graduation. Two of these copies will be bound and placed on file in the University's library; one copy will go to the department chairman and one copy to the student.

An oral examination on the content of the thesis, cognate literature and available source material may be held before a board appointed by the departmental chairman and approved by the Dean of the Graduate School.

All requirements for the master's degree must be completed within six years after course work is begun, including the time of any courses for which the candidate applies for transfer of credit. The application for the degree must be filed with the University Registrar by February 15. Ordinarily each candidate for the Master of Arts degree will give evidence of a reading knowledge of a foreign language. Application for this examination must be made with the departmental office not later than April 15 preceding the June in which the degree is to be received. The Graduate School alone has the power to recommend a candidate for a Master's degree.



# Faculty and Staff





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**Sister Irene Lawrence, RSCJ, Ph.D.** Campus Ministry

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**Robert F. Flor, B.Ed.** Assistant Director,  
Minority Student Affairs

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Foreign Student Adviser

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Director of Financial Aid and Director of Special Events

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Assistant Director of Financial Aid

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**William O'Connor, B.S.** Head Basketball Coach

**Jack Henderson, B.A.** Director, Connolly Center

**David K. Elder, M.Ed.** Director,  
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**Marietta Milbert, B.A.** Director of Public Relations

**Jean M. Merlino, B.A.** Director of  
University Publications

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University Bookstore

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The dates following faculty names indicate initial and subsequent appointments to the University faculty. Asterisks preceding names denote faculty members on leave of absence. Daggers (†) following names indicate Graduate School faculty members.

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Associate Professor of Spanish  
B.Econ., 1933, University of London; Contador Publico Nacional, 1937, Universidad Nacional de Buenos Aires, Facultad de Ciencias Economicas.

**Lois D. Aden, M.F.A. (1966)**

Assistant Professor of Drama  
A.B., 1953, Queens College; M.F.A., 1960, Yale University.

**Lewis E. Aldrich, Jr., Ph.D. (1968)**

Program Director, Biology  
Associate Professor of Biology  
B.A., 1950, Linfield College; M.S., 1954, Ph.D., 1960, Oregon State College.

**Irene Allen, M.L., (1970)**

Assistant Librarian  
B.A., 1968, M.L., 1969, University of Washington.

**Julian B. Andersen, Ph.D. (1970)†**

Assistant Professor of Business  
A.S., 1958, Weber State College; B.S., 1960, Ph.D., 1966, Utah State University.

**\*William E. Armstrong, S.J., Ph.D. (1957)**

Associate Professor of Modern Languages  
A.B., 1944, M.A., 1945, Gonzaga University; S.T.L., 1952, Alma College; Diplome de l'Institut de Phonetique Francaise de la Sorbonne, Universite de Paris, 1954; Ph.D., 1955, Catholic University of Paris.

**Engelbert M. Axer, S.J., Ph.D. (1941; 155; 171)**

Professor of Philosophy  
A.B., 1930, Valkenburg, Holland; S.T.L., 1940, St. Louis University; M.A., 1941, Gonzaga University, Ph.D., 1949, Georgetown University.

**Mary C. Bartholet, M.S. (1958; 1965)**

Associate Professor of Nursing  
B.S., 1949, College of St. Teresa; M.S., 1958, St. Louise University.

**Ernest P. Bertin, S.J., Ph.D. (1957; 1963; 1971)**

Professor of Chemistry  
A.B., 1944, M.A., 1945, Gonzaga University; S.T.L., 1952, Alma College; Ph.D., 1957, University of Notre Dame.

**William N. Bischoff, S.J., Ph.D. (1969)†**

Visiting Professor of History  
B.A., 1940, M.A., 1942, Gonzaga University; S.T.B., 1948, Alma College; Ph.D., 1950, Loyola University, Chicago.

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L.Ph., 1933, S.T.L., 1937, Gregorian; M.A., 1952, Seattle University; Ph.D., 1957, University of Washington.

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 A.B., 1936, M.A., 1938, Gonzaga University; S.T.B.,  
 1944, Alma College; Ph.D. 1958, University of  
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Assistant Professor of Drama  
 A.B., 1953, Gonzaga University; S.T.B., 1958, University  
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Associate Professor of Biology  
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Supply Sergeant

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B.A., 1939, North Idaho College of Education; M.Ed.,  
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## Where to Write

There is a central mail room on the campus to which all mail addressed to Seattle University, Seattle, Washington 98122, is delivered. Mail for student residence halls must be addressed to their respective locations. It will expedite delivery on the campus to specify the following as indicated:

Correspondence relating to the general interest of the University:  
**President**

Communications regarding curriculum, scholastic problems, degree programs:

The **Dean** of the particular school or the **Academic Vice President**

Admission:  
**Director of Admissions**

Alumni Affairs:  
**Director, Alumni Association**

Athletic Program:  
**Director of Athletics**

Athletic Program:  
**Director of Athletics**

Bulletins and Catalogs:  
**Director of Admissions**

Counseling and Testing:  
**Director, Counseling and Testing Center**

Diplomas and Graduation:  
**Registrar**

Student Housing:  
Men: **Director of Resident Student Services**  
Women: **Dean for Women**

Financial Aid and Student Employment:  
**Director of Financial Aid**

Foreign Students:  
**Director of Admissions or Foreign Student Adviser**

Gifts, Grants and Bequests:  
**Development Office**

Graduate Study:  
**Dean, Graduate School**

Jesuit Faculty Residence:  
**Father Minister**

Late Afternoon and Evening Classes:  
**Dean, Graduate School**

Personal Welfare and Health of Students:  
**Vice President for Students**

Public Information, Publications:  
**University Relations**

Readmissions:  
**Registrar**

Scholarships, Student Loans:  
**Director of Financial Aid**

Teachers' Certification and Placement:  
**Dean, School of Education**

Transcripts, Student Records, Grades:  
**Registrar**

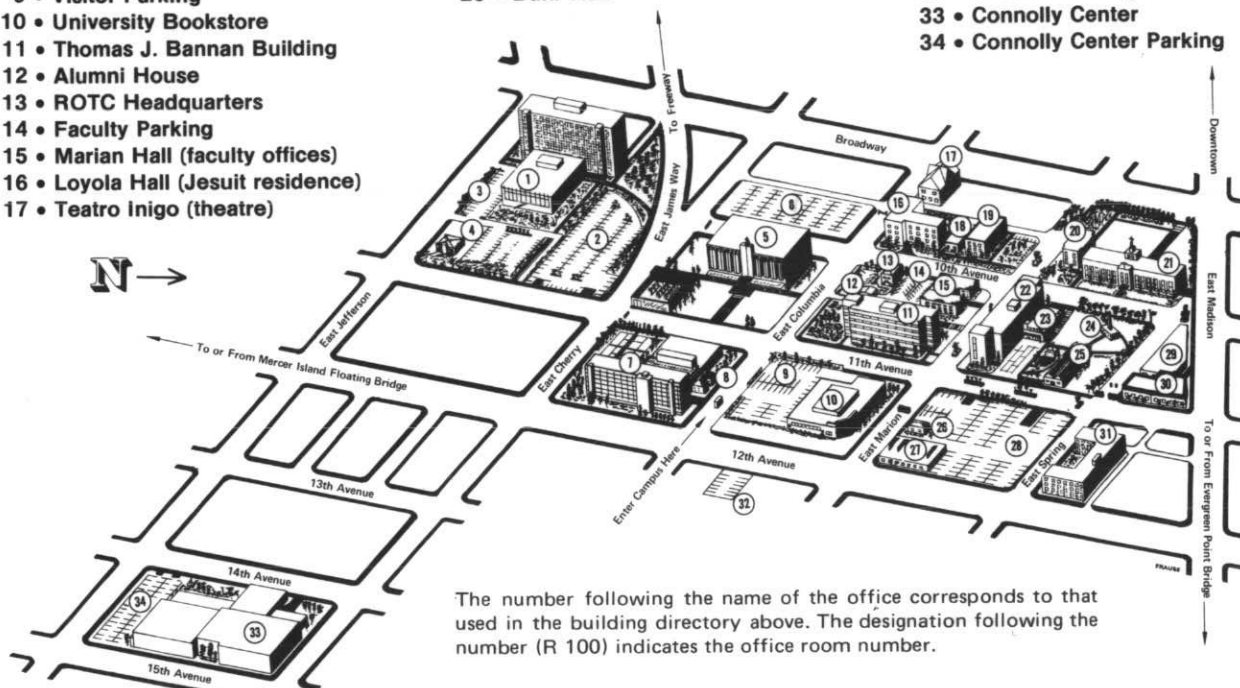
Tuition, Payment of Bills, Refunds:  
**Controller**

# campus guide

- 1 • Campion Tower
- 2, 3 • Student Parking
- 4 • Urban Affairs Institute
- 5 • Lemieux Library
- 6 • Student Parking
- 7 • Bellarmine Hall (coed residence)
- 8 • Bellarmine Annex
- 9 • Visitor Parking
- 10 • University Bookstore
- 11 • Thomas J. Bannan Building
- 12 • Alumni House
- 13 • ROTC Headquarters
- 14 • Faculty Parking
- 15 • Marian Hall (faculty offices)
- 16 • Loyola Hall (Jesuit residence)
- 17 • Teatro Inigo (theatre)

- 18 • Loyola Annex
- 19 • McCusker Building
- 20 • Garrand Building
- 21 • Liberal Arts Building
- 22 • William Pigott Building
- 23 • Pigott Auditorium
- 24 • Sculpture Lab
- 25 • Buhr Hall

- 26 • Faculty Parking
- 27 • Maintenance Shop
- 28 • Faculty Parking
- 29 • Engineering Building
- 30 • Student Union
- 31 • Xavier Hall (major men's residence)
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The number following the name of the office corresponds to that used in the building directory above. The designation following the number (R 100) indicates the office room number.

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