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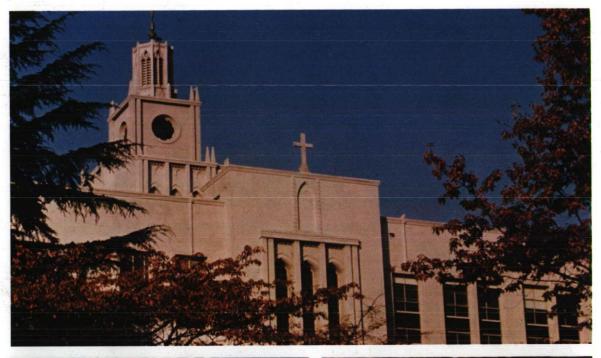
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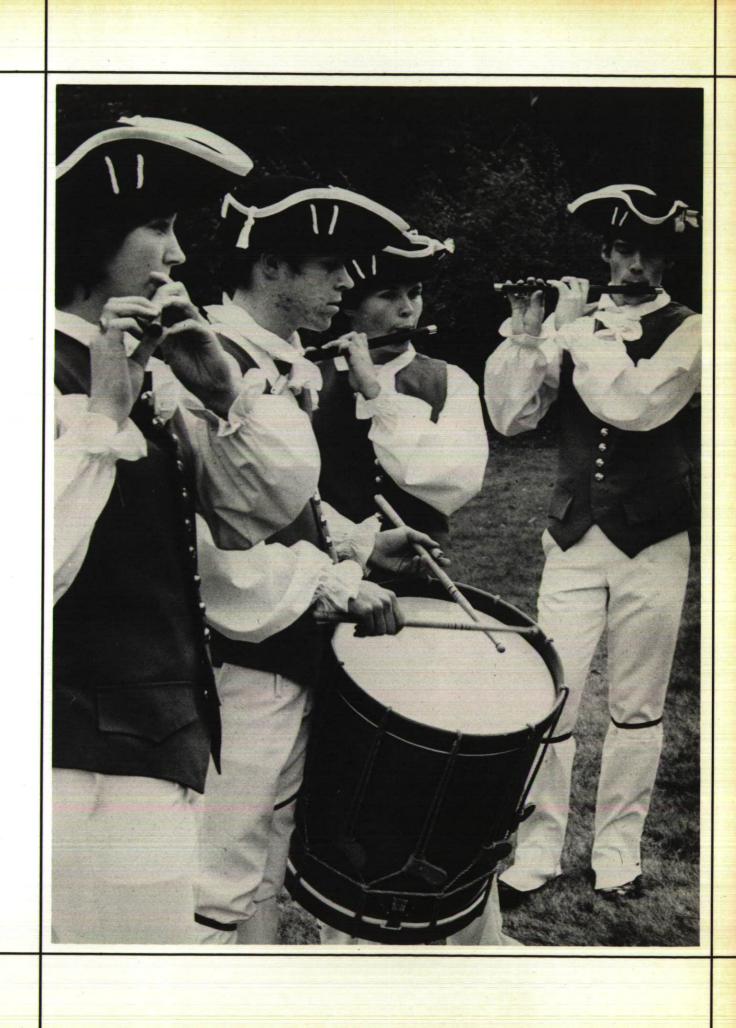
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Seattle University

1976-77 Bulletin of Information







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Seattle University Bulletin of Information Editor • Jean Merlino Assistant Editor • Lori Noma

Photography by Fred Toelkes • Floyd Saiki Allen Lee • Jon Mylius Lori Noma • Carol Mukasa



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 Advance Registration (Spring 1976) Registration March 29 March 29 **Classes Begin** April 2 Last Day to Register April 2 Last Day to Add or Change April 16 Good Friday-No Class April 26 - May 21 May 10 May 19 May 31 June 1-4 June 5 June 6

Advance Registration (Summer 1976) Last Day to Remove Incompletes Last Day to Withdraw with 'W' Memorial Day-No Class **Final Examinations** Baccalaureate Commencement

Summer Quarter 1976

April 26 - May 14 **Advance Registration** June 21 Registration June 21 **Classes Begin** June 25 Last Day to Register June 25 Last Day to Add or Change Independence Day-No Class July 5 July 16 July 19 Close First Term Registration Second Term August 12-13 **Final Examinations**

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Fall Quarter 1976

	Fall Quarter 1976
September 20 September 21 September 22 September 23 September 29 September 29 October 25 November 3 November 15-24 November 22 November 25-26 December 6-8	Orientation Registration—Continuing Students Registration—New Students Classes Begin Mass of the Holy Spirit Last Day to Register Last Day to Add or Change Veterans Day—No Class Last Day to Remove Incompletes Advance Registration (Winter 1977) Last Day to Withdraw with 'W' Thanksgiving Holiday—No Class Final Examinations
	Winter Quarter 1977
November 15-24 January 3 January 3 January 7 January 7 February 11 February 14-24 February 21 February 25 March 9-11	Advance Registration (Winter 1977) Registration Classes Begin Last Day to Register Last Day to Add or Change Last Day to Remove Incompletes Advance Registration (Spring 1977) Washington's Birthday—No Class Last Day to Withdraw with 'W' Final Examinations
	Spring Quarter 1977
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	Summer Quarter 1977
April 25-May 13 June 16-20 June 20 June 24 June 24 July 4 July 15 July 18 August 11-12	Advance Registration (Summer 1977) Registration Classes Begin Last Day to Register Last Day to Add or Change Independence Day—No Class Close of First Term Registration Second Term Final Examinations
	Fall Quarter 1977
September 26 September 27 September 28 September 29 October 5 October 5 October 24 November 10 November 14-23 November 24-25 November 30 December 12-14	Orientation Registration—Continuing Students Registration—New Students Classes Begin Last Day to Register Last Day to Add or Change Veterans Day—No Class Last Day to Remove Incompletes Advance Registration (Winter 1978) Thanksgiving Holiday—No Class Last Day to Withdraw with 'W' Final Examinations

PURPOSE AND SCOPE

Purpose and Scope

Seattle University, an institution of higher learning, has for its object and purpose: • the conservation, interpretation and transmis-

- sion of knowledge, ideas and values;
- · the extension of the frontiers of knowledge by critical and exhaustive investigation or ex-perimentation;
- 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 at-mosphere inside and outside the classroom, to develop an unbiased, truly liberated and enlightened intelligence in its faculty and stu-dest bedu; dent body.





SEATTLE UNIVERSITY

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In August, 1891, eleven years after the founding of Seattle, Fr. Victor Garrand, S.J., and Fr. Adrian Sweere, S.J., arrived in Seattle to lay the foundations of Seattle University. On April 16, 1893, work began on the brick building, known today as the Garrand Building. The first floor of the Building was used for classrooms, while the space between the second and third floors was left open to house the Immaculate Conception Church. The building is still in use today, although after the fire of 1907 the third floor was added, the roof was flattened and the steeple removed.



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History

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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.

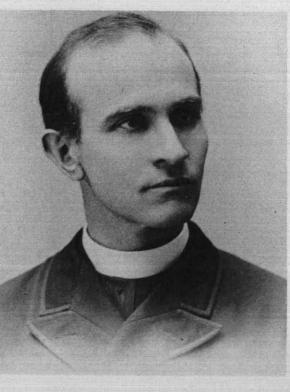
Conditions during the First World War led to the suspension of classes from 1918 until 1922. The latter year they were resumed on a seven-acre campus on Interlaken Boulevard which, with two buildings, had been presented to the college by Mr. and Mrs. Thomas C. McHugh. Both college and high school classes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



Rev. Adrian Sweere, S.J.



Rev. Victor Garrand, S.J.



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:

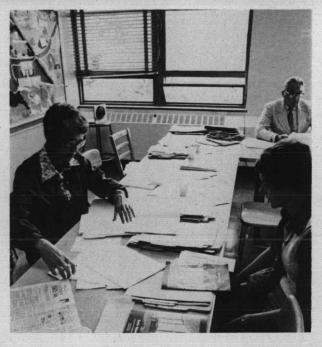
The College of Arts and Sciences comprises 12 departments. These are English, fine arts, foreign languages, history, journalism, military science, philosophy, political science, psychology, rehabilitation services, sociology and theology and religious studies. Program divisions are: community services,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

The Albers 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: 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 accounting, business, education, English, history, natural science, philosophy, public service, rehabilitation 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 Schools and Colleges National League For Nursing

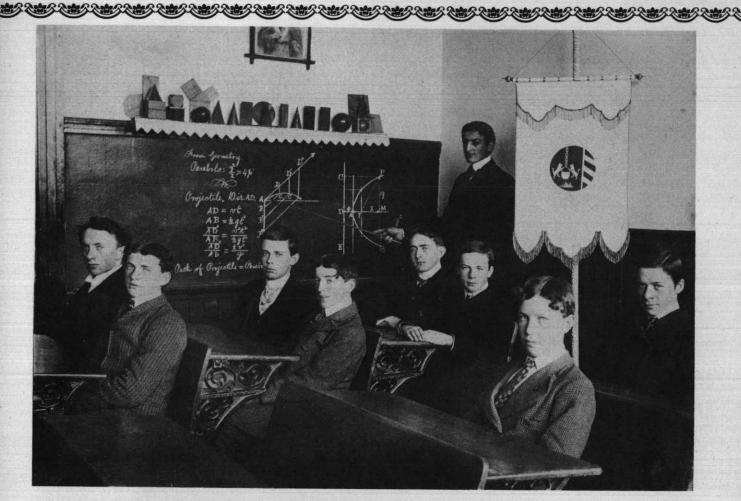
- American Chemical Society
- Engineering Council for Professional Development
- American Assembly of Collegiate Schools of **Business**
- National Council for Accreditation of Teacher Education

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

THE CAMPUS





The cornerstone of the first building on the present campus was laid in 1893 and blessed by Most Rev. Aegidius Junger, Bishop of the Nesqually diocese. Four years later, the school received its Articles of Incorporation as an institution of higher learning under the corporate title of Seattle College. In 1902 this Humanities class was in session and, in 1915, students enjoyed winter on the campus grounds.

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 3,500. 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), with accommodations for 450 students and Xavier Hall (1955), with a capacity of 200. Residence halls are coed.

On campus facilities include the A.A. Lemieux Library (1967), the major study and resource center, with seating for 1,100 students. A variety of study areas, including individual carrells, 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 and handball courts and a gymnastics and dance area.





The Student Union Building (1953), the Chieftain, houses the office of the Vice President for Students, student 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.

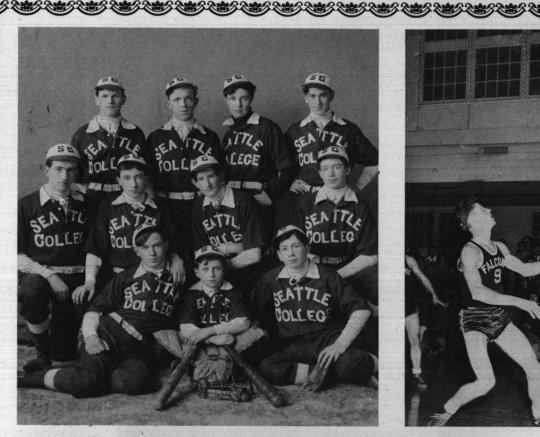
Seattle University is located in a seaport city surrounded by unsurpassed natural beauty. Seattle, the largest city in the Pacific Northwest and one of the 25 largest in the United States, has all the scenic and cultural variety of a metropolitan city with the unique advantage of mountains and water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

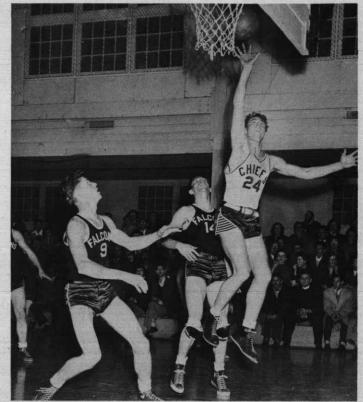
Within city boundaries, Lake Union and Lake Washington provide the opportunity for sailing, boating, water skiing and swimming.

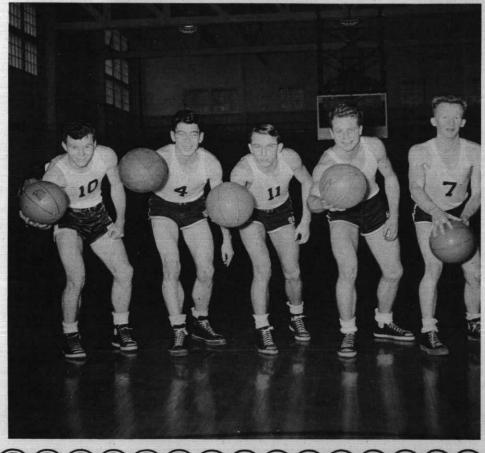
Ski areas are within an hour's drive of the city, with night and weekend skiing during winter months. Easy hikes, with trails marked and guide books available, are popular in the spring and summer months, as well as more difficult hikes for seasoned enthusiasts.

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.

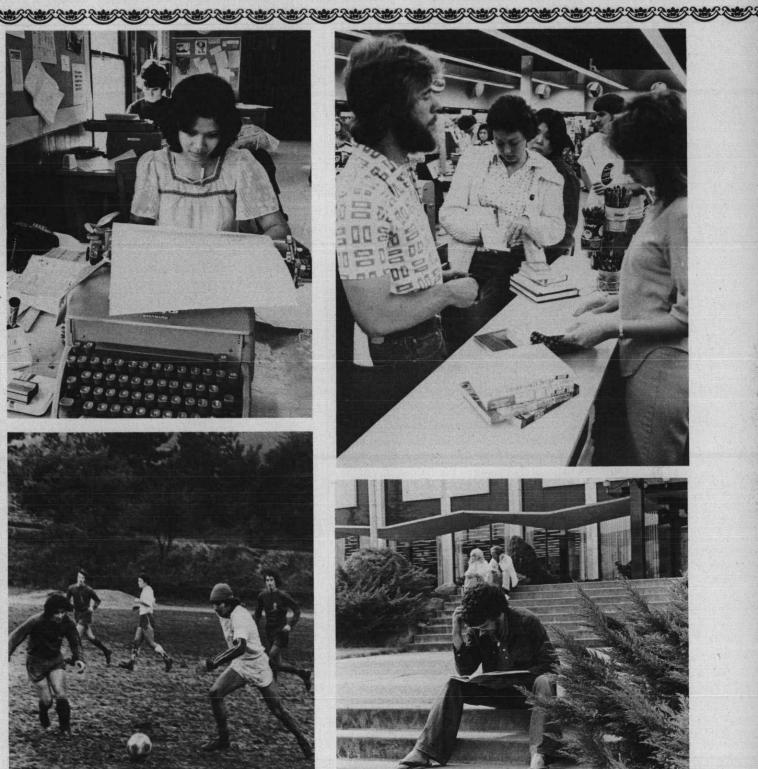






Throughout the University's history, athletics have played an important part in student life. Early in the 1923 school year, the athletes of the college formed the "S.C." Club, which later became the Letterman Club. The first uniformed college team took the baseball field in 1901. The 1909 baseball team is pictured above. The first Seattle College basketball game was played in the Memorial gymnasium on November 5, 1947. The Seattle University Chieftains became known in the basketball world with the arrival on the Seattle scene of two brothers from New Jersey, John and Ed O'Brien. John became the University's first All-American. Elgin Baylor was the next Chieftain to become an All-American in 1957.

STUDENT SERVICES



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COSTS-GENERAL INFORMA	TION Fees—Non-refundable
All charges are due and payable at the tim vanced registration or on registration day. Reg is a coordinated process involving the regis controller and the director of Financial Aid. For information about financial aid see pages 15-17 University reserves the right to change its without notice prior to the beginning of any que summer session.	Jistration Late registration, per day
Tuition Rates	
Undergraduate courses: Fall, Winter, Spring\$52.00 per cre Masters degree programs	
Business	dit hour dit hour dit hour dit hour dit hour
Auditors tuition	edit hour ay of the Ed 441 (per 5 credits)\$35.00 Engineering: CE 496, 497; ME 496, 497\$7.00
A deposit of \$50.00 is required of new stud mitted for Fall quarter. This deposit is forfe student does not register.	eited if a HI 401, 402\$ 5.00 HI 440, 441\$10.00
Family Tuition Plan	HI 475, 491 (computer)\$15.00 Mathematics: Mt 114, 21430.00 Music: MU 110, 111, 120, 122, 125\$50.00
Two or more members of a family living in the household and dependent upon a common and who are attending the University concurr full-time undergraduate students may apply for discount. Further information on the Family Tuit can be obtained at the Controller's Office.	support Nursing: N 205, 300 \$ 5.00 rently as Physics: All laboratory courses \$ 12.00 a tuition Psychology: \$ 12.00
	rsy 390\$30.00
Refunds	
Withdrawals (full or partial) 1-10 class days	per cent
Thereafter	Payment Schedule ve Mon- Deposit (refundable) classes Fall 466.00 g to the Winter 412.00

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.

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.

Career Planning and Placement

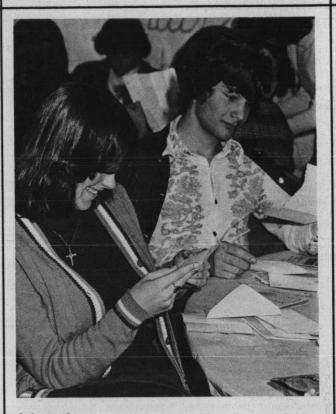
This office makes available to the SU student or alumnus, services related to career information, career counseling, job listing and referral, campus interviewing and job-seeking skills instruction. Literature pertinent to employing institutions is available as is material relative to career guidance. Trained personnel is available for vocational counseling. After registering with the office, the student or alumnus is entitled to sign up for interviews with companies visiting campus. Job announcements and openings are posted and accessible to walk-in traffic. Instruction is given in resumewriting and workshops, panels and small-group instruction in job-seeking skills and interview techniques are available.

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. At the discretion of the individual instructor, students may make up class examinations at the Center.

Minority Student Affairs Program

Seattle University offers to students from culturally unique economically and academically deprived backgrounds a special program of supportive services. These services include financial assistance, when available, counseling, tutoring, campus employment, job placement, post graduate and career information and ethnic cultural programs. For further information, contact the Director, Office of Minority Student Affairs, Bellarmine Annex.



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.

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 through its Reach Out program.

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.

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.

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 chartered organizations may be obtained from the Office of the Director for Student 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.

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 Phi—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.

Athletic Program

Seattle University is a member of the National Collegiate Athletic Association, the Association of Intercollegiate Sports for Women 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. Intercollegiate Sports for men include basketball, baseball, golf, tennis, crew, soccer and cross country. The Women's Intercollegiate Program offers competition in gymnastics, tennis, volleyball and track and field.

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.

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. Letters of permission and requests for waivers are to be sent to the Director for Resident Student Services. Upperclassmen may live in the residence halls if space is available.

Residence Halls

Bellarmine Hall has a capacity of 444 and Xavier accommodates 206. 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. A seventy-dollar (\$70.00) deposit is required to make reservations. See page 12 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

Meeting College Costs

The financial aid program at Seattle University assists academically competent and needy students in meeting the expenses of their college education. This assistance is offered to both new and continuing students, may be directed toward normal educational expenses as well as living expenses, and is available to full-time students without racial or religious discrimination.

Seattle University expects its students and their families to make a reasonable contribution toward the expense of a college education. This expected contribution is determined by the financial need analysis of the College Scholarship Service (CSS) or the American College Testing Program (ACT). Financial need is the difference between the cost of attending college and the amount the student and family can contribute toward that cost. Once the expected student and family contribution is determined, the University will attempt to supplement that contribution with an award of financial aid which may consist of a combination of grants, loans, and/or part-time employment. The Financial Aid Director will determine the student's eligibility for all types of aid and, hopefully, the total cost of attending Seattle University can be met from three sources—student, family, and financial aid.

How to Apply for Financial Aid

- Apply for admission to Seattle University. A student must be ACCEPTED to Seattle University before a financial aid award will be offered.
- 2) Submit by mail the Parents' Confidential Statement to CSS offices in Berkeley, California or Princeton, New Jersey or submit by mail the Family Financial Statement to ACT offices in Iowa City, Iowa. Be sure to indicate Seattle University as a recipient of the need analysis which will be calculated from the information you provide on the statement you mail to the service.
- Submit the Seattle University Application for Aid by mail or in person to Seattle University.
- Submit by mail a Basic Educational Opportunity Grant application to the Federal government at offices in Iowa City, Iowa.

To ensure maximum consideration for financial aid, your file must be complete in the Seattle University Financial Aid Office by March 1. It is the applicant's responsibility to see that the applicant's file is complete. Applicants whose files are completed after the deadline will be awarded on a funds available basis.

Currently enrolled students and transfer students who are enrolling for fall quarter must observe the March 1 deadline. All applicants for other than fall quarter should contact the financial aid office to determine the deadline prior to the quarter for which the applicant will enroll. Continuing students must reapply for financial aid each year.

Applicants are advised to make and retain copies of all documents submitted so that other documents which might require some of the same information might be easier to complete.

SCHOLARSHIPS

A limited number of scholarships are awarded annually to entering new students, 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 3.40 grade point average on a 4.00 scale to be considered. Awards range from partial to full tuition and do not usually apply to living expenses.

Seattle University

Some scholarships are provided directly from Seattle University's own funds. The number awarded each year depends on available funds. Applicants need not prepare an application separate from the Seattle University Application for Aid.

Honors Program Scholarships

Tuition scholarships are granted for one year and are renewable on the performance basis. Applicants should contact the Honors Program chairperson 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. Auditions are held under the jurisdiction of the Fine Arts department chairperson and inquiries should be directed accordingly.

Donated Scholarships

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

Father Beezer Memorial

Alumni and friends of the late Gerald Beezer, S.J. have established a fund to maintain a scholarship in memory of his many years of devoted service to the University. Applicants may receive a partial scholarship grant at this time.

The Blume Family

The Boeing Company

A scholarship grant extended to students majoring in engineering, physics, mathematics, or business. Renewable annually.

Alphonse & Mary Brenner and John Brenner Scholarship Fund

A grant to a deserving Catholic student from the Yakima diocese.

Louella Cook Foundation

Farmers Insurance Group

Scholarship funds are granted to University students majoring in business or mathematics. These partial scholarship grants are renewable.

Seattle University Guild Scholarships For scholarships in the Fine Arts department.

16 FINANCIAL AID

Italian Club of Seattle

For students whose parents are Italian Club members.

Laventhol & Horwath

A partial scholarship award to a student majoring in accounting.

Harry Kinerk Memorial Scholarship A partial scholarship award in memory of the late Professor Harry Kinerk.

Rosemary McCone Memorial

Paul Pigott Memorial

Pay-n-Save Corporation Scholarship

For a student majoring in marketing.

ROTC Scholarships—Army

The United States Army awards scholarships to selected high school seniors and to college freshmen, sophomores and juniors who enroll in the Army Reserve Officer Training Corps program at Seattle University. All expenses for tuition, books and fees are paid for one, two, three or four years, and each student receives an additional \$100 per month allowance while on scholarship during the school year. Write to the Seattle University Professor of Military Science for information on application procedures.

Albert A. Schafer Memorial

Seattle First National Bank Minority Scholarship

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

Professional Nurses Traineeship

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

Washington Congress of Parents, Teachers, and Students Financial Grant

A grant of \$175 per academic year to an incoming first year new student with deep need. This may be renewable all four years of college.

William E. Sullivan Memorial

Western Gear Foundation

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

William P. Woods Business Scholarship

A \$1,000 award to a deserving upperclassman or graduate. Applicants should contact the Dean for the School of Business.

Wyman Youth Trust

Loans

Loans are a vital part of the financial aid award "package" offered to students. Some loans do not require payment of principle or interest until the student graduates or leaves school. At that time, low interest payments which may extend over a long period, begin. Loans are an excellent means for the student to assume, but delay, at least a part of the cost of education. This allows the student's family to assume a portion of the education cost without utilizing current income or savings. Students must be United States citizens (or have Immigration Department approved permanent status) to be eligible for loans which involve federal funds.

National Direct Student Loan (NDSL)

A long-term loan based on financial need. Eligible students may borrow a total of \$5,000 for their undergraduate education. Repayment begins nine months after the student graduates or leaves school. The annual interest rate is three per cent and repayment may extend ten years. The NDSL repayment program also includes deferrment provisions and forgiveness features.

Federaly Insured Student Loan (FISL)

A long term loan arranged by the student with a lender selected by the student. A bank, credit union, or savings and loan are possible lenders. Students may borrow a total of \$7,500 for their undergraduate education. Repayment begins nine months after the student graduates or leaves school. The annual interest rate is seven per cent and repayment may extend ten years. The FISL is not need-based and may include a provision for the federal government to pay the interest while the student is in school. Early application is advised since processing takes 6 to 8 weeks.

Nursing Student Loan

A long-term loan based on financial need for full time nursing students. Eligible students may borrow up to \$2,500 annually. Repayment begins nine months after the student graduates or leaves the School of Nursing. The annual interest rate is three per cent and repayment may extend ten years. No interest is charged while the student is enrolled in the School of Nursing and forgiveness of 85% of the loan is available.

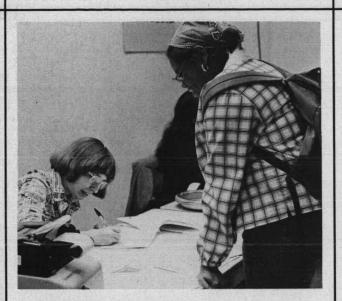
Law Enforcement Education Loan

A long term loan for full time students enrolled in a graduate or undergraduate program related to law enforcement. A LEEP loan will provide necessary funds to cover tuition and fees. The Police Science and Administration and Community Services programs have been approved for this loan. The loan features an annual interest rate of seven per cent and a liberal forgiveness policy.

Consult the Financial Aid office for current policy on student eligibility.

Student Short-Term Loans

Students are expected to arrive on registration day with funds required to pay tuition, room and board, and all fees. Late applicants for the Federally Insured Loan may not have received their Ioan funds, or other causes may prevent a student from having the required funds at registration. The Seattle University Alumni Credit Union may grant a short term Ioan to these students or their families. These Ioans, however, must be repaid during the quarter for which they apply. Application for these Ioans 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.

Aida Medack Loan Fund

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

Grants

Several forms of grants are offered as part of the financial aid award package which might also include loans and employment. These are non-repayable federal and state grants as well as Seattle University tuition grants which provide partial tuition. Need rather than grade point average is the primary consideration.

Supplemental Education Opportunity Grant (SEOG)

Seattle University receives these federal funds to distribute to students with exceptional financial need. SEOG awards usually range from \$200 to \$1,000 in the initial year and may continue in the subsequent years as student need and federal allocations determine. SEOG awards are non-repayable.

Basic Educational Opportunity Grant (BEOG)

Students considering Seattle University are encouraged to obtain a BEOG application form, complete the form, and mail it directly to the federal government in Iowa City, Iowa. In approximately four weeks the federal government returns to the student an eligibility report and, regardless of the reported eligibility, it is necessary for the student to forward that student eligibility report to the Seattle University Financial Aid Office which will determine the BEOG amount, all of which is non-repayable. Up to \$1,400 per year is available to qualified students. Students currently enrolled at Seattle University and receiving financial aid are required to file a BEOG application and submit the student eligibility report.

Nursing Scholarship Grant

Federal non-repayable grants of up to \$2,000 per year are available to nursing students with exceptional financial need.

Washington State Need Grant

A grant designed to assist needy and/or disadvantaged Washington state residents in obtaining postsecondary education. Selection is made by the Council for Postsecondary Education from nominations submitted by the University.

Law Enforcement Education Grants

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

Veterans, Widows & War Orphans Educational Assistance

Veterans (or spouses of deceased veterans) may receive up to 45 months of educational assistance under terms of the GI Bill. War orphans and dependents of disabled veterans may also receive up to 45 months of educational assistance. Contact the Seattle University Veterans Office for information and forms.

Social Security Assistance

Students may be eligible for Social Security assistance if one of their parents currently receives or had received social security benefits. Eligible students must be between 18-22 years of age, unmarried and a full time student. Information and forms may be obtained from a Social Security office.

Student Employment

The financial aid award frequently includes the workstudy element along with the loan and grant elements. Work-study is a system of employing needy students on or off campus as a part of their financial aid.

Federal College Work-Study Program (FCWSP)

Students who have a determined need are offered parttime employment on or off campus (non-profit employers).

State College Work-Study Program (SCWSP)

Students who have a determined need per the state formula are offered part-time employment with off campus employers which may be profit employers.

Army ROTC Subsistence

\$100 per month is paid to all students enrolled in the Army ROTC program during their Junior and Senior years. Write to the Seattle University Professor Military Science for information.

Student Job Placement Center

The Financial Aid Office maintains a listing of jobs available with Seattle area employers. No charge is made to the student for this service.



Much of the early activity of Seattle College centered in and around the Garrand Building. In 1898, classes were conducted in two rooms and referred to as the juniors and seniors. The playground was divided and known as the "upper" and "lower" grounds.

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. 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.

Seattle University offers the opportunities and experiences of higher education to all students equally without regard to race, religion, age, sex or national origin. It does so in keeping with the guidelines and requirements of laws and regulations as promulgated by state and federal agencies.

Although the fall quarter is the usual 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 \$15 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 an acedemic high school grade point average of 2.50 or above as measured on the 4.00 scale or rank in the upper 50 per cent of the senior class.

Have completed 16 units of college preparatory courses.

Applicants with a grade point average below 2.50 as computed by the University admissions office will be reviewed by a special board. Applicants with a grade point average below 2.00 will not be admitted to the University on either a regular or probationary status.

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. One unit equals one year. These 16 units must be distributed as follows:

English	
Mathematics (Algebra, Geometry)2	
History1	3
Laboratory Science1	
Electives (approved)	

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.

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.

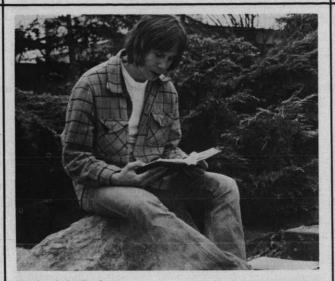
In making application for admission the candidate must complete the following procedures after completion of at least the sixth semester:

- 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.
- Submit a non-refundable application fee of \$15 to the Office of Admissions. Make remittances payable to Seattle University.
- 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 and woman should be addressed to the Director of Resident Student Services.
- Follow carefully any other instructions which are received with the letter of acceptance.

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 are encouraged to apply before May 1. All applications for admission should be received no later than one month before the beginning of each quarter.





Early Admission

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 and their high school counselor will be considered for enrollment after their junior year at high school.

Early Decision Plan

Students who select Seattle University as their firstchoice 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 sounselors 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.

Placement Examinations

Placement test 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 students 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 submit the test results one month prior to the quarter they wish to enroll.

Special Consideration

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.

22 ADMISSION POLICY

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:

- Submit to the Director of Admissions at Seattle University the application form, application fee and one 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. No transfer applicant will be admitted with a grade point average below 2.00.
- Transfer applicants who have completed less than one full year (30 quarter credits or 20 semester credits) at another university must fulfill secondary school unit requirements for admission to the Freshman class.
- Submit a non-refundable application fee of \$15 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 two letters of recommendation are required.

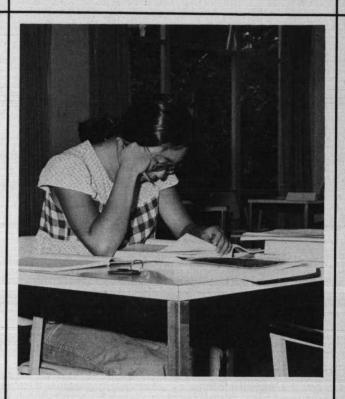
In assessing the student's record for admission, grades in non-credit courses will not be counted. For work done in institutions whose academic standing is unknown or for work with private teachers, admission and advanced credit will be granted only upon examination. Examination to establish credit for 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 28).

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:

- 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.
- 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

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 enrolls in a college or university.

ACADEMICS

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On October 26, 1931, Seattle College admitted its first women students in night school, non-credit lecture classes, and by 1933, the coeds were taking afternoon classes for credit. Fr. Howard Peronteau, S.J., the dean, was instrumental in opening the way for women to be admitted. The plan was completed under Fr. James McGoldrick, S.J., above, who became dean in 1933. On September 13, 1931, the student bookstore was established on campus. It was located in the Garrand Building from 1931 to 1965. The present Bookstore Building was acquired in 1965.

24	CO	ORE	CU	IRRI	CUL	.UM	

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

ENGLIS	H SEQUENCE	10 credits
En 100	Freshman English	5 credits
and any o	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

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.

*FINE ARTS SEQUENCE **5 credits** EA 101 Eine Arte_Art

		JCIEUIIS
FA 102	Fine Arts—Drama	5 credits
FA 103	Fine Arts-Music	5 credits

*Any one of the above courses may be taken as an option to an English literature CORE course or a history CORE course to fulfill five (5) credits. (This option applies only to students in the Schools of Arts and Sciences and Nursing, but not Business, Education, or Science and Engineering, who require their students (including those transferring in from another School within the University or outside of it) to take the regular English/History sequence.)

MATHEMATICS/SCIENCE SEQUENCE

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-

10 credits

majors in	mathematics and the sciences:	and the second
BI 101	Life Science	5 credits
Ch 100	Principles of the	
	Physical Sciences	5 credits

Mt 175	Mathematics for	
Ph 100	Liberal Arts Students Modern Physical	5 credits
	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** -The World **5 credits** PI 220 Philosophical Problems -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 listing 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.

SOCIAL SCIENCE SEQUENCE

10 credits

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

Asian-American Experience	5 credits
Nature of Economic Society	5 credits
Principles of Economics I	5 credits
Principles of Economics II	5 credits
	5 credits
	5 credits
	5 credits
	ocreans
	5 credits
	JCieuns
Amoricon Dolitical	5 credits
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	-
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Systems	5 credits
	and the second second
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in the United States	5 credits
Introductory Psychology	5 credits
Personality Adjustment	5 credits
Abnormal Psychology	5 credits
and Development	5 credits
	Nature of Economic Society Principles of Economics I Principles of Economics II American Economic History History of Economic History History of Economic Thought American National Government Comparative European Democracies Government and the Economy American Political Thought Introduction to Introduction al Politics Comparative Asian Systems Comparative African Systems Minority Politics in the United States Introductory Psychology Personality Adjustment Abnormal Psychology Psychology of Growth

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.)

THEOLOGY AND RELIGIOUS STUDIES SEQUENCE 10 credits

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

AREAT		S
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	*	
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 347	Black Religious Experience	5 credits
Rs 350	Perspective of Christian Hope	5 credits
Rs 420	Christian Sacraments	5 credits
Rs 433	Theology of Human Sexuality	
	and of Marriage	5 credits
Rs 443	Vatican II and Future	5 credits
Rs 450	Theology of Liberation	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.

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.

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.

The policy of Seattle University on the right of student access to his/her educational record and on confidentiality of information conforms to current public law. The full statement of policy is available for inspection in the Office of the Academic Vice President and/or Registrar.

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.

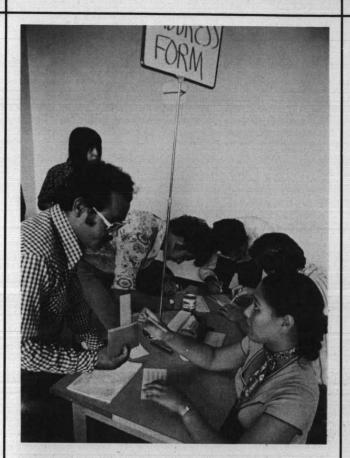
ADVANCED STANDING — Granted to transfer students who have previous college work which is acceptable to Seattle University.

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 course without obtaining college credit.

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

CERTIFICATION FOR TEACHERS — 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 term of nine or ten weeks. To earn five credits a student attends the class five hours each week for 10 weeks. A two-hour laboratory period is considered the equivalent of one hour of lecture and/or recitation except in the School of Science and Engineering.

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 or post master's 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 or professional program.

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 nine or ten 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 student taking course work 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 Credit Hour.

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

Attendance Requirement

Attendance may be an essential and intrinsic element of the educative process. In any course in which attendance is necessary to the achievement of a clearly defined set of course objectives, it may be a valid consideration in determining the student's grade. While there is no all-University regulation requiring class attendance, it is the responsibility of the instructor to state the relevance of attendance at the beginning of each course.

Classification of Students

Regular undergraduate students are classified as follows:

Freshmen-	0-44 credits completed
Sophomore-	 45-89 credits completed
Junior-	90-134 credits completed
Senior-	135 or more credits completed

Other students are classified as follows:

5th year—	post baccalaureate students not seeking an advanced degree
Graduate—	post baccalaureate students admitted to Graduate School for a master's
Special—	degree program an undergraduate student awaiting approval for regular status
Transients-	non-matriculated students registering for one or two guarters only
Auditors—	non-matriculated students registered for audit only not for regularly graded credit

Concurrent Enrollment at Two Colleges

University regulations require students to seek written permission to be enrolled at another institution simultaneously with enrollment here. Credits completed at a second institution are not transferable unless prior to enrolling elsewhere a faculty action authorizing dual enrollment is approved by the Dean and Registrar.

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 nonaccredited college or university, with the following restrictions:

- 1. Student must be currently registered at Seattle University.
- 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.



- 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.
- 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.
- 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.
- 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.
- Students who wish to qualify for credit by examination must apply to the Dean, Registrar and Controller for approval.
- No graduate credit is to be given by examination.
 No credit by examination may be given for phy-
- sical 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

Students who have three quarters at Seattle University with a cumulative grade point average below 2.0 or who fail to maintain standards in a professional school, or those who receive failing grades in 10 or more credits in one quarter, or those with an excessive number of I or NC grades, are subject to dismissal. If dismissed for academic reasons, request for reconsideration must be filed in writing with the dean in accordance with the policy of the individual college.

A student withdrawing voluntarily from the University is entitled to a statement of honorable dismissal if he/she 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. Errors in grades must be reported within six months of date of issue of grade reports.

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:

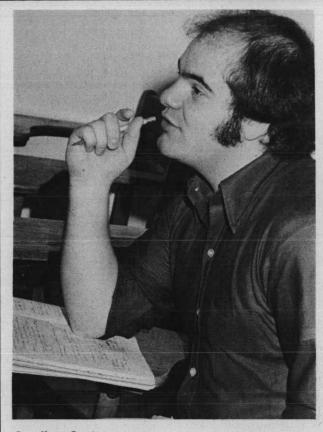
A	 4	quality points	
в		quality points	
C		quality points	
D	 1	quality point	1.
E	 0	quality points	

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. The University does not hold itself responsible for grade report errors unless the Registrar is notified of the error within six months after the date of issue of a grade report.



Grading System

Grade

B

C

D

E

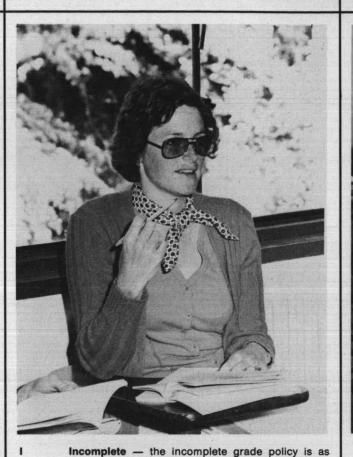
CR

NC

The University follows the letter grading system shown below.

Descriptive Value

- Superior student 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.
- Above average student knowledge is very good, scholarship meets all requirements, information is complete but not detailed.
 - Average student knowledge is good; scholarship meets assignments, but information is incomplete.
- Below average student knowledge is fair, scholarship does not meet assignments; essential information is lacking or false information given.
- Failing student.
- Withdrawal official withdrawal during the first eight weeks of the quarter.
- Credit grade assigned under credit/no credit option if work meets or is above minimum passing level.
- No Credit grade assigned under credit/no credit option if work is below minimum passing level.



credit for the work completed. N grades assigned prior to Summer 1971 may be removed through August 1973 without re-registration.

N Grades Received Summer term	Must be Removed Before 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

Satisfactory — a satisfactory grade which may be given for thesis, research, independent study, offcampus courses, field experience type courses and in non-credit courses.

Audit - course for which no credit is given.

Missing — symbol used on grade reports to inform student that grade has not been received from instructor.

Honor Roll

S

Y

M

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.

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.

No Grade — 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

N

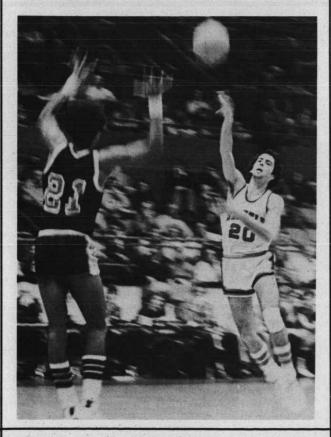
Credit/No Credit Option

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

- Student must declare his desire for credit/no credit during registration; student may change to or from credit/no credit only during the five-day drop/add period.
- 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	courses
	45-896	courses
	90-1344	
	135 and above0	courses

- Credit/no credit may apply to a maximum of two courses in the major or departmental requirements outside the University core.
- 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 item No. 6 below.
- All P.E. activity courses and music practice courses shall be credit/no credit.





 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. When student selected the CR/NC option this becomes a matter of record with the Registrar, but it is not reported to instructors.

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-forreadmission 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 \$8 for the first day and \$8 for the next four days to a maximum of \$40 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 Registrar 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.

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.

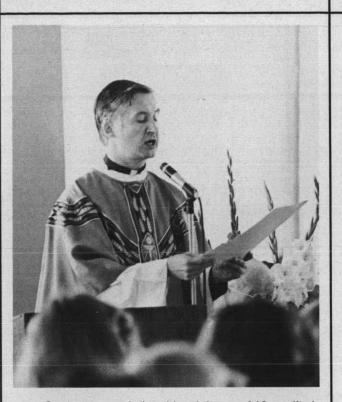
Application for a Degree

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—Bachelor's

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; A minimum grade point average of 2.00 must be achieved.
- 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 and religious studies 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 peti-tion 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.

	1976 and Afte
Cum Laude	3.40
Magna Cum Laude	3.65
Summa Cum Laude	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.





Seattle University's first major academic unit, the College of Arts and Sciences, was started in 1900. On April 7, 1937, Seattle College was granted full and unconditional accreditation by the Northwest Association of Secondary Higher Schools. Among the programs offered by the College of Arts and Sciences are music and drama.

COLLEGE OF ARTS AND SCIENCES James G. Powers, S.J., Ph.D., 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 instruments 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 instruments 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 18 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 and Administration, 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.

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, Police Science and Administration, Psychology, Rehabilitation, 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.

ARTS AND SCIENCES 37 Community Services



Community Services

Herbert M. Kagl, Ph.D., Director

Associate Professor: James W. King, S.J.

Assistant Professors: Padmini Gulati Herbert M. Kagi Henrietta Tolson

Objectives

Community Services is an interdepartmental undertaking involving social work courses and economics, political science, psychology and sociology. The primary objective is to prepare students for work in the field of social services immediately after the bachelor's degree. Other objectives are to contribute to the liberal education of all students, and to prepare students for admission to graduate schools of social work. The program assists students in deciding on a career choice by making known the nature of, and opportunities in, the social service field, and provides 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

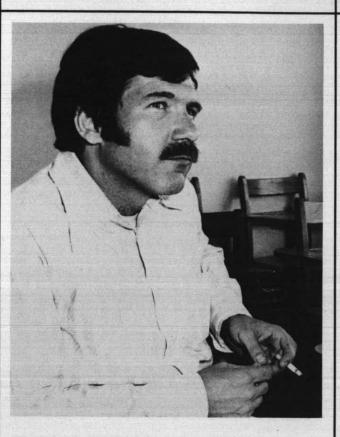
Bachelor of Arts — 105 credits which must include CS 300, 374, 376, 378, 379, 478 and 479; 25 credits in sociology; 15 credits in psychology; 10 credits in political science; 10 credits in economics; 5 credits in statistics courses, in either the sociology or psychology departments; and 5 credits of Fine Arts.

Bachelor of Arts in Community Services

Freshman year

Political Science	credits credits credits credits
Sophomore year Economics 5 Mathematics/Science core option 5 Philosophy 220 and core option 10	credits credits
Fine Arts	credits credits credits credits credits credits credits
Senior year Community Services 378, 379, 478, 47920 Psychology 201	credits
Total 180	credits

38



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: Alc 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.A. in Rehabilitation. 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 45 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) preprofessionals, 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.

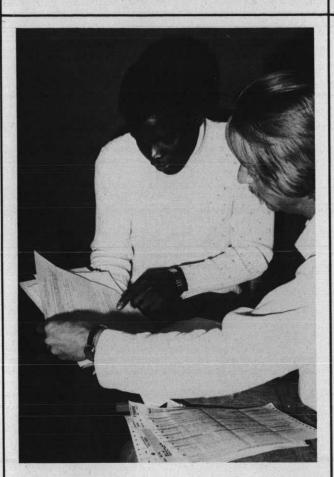
Community Services Courses

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

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)

ARTS AND SCIENCES Community Services



 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

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.

00 0/4	Provides students with some under basic principles and processes im- help to individuals, groups and com- human services field; focus on som methods, techniques and strategies provision of services to these group	volved in giving nmunities in the me of the basic employed in the
CS 376	Factors of Interviewing The interview as one of the major me people; study of factors of knowledg proficient interviewing to provide a development. Prerequisite: CS 300 (winter, spring)	e and method in basis for future
CS 377	Field Experience	5 credits
	For Sociology majors only. (spring)	
CS 378 CS 379 CS 380	Field Experience I Field Experience II Field Experience III Direct observation, supervised prace and academic study in a selected agency or organization with stress p agency's clientele, its services and the community. Prerequisites: CS 37 for 378; 378 for 379; 379 for 380. (fall	d social welfare blaced upon the its functions in '6 or permission

Alcoholism Courses

Alc 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, sterotypes, 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 Alc 401 through 410.

Alc 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: Alc 400.

Alc 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: Alc 400.

Alc 403 Personal and Social Rehabilitation 2 credits Motivation and personality reconstruction in the recovering alcoholic. Post-detoxication vs. longrange sobriety; relapses, the dry drunk. Spiritual aspects of rehabilitation. Alcoholics Anonymous. Family and social adjustments. Al-anon and Alateen. Industrial programs and policies. Pre or coreguisite: Alc 400.

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E orodite

	Community Services		
Alc 404	Agency Administration 2 credits Personnel policies and practices, budgeting, finan- cing, 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: Alc 400.	CS 423	Personal and Social Rehabilitation 2 credit Personality reconstruction in the recovering dru addict or abuser. Post-detoxification vs. long-rang drug-free state, relapses, spiritual aspects of dru rehabilitation. Family and social adjustments Follow-up techniques. Civil government and in dustrial programs and policies.
Alc 405		CS 424	Agency Administration 2 credit Personnel policies and practices, budgeting, finan cing, office management, public relations professional ethics. Governmental regulations of drug agencies. Informational and educationa policies and techniques. Relations with public an private school systems, courts, other profession and agencies, law enforcement agencies and the clergy.
Alc 406	Counseling Ethnic/Minority Alcoholics 2 credits Special problems and techniques, understanding of cultural background and instruction by members of minority groups. Prerequisite: Alc 400.	CS 425	The Law and Drug Misuse 2 credit Local, state, federal laws concerning schedule drug and opiates. Changing patterns of law on thes governmental levels. Possession-sale law patterns Marijuana and the law.
Alc 407 Alc 408	Field Experience I in Alcoholism 4 credits 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: Alc 400.	CS 426	Counseling Ethnic/Minority Drug Abusers 2 credit Special problems and techniques, understanding of cultural background. Instruction by qualifie members of such groups as Blacks, Asia Americans and American Indians.
Alc 409 Alc 410	Courses taught by a particular expert or on a certain aspect; e.g., counseling the alcoholic family.	CS 427 CS 428	Field Experience I - Drugs 4 credi Field Experience II - Drugs 4 credi Supervised work in two different agencies, clinic rehabilitation centers, referral centers, mental healt centers. Oral and written reports of students reference of students reference.
	Open only to students with sufficient academic background to pursue independent study. Permis- sion of director required.	CS 429	quired. Special Topics - Drugs 1-2 credi Courses taught by experts in specialized areas or of certain aspects of drug use, abuse, rehabilitatio e.g., Transcendental Meditation and drug rehabilitation; behavioral modification; milieu; Gestalt theor
Drug A	Abuse Courses	CS 430	Individual Research - Drugs 1-2 credi Open only to students with sufficient academ background to pursue independent study. Permi
CS 420	Scope and complexity of problems arising from ad- dictive 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 478 CS 479	Coordinating Seminar II 3 credi Discussion and analysis of practices, programs, of jectives, policies and procedures of various ager cles, organization and institutions. Corequisites: C
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.	and the second state of the second	378 with 478; 379 with 479. Special Topics 1-5 credi Special Topics 1-5 credi Special Topics 1-5 credi Prerequisite: Upper division standing and permision. 100 permision
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	CS 497 CS 498	Individual Research1-5 crediBy arrangement, with professional Prerequisite: Upper division standing sion.and permiIndependent Study1-5 credi
	modalities. Vocational and occupational guidance. Information and referral, use of local facilities.		Prerequisite: Upper division standing and permission.

ARTS AND SCIENCES English

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Gideau themes in The Return of The To save measif is to rece weighting; + State of unencumber 2. Dried role or dution 4. He who finds his bill feet on his art

English Alexander McDonald, S.J., M.A. (Oxon.), Chairman

Professors:

Robert J. Carmody, S.J. (Emeritus) Joseph B. Monda Edward H. Spiers

Associate Professors:

Hamida Bosmajian Kenneth D. MacLean Alexander F. McDonald, S.J. James G. Powers, S.J. William Taylor Charles A. Wollesen, S.J.

Assistant Professors:

Donald J. Foran, S.J. Dolores M. Johnson Stephen R. Kuder, S.J. Erlinda F. Rustia Edwin H. Weihe

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 (in 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 10 credits of one of those languages.

Departmental Requirements

- Bachelor of Arts (English concentration)—60 credits of English which must include the following courses: En 100, 250, 264, 266, 310, 314, 315 and 330. The remaining credits must be taken in courses in the 300 and 400 series. The nature of the courses is to be determined by the student in consultation with his adviser.
- Bachelor of Arts (Comparative Literature Concentration)—60 credits of English and Comparative Literature which must include the following courses: En 100, 250, 264, 265, 266, 314, 315, 414 and 416. The remaining credits must be taken in the 300 and 400 series. Recommended are En 382 and 415. The student must take one five-hour course of a foreign literature in the original language when a reading competency in that language has been demonstrated.
- Teaching Major (School of Education) 60 credits of English which must include En 100, 175, 250, 264, 265, 301, 330, either 266, 382, 482 or 484, and either 310 or 407. The remaining 15 credits must be taken in courses in the 300 and 400 series. En 314 and 315 are strongly recommended.
- Undergraduate Minor 20 credits of English beyond En 100 and either 264, 265 or 266. These courses should be taken in the 300 and 400 series, as specified by the department. For the Journalism — English Interdisciplinary Program, see the section on Journalism.
- 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 in Teaching 40 credits of English of which 25 must be in graduate courses. En 501, 505, 507 (or their equivalents) are required. Neither a foreign language nor thesis is required, and there is no final comprehensive examination.

ARTS AND SCIENCES English

Bachelor of Arts

Freshman year

English 100, 25010 credits
Fine Arts 101, 102, 103 (English
concentration; recommended)15 credits
Foreign Language (Comparative Literature
concentration; recommended)15 credits
History core option10 credits
Philosophy core option 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 310, 314, 315, 330 (English concentration)20 c	credits
or English 314, 315, 414, 415 (Comparative Literature concentration)20 c	
French or German 105, 106	credits
Senior vear	

English 300 and 400 series co	urses	15 credits
Electives		30 credits
	Total	180 credits

English Courses

En 100	Freshman English 5 credit	8
	Study and practice in rhetoric, emphasizing expository writing and mastery of style.	-

- En 101 Freshman English 5 credits Continuation of En 100.
- En 132 **Masterpieces of American Literature** 5 credits Close reading and analysis of American literary classics: novels, plays, poetry and essays.
- En 133 **Masterpieces of World Literature** 5 credits Close reading and analysis of world literary classics: novels, plays, poetry and essays.
- En 134 **Masterpieces of British Literature 5 credits** Close reading and analysis of British literary classics: novels, plays, poetry and essays.
- En 175 Introduction to Literature 5 credits Introduction to the study of novels, plays, poetry and essays.
- En 200 **Advanced Composition** 5 credits Advanced study and practice in expository 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 En 265 En 266	Great English Authors I 5 credits Great English Authors II 5 credits Great English Authors II 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 the Eighteenth Century (1640-1798). III. Study of major British writers from the Romantic period to the Victorian period (1798-1900). Required of English majors.
En 291 En 292 En 293	Special Topics1-5 creditsSpecial Topics1-5 creditsSpecial Topics1-5 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." Required of English majors.

En 313 Mythology 5 credits Study of the mythological backgrounds of English and American literature.

ARTS AND SCIENCES English

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En 314	Backgrounds of Western Literature I	5 credits	En 490	Literary Criticism	5 credits
En 315			En 491	Special Topics	1-5 credits
	Literature II	5 credits	En 492 En 493	Special Topics Special Topics	1-5 credits 1-5 credits
	I. From the beginnings into Medieval Per Dante through the Renaissance. Require				
	majors.	o or English	En 497 En 498	Individual Research	5 credits 5 credits
En 330	Introduction to Shakespeare	5 credits	En 490	Individual nesearch	Jereans
	Readings in the comedies, tragedies a	nd histories.			
	Required of English majors.		Quedu		Contraction of
En 382	Major American Novelists	5 credits	Gradu	ate Courses	
	American fiction from its beginning to m	odern times:	En 500	Introduction to Graduate	
	Cooper, Melville, Twain, James, Faulkner and others.	Hemingway,		English Studies	5 credits
	Fauktier and others.	the second	En 501	Studies in Rhetoric	5 credits
En 383	Classics of Black American Literature An historical approach to the literature			Compositive Crommore	5 credits
	Americans, with emphasis on the mod	erns: Jones,	En 505	Comparative Grammars	Jeredita
	Wright, Cleaver, Baldwin, Ellison and c		En 507	History of the English Language	5 credits
	context of general American literature.		En 508	Old English	5 credits
En 391	Special Topics	1-5 credits			5 credits
En 394	Modern Tradition: Fiction	5 credits	En 510	Chaucer	
	Modern Tradition: Poetry	5 credits	En 512	Medieval Literature	5 credits
En 395	Modern Tradition: Poetry	5 credits	En 520	The English Renaissance	5 credits
En 398	Modern Tradition: Drama	5 credits	En 522	Elizabethan Drama	
En 401	Studies in Rhetoric	5 credits		(non-Shakespearean)	5 credits
En 407	History of the English Language	5 credits	En 535	Shakespeare (Comedies and	
EN 407	Study of the historical development of		En 555	Histories)	5 credits
			En 536	Shakespeare (Tragedies)	5 credits
En 411	Medieval Literature	5 credits	En 550	Shakespeare (Tragedies)	1. Carter and the start
-	Eighteenth and Nineteenth Century		En 540	Milton	5 credits
En 414	Continental Literature	5 credits	En 545	Seventeenth Century Literature	5 credits
En 415	Russian Literature	5 credits	En 550	Eighteenth Century Literature	5 credits
En 416	Eastern Literature	5 credits	En 560	English Romanticism	5 credits
En 420	Renaissance Literature	5 credits	En 570	Victorian Literature	5 credits
En 430	Shakespeare I	5 credits	En 580	Colonial American Literature	5 credits
En 431	Shakespeare II	5 credits			
	I. Tragedies. II. Comedies/histories.		En 581	American Transcendentalists	5 credits
En 440	Milton	5 credits	En 582	Modern American Literature	5 credits
En 445	Seventeenth Century Literature	5 credits	En 584	The English Novel	5 credits
					5 credits
En 450	Restoration and Eighteenth Century Literature	5 credits	En 586	Modern Poets	
			En 588	Modern Dramatists	5 credits
En 452	Eighteenth Century English Novel	5 credits	En 590	Theories of Criticism	5 credits
En 460	Romantic Literature	5 credits	En 593	Special Topics	5 credits
En 475	Victorian Literature	5 credits	EU 293	Special Topics	A DATE OF THE OWNER
S			En 594	Special Topics	5 credits
En 477	Nineteenth Century English Novel	5 credits	En 595	Special Topics	5 credits
En 482	American Literature to 1900	5 credits	E. 500		5-10 credits
En 484	Twentieth Century American		En 596	HUITUUAI Nesearch	
	Literature	5 credits	En 597	Individual Research	5-10 credits
En 487	Contemporary Literature	5 credits	En 598	Individual Research	5-10 credits
		5 credits	En 599	Thesis	10 credits
En 488	The Film and Literature				



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

Professors: Louis K. Christensen Nikolas Damascus

Associate Professors: William J. Dore, Jr. Marvin T. Herard J. Kevin Waters, S.J.

Assistant Professors: David M. Butler James V. Connors, S.J. Louis E. Kelly Val M. Laigo

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 77 credits which must include Mu 115, 116, 117, 215, 216, 217, 315; 10 credits from 415, 416, or 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.

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- 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 option10	credits
Fine Arts 101 5	credits
Philosophy 110, 22010	
Social Science core options10	credits
Electives 4	credits

Sophomore year

Art 231, 232, 233 and electives	10	credits
Fine Arts 102		
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		
Fine Arts 103	5	credits
Music elective		
Theology core option	5	credits

Senior year

Art electives	33	credits
Music elective		
Electives	7	credits

Total . . . 180 credits

Bachelor of Arts — Major in Drama

Freshman year

Drama 101, 225, 226, 227, 261, 26211	credits
English 100, 13410	credits
History core option10	credits
Philosophy 110 5	credits
Electives 9	credits

Sophomore year

Art electives 4	credits
Drama 220, 221, 222, 26312	credits
Mathematics/Science core options10	
Philosophy 220 and core option10	
Social Science core options10	credits

Junior year

Drama 351, 352, 353, 420, 4211 Fine Arts sequence	3 credits 5 credits
Music elective	5 credits
Theology core option	5 credits 5 credits



Senior year

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

Total . . . 180 credits

Bachelor of Arts — Major in Music

Freshman year

English 100 and core option10	credits
Fine Arts 103 5	credits
History core option10	credits
Music 115, 116, 117 15	credits
Music 130 or 131 or 135 3	credits
Music 110 2	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

4 credits	
8 credits	
5 credits	
10 credits	
6 credits	
5 credits	
10 credits	
10 credits	
5 credits	
9 credits	
	4 credits 10 credits 8 credits 5 credits 5 credits 10 credits 6 credits 5 credits 10 credits 10 credits 5 credits 9 credits

Total . . . 180 credits

Bache	elor of Arts — Area major in Fine Arts	A
English Fine A History Philoso	man year n 100 and core option rts sequence rcore option n 10 credits r core option n 10 credits n 10 credits	A
Art 221 Drama Mather Music Philoso Social	more year1, 222, 2236 credits220, 2216 creditsmatics/Science core options10 credits130 or 131 or 1353 creditsophy 220 and core option10 creditsScience core option5 creditsgy core option5 credits	A
Drama Music Theolog Elective	1, 232, 233 and electives 12 credits 261 and electives 14 credits 115, 116, 117 9 credits gy core option 5 credits es 5 credits	A
Music	year ctives	A
Fi · · · · ·	Total 180 credits	A
Fine A FA 101	Fine Arts — Art 5 credits Synoptic view of art history; period and national styles; principles and implications of design, with cross-reference to music and drama	Ae
FA 102	Fine Arts — Drama 5 credits Introduction to drama as an art form. An historical approach with emphasis on major periods, plays and philosophies.	Ae
FA 103	Fine Arts — Music 5 credits Introduction to music as an art and as a literature, with emphasis upon historical and cultural cor- relations.	
FA 201	Fine Arts — Art and Music 5 credits Interdisciplinary course providing both fundamental concepts and historical perspective. May be taken in lieu of either FA 102 or 103.	Ae
FA 202	Fine Arts — Drama and Music 5 credits 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 re- quired 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.	Ar Ar Ar

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.
- Ac 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 eeing and hearing works of art and developing their own skills through participation in and creating their own works.
- A 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.
- e 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 students participating 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

	Drawing	2 credits
	Drawing	2 credits
Art 223	Drawing	2 credits
	Studies of line and value in the c training in awareness and percep space indication; essential relati forms.	otion; structure and

2 credits 2 credits 2 credits Primary concepts and analysis of structure; problems of contemporary design; form in three-1-5 credits 1-5 credits 1-5 credits **5 credits** 5 credits

Art 312 **History of Art** Survey of the arts of the Western world from the earliest times to the Renaissance and from the Renaissance to the present.

Art 231

Art 232

Art 233

Art 291

Art 292

Art 293

Art 311

Design

Design

Design

dimensional design.

Special Topics Special Topics

Special Topics

History of Art

Art 321	Advanced Drawing	3 credits
Art 322	Advanced Drawing	3 credits
	Advanced Drawing	3 credits
	Study of the human form; speci	al problems in group
	composition, Prerequisite: Art	

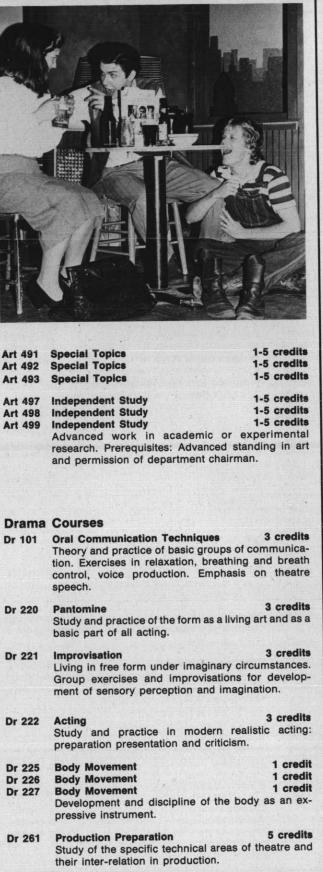
all	
Art 331	Advanced Design 3 credits
Art 332	Advanced Design 3 credits
Art 333	Advanced Design 3 credits
el-	Problems of practical application; advertising art; synthesis and research. Prerequisite: Art 233.
Art 334	Graphics 2 credits
Art 335	Graphics 2 credits
Art 336	Graphics 2 credits
	Principles 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

materials; advanced problems.

teachers.

Art 370	Arts and Crafts Experience in artistic expressio for elementary and secondary a	5 credits n in basic art media school teachers.
Art 446	Advanced Painting Advanced Painting	3 credits 3 credits
Art 447 Art 448	Advanced Painting	3 credits
	Experimental research toward t creative and personalized id research. Prerequisite: Art 34 department chairman.	iom, synthesis and
Art 451	Advanced Sculpture	3 credits
Art 452	Advanced Sculpture	3 credits
Art 453	Advanced Sculpture	3 credits
	Includes foundry techniques an Prerequisite: Art 453 or permis	nd lost wax process. sion of instructor.
Art 470	Advanced Media	5 credits
	Experience in artistic express media for elementary and	ion in advanced art secondary school

ARTS AND SCIENCES Fine Arts



Dr 262 Production Projects Dr 263 Production Projects		- here a		
Dr 263 Production Projects Student specializes in one of the Scene Construction, Lighting-Sc Makeup, Design (scene or costu periods in conjunction with ma Prerequisite: Dr 261	ound, Costume- ume), Laboratory	4	The state	2
Dr 291 Special Topics Dr 292 Special Topics Dr 293 Special Topics	1-5 credits 1-5 credits 1-5 credits		m.	
Dr 300 Dramatic Theory I Dr 301 Dramatic Theory II I. A study of Aristotle's Poetics an theories to Lessing. II. Dramati Diderot to Langer and the Present. 300 for 301	c theories from			
Dr 310 American Theatre I Dr 311 American Theatre II I. The history of the American Theat nings until the Civil War. II. The American Theatre history from the opresent.	continuation of)T
Dr 351 Representative Plays I Dr 352 Representative Plays II	3 credits 3 credits	NT I	10	I.Alle
Dr 353 Representative Plays III Great playwrights and repres presented in a chronological orde Age of Greece to the Elizabethean	3 credits sentative plays rr. I. The Golden era. II. Restora-	Dr 491	Second Zerola	
tion to the 20th Century. III. The 20 Dr 400 Ensemble		Dr 492 Dr 493	Special Topics Special Topics Special Topics	1-5 credits 1-5 credits 1-5 credits
Dr 401 Ensemble Dr 402 Ensemble	1-5 credits	Dr 497	Independent Study	
Di 402 Ensemble		Dr 498	Independent Study	1-5 credits 1-5 credits
Dr 410 Tragedy A senior seminar investigating trag Aristotle to the present.	3 credits	Dr 499	Independent Study	1-5 credits
Dr 411 Comedy	3 credits			
A senior seminar on the nature of c Greeks until the present.	VALUE AND A COMPANY		Courses	
Dr 412 Mixed Genre A senior seminar on dramas that are	3 credits		Piano Lessons Vocal Lessons	1 credit 1 credit
nor comedy.	N	Nu 114	Music Fundamentals and M Rudiments of music and met	ethods 5 credits
Dr. 420 Directing Theory and practice in principles of o styles of drama.	2 credits directing various		successful music program in Required of all majors in ele tion.	the elementary school.
Dr 421 Directing Experience Practical application of directing p		Au 115	Theory I	5 credits
done in the community. Prerequisite mission of instructor.	. Dr 420 or nor	Au 116 Au 117	Theory II Theory III Basic musicianship, stressin modes, intervals, chords,rhy	5 credits 5 credits ng scales and tonality,
Dr 425 Drama Internship Actual apprenticeship in specific are community under the supervision faculty. Prerequisite: Drama majors	of the drama		of these concepts will be acquing, analysis, discussion ar Prerequisite: Placement by e	uired by listening, sing- nd keyboard practice.
mission of Drama faculty.		lu 120	Violin	1 credit
Dr 451 Theatre History I Dr 452 Theatre History II	2 credits M 2 credits	lu 122	Cello	1 credit
- ite incute motory in				
Dr 453 Theatre History III I. Primitive to Elizabethean era. II. Res	2 credits M	lu 123	Classical Guitar	1 credit

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	- Andrews	

Mu 130	A Cappella Choir 1 credit	Mu
Mu 131	Vocal Ensemble 1 credit	
Mu 135	Fine Arts Ensemble 1 credit Instruments, singers, dancers and actors in ensem- ble performance.	Mu
Mu 136	Orchestra 1 credit Prerequisite: Audition	
Wu 151	Songwriting 5 credits A course for beginners in music theory. This course is designed for the general student.	Mu
Mu 200	Music of J.S. Bach 2 credits Analysis of his instrumental and vocal music, par- ticularly as reflecting the ultimate refinement of Baroque form. Prerequisite: FA 103	
Mu 201	Studies in American Music 3 credits Survey from the early folksong to the vocal and in- strumental music of the present.	Mu
Mu 202	History of Opera 3 credits Consideration of the basic elements in the combina- tion of music and drama with a historical survey of the various solutions offered to the problems in- volved. Prerequisite: FA 103.	M
Mu 205	Symphonies of Beethoven 3 credits Nine works, preceded by a brief consideration of symphonic form. Prerequisite: FA 103.	
Mu 207	History of Jazz 2 credits Explorations of origins in Afro-American culture, its evolution as a result of merging cultures and the ac- complishment of a distinctly new musical language.	M

ARTS AND SCIENCES 49 Fine Arts		
Mu 214	Introduction to 20th Century Music Techniques, forms and styles of impi expressionism; neo-classicism and total control-chance-electronic music	dodecaphony;
Mu 215 Mu 216	Theory IV Theory V Advanced musicianship, beginning p analysis.	5 credits 5 credits part writing and
Mu 217	Theory VI Advanced musicianship, part writing Harmonic style of the common-pract the late Nineteenth Century. Corequire with 372; 217 with 373.	ice period up to
Mu 251	Electronic Music Creative modification of electronic s of synthesizers. Lectures and indivi work. Recommended for public scho prerequisites.	dual laboratory
Mu 291 Mu 292 Mu 293	Special Topics Special Topics Special Topics	1-5 credits 1-5 credits 1-5 credits
Mu 315	Theory VII and History of the 19th Century Advanced part writing and analysis. of the common-practice period from ment of the principle of tonality to to that principle in the late Nineteenth	m the establish-
Mu 372	History and Literature of Music Classic Period Corequisite: Mu 216.	3 credits
Mu 373	History and Literature of Music Romantic Period Corequisite: Mu 217.	3 credits
Mu 415	Counterpoint (modal), Literature at History of the Middle Ages and Renaissance Sixteenth-Century contrapuntal style music of Palestrina and his conte music majors.	5 credits e as found in the
Mu 416	Counterpoint (tonal), Literature an History of the Baroque Era Eighteenth-Century contrapuntal st the music of Bach and his conter music majors.	5 credits tyle as found in
Mu 417	Counterpoint Literature and Histor of the 20th Century Contrapuntal techniques as used to the Twentieth Century. For music r	5 credits by composers in
Mu 418	Orchestration and Harmonic Analysis Practical application of study of the their creative use. Prerequisite: Per viser.	5 credits instruments and ermission of ad-
Mu 491 Mu 492 Mu 493	Special Topics	1-5 credits 1-5 credits 1-5 credits

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Foreign Languages C. L. Abello, B. Econ., Chairman

Associate Professors: Clarence L. Abello Francis X. Bisciglia, S.J R. Maxime Marinoni Paul B. Milan

Assistant Professors: George Morris, S.J. Adele Palmberg James L. Stark

Instructor: Paula J. Laschober

Objectives

The foreign language programs in French, German, Italian, Spanish, Latin, Greek and Japanese, as well as 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 about another culture and civilization, its history, geography, literature and arts through the medium of its language leads to better understanding one's self and the world. To achieve this goal 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 are quite good. 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, and in foreign countries.

Bachelor of Arts in Social Science — Asian Studies

This degree 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.

A double major may be completed by meeting the major requirements of the Departments of Economics, History, Political Science, Sociology or Foreign Languages.

Degrees Offered

Bachelor of Arts 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 a foreign 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 the elementary language courses 115, 125 and 135. These 40 credits must include 215, 225, 235, 315, 325 and any three courses at the 400 level.

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

	ARTS AND SCIENCES 51 Foreign Languages	
 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. Teaching Major (School of Education) — 40 credits be- yond elementary courses 115, 125, 135. The 40 credits must include courses 215, 225, 235, 315, and 325. Undergraduate Minor (modern languages) — 20 credits beyond elementary language courses 115, 125 and 135. Those 20 credits must be earned in 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 in- ternship as a teaching assistant in the University's French-in-France Institute in Grenoble (Fr 460, 461, 462) and Fr 465 or 491 	 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. 	
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 graduate project.	Bachelor of Arts — Modern Languages Freshman year English 100, 133, 134 or 200	
 International Studies The French-in-France Program offers a full academic year of study (45 credits) of French language, culture and civilization in Grenoble, France under the direction of regular faculty. The program is open to all students of the University, with no prerequisites. The German-in-Austria program offers one full academic year of study in Graz, Austria under the direction of regular faculty. There are no language prerequisites and the program is open to all students of the University. 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 in the Ateneo de Manila. The Summer Institute in Rome for advanced Italian 	Sophomore year Major Language 215, 225, 235	
The Summer Institute in Rome for advanced Italian language students. Study and exploration of the culture, civilization, literature and arts of various regions of Italy. Headquarters are in Rome. Reading Programs (sequence of two courses: 105, 106) prepare the student to translate the written text with ac- curacy 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.	Consult Classics adviser or department chairman. Bachelor of Arts in Social Science — Asian Studies Freshman year English 100	

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Sopnomore year
Social Science core option (Ec 100 or 271 and Pls 150 or 160 recommended)10 credits Philosophy core option
Junior year Full academic year at Sophia University or Ateneo de Manila-Japanese 291, 292, 293 (including internship)
Senior year 5 courses in the discipline of concen- tration selected from the 300 and 400 level

Modern Language Courses

rrench	Courses	
Fr 105 Fr 106	Reading French Reading French An intensive two-course program French for reading and translation comprehension. The two-course at an accelerated pace, the matter in the traditional three-course sequ competency attained in 106 is con lent to that of the former 103.	with accuracy and sequence covers, generally studied uence. The level of
All the fo	llowing courses except Fr 390 are	taught in French.

Fr 115	French Language I	5 credits	1407
Fr 125	French Language II	5 credits	Gr
Fr 135	French Language III	5 credits	-
Fr 215	French Language IV	5 credits	Gr
Fr 225	French Language V	5 credits	Gr
Fr 235	French Language VI	5 credits	-
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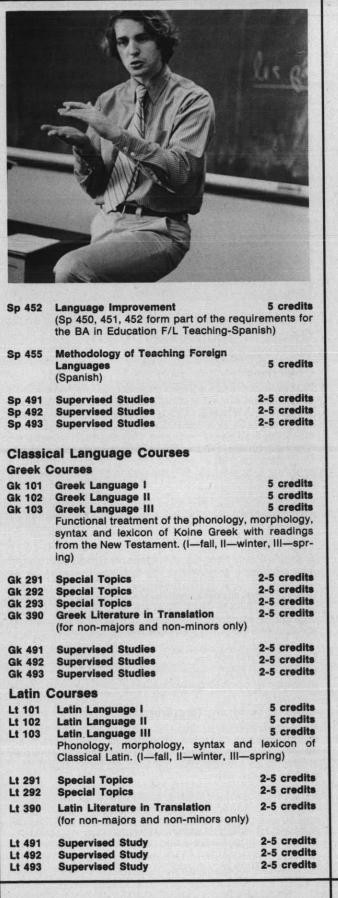
Fr 291	Special Topics	2-5 credits
Fr 292	Special Topics	2-5 credits
Fr 293	Special Topics	2-5 credits
Fr 315	French Culture, Civilization,	
	History and Geography	5 credits
Fr 325	Introduction to French Literature	5 credits
Fr 390	French Literature in Translation (for non-majors and non-minors only)	2-5 credits
Fr 415	XIXth Century, Literary Movements	5 credits
Fr 425	XVIIth 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 re	quirements
	for the BA in Education - F/L teaching	(French).
Fr 455	Methodology of Teaching Foreign	
FI 400	Languages (French)	2-5 credits
Fr 460	Theories, Techniques and Practice	2-5 creaks
FI 400	of teaching the French Language	5 oredite
Fr 461	Theories, Techniques and Practice	5 credits
FI 401	of Teaching French Culture	
	and Civilization	
Fr 462		5 credits
FF 402	Teaching Internship	5 credits
	These three courses form part of th	
		h-in-France
	Program.	
Fr 465	Comparative Methods, Techniques and	
	Performance Objectives of Foreign	
	Language Teaching	3 credits
	Language reaching	3 credits
Fr 491	Supervised Studies	2-5 credits
Fr 492	Supervised Studies	2-5 credits
Fr 493	Supervised Studies	2-5 credits
	esperante entrante	L-0 oround

German Courses

Gr 105	Reading German	5 credits
Gr 106	Reading German	5 credits
	An intensive two-course program of stu	dy of written
	German for reading and translation w	
	and comprehension.	
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	German Culture, Civilization,	
	History and Geography	5 credits
Gr 325	Introduction to German Literature	5 credits
Gr 390	German Literature in Translation	2-5 credits
	(for non-majors and non-minors only)	
Gr 415	Contemporary German Literature	5 credits
	(Short stories-plays)	
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

ARTS AND SCIENCES Foreign Languages

Gr 440	German Classicism and Romanticism	A CONTRACTOR OF A PARTY OF A PART	
Gr 445	Contemporary German Literature (Prose)	5 credits	
Gr 455	Methodology of Teaching Foreign	2-5 credits	and Kut
	Languages (German)		
Gr 491 Gr 492	Supervised Studies 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	
lt 103	Reading Italian III	5 credits	
	Intensive study of written Italian for r translation with accuracy and comprehe		
lt 291	Special Topics	1-5 credits	8
It 292	Special Topics	1-5 credits	
lt 293	Special Topics	1-5 credits	1
Japane	se Courses		s
Ja 115	Japanese Language I	5 credits	
Ja 125 Ja 135	Japanese Language II Japanese Language III	5 credits 5 credits	
Ja 135	Japanese Language IV	5 credits	s
Ja 225	Japanese Language V	5 credits	
Ja 235	Japanese Language VI	5 credits	
Ja 291	Special Topics	1-5 credits	s
Ja 292 Ja 293	Special Topics Special Topics	1-5 credits	9
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Spanis	h Courses		1111
Spanis Sp 105	h Courses Reading Spanish	5 credits	G
Sp 105	Reading Spanish Reading Spanish	5 credits	G
Sp 105	Reading Spanish	5 credits dy of written	0 0 0
Sp 105 Sp 106	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi	5 credits dy of written ith accuracy	000
Sp 105 Sp 106 All the fo	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Ilowing courses except Sp 390 are taught Spanish Language I	5 credits dy of written ith accuracy t in Spanish. 5 credits	0000
Sp 105 Sp 106 All the fo Sp 115 Sp 125	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Nowing courses except Sp 390 are taugh Spanish Language I Spanish Language II	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits	0000
All the fo Sp 115 Sp 125 Sp 135	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Nowing courses except Sp 390 are taugh Spanish Language I Spanish Language II Spanish Language III	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits	0000
All the fo Sp 105 All the fo Sp 115 Sp 125 Sp 135 Sp 215	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Nowing courses except Sp 390 are taugh Spanish Language I Spanish Language II Spanish Language III Spanish Language IV	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits	0000
All the fo Sp 115 Sp 125 Sp 135	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Nowing courses except Sp 390 are taugh Spanish Language I Spanish Language II Spanish Language III	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits	0000
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 225 Sp 235 Sp 291	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Iowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Language V Spanish Language VI Spacial Topics	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits	0000
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 225 Sp 235 Sp 291 Sp 292	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Iowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Language V Spanish Language VI Special Topics	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits	0000
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 225 Sp 235 Sp 291 Sp 292 Sp 293	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Iowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Language V Spanish Language VI Special Topics Special Topics	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits	0000
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 225 Sp 235 Sp 291 Sp 292	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Nowing courses except Sp 390 are taugh Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Language S Special Topics Special Topics Spanish Culture, Civilization,	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits	
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 225 Sp 235 Sp 291 Sp 292 Sp 293	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Nowing courses except Sp 390 are taugh Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Literature	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 5 credits	
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 125 Sp 215 Sp 225 Sp 235 Sp 291 Sp 292 Sp 293 Sp 315	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Iowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Language V Spanish Language V Spanish Language V Spanish Language VI Special Topics Special Topics Special Topics Spanish Culture, Civilization, History and Geography Introduction to Spanish Literature Spanish Literature in Translation	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 5 credits	
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 235 Sp 235 Sp 291 Sp 292 Sp 293 Sp 315 Sp 325	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Nowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Literature, Civilization, History and Geography Introduction to Spanish Literature Spanish Literature in Translation (for non-majors and non-minors only)	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 5 credits	
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 235 Sp 235 Sp 291 Sp 292 Sp 293 Sp 315 Sp 325	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Iowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Language V Spanish Language V Spanish Language V Spanish Language VI Special Topics Special Topics Special Topics Spanish Culture, Civilization, History and Geography Introduction to Spanish Literature Spanish Literature in Translation	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 5 credits	
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 125 Sp 215 Sp 225 Sp 235 Sp 291 Sp 292 Sp 293 Sp 315 Sp 325 Sp 390 Sp 415 Sp 425	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Nowing courses except Sp 390 are taugh Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Language V Spanish Language V Spanish Language VI Special Topics Special Topics Special Topics Special Topics Spanish Culture, Civilization, History and Geography Introduction to Spanish Literature Spanish Literature in Translation (for non-majors and non-minors only) XIXth Century. The Romanticism The Generation of 1898 — Essays and Poetry	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 5 credits 2-5 credits 5 credits	
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 125 Sp 215 Sp 225 Sp 235 Sp 235 Sp 291 Sp 292 Sp 293 Sp 315 Sp 325 Sp 390 Sp 415 Sp 425 Sp 435	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Nowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Language V Spanish Language VI Special Topics Special Topics Special Topics Spanish Culture, Civilization, History and Geography Introduction to Spanish Literature Spanish Literature in Translation (for non-majors and non-minors only) XIXth Century. The Romanticism The Generation of 1898 — Essays and Poetry Early 20th Century Literature	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 5 credits	
Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 235 Sp 235 Sp 291 Sp 292 Sp 293 Sp 315 Sp 325 Sp 390 Sp 415 Sp 425 Sp 435 Sp 440	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Iowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language IV Spanish Language V Spanish Language V Spanish Language VI Special Topics Special Topics Special Topics Special Topics Spanish Culture, Civilization, History and Geography Introduction to Spanish Literature Spanish Literature in Translation (for non-majors and non-minors only) XIXth Century. The Romanticism The Generation of 1898 — Essays and Poetry Early 20th Century Literature Contemporary Spanish Theatre	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 5 credits 2-5 credits 5 credits	
All the fo Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 235 Sp 235 Sp 291 Sp 292 Sp 293 Sp 315 Sp 325 Sp 390 Sp 415 Sp 425 Sp 435	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Ilowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language III Spanish Language IV Spanish Language V Spanish Literature, Civilization, History and Geography Introduction to Spanish Literature Spanish Literature in Translation (for non-majors and non-minors only) XIXth Century. The Romanticism The Generation of 1898 — Essays and Poetry Early 20th Century Literature Contemporary Spanish Theatre Contemporary Spanish American	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 5 credits	
Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 235 Sp 235 Sp 291 Sp 292 Sp 293 Sp 315 Sp 325 Sp 390 Sp 415 Sp 425 Sp 435 Sp 440	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Iowing courses except Sp 390 are taught Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language IV Spanish Language V Spanish Language V Spanish Language VI Special Topics Special Topics Special Topics Special Topics Spanish Culture, Civilization, History and Geography Introduction to Spanish Literature Spanish Literature in Translation (for non-majors and non-minors only) XIXth Century. The Romanticism The Generation of 1898 — Essays and Poetry Early 20th Century Literature Contemporary Spanish Theatre	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 2-5 credits 2-5 credits 2-5 credits 5 credits	
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Sp 105 Sp 106 All the fo Sp 115 Sp 125 Sp 135 Sp 215 Sp 235 Sp 235 Sp 291 Sp 292 Sp 293 Sp 315 Sp 325 Sp 325 Sp 325 Sp 390 Sp 415 Sp 425 Sp 435 Sp 440 Sp 445	Reading Spanish Reading Spanish An intensive two-course program of stu Spanish for reading and translation wi and comprehension. Ilowing courses except Sp 390 are taught Spanish Language I Spanish Language I Spanish Language II Spanish Language III Spanish Language IV Spanish Language V Spanish Literature, Civilization, History and Geography Introduction to Spanish Literature Spanish Literature in Translation (for non-majors and non-minors only) XIXth Century. The Romanticism The Generation of 1898 — Essays and Poetry Early 20th Century Literature Contemporary Spanish Theatre Contemporary Spanish American Literature Methodology of Teaching the	5 credits dy of written ith accuracy t in Spanish. 5 credits 5 credits 5 credits 2-5 credits 2-5 credits 2-5 credits 2-5 credits 2-5 credits 2-5 credits 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 indepth 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 Humanities Bachelor of Arts in Social Science

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 COMBINA-TION IS THE RESPONSIBILITY OF THE STUDENTS IN CONSULTATION WITH THE PROGRAM DIRECTOR OR AN ASSIGNED ACADEMIC ADVISER.



History

Robert D. Saltvig, Ph.D., Chairman

Professors:

William N. Bischoff, S.J. (Visiting) Joseph P. Donovan, S.J. Thomas E. Downey (Emeritus)

Associate Professors:

C. Robert Harmon Warren B. Johnson Albert B. Mann James E. Parry Robert D. Saltvig

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.

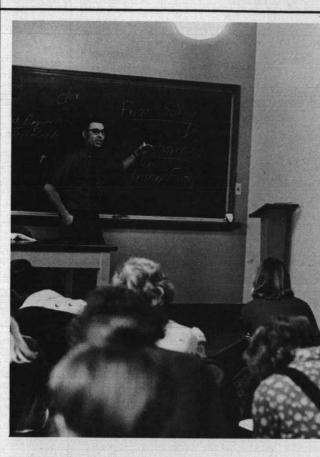
Degrees offered

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		Napoleonic world. III. Western man through the 19th and 20th centuries.
Bachelor of Arts - 60 credits including Hs 101, 102,		and zour contailes.
103, 200, 400 and 499. Of the remaining 30	Hs 200	Methodology 5 credits
credits, a combination of three 300-numbered		Techniques of historical research, criticism and
courses and two 400-numbered courses is to be		writing. Prerequisites: Hs 101, 102, 103
taken in a general area (Western Europe, United	の時間に言い	
States, Latin America or Russia-China-Japan)	Hs 231	Survey of the United States 5 credits
recommended by the student's adviser. Ten credits of language or their equivalent are re-		Events, movements and institutions of American
quired (may be taken in junior year). Further	1.16 2.5 30	history from the era of discovery and colonization to
study in the same language or a second language	THE AVERAGE	the present.
is recommended for students contemplating	Hs 251	Survey of Latin America 5 credits
graduate school.		Events, movements and institutions of Latin
ndergraduate Minor - 35 credits of history of which		American history from the era of discovery and
Hs 101, 102 and 103 are required.		colonization to the present.
113 101, 102 and 100 are required.	H- 074	Survey of Russian History 5 credits
aching Major (School of Education) EE credits of	Hs 271	Survey of Russian History 5 credits An introduction to the history and culture of Russia
eaching Major (School of Education) — 55 credits of history including Hs 101, 102, 103, 231, 300, 341		and the Soviet Union.
(or Ed 420 for those preparing for elementary		
teaching) and five 300 numbered courses.	Hs 281	Survey of the Far East since 1900 5 credits
		Domestic and international development of China,
laster of Arts – 45 credits of history including Hs 500,		Japan and the states of Southeast Asia.
501 and seven field courses. Of the latter 15		
credits are to be taken in a special area (Western	Hs 291	Special Topics 1-5 credits
Europe, United States, Latin America, and up to 20 credits may be taken from undergraduate	Hs 292	Special Topics 1-5 credits
courses numbered 405-498. In place of two of the	Hs 293	Special Topics 1-5 credits
400-numbered courses a student may substitute		
a thesis, but he must register for Hs 599 the	Hs 300	Teaching of History 5 credits
quarter in which he completes his work. A reading		Techniques of instruction in historical awareness
knowledge of a foreign language is required and	G. Contraction	and in basic historical content for the secondary
an examination will be conducted before comple-		level of education. Limited to history majors and minors in the School of Education.
tion of one-half of the program. A final com-		minors in the school of Education.
prehensive examination, written and oral, cover- ing all fields taken, but with emphasis on the	Hs 304	Europe of the Early Middle Ages 5 credits
special area, will be required.		European origins of Western civilization from
		Constantine to Charlemagne. Prerequisite: Hs 101.
achelor of Arts		Europe of the 11th and
eshman year	Hs 305	Europe of the 11th and 12th Centuries 5 credits
nglish 100 and core option10 credits		Cultural, social and political institutions of Europe
istory 101, 102, 103 15 credits hilosophy 110 5 credits		from the Ottonian Renaissance through the 12th
lectives		century Renaissance. Prerequisite: Hs 102.
Sophomore year	Hs 306	Europe of the High Middle Ages 5 credits Analysis of the cultural, social and political in-
listory 200 and electives		stitutions of 13th century Europe. Prerequisite: Hs
hilosophy 220 and core option		102.
heology core option		
	Hs 307	Europe of the Renaissance 5 credits
lunior year	POSK (102)	Movements and institutions from Italy to the rest of
History electives	Carles 1	Europe; from the 14th through the early 16th cen-
Mathematics/Science core options	1.1.1.1.1.1.1.	turies. Prerequisite: Hs 102.
Social Science core option 5 credits	Hs 309	Europe of the 16th Century 5 credits
Theology core option	118 309	The Protestant and Catholic Reformation. Prere-
		quisite: Hs 102.
Senior year	Fight Land	
Modern Language10 credits	Hs 310	Europe of the 17th Century 5 credits
History 400, 499 and elective		The Scientific Revolution, baroque synthesis and
Social Science core option	Self.	European state system to Utrecht. Prerequisite: Hs
		102.
Total 180 credits	Hs 311	Europe of the 18th Century 5 credits
		Cultural and political ferment of Western civilization
History Courses	and the second	in the century from Utrecht to Waterloo. Prere-
Hs 101 Western Culture I 5 credits	STR. S.	quisite: Hs 102.
Hs 102 Western Culture II 5 credits		Europe of the 19th Contumy E condition
	Hs 313	Europe of the 19th Century 5 credits
Hs 103 Western Culture III 5 credits	110 010	The are of revolutione in ideas and society from the
Hs 103 Western Culture III 5 credits I. Topical studies in the civilizations of Western man	1.5 010	The era of revolutions, in ideas and society, from the Nanoleonic wars to the beginning of World War I.
Hs 103 Western Culture III 5 credits	1.5 010	The era of revolutions, in ideas and society, from the Napoleonic wars to the beginning of World War I. Prerequisite: Hs 103.

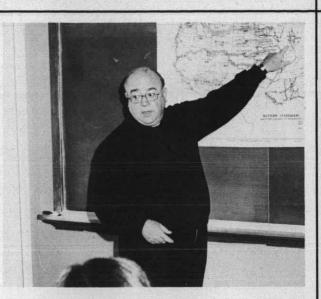


Hs 315		5 credits
	Contemporary movements and ins	titutions in the
	home base of Western civilization, th	rough war and
	peace. Prerequisite: Hs 103.	

- 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 5 credits of the Union The United States from the era of Jackson through the Civil War and Reconstruction.
- Hs 337 The United States Expansion 5 credits and World Power 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.

AM SOUTH 1-	
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 Hs 348	Afro-American History I 5 credits 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 pre- sent.
Hs 353	Brazil 5 credits Development, under Portuguese and other in- fluences, of the Brazilian nationality and culture to the present.
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, Equador and Colombia from the Spanish Conquest to the present.
Hs 362	Tudor England5 creditsRule of the Tudor monarchs from Henry VII throughElizabeth I and the English Reformation. Prere- quisite: 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 Britain5 creditsHistory of the great island kingdom, from the 18ththrough the 20th centuries. Prerequisite: Hs 103.
Hs 372	Early Russia5 creditsOrigins and development of Russia from the Kievanperiod through the era of Peter the Great.
Hs 373	Modern Russia5 creditsHistory and culture of the Russian people in 19th and20th centuries. Prerequisite: Hs 103.
Hs 381	Chinese Civilization 5 credits The development of Chinese culture, thought and in- stitutions 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 Japan5 creditsThe transformation of Japan from Feudalism to Imperial power and industrial giant, 1867 to present.

ARTS AND SCIENCES 57 History



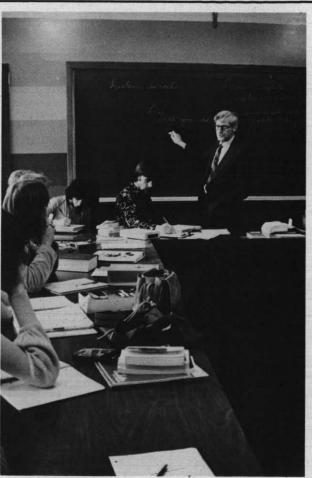
Hs 391 Hs 392 Hs 393	Special Topics Special Topics Special Topics Private work by arrangement with department chairman.	1-5 credits 1-5 credits 1-5 credits approval of	Hs 434	Amer Event tic se War Confe
Hs 400	Historiography Historical study and writing and the history from the earliest times to Prerequisite: Hs 200.		Hs 435	Amer Politi Amer
Hs 404	Studies in the Early Middle Ages Prerequisite: Hs 304.	5 credits	Hs 437	The I An A Prere
Hs 405	The 12th Century Renaissance Prerequisite: Hs 305.	5 credits	Hs 451	Pre-C Maya seque
Hs 406	Studies in the Europe of the High Middle Ages Prerequisite: Hs 306.	5 credits	Hs 453	or 35
Hs 411	France: Ancien Regime Studies in the institutions and events preluding the fall of old France. Prerect			Vario religi 359.
Hs 412	The French Revolution and Napoleon Studies in the institutions and events preluding the fall of old France. Prerect	n 5 credits of the century	Hs 462	Engli Analy the K Settle
Hs 414	Modern Germany Studies in German history and culture Adenauer. Prerequisite: Hs 313 or 31		Hs 464	Purita Crise Prere
Hs 415	Modern Christian Culture Reading in interpretive and secondar vestigating the relationship of Chris and 20th Century Western culture.		Hs 481	Mode Prob natio cums revol
Hs 431	The Westward Movement American frontier history from colon end of the 19th Century. Prerequisite:			done
Hs 432 Hs 433	American Diplomacy I American Diplomacy II I. Diplomatic history of the United Independence through the 19th	d States from Century. II.	Hs 491 Hs 492 Hs 493	Spec Spec
	Diplomatic history of the United Sta 20th Century. Prerequisites: Hs 231 o 432; 231 or 337 or 339 for 433.		Hs 494 Hs 495 Hs 496	Sem Sem
and the second				



434	American Revolution and Confederation 5 credits
	Events and interpretations in the history of the Atlan-
	tic seaboard provinces from the end of the Great
	War for Empire through Independence and the
	Confederated United States. Prerequisite: Hs 331.

- Is 435 American Civil War and Reconstruction 5 credits Political, social and economic aspects of the American Civil War and Reconstruction.
 - 437 The Progressive Movement 5 credits An American political and social phenomenon. Prerequisite: Hs 337.
 - 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.
- 5 453 Colonial Institutions in Latin America 5 credits Various aspects, political, social, economic and religious. Prerequisite: Hs 351 or 353 or 355, 357 or 359.
- 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.
- 464 Puritans and Parliament Men 5 credits Crises of the 17th Century English church and state. Prerequisite: Hs 363.
- 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

58	ARTS AND SCIENCES Honors	
Hs 497 Hs 498	Independent Study 1-5 credits Independent Study 1-5 credits Private studies by arrangement with approval o department chairman. Prerequisite: Completion o 300-series courses in related areas.	
Hs 499	Senior Seminar 5 credits Specially directed projects in research and com- position. Limited to seniors in Arts and Sciences Prerequisites: Hs 200 and at least one course in the 400 series.	
	ate Courses	
Hs 500	Historical Methodology 5 credit	
Hs 501	Historiography 5 credit: Analysis of the ideas and techniques of selected major historians, from Herodotus to contemporary writers.	
Hs 505	Medieval History 5 credite Studies in Medieval history and culture.	
Hs 507	Renaissance and Reformation5 creditsStudies in the cultural and religious history ofEurope from the 14th through the 17th centuries.	
Hs 512	Early Modern Europe 5 credits From the Renaissance through the Enlightenment.	
Hs 513	Revolutionary Europe5 creditsStudies 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.	H Ro
Hs 534	United States — 20th Century Domestic 5 credits The contemporary nation from Wilson through John- son.	
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 westward movement.	0 T
Hs 551	Latin America — Colonial 5 credits Spanish and Portuguese colonies to the Revolution.	to
Hs 552	Latin America — National 5 credits The 19th and 20th centuries.	ni th
Hs 553	Mexico 5 credits Topics in Mexican history from the Spanish ex- plorations to the present.	
Hs 554	Brazil 5 credits Topics in Brazilian history from the Portuguese ex- plorers to the present.	du In or
Hs 598	Special Topics 1-5 credits	0.0
Hs 599	Thesis 5 credits	m



Honors Program Rosaleen Trainor, CSJ, Ph.D., Director

Associate Professor: Sr. Rosaleen Trainor, CSJ

Objectives

The Honors Program is a two-year program designed to develop 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 times. The various disciplines, literature, thought, history, fine arts 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 dialogue 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.

ARTS AND SCIENCES 59 Honors

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.

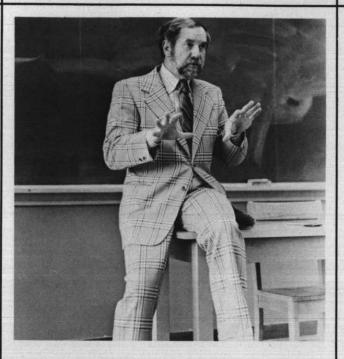
Program Requirements

When accepted in the Program, students complete each of the course sequences numbered Hu 101 through 243. Completion of the Honors Program satisfies University core requirements in philosophy, science, English, history and theology. En 220 and PI 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 Hu 202 Hu 103	Humanities Seminar - Thought Humanities Seminar - Thought Humanities Seminar - Thought Three quarters of critical reading and the works which have most deeply development of the Western world, in Testament, Pre-Socratics, Plato, Aris New Testament, St. Augustine, St. T	d discussion of influenced the cluding the Old totle, Epictetus,
Hu 111 Hu 112 Hu 113	Humanities Seminar - Literature Humanities Seminar - Literature Humanities Seminar - Literature Critical examination of those literar have most deeply influenced the devo Western world, including the dramat Old Testament, Homer and the wrights, Virgil, St. Paul, St. Augustine, of Roland, Dante and Chaucer.	y works which elopment of the ic books of the Greek play-
Hu 121 Hu 122 Hu 123	Humanities Seminar - History Humanities Seminar - History Humanities Seminar - History Historical survey designed to furnis discipline for humanities-thought ar literature, covering Hebrew, Greek Medieval Christian history.	nd humanities-
Hu 131 Hu 133	Humanities Seminar - Science Humanities Seminar - Science The history and nature of the physic	2 credits 2 credits al sciences.
Hu 142	Humanities Seminar - Art Synoptic view of art history; period styles; principles and implication of d	
Hu 191* Hu 192*	Interdisciplinary Seminar Interdisciplinary Seminar	5-10 credits 5-10 credits
Hu 201 Hu 202 Hu 203	Humanities Seminar - Thought Humanities Seminar - Thought Humanities Seminar - Thought Three quarters of critical reading and cluding Descartes, Bacon, Hobbes, L Leibniz, Rousseau, Hume, Kant, He Nietzsche, Marx and the Existentialists	4 credits 5 credits discussion, in- ocke, Spinoza, egel, J.S. Mill,



Hu 211 Hu 212 Hu 213	Humanities Seminar - Literature Humanities Seminar - Literature Humanities Seminar - Literature Shakespeare, Donne, Moliere, Milto Goethe, the Romantics, Victorians, F and modern plays through the Exis	Russian novelists
Hu 221 Hu 222 Hu 223	Humanities Seminar - History Humanities Seminar - History Humanities Seminar - History The Reformation to the present.	4 credits 4 credits 4 credits
Hu 231 Hu 232	Humanities Seminar - Science Humanities Seminar - Science A study of some contemporary prot sical sciences.	3 credits 3 credits blems in the phy-
Hu 243	Humanities Seminar - Music Synoptic view of music history with historical and cultural correlations.	
Hu 291 Hu 292 Hu 293	Special Topics Special Topics Special Topics	1-5 credits 1-5 credits 1-5 credits
Hu 398	Humanities Special Topics Private work by arrangement. Prere of program director.	1-5 credits quisite: Approval
Hu 499	Humanities Senior Seminar Reading and discussion of major sy in the humanities on selected topi Approval of instructor.	
* Not an	Honors Program course	



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

Associate Professor: John R. Talevich

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 a free 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, as a staff member of a student publication or in internships.

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); 10 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, 407, 488 and 490.

Journalism/Fine Arts Interdisciplinary Program—60 credits which must include Jr 100, 200, 210, 250, 330, 430 and 10 credits chosen from Jr 350, 370 or internship; and 20 credits of fine arts courses chosen in consultation with the adviser. Students in this program must also take the 10 credits of language/fine arts required by the department in the fine arts area.

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 History 101, 102 or 102, 103 Journalism 100 Philosophy 110, 220 Social Science core options	10 credits 5 credits 10 credits
Sophomore year	
Journalism 200, 210, 250 Modern Language, Fine Arts or	
Speech/Drama options	.10 credits
Philosophy core option	. 5 credits
Social Science option	. 5 credits
Theology core options	10 credits
Junior year	
English 200/300 options History 331 or 333 or 335 or 337 or 339	.10 credits
or 247 or 248 or approved substitutes	10 orodite

or 347 or 348 or approved substitutes 10 cred	its
Journalism 330 and 300/400 options15 cred	
Electives10 cred	
Conjer ver	

senior year

Journalism 300/400 options15	credits
Mathematics/Science core options10	credits
Electives	credits

Total . . . 180 credits

ARTS AND SCIENCES 61 Journalism

Journalism Courses

Introduction to Journalism

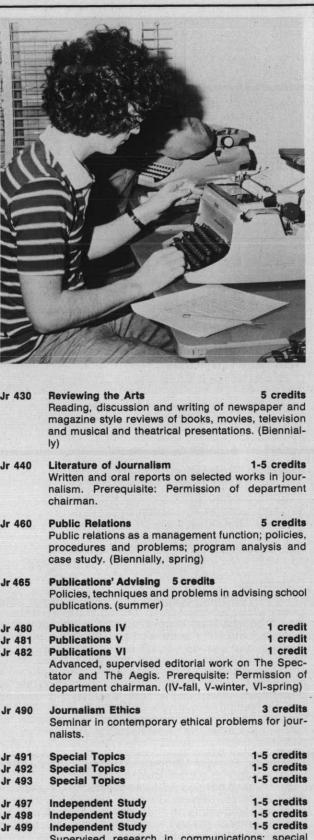
Review of grammar for journalists. Introduction to

Jr 100

journalistic style. Study of contemporary media content. Jr 200 Mass Communication and Society 5 credits Historical press concepts; nature and functions of the mass media; social, political and economic roles; principles governing journalistic communication; role of the news consumer. (fall) **5 credits** Jr 210 Newswriting Elements of the news story; practice in gathering data for and writing news stories. Prerequisite: Jr 100 Jr 250 Newsediting 5 credits Copy and proof editing procedures; headline writing, layout and makeup of the newspaper; photographic editing techniques. Jr 291 **Special Topics** 1-5 credits 1-5 credits Jr 292 **Special Topics Special Topics** 1-5 credits Jr 293 **5 credits** Jr 310 **Reporting Public Affairs** Study of and practice in gathering and writing complex news stories based upon activities of government, judicial and community agencies. Prere-Jr 430 quisite: Jr 210. (Biennially, fall) 2 credits Jr 320 Photojournalism I ly) Jr 321 Photojournalism II 2 credits Elementary principles of newsphotography, Jr 440 processing and picture editing. Photography for student publications. Prerequisite: Permission of department chairman. (Biennially, I-fall, II-winter) 5 credits Jr 460 Jr 330 **History of Journalism** Study of the origins and growth of the American press from colonial to modern times. (Biennially) **3 credits** Jr 345 Law of the Press Constitutional guarantees and restrictions on Jr 465 freedom of information, with a study of significant cases; libel, copyright, privacy, postal regulations. (Biennially) Jr 480 **Magazine and Feature Writing** Jr 481 **5** credits Jr 350 Elements of non-fiction articles for newspapers and Jr 482 magazines; actual writing for sale. (Biennially) Jr 355 **Communications Graphics 5 credits** Basic typographic, layout and design concepts. Jr 490 Editing techniques for organizational publications. Planning and purchasing printing. (Biennially, nalists. winter) Jr 370 **Editorial and Opinion Writing 5 credits** Jr 491 Nature, function and structure of persuasive writing; Jr 492 Jr 493 analysis of media editorials; practice in editorial writing. (Biennially, spring) Jr 497 Jr 498 Jr 380 **Publications I** 1 credit

5 credits

Jr 381 Publications II 1 credit Jr 382 Publications III 1 credit Supervised editorial work on The Spectator and The Aegis. Prerequisite: Permission of department chairman. (I-fall, II-winter, III-spring)



Supervised research in communications; special projects; internships on media and affiliated agencies. For journalism students only. Prerequisite: Permission of department chairman.



Military Science Lt. Colonel Archille O. Bourque, M.B.A., Chairman

Professor: Lt. Col. Archille O. Bourque

Assistant Professors:

Capt. James Griffin Capt. Montie T. Hess Capt. Gordon A. Larson Major Donald S. Ulm

Objectives

The Military Science program is specifically designed to give college men and women training and experience in the art of organizing, motivating and leading others. It includes instruction to develop self-discipline, physical stamina, and bearing-qualities that are an important part of leadership and should contribute to success in any kind of career, military or civilian. The emphasis is on "doing" rather than classroom instruction alone. Department philosophy is that leadership is learned only by leading, and ample opportunity is provided in the Military Science program for the practice of leadership under the supervision of experienced instructors.

The Army Reserve Officer's Training Corps (Army ROTC) program is conducted by the Military Science department to develop college educated officers for the Army and Army Reserve. Through Army ROTC the man or woman who wants an Army career can earn either a Regular Army or Reserve commission as a lieutenant. A student may take Army ROTC by two different methods; by enrolling in Army ROTC as an elective and majoring in some other academic discipline, or by majoring in Military Science.

Degree Offered

Bachelor of Science in Military Science

General Program Requirements

Students in Military Science must satisfy the University core curriculum requirements as given on page 24. Military Science majors must also satisfy requirements for a minor in some other academic discipline.

Programs

Three distinct programs are conducted by the Military Science department: Basic Army ROTC, Advanced Army ROTC, and the Military Science degree program.

Basic Program-The basic course is elective for all physically fit students at the University. The course consists of two hours of classroom instruction per week and three hours of leadership laboratory twice a month for six academic quarters (freshman and sophomore years). Students who are unable to participate in ROTC classes on campus during their first two years of college may satisfy requirements for Basic Army ROTC by attending Army ROTC Basic Camp for six weeks during the summer after their sophomore year.

Advanced Army ROTC—The advanced course is elective for qualified students who have received credit for the two-year basic course or successfully completed basic camp. The course consists of three hours of classroom instruction per week and three hours of leadership laboratory twice a month for six academic quarters (junior and senior years). Advanced course students must also attend Army ROTC Advanced Camp for six weeks during the summer between the junior and senior year. Advanced course students receive \$100 per month allowance for up to 20 months of their junior/senior years. Upon completion of advanced course requirements and graduation from the University, students are commissioned as second lieutenants in the Regular Army or Army Reserve.

Degree Requirements

Bachelor of Science in Military Science-40 credits in military science, successful completion of the Army ROTC advanced course, and completion of requirements for a minor in another academic discipline.

Undergraduate Minor-32 credits in military science which must include successful completion of the Army ROTC advanced course.

Scholarships

Army ROTC scholarships are available to selected students who desire a military career. Expenses for tui-tion, books and fees are paid for one, two, three or four years, and each student receives a \$100 per month allowance for each school year while on scholarship. For more information write the Professor of Military Science, Seattle University.

Bachelor of Science in Military Science Basic Course

Freshman year (MS I)

English core requirement10	credits
History core requirement10	credits
Mathematics/science core requirement10	credits
Military Science 101, 102, 103	credits
Philosophy core requirement5	credits

ARTS AND SCIENCES Military Science

Sophomore year (MS II) Military Science 200, 202, 203	MS 291 Special Topics 1-5 credits MS 292 Special Topics 1-5 credits MS 293 Special Topics 1-5 credits Military Science Advanced Courses
Electives 10 credits	
Advanced Course Junior Year (MS III) Military Science 300, 302, 303, 304	MS 300 Military Topographical Analysis 4 credits Principles of land navigation, orienteering, terrain analysis, map reading and aerial photograph inter- pretation for the small unit leader. Three one-hour conferences per week. (fall)
Electives	MS 302 Tactical Operations 4 credits The role of the company commander and his subor- dinate leaders during tactical operations. Planning and execution of small unit offensive and defense maneuvers. Three one-hour conferences per week. (winter)
Total 180 credits	
Military Science Basic Courses MS 101 Psychology of Leadership 2 credits Psychological basis for the phenomenon of leadership. A study of why groups follow a leader in informal and formal situations. Two one-hour con- ferences per week. (fall, winter, spring)	MS 303 Preparation for Leadership 4 credits Special problems of military leaders. Adjustment to military life. Selected military subjects in preparation for Army ROTC advanced camp. Pre-camp testing and evaluation. Three one-hour conferences per week. (spring)
MS 102 Analysis of Conflict 2 credits Interdisciplinary studies in the uses and abuses of national power. Introduction to the principles of war- fare and application of military force. Team-taught by political science, history and military science departments. Two one-hour conferences per week. (fall, winter, spring)	MS 304 Army ROTC Advanced Camp 4 credits Application of leadership principles and techniques in a military environment. Students perform as leaders in a variety of roles, both administrative and tactical. All students receive pay and travel ex- penses. Conducted for six weeks during June and July at Fort Lewis, Washington. Successful comple- tion of Advanced Camp is required for com-
MS 103 American Military History 2 credits United States military history from the colonial wars to the Vietnam conflict. Emphasis is on military leadership, the principles of war, and development of the military art. Two one-hour conferences per week. (fall, winter, spring)	missioning. Prerequisite: MS 303. (summer) MS 401 The Military Team 4 credits Discussion of command and staff, combined arms, combat support, and service support elements. Concepts of planning, coordination, and decision- making at division, brigade, battalion and company level. Three one-hour conferences per week. (fall)
MS 200Communication Skills Development2 credits Development of oral and written communication skills for the military leader. Methods of military in- struction. Student presentations and writing projects provide practice in communicating thoughts to others. Two one-hour conferences per week. (fall)MS 202Military Organizations2 credits	MS 402 Military Logistics/Military Justice 4 credits Discussion of the responsibilities of the junior officer concerning logistical management of the Army sup- port system. The Uniform Code of Military Justice, its application within Army units, and its importance to military discipline. Three one-hour conferences per
Introduction to the structure of the American Military establishment and branches of the Army. Discussion of equipment and weapons available to combat un- its. Two one-hour conferences per week. (winter)	week. (winter) MS 403 The US Military and World Affairs 4 credits
MS 203 Concepts of Combat Operations 2 credits Principles of offense and defense. Application of the principles of warfare by small unit leaders. Combat formations and battle drill. Two one-hour con- ferences per week. (spring)	The interrelationship of the US with other nations and the role of military and political arms of govern- ment. Responsibilities of the junior officer in Army administrative management. Selected military sub- jects in preparation for commissioned service. Three one-hour conferences per week. (spring)
MS 204 Army ROTC Basic Camp 4 credits Military training at Fort Knox, Kentucky qualifying the student for entry into the Army ROTC advanced course. Subjects include instruction offered on cam- pus in MS 101 thorugh MS 203. Open to students who have completed their Sophomore year and have no prior Army ROTC experience. Students receive pay and travel expenses. Six weeks during June and July. (summer)	MS 404 Flight Instruction Program 4 credits Ground school and 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 a senior in the Military Science program and meet physical require- ments. (fall, winter, spring)



Philosophy

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

Professors:

Engelbert M. Axer, S.J. J. Gerard Bussy, S.J., (Emeritus) Leo B. Kaufmann, S.J. James T. McGuigan, S.J. (Emeritus) James B. Reichmann, S.J.

Associate Professors:

Robert J. Cousineau, S.J. Harry H. Kohls, S.J. Sr. Roberta McMahon, O.P. Michael T. Toulouse, S.J.

Assistant Professors:

J. Patrick Burke Vernon J. Harkins, S.J. Ronald R. Talmage

James W. Riley, S.J.

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.

Degrees 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 of 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 Pl 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: Pl 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 through either 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.

metaphysics and ethics based on Lonergan's "In-

sight" and related writings. Prerequisite: PI 220.

Freshman year English 100 and core option10 credits PI 250 Ethics 5 credits History core option10 credits 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. Sophomore year PI 252 **Business Ethics 5 credits** English elective 5 credits Application of general ethical theory to those problems directly related to the business world; employment practices, wages, advertising, honesty, strikes. Prerequisite: PI 220. Theology core option 5 credits Elective 5 credits PI 255 **Medical Ethics 5 credits** Junior year Application of general ethical theory to basic problems encountered in the medical profession; fees, professional secrecy, rights of patients, abor-tion, transplants, drugs. Prerequisite: Pl 220. PI 260 Logic I **5 credits** Systematic treatment of traditional logic. The themes Senior year of communication and language, division and defini-Fine Arts sequence10 credits tion, propositions, syllogisms and the nature of science will be examined. PI 261 Logic II **5 credits** Introduction to symbolic or mathematical logic from both an intuitive and formal standpoint. Elementary Total 180 credits calculus of classes and relations and introduction to axiomatic set theory and Boolean algebra. Prerequisite: PI 220. **Philosophy Courses** PI 280 **19th Century Philosophy 5 credits Philosophical Problems:** Readings from source material of the 19th Century philosophers. Investigation of central topics, World **5 credits** A combined historical and problematic approach to problems and teachings of selected authors from Hegel to Nietzsche. Prerequisite: PI 220. the nature of philosophical inquiry. An introduction to fundamental philosophical problems of being, PI 285 20th Century Philosophy language, logic, knowledge, reality, human exist-The Analytic Tradition 5 credits ence and God. Readings from source material from 20th Century analytic philosophers. Investigation of contemporary Introduction to Ancient Greek Philosophy schools of logical positivism and linguistic analysis **5 credits** from Russell to Wittgenstein. Prerequisite: PI 220. Readings from source material of the philosophy of the ancient Greeks. Investigation of the topics, prob-PI 290 20th Century Philosophy lems and doctrines of the pre-Socratics, Plato and The Speculative Tradition 5 credits Aristotle. Readings from source material of 20th Century process philosophers from Bergson to Whitehead Introduction to Medieval Philosophy 5 credits and of the phenomenological tradition from Husserl Synthesis of medieval philosophy in its historical perspective with a particular examination of the themes of Arabic, Scholastic and Nominalist to Sartre. Prerequisite: PI 220. PI 291 **Special Topics** metaphysics. 1-5 credits PI 292 **Special Topics** 1-5 credits PI 293 1-5 credits Introduction to Modern Philosophy **Special Topics 5 credits** Prerequisite: PI 220 Readings from source material of the modern philosophers. Investigation of topics, problems and PI 295 Contemporary Philosophical Problems 5 credits doctrines of selected authors from Descartes to Indepth study of one or more contemporary Kant. philosophical problems such as: language and Philosophical Problems - Man meaning; knowledge and reality; body-mind free-5 credits dom and responsibility; God and evil; atheism. Systematic study of man, his nature and his powers. Special emphasis on the human knowing process PI 300 **Philosophy of Nature** and the problems of human freedom and personal 5 credits responsibility. Prerequisite: PI 110. Philosophical appraisal of the material universe, its nature, causes and activities, incorporating the mathematical and experimental findings into the phil-**Cognitional Analysis 5 credits** Study of the dynamics of man's cognitional structure osophical account of the cosmos. Prerequisite: PI and of the implications of this dynamism for 220.

Bachelor of Arts

PI 110

PI 125

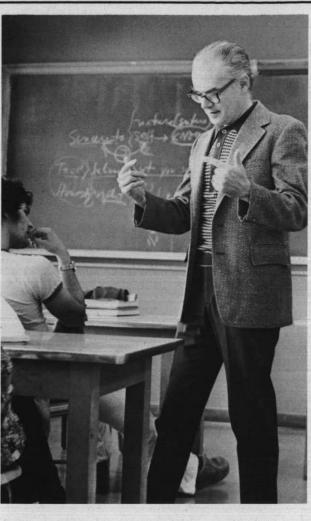
PI 150

PI 175

PI 220

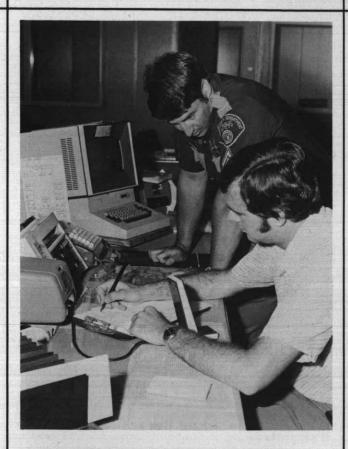
PI 230

PI 303	Philosophy of Science 5 credits Philosophical reflections on the historical develop- ment of the scientific view of the cosmos. Readings
	from significant sources. Prerequisite: PI 220.
PI 305	Philosophy of Science — The Behavioral Science 5 credits Study of the philosophical implications and presup- positions of the methodology and conceptual framework of the behavioral sciences; special emphasis on behavioral psychology and statistical analysis. Prerequisite: Pl 220.
9 307	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 philosphers such as Hare, Stevenson and Fletcher. Prerequisite: PI 220.
PI 312	Contemporary Social Ethics5 creditsMoral problems facing urbanized man in his con- temporary setting. Prerequisite: PI 220.
ข 315	Value Theory5 creditsSurvey and critique of various theories of value, in- cluding representatives of naturalism, utilitarianism, analysis, existentialism, formalism, moral sense. Prerequisite: PI 220.
9 325	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: Pl 220.
PI 335	The Philosophy of History 5 credits Study of the aim and scope of history; the meaning of historical explanation and the criteria for historical truth. 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 presup- positions of the historical phenomenon of racial con- flict viewed as a derivative of cultural alienation. Prerequisite: PI 220.
PI 340	Plato 5 credits Selected readings from Plato's "Dialogues." Prere- quisite: Pl 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: Pl 220.



PI 390	Plotinus 5 credits
	Selected readings from Plotinus' "Enneads." Prerequisite: Pl 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 leading Arab and Jewish philosophers. Prerequisite: PI 220.
PI 420	St. Thomas Aquinas5 creditsSelected readings from the writings of St. ThomasAquinas. Prerequisite: PI 220.
PI 440	Renaissance Philosophy5 creditsSurvey of readings from important Renaissancephilosophers and Humanists such as Nicholas ofCusa, Machiavelli, Erasmus, Thomas More, Ficino,Pomponazzi, Bruno. Prerequisite: Pl 220.
PI 450	Descartes 5 credits Consideration of his principal writings, discussion of clear and distinct ideas, the methodic doubt, the ex- istence and attributes of God, the nature of the material world, the mind-body problem. Prere- quisite: PI 220.

			Philo	osophy
PI 455	British Empiricism of the	PI 488	Early Existentialism	5 credits
	Seventeenth Century 5 credits Study of British Empiricism with special emphasis on Locke, Berkeley and Hume. Prerequisite: PI 220.		Philosophies of Kierkegaard, Dostoevsky, with emphasis on th trends. Prerequisite: PI 220.	
1 456	17th Century Rationalism5 creditsPhilosophical systems of Spinoza and Leibnitz.Prerequisite: Pl 220.	PI 489	Existentialism Selected readings from contempor figures including Sartre, Heidegge Camus, Jaspers, Marcel and Tillich.	er, de Beauvoir,
460	Kant 5 credits Seminar in "The Critique of Pure Reason" with a brief supplementary discussion of the moral		220.	. Fielequisite. Fi
	rationalism of Emmanuel Kant. Prerequisite: PI 220.	PI 490	Jean-Paul Sartre	5 credits
465	Hegel 5 credits Philosophy of Hegel with emphasis on "The Phenomenology of Spirit" and "The Philosophy of History." Prerequisite: PI 220.		Analysis of Sartre's phenomenolog "Being and Nothingness" and its co istential phenomenology. Prerequis	ontribution to ex-
		PI 491	Special Topics in Philosophy	1-5 credits
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 492 PI 493	Special Topics in Philosophy Special Topics in Philosophy	1-5 credits 1-5 credits
	Construction and Lonin, Frei oquisite. Fr 220.	PI 494	Seminar	5 credits
468	Marx 5 credits	PI 495	Seminar	5 credits
	A study of the historical background, philosophic origins and nature of the dialectical materialism of Karl Marx. Prerequisite: Pi 220.	PI 496	Senior Seminar Specially directed projects in rese seniors in Arts and Sciences. Prei and at least two other courses in the	requisite: PI 220
470	Philosophy of Society 5 credits		and at least two other courses in the	500/400 series.
	Consideration of the social nature of man, purpose of society, social groups, the common good, sub- sidiarity, pluralism and authority. Prerequisite: Pl	PI 497 PI 498	Independent Study Independent Study	1-5 credits 1-5 credits
	220.	PI 499	Thesis Original philosophical investigation	1-5 credits
475	Linguistic Analysis 5 credits Representative readings from among Wittgenstein, Ayer, Ryle, Austin, Strawson, Hampshire, Hare.		tion of a faculty member appointed of the department. Prerequisite: Pl	by the chairman
	Prerequisite: PI 220.			
478				
478	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process	Gradu	ate Courses	
478	Prerequisite: PI 220. Process Philosophy 5 credits	Gradu PI 510	ate Courses Plato	5 credits
478	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de	PI 510 PI 520	Plato Aristotle	5 credits
	Prerequisite: PI 220.Process Philosophy5 creditsSelected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.American Philosophy5 credits	PI 510 PI 520 PI 525	Plato Aristotle Epicureans	5 credits 5 credits
	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220. American Philosophy 5 credits Survey of American philosophy with readings from	PI 510 PI 520	Plato Aristotle	5 credits
	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220. American Philosophy 5 credits Survey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas	5 credits 5 credits 5 credits 5 credits 5 credits 5 credits
480	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220. American Philosophy 5 credits Survey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 550	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes	5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits
180	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220. American Philosophy 5 credits Survey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220. Heidegger 5 credits	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas	5 credits 5 credits 5 credits 5 credits 5 credits 5 credits
180	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220. American Philosophy 5 credits Survey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 550 PI 552 PI 554 PI 554 PI 560	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant	5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits
180	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220. American Philosophy 5 credits Survey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220. 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,"	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 550 PI 552 PI 554 PI 560 PI 565	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel	5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits
180	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220. American Philosophy 5 credits Survey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220. Heidegger 5 credits Investigation of his theory of being and its relation to man and to time, especially as seen in "Being and	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 550 PI 552 PI 554 PI 560 PI 565 PI 570	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy	5 credits 5 credits
180	Prerequisite: PI 220.Process Philosophy5 creditsSelected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.American Philosophy5 creditsSurvey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.Heidegger5 creditsInvestigation 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 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 550 PI 552 PI 554 PI 560 PI 565	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy Kierkegaard and Nietzsche Sarte	5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits 5 credits
180 483	Prerequisite: PI 220. Process Philosophy 5 credits Selected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220. American Philosophy 5 credits Survey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220. 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,"	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 550 PI 552 PI 554 PI 560 PI 565 PI 570 PI 580 PI 583 PI 584	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy Kierkegaard and Nietzsche Sarte Merleau-Ponty	5 credits 5 credits
480	Prerequisite: PI 220.Process Philosophy5 creditsSelected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.American Philosophy5 creditsSurvey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.Heidegger5 creditsInvestigation 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.Merleau-Ponty5 creditsHis philosophy as set forth in "The Phenomenology of Perception" and "The Structure of Behavior."	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 552 PI 554 PI 565 PI 565 PI 565 PI 570 PI 580 PI 583 PI 584 PI 585	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy Kierkegaard and Nietzsche Sarte Merleau-Ponty Heidegger	5 credits 5 credits
180	Prerequisite: PI 220.Process Philosophy5 creditsSelected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.American Philosophy5 creditsSurvey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.Heidegger5 creditsInvestigation 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.Merieau-Ponty5 creditsHis philosophy as set forth in "The Phenomenology	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 550 PI 552 PI 554 PI 560 PI 565 PI 570 PI 580 PI 583 PI 584	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy Kierkegaard and Nietzsche Sarte Merleau-Ponty	5 credits 5 credits
480 483 484	Prerequisite: PI 220.Process Philosophy5 creditsSelected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.American Philosophy5 creditsSurvey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.Heidegger5 creditsInvestigation 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.Merleau-Ponty5 creditsHis philosophy as set forth in "The Phenomenology of Perception" and "The Structure of Behavior."	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 552 PI 552 PI 554 PI 560 PI 565 PI 570 PI 583 PI 584 PI 585 PI 585 PI 586 PI 587	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy Kierkegaard and Nietzsche Sarte Merleau-Ponty Heidegger Contemporary Ethical Theory Value Theory	5 credits 5 credits
480 483 484	Prerequisite: PI 220.Process Philosophy5 creditsSelected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.American Philosophy5 creditsSurvey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.Heidegger5 creditsInvestigation 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.Merleau-Ponty5 creditsHis philosophy as set forth in "The Phenomenology of Perception" and "The Structure of Behavior." Prerequisite: PI 220.Paul Ricoeur — Philosophy of Will5 creditsIntroduction into Ricoeur's methodology and	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 550 PI 552 PI 554 PI 560 PI 565 PI 570 PI 583 PI 583 PI 584 PI 585 PI 585	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy Kierkegaard and Nietzsche Sarte Merleau-Ponty Heidegger Contemporary Ethical Theory	5 credits 5 credits
480 483 484	Prerequisite: PI 220.Process Philosophy5 creditsSelected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.American Philosophy5 creditsSurvey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.Heidegger5 creditsInvestigation 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.Merleau-Ponty5 creditsHis philosophy as set forth in "The Phenomenology of Perception" and "The Structure of Behavior." Prerequisite: PI 220.Paul Ricoeur — Philosophy of Will5 credits	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 552 PI 552 PI 554 PI 560 PI 565 PI 565 PI 570 PI 583 PI 584 PI 585 PI 586 PI 587 PI 587 PI 591	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy Kierkegaard and Nietzsche Sarte Merleau-Ponty Heidegger Contemporary Ethical Theory Value Theory Special Topics	5 credits 5 credits
478 480 483 484 485	Prerequisite: PI 220.Process Philosophy5 creditsSelected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.American Philosophy5 creditsSurvey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.Heidegger5 creditsInvestigation 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.Merleau-Ponty5 creditsHis philosophy as set forth in "The Phenomenology of Perception" and "The Structure of Behavior." Prerequisite: PI 220.Paul Ricoeur - Philosophy of Will5 creditsIntroduction into Ricoeur's methodology and phenomenology of will, especially as contained in his "reedom and Nature." Prerequisite: PI 220.	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 552 PI 552 PI 554 PI 560 PI 565 PI 570 PI 583 PI 584 PI 585 PI 585 PI 587 PI 591 PI 592 PI 593 PI 595	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy Kierkegaard and Nietzsche Sarte Merleau-Ponty Heidegger Contemporary Ethical Theory Value Theory Special Topics Special Topics Special Topics	5 credits 5 credits 1-5 credits 1-5 credits
480 483 484	Prerequisite: PI 220.Process Philosophy5 creditsSelected readings from philosophers of process such as Bergson, Dewey, Whitehead and Teilhard de Chardin. Prerequisite: PI 220.American Philosophy5 creditsSurvey of American philosophy with readings from Peirce, James, Royce, Dewey, Santayana and Whitehead. Prerequisite: PI 220.Heidegger5 creditsInvestigation 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.Merleau-Ponty5 creditsHis philosophy as set forth in "The Phenomenology of Perception" and "The Structure of Behavior." Prerequisite: PI 220.Paul Ricoeur — Philosophy of Will5 creditsIntroduction into Ricoeur's methodology and phenomenology of will, especially as contained in his	PI 510 PI 520 PI 525 PI 530 PI 535 PI 540 PI 550 PI 552 PI 554 PI 560 PI 565 PI 570 PI 583 PI 583 PI 584 PI 585 PI 586 PI 587 PI 591 PI 592 PI 593	Plato Aristotle Epicureans St. Augustine Early Medieval St. Thomas Aquinas Descartes British Empiricists 17th Century Rationalism Kant Hegel American Philosophy Kierkegaard and Nietzsche Sarte Merleau-Ponty Heidegger Contemporary Ethical Theory Value Theory Special Topics Special Topics	5 credits 5 credits



Police Science and Administration Herbert M. Kagi, Ph.D., Director

Assistant Professors:

Herbert M. Kagi Michael M. Kelliher

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 Administra-tion 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 option10	credits	
History core option10	credits	
Mathematics-Science core option10	credits	
Police Science and Administration 5	credits	
Philosophy option15	credits	
Theology option10	credits	
Economics10	credits	
Political Science 5	credits	
Sociology 5	credits	
Psychology 5	credits	
Elective 5	credits	

Junior year

Psychology10	credits
Political Science10	credits
Police Science and Administration10	credits
Sociology10	
Elective 5	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 socie- ty. 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 420 The Politics of Civil Liberties 5 credits
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.	An introduction to the "Politics" of civil liberties in American Society by inter-relating the attitudes and behavior of Americans with Supreme Court doc- trine, and thereby portray the political context of civil liberties doctrine ("law") at the time of its promul- gation and afterwards. The focus will be upon three
PSA 365 Probation and Parole 5 credits Examination of current trends in probation, parole, supervision, the legal aspects, research, prediction and personnel.	major libertarian values: Freedom ox expression; equality; and due process in criminal procedure. PSA 425 Problems of Public Service Bureaucracies 5 credits Descriptive analysis of the administrative side of
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 correc- tional institution and community-based corrections.	 large scale post-Industrial governments. Special em-hasis upon coordination and conflict resolution among public agencies by examining the budgeting and planning processes. PSA 450 Politics of the Criminal Justice System 5 credits The relationship of political values and partisan influence in the criminal justice system including courts, prosecutors, attorneys and pressure groups.
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 455 Criminal Justice System Planning 5 credits Methodology of systems planning, theories of analy- sis and problems of program evaluation with special attention to the criminal justice system.
PSA 410 Juvenile Justice Systems 3 credits Examination and study of contemporary police- juvenile operations; police authority and respon- sibility. Theory and examination of the Juvenile Jus- tice System. The development of police juvenile un- its. Relationship between the juvenile-officer, crime	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 415 Victimology 5 credits Survey of the victim-offender relationship; including the origin and scope of victimology, a victim and his society, the victim and the administration of justice and the social reaction to victimization.	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. Preredita

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Political Science

Ben Cashman, Ph.D., Chairman

Professors:

Charles S. LaCugna Sr. Christopher Querin, S.P.

Associate Professor: Ben Cashman

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 highly flexible and designed to serve a variety of student interests within the broad area of public affairs and activities. This program is for students who have decided on public service as a career and is especially suited for individuals now employed in the public area who have not completed the baccalaeurate degree or wish additional education. (Depending on the agency, funds may be available to help defray tuition costs.) All of the options within the program stress a basic academic program augmented by an on-the-job internship in an appropriate agency during the senior year. This program will give the necessary preparation for the beginning level staff, professional, and research positions in departments and agencies of city, county, state and national government. It is the expectation that normal progression after employment will bring graduates to leadership roles in public agencies.

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.

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 — 50 regular class credits of political science which must include Pls 160. A maximum of 15 additional internship credits will be allowed but an internship will not necessarily be required of all BPA students; determination of this requirement will be made in consultation with the adviser. If no internship is taken, the student must take 10 additional hours of political science course work. There are four areas of specialization within this degree and courses will be determined according to the area of concentration: Urban Studies, American Studies, International Studies and Public Administration.

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

ARTS AND SCIENCES Political Science

Bachelor of Arts Freshman year	Pls 160 American National Government 5 credits Study of the foundations, structures, functions of the
English 100 and core option	executive, legislative and judicial branches of the government and their inter-relations with the popular processes of government.
Social Science core option 5 credits	Pls 200 Comparative European Democracies 5 credits
Sophomore year Philosophy core option 5 credits Political Science 200 series 10 credits Social Science core option 5 credits	Analysis of selected foreign democratic systems; constitutional and ideological principles, govern- mental forms, practices and problems.
Theology core options10 credits Electives	Pis 214 Government and the Economy 5 credits Government regulation and promotion of business, agricultural, labor and consumer interests. The re-
Mathematics/Science core options10 credits Political Science 300 series	gulatory agencies. Government corporations, anti- poverty programs. Government economic Stabiliza- tion policies, critique of American capitalism.
Senior year Political Science 400 series	PIs 242 American Political Thought 5 credits Study of American political traditions; Puritanism, revolutionary thought, federalism, Jeffersonianism, intellectual democracy, slavery, progressivism, prag- matism, social utilitarianism and political thought in law and literature.
Bachelor of Public Affairs	Pls 249 Introduction to International Politics 5 credits
Freshman year English 100 and core option10 credits History 103 and core option10 credits Philosophy 110, 22010 credits Political Science 160	Analysis of the dynamic forces in international rela- tions; power nationalism, sovereignty, colonialism, imperialism, theories of war and peace.
Psychology 100 5 credits Sociology 101 5 credits	PIs 280 The Judicial Process 5 credits Overview of the role of law and the judiciary in Ameri- can political life; the powers and limitations of the judiciary; individual rights in legal conflicts; study of selected key cases. Designed especially for non-
Sophomore year Economics 271	majors.
Political Science	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. Practi- cum sessions, the writing and analyzing of Constitu- tions and the politics inherent in parliamentary pro-
Junior year Mathematics/Science core options10 credits	cedure.
Political Science	
Electives20 credits	Pls 291 Special Topics 1-5 credits Pls 292 Special Topics 1-5 credits
Senior year Political Science 488 or 48915 credits Political Science15 credits	Pls 293 Special Topics 1-5 crdits
Electives15 credits Total 180 credits	Pls 315 Comparative Totalitarian Systems 5 credits Study of 20th Century totalitarian ideologies and their influence on governmental functions and pro- cesses. Comparative study of selected communist states, military dictatorships and nationalist-authori-
	tarian states.
Political Science Courses	Pls 324 Political Parties and Interest Groups 5 credits
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 vari-	Theories, organization, strategy and leadership or American political parties, campaigns and party leadership. Role of agrarian, labor, professional, educational, business and ethnic groups in the Ameri- can political process; their impact on institutions and
ous forms of government; definitions of key terms.	processes of government.

	ARTS AND SCIENCES Political Science		
Pis 325	The Legislative Process 3 credits Analysis of American State and national legislative processes; legislative politics; the role of the legis- lature in the political system; lobbying; theories of representation.	Pis 362	Contemporary International Relations in Africa 5 credit Role of Africa in world politics from World War I t the present; the Western Powers in Africa; Africa nations in the United Nations.
Pis 330 Pis 335	Government of the Soviet Union5 creditsStudy of the ideological foundations of Soviet govern- ment, the functions of government, the role of the Party, the military and Soviet law.Government of Communist China5 credits	Pis 370	Public Administration5 creditRole of public administration in the political systemrelationship of bureaucracy to the executive, judiciaand legislative branches of government, thbudgetary process, personnel administrationorganization theory; control of the bureaucracy.
Pis 340	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. Comparative Politics of Asia 5 credits Analysis of selected Asian systems; governmental	Pls 371	State Government and Politics 5 credit Comparative analysis of American stat governments including the executive, judicial an legislative branches of government, state part politics; policy outputs of state governments; state local, interstate and state-national intergovernment
Pls 341	forms and ideologues; problems of nation-building; inter-state relations in the area. Comparative African Systems 5 credits Analysis of selected governments of Africa; consti- tutionalism, militarism, economic development and	Pis 372	Urban and Metropolitan Government and Politics 5 credit
Pis 342	social change. Comparative Latin American Systems 5 credits Analysis of selected governments of Latin America;		Problems of large American cities with specia emphasis on transportation, housing, public safet and planning problems. Fiscal problems of American cities; analysis of the types of America city government; metropolitan government; publi school politics.
Pie 350	nationalism, imperialism, revolutionary models and problems of economic development and social change.	Pis 374	The American Presidency 5 credi Analysis of the powers of American president relationship with Congress, bureaucracy, judiciar public, private sector of the economy and wi
	Fundamentals of international law; states and inter- national law; the individual in international law; crea- tion; application and enforcement of international law.	PI 477	foreign governments. Emphasis on analysis of the activities of the incumbent president and his contemporaries.
Pls 351	Political Thought:5 creditsAncient and Medieval5 creditsCritical examination of political ideas from the pre- Socratics to 1400. Middle Eastern as well as West- ern Medieval ideas will be considered with emphasis on the rading of source materials.	Pis 375	Minority Politics in the United States 5 credit Examinations of the non-white American in politic and legal perspective and an analysis of alternative for change. Consideration of Native American Chicanos and Asian-Americans with special focu on the Black political experience. Prerequisite: P 160 or permission.
Pis 353	Modern Political Thought 5 credits Political ideas from Machiavelli through Hobbes, Locke, Montesquieu, Rousseau, the English Utilitar- ians, 19th Century non-Marxian Socialism.	Pis 385	Peace and The United Nations 5 credit Introduction to the history, theories and problems of international organizations; the League of Nation and the United Nations and the Specialized Agen cies.
Pis 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 390	Diplomatic and Consular Practices 3 credit Analysis of American foreign policy-making; th Constitutional framework; operations of the Depart ment of State and overseas missions; diplomati privileges of immunities.
	Recent Political Theory 5 credits Critical analysis of political theories from Marx to the present.	Pis 391	United States Foreign Policy 5 credit Constitutional framework; major factors in formula tion and execution of foreign policy; American polic in Europe, the Near East, Africa, the Far East and i Latin America historically and current.
Pis 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.	Pis 400	

the use of recent approaches to politics, political culture, systems analysis and the developmental model. Prerequisites: PIs 200 and 315.

Pls 402 Comparative Politics of the Middle East

Middle East 5 credits Study of the nature of the political conflict between Israel and her Arab neighbors; special emphasis on the political institutions of Egypt and Israel.

- Pls 418 Constitutional Law 5 credits Growth, philosophy and development of the United States Constitution as reflected in decisions of the Supreme Court with emphasis o the role of the Court in contemporary America. Prerequisite: Junior or senior standing.
- PIs 419 The Supreme Court and the Bill of Rights 5 credits Interpretation of the Bill of Rights by the Supreme Court and the impact on the individual and the States. Prerequisite: Junior or senior standing.
- Pls 435 Politics of Developing Countries 5 credits Emergence of nationalism, resistance and conflict in the modernization process, economic modernization, patterns and problems of political development.

Pi 437 Peace Movements and World Government 5 credits An analysis of the theoretical basic 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.

- PIs 438 Contemporary World Politics 5 credits 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.
- PIs 488
 Internship American Government
 2-15 credits

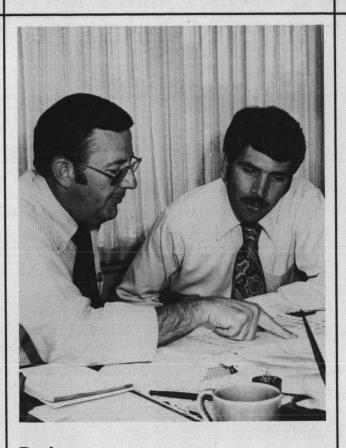
 PIs 489
 Internship International
 2-15 credits

 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.

Pls 490 Scope and Methods of Political Science 2-5 credits Analysis of the history, methodology and focus of research in political science. Current state of the discipline. Prerequisite: Permission of instructor.

PIs 491	Special Topics	2-5 creaits
Pls 492	Special Topics	2-5 credits
Pis 493	Special Topics	2-5 credits
Pis 494	Seminars	2-5 credits
Pis 495	Seminars	2-5 credits
Pls 496	Seminars	2-5 credits
Pis 497	Independent Study	2-5 credits
Pis 498	Independent Study	2-5 credits
Pls 499	Independent Study	2-5 credits



Prelaw

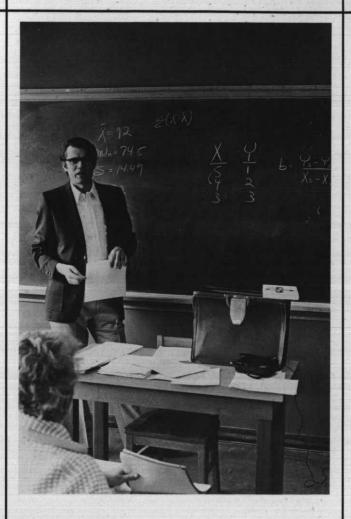
Ben Cashman, Ph.D., Adviser Sr. Christopher Querin, SP, Ph.D., Adviser

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 arrangments to tak the law school admissions test. The application form and the instruction booklet for this test may be obtained from the prelaw adviser.



Psychology

George D. Kunz, Dh.D., Chairman

- Professors: Thomas W. Cunningham James E. Royce, S.J.
- Assistant Professors: R. Michael Brown Thomas B. Hamilton George D. Kunz

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.

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 option10	credits
Mathematics/Science core option 5	
Psychology 100, 20110	
Electives15	

Sophomore year

Mathematics/Science core option 5	credits
Philosophy 110, 22010	
Psychology elective 5	credits
Social Science core option 5	credits
Electives	credits

Junior year

English core option 5	
Psychology 301, 401 and electives	credits
Theology core options10	credits
Elective 5	credits

Senior year

	hilosophy core option	credits
P	sychology electives10) credits
E	lectives) credits

Total . . . 180 credits

ARTS AND SCIENCES 75 Psychology

Bachelor of Science

Freshman year

English 100 5	credits
History core option10	
Mathematics/Science electives	
Psychology 100 5	
Electives10	

Sophomore year

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

Junior year

English core option 5	credits
Mathematics/Science electives10	
Psychology 301, 330 and elective15	credits
Social Science core option 5	
Theology core options10	

Senior year

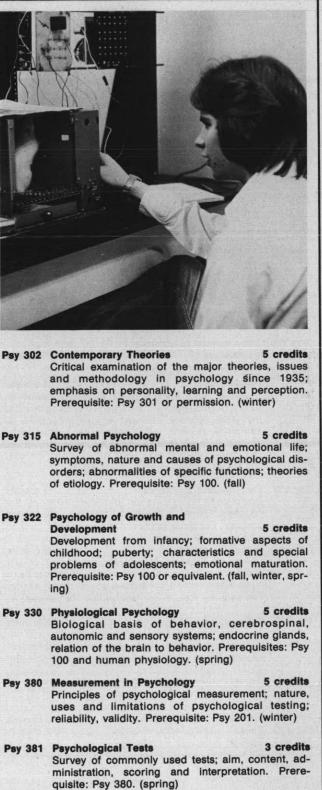
Mathematics/Science elective 5	credits
Philosophy core option 5	credits
Psychology 401, 402 and elective15	credits
Electives	

Total . . . 180 credits

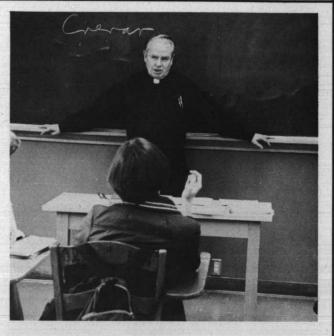
Psychology Courses

Psy 100	Introductory Psychology	5 credits		sy
	General introduction to the	e data of scientific psv-		or
	chology, including its natu organic, environmental and fluence human behavior. (f	re, scope and method; personal factors that in-		of
	nachoo naman bonamon (i	an, miller, epinig,	Psy 322	Ps
Psy 201	Statistics I	5 credits		De
Psy 202	Statistics II	3 credits		De
	I. Basic descriptive method	ds; measures of central		ch
	tendency, variability, correla	ation and regression; in-		pr
	ferential statistics, hypoth	esis testing, bionomial		Pr
	probability, t-tests, Chi-squ			ing
In the Invention	variance. II. More comp	lex analyses; factorial		-
	designs and non-parametri		Psy 330	P
Carton Carta	Psy 201 or 202. (I-fall, wint	er, spring, Il-winter)		Bi
				au
Psy 210	Personality Adjustment	5 credits		re 10
+	The normal personality; s			IC
	actualization; personality		Psy 380	M
	various inadequate reactio mechanisms; positive mer		,	Pr
Service	Psy 100 (winter, spring)	ital fieatti. Frerequisite.		us
	Psy 100 (winter, spring)			re
1. 2015				
			Psy 381	P
Psy 291	Special Topics	1-5 credits	Fay 301	S
Psy 292	Special Topics	1-5 credits		m
Psy 293	Special Topics	1-5 credits		q
		Contraction of the second second second		4
			Psy 390	C
Psy 301	History and Schools of Ps	chology 5 credits		U
and the second	Survey of the history of p	sychology, including the		SC
Sector Sector	classic periods of struc			SC
	behaviorism, psychoanalyt	ic schools and Gestalt.		m

Prerequisite: Psy 100. (fall)



y 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 con-ditioning. Three lecture and four laboratory hours per week. Prerequisites: Psy 100 and 201 for 401; 401 for 402. (I-fall, spring, Il-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) **Group Dynamics** Psy 460 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

By arrangement. Prerequisite: Permission.

Psy 498 Individual Research

Individual Research

Psy 499



Rehabilitation Ekkehard J. Petring, Ph.D., Chairman

Assistant Professors:

Josef Afanador Susanne Bruyere Jerome R. Dunham J. Hutchison Haney John L. Kite Ekkehard J. Petring John K. Thompson

Objectives

2-5 credits

2-5 credits

The Rehabilitation 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, social welfare agencies, poverty programs, prisons, evaluation centers, and healthrelated associations, as well as private agencies such as transitional workshops, rehabilitation centers,

	ARTS AND SCIENCES 77 Rehabilitation
hospitals, speech and hearing centers, work activity centers (adult development centers) and others. Emphasis is placed on actual supervised field ex- periences in a variety of rehabilitation related agencies (30 credits), in addition to giving the students	Rhb 201 Interviewing and Interpersonal Skills 5 credits Using group and interpersonal communication tech- niques, the course emphasizes the interaction dy- namics between the rehabilitation specialist and the disabled client.
knowledge in medical and psychological aspects of dis- ability, the world of work or occupational information and community resources in rehabilitation. Degree Offered Bachelor of Arts in Rehabilitation	Rhb 203 Tests and Measurement in Rehabilitation 5 credits Analyzes various methods of testing and evaluating disabled people and how the methods relate to the rehabilitation process.
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 science as outlined below.	Rhb 210 Field Experience in Rehabilitation 5 credits Actual experience in an agency or institutional set- ting within a rehabilitation framework. Integration and application of classroom knowledge with live ex- perience in the field. Coordinating seminars are an integral part of each field experience course (one hour of seminar to eight hours of field experience). Prerequisite: Rhb 100.
 Bachelor of Arts—65 credits in rehabilitation including Rhb 100, 201 (or Psy 380), 203 (or Psy 427), 210, 301, 305, 310, 400, 405, 410; 15 credits in psy- chology and 10 credits in sociology (Psy 100, 201, 315, and Sc 101, Sc elective). 	Rhb 291 Special Topics1-5 creditsRhb 292 Special Topics1-5 creditsRhb 293 Special Topics1-5 credits
Freshman year English 100 and core option10 credits distory core option10 credits Philosophy 1105 credits	Rhb 301 Environmental Impact of Disability 5 credits The impact of mental, physical, and social dis- abilities as related to the individual, his social en- vironment, 'the culture and its values, economic situations and vocational opportunities.
Psychology 100 5 credits Rehabilitation 100 5 credits Sociology 101 and Sociology elective 10 credits Sophomore year 10 credits Biology 200, 210, or 270, 271 10 credits Philosophy 220 5 credits	Rhb 305Medical Aspects of Disability5 creditsStudy 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. Prerequisite: Anatomy and Physiology.
Philosophy 2205 creditsPsychology 2015 creditsRehabilitation 201, 203, 210, 30120 creditsTheology core option5 credits	Rhb 310 Field Experience in Rehabilitation5 creditsSee course description for Rhb 210.
Junior year Philosophy core option	Rhb 391Special Topics1-5 creditsRhb 392Special Topics1-5 creditsRhb 393Special Topics1-5 creditsBy arrangement with the approval of department chairman.1-5 credits
Elective	Rhb 400 Rehabilitation Resources 5 credits Rehabilitation community organization, its power structure, and methods of determining, evaluating and analyzing rehabilitation resources.
Electives20 credits Total 180 credits	Rhb 405 Job Placement and Development 5 credits The nature and use of occupational information as applied to job characteristics, job development, job seeking skills, vocational theories and practical ex- perience.
Rehabilitation Courses Rhb 100 Introduction to Rehabilitation 5 credits Principles of vocational rehabilitation, the historical	Rhb 410 Field Experience in Rehabilitation 5-15 credits See course description for Rhb 210.
background, various community rehabilitation resources, the rehabilitation process, and the role	Rhb 497 Independent Study 1-5 credits Rhb 498 Independent Study 1-5 credits Individualized studies by arrangement with the ap-



Master of Arts in Rehabilitation Ekkehard J. Petring, Ph.D., Director

Objectives

The Master of Arts in Rehabilitation is designed to prepare graduates for professional responsibilities in the human service field. To attain this major objective, the program is designed with the following goals: (1) to develop the graduate's rehabilitation skills for the entry level in private or public rehabilitation settings; (2) fulfill the need of the professional rehabilitation worker who wants to continue his education; (3) to fulfill the need of the student who wants an opportunity to specialize in the rapidly changing field of rehabilitation; (4) to fulfill the need of the student who wants in-depth study in a selected area of concentration.

The program prepares students who, upon graduation become employed as counselors in public and private human service settings, such as State vocational rehabilitation agencies, federally sponsored human agencies, county agencies, 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.

The development and improvement of counseling skills will be emphasized. Special attention will be given to counseling methods utilized in the student's area of interest, such as working with alcoholics or public offenders. Furthermore, each student will select electives in their area of interest.

General Program Requirements

Each student is responsible for knowing the academic regulations and requirements set forth in this Bulletin of Information, and for revisions of same.

Depending upon an applicant's professional background, the minimum number of credits are 45, the maximum 67.

A one-to-two day comprehensive written/oral examination will be required of rehabilitation graduate students nearing completion of their degree requirements.

Program of Study

The Master of Arts in Rehabilitation is comprised of four phases of study: A) Foundation; B) Rehabilitation core; C) Electives; and D) Educational research.

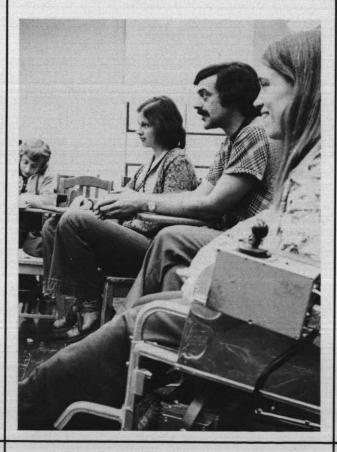
A. Foundation Courses

(may be waived for students with satisfactory prior academic coursework or relevant job experience):

Rhb 301	Environmental Impact of Disability
Rhb 305	Medical Aspects of Disability
Rhb 400	Rehabilitation Resources
Rhb 405	Job Placement and Development

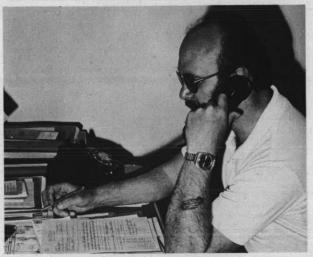
Degree Offered

Master of Arts in Rehabilitation



ARTS AND SCIENCES Rehabilitation

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Admission Requirements

- a. Bachelor's degree from an accredited academic in stitution, preferably in one of the social sciences. b. GPA: 3.00 minimum.
- c. Miller's Analogies Test. d. Personal interviews with rehabilitation faculty.
- e. Two letters of recommendation.

Debebilitation Care Cou

f. In most cases, prior to acceptance, one year of ex perience in the field of rehabilitation or a related area.

D.	Renabilitation Core Courses		
	RHB 500	Principles of Rehabilitation	
	RHB 505	Vocational Diagnosis	
	RHB 510	Rehabilitation Counseling Process	
	RHB 515	Supervision and Management in Rehabilitation	
	RHB 520	Group Process in Rehabilitation	

- Practicum in Rehabilitation **RHB 530**
- Practicum in Rehabilitation **RHB 531**
- Internship in Rehabilitation **RHB 540**

C. Electives (Four to six credits)

The course, or courses, chosen by the student mus reflect relevance in his area of interest in rehabilitation For example, if a student is interest in refracting with juvenile delinquents and/or adult offenders, a Police Science and Administration course in Corrections (PSA 366) or Probation and Parole (PSA 365) would be two suitable choices. Courses in Alcohol Studies may be chosen up to a total of 14 credits, which constitutes a ecialty program

specially program.		
D. Educational Research (One course) ED 500 Introduction to Research and Graduate study (3 credits)	Rhb 540 Internship in Rehabilitation Full-time placement in a rehabilitation so tegrating and applying knowledge from to room; further development of counseling phasized, students will be supervised by	the class- skills em-
Rehabilitation Courses		
A) Foundation Courses	RHB 592 Special Topics 1-	10 credits 10 credits 10 credits
Rhb 301 Environmental Impact of Disability 5 credits Impact of mental, physical, and social disabilities as		
related to the individual, his social environment, the		10 credits
culture and its values, economic situations and	The out manual neodaron	10 credits
vocational opportunities.	RHB 598 Individual Research 1-	10 credits

			1. 51 × 1.
		Medical Aspects of Disability Study of medical terminology and analysi disabling conditions and diseases for a b standing of general medical and spe aminations.	asic under-
	Rhb 400	Rehabilitation Resources Rehabilitation community organization, structure, and methods of determining, and analyzing rehabilitation resources.	5 credits its power evaluating
	Rhb 405	Job Placement and Development Nature and use of occupational informa plied to job characteristics, job develo seeking skills, vocational theories and p perience.	pment, job
	B) Reh	abilitation Core Courses	
	Rhb 500	Principles in Rehabilitation Counseling and placement in reh rehabilitation supervision and adminis theories of career development.	5 credits abilitation, stration and
	Rhb 505	Vocational Diagnosis Critical review of clinical methods; inc praisal and other methods of assisting with a disability in selecting a vocation case review and analysis.	the person
d	Rhb 510	Rehabilitation Counseling Process Theories of rehabilitation counseling, niques and emphasis on application in r settings.	3 credits their tech- ehabilitation
	Rhb 515	Supervision and Management in Rehabilitation Principles of supervision and manage and case management as it applies to health and rehabilitation facilities.	3 credits ment; fiscal a variety of
	Rhb 520	Group Process in Rehabilitation Seminar on the rehabilitation process, and selected counseling theories as groups in conjunction with one super ticum experience.	applied to
	Rhb 530	Practicum in Rehabilitation Counseling experience applying the prehabilitation; the student functions parehabilitation agency (one hour of indivision per two hours of practicum experience)	art-time in a ridual super-
e a	Rhb 531	Practicum in Rehabilitation	3 credits
e	Rhb 540	Internship in Rehabilitation Full-time placement in a rehabilitation tegrating and applying knowledge fro room; further development of counselin phasized, students will be supervised	m the class- ng skills em-
8	RHB 592	I Special Topics * 2 Special Topics 3 Special Topics	1-10 credits 1-10 credits 1-10 credits



Sociology James P. Goodwin, SJ, M.A., Chairman

Professors:

James P. Goodwin, S.J. J. Robert Larson Anita Yourglich

Assistant Professor: David D. McCloskey

Objectives

Sociology has the dual capacity of satisfying the need of students for a humane and liberalizing discipline and of providing a sound basis for careers either in the science of sociology or in social research or in the social services. Courses are designed to provide a systematic inquiry into the complex structures of modern society and their many functions. They also investigate the interactions between persons, their groups and culture.

Students may choose sociology for various purposes: Some are interested in making a career of teaching sociology or doing sociological research; others study sociology in preparation for graduate study and a career in social work; still others seek in sociology a broader and deeper understanding of man and his works. With a view to these interests, different combinations of courses are recommended to students. In a separate brochure, combinations of courses are suggested for those interested in the sociology of family relations, in the sociology of deviant behavior, in urban sociology, and in methods of sociological research. Common to all of these are required courses intended to communicate to the student a knowledge of the conceptual tools of analysis and the methods of sociological research.

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, 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.

Undergraduate Minor — 30 credits which will include Sc 101, 380 and 17 to 20 credits of upper division sociology courses.

Bachelor of Arts

Freshman year English 100 and core option Philosophy 110, 220 Psychology 100 Sociology 101, 201 Electives	10 credits 5 credits 10 credits
Sophomore year History core option Philosophy core option Political Science or Economics core option Sociology 200, 380, 381 Theology core options Elective	5 credits 5 credits 15 credits 10 credits

ARTS AND SCIENCES Sociology

Junior year Mathematics/Science core options Modern Language 105, 106 Sociology electives Electives	.10 credits .15 credits
Senior year Fine Arts 101, 102, 103 Sociology electives Electives	.15 credits

Total . . . 180 credits

Sociology Courses

- Sc 101 **Fundamentals of Sociology 5 credits** 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.
- 5 credits Sc 201 **Social Statistics** Basic principles and methods for compiling and interpreting data statistically: graphs, frequency distributions, central tendencies, measures of association. Analysis of variance, Chi square, regression correlations, meaning and application of nonparametric statistics.
- Sc 256 Criminology 5 credits Theoretical overview of the conceptualizations of the causes of criminal behavior; sociological analysis of criminal interactions, criminal systems and their functions.
- Sc 257 **Juvenile Delinquency** 5 credits Analysis of deviations and deliquencies of juveniles as distinct from those of adult offenders, and sociological explanations of these behaviors within contemporary conceptual models.
- **5 credits** Sc 260 Sociology of Family Explanation of family as a social system with structure and functions; 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.



00	Interracial and interetinic
	Relations 5 credits
	Concept of race and ethnic group; analysis of the
	factors in interracial and interethnic tensions; ex- amination of the programs advocated for reducing tension and producing solidarity. Prerequisite: Upper division standing or permission of instructor.
80	Urban Community 5 credits Study of urban community structures and in- stitutions; historic city types; the process of ur- banization; world cities; aspects of American urban communities. Prerequisite: Upper division standing

Sc 291	Special Topics in Sociol	logy 1-5 credits
Sc 292	Special Topics in Sociol	logy 1-5 credits
Sc 293	Special Topics in Sociol	logy 1-5 credits

Sc 300 Introduction to Social Work

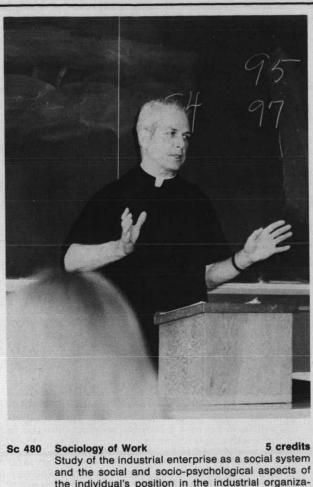
or permission of instructor.

Sc 2

- **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.
- The Black People's Social Sc 302 5 credits Movement 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.

82	ARTS AND SCIENCES Sociology		
Sc 340	Advanced Social Psychology 5 credits Analysis employing specific socio-psychological conceptual models; tests of propositions derived from these models; Prerequisite: Upper division standing or permission of instructor.	Sc 377 (Cs 377)	Supervised Field Experience 5 credit Direct observation and academic study in a selecte community agency with stress placed upon th agency's clientele, its services and its function in th community. Prerequisite: Sc 300 and 376.
Sc 350	Small Groups 5 credits Sociological models and methods for analyzing small, interpersonal systems of interaction, their dy- namics and structures, as well as their potentials for change and growth.	Sc 380 Sc 381	Methods of Sociological Research I 5 credit Methods of Sociological Research II 5 credit I. Logical structure and general procedure of science, analysis of specific techniques of dat gathering applied to sociology; observation
Sc 351 (PSA 350)	Police and the Community 5 credits The role of police in the community; relationships with individuals, groups and community organiza- tions. Analysis of ethnic, cultural and economic dif- ferences as factors in the administration of justice; causes of tension and conflict; positive and negative factors in the control of hostilities; community re- sponsibility for the administration of justice.		questionnaire, interview and case study; problems of measurement, including qualitative and quantitative techniques such as scaling; problem of dat analysis, including test of hypotheses throug statistical techniques. II. Application of method learned in Sc 380 to the design and execution of research project by the student. Prerequisites Upper division standing or Sc 201 for 380; 380 fo 381.
Sc 352 (PSA 360)	Society and Justice 5 credits The criminal justice process from arrest through release; the relationship and respective respon- sibilities of the police, the prosecutor, the defense, the courts, the prisons and corrections, as each in-	Sc 400	Sociology of Religion 5 credit Investigation of the religious institutions in society i terms of their structure, function and change Prerequisite: Upper division standing or permissio of instructor.
Sc 360	tegrates into a system designed to reduce criminal behavior. Complex Organizations 5 credits Sociological analysis of large, complex social organizations, the kinds of modern organizations and the relationships among organizations and to		Social Stratification 5 credit Social differentiation with emphasis upon institu- tionalized aspects of power, privilege and prestige Generalizations drawn from available studies of rank, social mobility and social classes. Prerequisite Upper division standing or permission of instructor
Sc 362 (PSA 362)	the larger social environment both historically and currently. Deviant Behavior 5 credits An overview of what American society generally re- gards as deviant behavior. Emphasis is placed on the results of stigmatization and the acceptance of low self-esteem.	(PSA 410)	Juvenile Justice Systems 3 credi Examination and study of contemporary police juvenile operations; police authority and respon sibility. Theory and examination of the juvenile jus- tice system. The development of police juvenile un- its. Relationship between the juvenile officer, crim prevention, and police-community relations.
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.	(PSA)	Victimology 5 credit A survey of the victim-offender relationship; includin the origin and scope of victimology, a victim and hi society, the victim and the administration of justice and the social reaction to victimization.
Sc 365 (PSA 365)	Probation and Parole 5 credits Examination of current trends in probation and parole supervision, personnel qualifications, legal aspects, and research on results and prediction of outcome.		Mass Communication 5 credit 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 366 (PSA 366)	Corrections 5 credits Analysis of the various post-arrest treatment methods applied to offenders; examination of reha- bilitative versus punishment theories; evaluation of psychiatric and psychological group treatment methods, reality therapy and other approaches to behavior modification; examination of the correc- tional institution and community-based corrections. Prerequisite: Upper division standing or permission of instructor.	Sc 430	Social Change 5 credit Critical review of attempts to explain transition: within a specific social system and large scale tran sitions from one societal form to another; discussion of concepts which may relate the two types o change in one general theory of social change Prerequisite: Upper division standing or permission of instructor.
Sc 376 (CS 376)	Factors of Interviewing5 creditsThe interview as one of the major methods of helping people; study of the knowledge and skills needed for proficient interviewing to provide a basis for future development. Prerequisite: Sc 300 or permission.	1 	nstitute or Workshop 5 credits Special topics of current relevance in the nation of ocal community treated from a sociologica perspective as a community service. Prerequisite Jpper division standing.

ARTS AND SCIENCES Speech



	Study of the industrial enterprise as a social system and the social and socio-psychological aspects of the individual's position in the industrial organiza- tion; relationship of these phenomena to a theory of work. Prerequisite: Upper division standing or per- mission 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 credit
Sc 499	Directed Reading in
	Sociology II 1-5 credit
	Sociological reading at an advanced undergraduat
	level in a tutorial relationship with one professo
	Prerequisite: Upper division standing.

Speech

Margaret A. Penne, 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.

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

- Sph 100
 Fundamentals in Speech
 5 credits

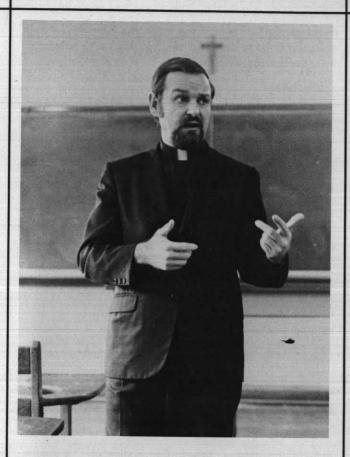
 Theory and practice of basic speech communication skills. Introduction to interpersonal communication, public communication and aesthetic communication.
 5 credits
- Sph 200 Public Speaking 5 credits Theory and practice in organizing and delivering a speech.
- Sph 201 Interpersonal Speech Communication 5 credits Theory and practice of skills in interpersonal situations. Emphasizes self-awareness, sensitivity to others, and a humanistic approach to communication.
- Sph 202 Oral Interpretation 5 credits Analysis and interpretation of literature. Practice in interpreting prose, poetry and drama.
- Sph 204 Methods of Debate 5 credits Introduction to debate; principles involved in rational and effective argumentation; practice in important forms of debate on the National debate topic.

Sph 291	Special Topics	1-5 credits
	Special Topics	1-5 credits
	Special Topics	1-5 credits
	Prerequisite: Permission of instructor.	

Sph 310 The American Speaker 5 credits Study and criticism of American public speaking. Practice in contemporary methods of public speaking. Prerequisite: Sph 100 or Sph 200 or permission

of instructor. Sph 320 Speech for the Classroom Teacher 5 credits Emphasis on the teacher as a communicator and leader in learning communication skills. Discussion, story telling, oral interpretation and drama.

Sph 491 Special Topics 2-5 credits Prereguisite: Permission of instructor.



Theology and Religious Studies Roger Blanchette, S.J., M.A., Chairman

Professors:

William F. LeRoux, S.J. Michael J. Taylor, S.J.

Associate Professors:

Francis J. Lindekugel, S.J. Cornelius J. O'Leary, S.J. Louis A. Sauvain, S.J.

Assistant Professors: Roger E. Blanchette, S.J. Robert J. Egan, S.J. L. George Jeannot L. John Topel, S.J.

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

ricommun year		
English 100 and core option10	credits	
History core option10	credits	
Philosophy 110, 22010	credits	
Social Science core options10	credits	
Theology and Religious Studies 200 5	credits	

Sophomore year

Philosophy core option	5 credits
Social Science elective	5 credits
Theology and Religious Studies	
Electives	20 credits

Junior year

Mathematics/Science core options10	credits
Philosophy elective	credits
357, 35815	credits
Electives15	credits

Senior year

Theology	and	religious	studies	electives	25	credits
Electives					20	credits

Total . . . 180 credits

			ARTS AND SCIENCES 85 Theology and Religious Studies		
tablished under	ies Center s Center designates an agency es- the cooperative auspices of Seattle he Archdiocesan Office of Religious	RS 210	Synoptic Gospels 5 credits Investigation of the Gospels of Matthew, Mark and Luke.		
Education, com programs in con professional and are a continuing courses are not	mitted to planning and providing tinuing religious formation for adults, lay. Religious Studies Center courses g education service; credit for these applicable toward meeting the un- ctive, core, or other baccalaureate	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.		
degree requiren Religious Studie 300, 301, 302, 3	Thents. Courses offered through the s Center are RS 201, 202, 203, 204, 03, 304, 305, 306, 307 308, 309, 400, 5, 406, 407, 408, 409, 410, 411, 412.	RS 220	Pauline Theology 5 credits Study of Paul's theological development analyzed in his epistles.		
For Admission equivalent; credits of the workshops	gious Education (SUMORE) — a Bachelor of Arts degree or 10 quarter credits or 6 semester neology, or the equivalent in non-credit or approved independent reading;	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.		
no transfe quirements	t average of 3.00 for regular standing; r credits accepted; no language re- nferal — 43 credits of course work	RS 289	Comparative Religion 5 credits Investigation and contrast of the major world religions: Pantheism, Buddhism, Hinduism, Judaism, Christianity and Islam.		
completed sessions wi core subje sive exami thesis. At program a six quarter related to r for the pra	to over three eight-week summer thadequate graduate achievement; all cts required; final written comprehen- nation; a 3 credit practicum research the discretion of the director of the nd the Dean of the Graduate School, hours of graduate credits in areas eligious education may be substituted cticum research thesis. A student per-	RS 290	Religious Experience East and West 5 credits Anthropological, sociological and psychological perspectives on the phenomenon of religious ex- perience in human history as these reveal the nature and meaning of this experience within human ex- istence.		
mitted to n 49 credit h credits ma the first two these cred	hake this substitution would complete ours for the degree. These substituted y be earned only after attendance at o summer sessions. The substitution of its may be made from any college or	H3 293	Special Topics 3-5 credits Special Topics 3-5 credits Special Topics 3-5 credits Special Topics 3-5 credits		
university areas rela such as the munication quired cor dinarily live	offering a graduate program in the ted to religious education. Courses communication workshops and com- seminars are non-credit, but are re- e courses for all. Students must or- on campus; all degree work must be within six years of the initial summer.	RS 300*	The Faith Experience of Modern Man2 creditsThe 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 humen experience		
Theology Cou			human experience.		
the Scri	of key books of the Bible and/or themes of ptural tradition and its development. For with a minimal previous background in	RS 301*	Theology of Person: Man and God in Contemporary Thought 2 credits Study of contemporary man as interpreted by psy- chology, anthropology, philosophy, theology, and reflected in literature; contemporary concepts of		
Values f A study derstand	tament: Meaning and or Today 2 credits of the Old Testament, with a view to un- ling its meaning and message for persons of		God, as these arise out of man's personal ex- perience and self-understanding. • Theology of Production: Divine		
RS 202* New Tes Values f A study derstand	our time. stament: Meaning and or Today 2 credits of the New Testament, with a view to un- ding its meaning and message for persons of our time.	10.281	Creation and Human Technology 2 credits Man as creature in his multiple relationships of dependence on God and interdependence to his en- vironment; 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.		
(Old Te	iptures: Special Topics stament) 2-3 credits iptures: Special Topics	*Offere	d through the Archdiocesan Office of Religious Educa		

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RS 303*	The Contemporary Jesus: Person or Movement? 2 credits The person of Jesus Christ in his historical, redemp- tive role as a basis for understanding Jesus Christ today; how Jesus relates to man today, both in- dividually and within the community; the search for Jesus as a dimension of modern man's search for meaning.	RS 335	Christ and Modern Man 5 credits Biblical foundation for the Christian affirmation of the human and divine in Jesus, and a further in- vestigation and analysis of the Christian com- munity'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 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 340	Study of the pre-biblical and biblical notions of man; the development of early Christian and scholastic theology of man as redeemed and graced; contem- porary man as related to this background.
	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 ad- dressing problems raised by medical technology to- day, e.g., euthanasia, genetic engineering, en- vironmental control.	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.
	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. The Church and Christian	RS 347	Black Religious Experience 5 credits Black religion is a theology of freedom, of proclama- tion, 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 par- ticular. Black Religion, the Black Church, in its con- crete existence is its own truth about God, and the observer who would chronicle this truth must start
	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 350	where the Church starts and end where the Church ends. 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
RS 308*	Sacraments and Religious Experience 2 credits The meaning and role of Christian sacraments in the religion of modern man; understanding how the		Christ; a view of history that arises out of a Christian eschatology and a theology of hope that confronts modern secularism.
RS 309*	sacraments in their psychological and social dimen- sions both create and express the Christian com- munity while celebrating key moments in the religious experience of that community. Prayer and Worship: Person	RS 355	Early Christian Theology 5 credits Study of the development of Christian doctrine dur- ing the first five centuries of Christianity: theological, historical and literary analysis of the writings of St. Justin, Irenaeus, Tertullian, Origin, St. Athanasius, the Cappadocian Fathers, St. Augustine and St. Cyril
	and Community Before God 2 credits The spirit and function of prayer in Judaeo-Christian experience; the forms in which the prayer life of in- dividuals and groups takes expression; and the qualities of prayer as it facilitates and enriches the growth toward Christian fulfillment.	RS 357	of Alexandria. Prerequisite: RS 200. 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 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 358	Reformation Theology 5 credits The theological dispute of the Reformation on justification by faith alone; total depravity, irresistible grace, controversies among Catholics, Lutherans,
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 ex- perience of God in the Bible and the theological reflection on who the God-who-is-with-us is?	*Offered	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. through the Archidiocesan Office of Religious Educa- Seattle University; not open to regular students.

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

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* Catechetical Ministry I 2 credits

RS 405* Catechetical Ministry II

RS 406* Catechetical Ministry III 2 credits A three course sequence for the development and evaluation of a competency approach for the preparation of catechists. I. A rationale and theology for the ministry of catechist; historical and scriptural basis of catechetical ministry; qualities of the catechist. II. Competencies of the catechist; development of educational modules for skills and competencies needed in catechesis; facilitating faith experience, building of Christian community and personal identity. III. Testing and evaluating competency modules within the parish situation. Prerequisite: 404 for 405, 405 for 406.

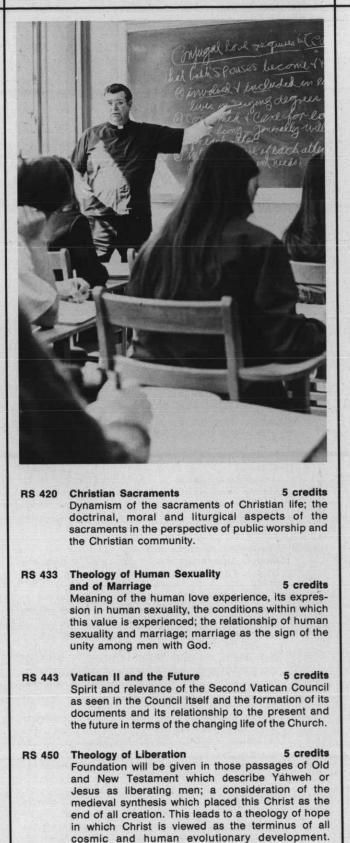
RS 407* Christianity and Culture 2 credits Various views held by Christians toward the culture in which they live; observation of the American scene and the role of the Church both in encouraging notions of America as an especially chosen people and in challenging such assumptions. What the future role of the Church might be in preparing Americans to live more cooperatively on the "spaceship earth."

- 2 credits **RS 403* Religion and Technology** 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. 2 credits
- **RS 409* Environmental Ethics** 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.

2-3 credits
2-3 credits
2-3 credits

* Offered through the Archdiocesan Office of Religious Education and Seattle University; not open to regular students.

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Liberation, finally, will be treated according to contemporary theologies of socio-economic and

political liberation.

	ARTS AND SCIENCES Theology and Religious Studies			
RS 475	Contemporary Christian Morality 5 credits Dynamics of Christian living and the moral im- plications of the Christian commitment; formulation of the principles of a Christian ethic; contemporary approaches to decisionmaking in matters of morali- ty; problems encountered by the Christian con- science in today's world including issues of life and	RS 490	Special Topics—Core Under this number, from time to tim provided various courses that are available in the core curriculum. prerequisite will be RS 200 or the department chairman.	ordinarily th
	death.	RS 491 RS 492	Special Topics Special Topics	3-5 credit
RS 476	Evaluation of the growing socialization of human life and a study of major social is ues in the 20th Century in the light of the Vatican II document "The Church in the Modern World" and the encyclicals "Peace on	RS 493 RS 494 RS 496 RS 497 RS 498	Special Topics Special Topics Directed Readings in Theology	3-5 credi 3-5 credi 3-5 credi 2-5 credi 2-5 credi
	Earth" and "Development of Peoples" and of con- temporary Protestant social statements.	H5 498	Independent Study	2-5 credi
RS 477	Christian Response to Some Socio-Legal Problems 5 credits Traditional Christian reverence for life. Contem- porary moral and legal problems such as eugenic engineering, artificial insemination, genetic surgery, compulsory sterilization and abortion. Recommend- ed for students majoring in nursing, premedicine	Gradua	ate Courses	
	and prelaw.	RS 502	Religious Perspectives in	
RS 478	Survey of Jewish History 5 credits Survey of Jewish history up to the contemporary period with special emphasis on the Second Com- monwealth and Talmudic Period.		Psychology Transition and growth in faith from youth to the religion of maturity; ur faith in this process of growth; c plications of religious instruction; n	nderstanding atechetical in atural liturgic
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 505	response of men in their faith real associated with the learning, living an of the Christian message.	nd transmissio
RS 481			Sacramental Theology Explanation of membership in the wo munity; use of the conceptual mod belonging and its application by C and present; deeper understanding from historical perspective as well as of living in a faith community enterin with God through the sacraments.	del of religiou Christianity pa g of sacrame the experience
RS 485	Theological Horizons of Modern Literature 5 credits Study of selected literary works in terms of their theological implications and religious insights.	RS 506	Communication Workshop: Interpersonal Communication Skills Introducing the student to awarene	ess of self an
RS 486	the state of the second s		others, development of listening sl barriers to effective interpersonal of constructive use of feedback and en ding.	communicatio
	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 507	Communication Workshop: Conflict Resolution Applying interpersonal communication flicts within ourselves and between dealing with fear and ignorance,	us and other frustration an
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 tenents; Bult- man, Tillich, Neibuhr. Prerequisite: Approval of department chairman.		violence, alternatives to manipulation a source of conflict, awareness responsibility, decision-making, bu base and creative alternatives for co- ment.	and person ilding a pow
RS 488	Methodology 5 credits Introduction to the history, methodology and sources of research in theology; the conditions for theological development; evaluating this develop- ment in terms of doctrinal evidence; and the con- tinuing Christian response in its magisterial and credal functions.	RS 508	Communication Workshop: Groups and Organizations Clarifying expectations, dealing with structive ways, understanding patter in groups, reducing defensiveness, a of building satisfying living / working g ing more effectiveness in ehlping	rns of behavio alternative way groups, achiev

		ARTS AND SCIENCES 8 Theology and Religious Studies				
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 540	Christian Self-Image Analysis of contemporary philosophic the intellectual environment in which message is translated. Influence of from Kierkegaard through Marcel with of linguistic analysts such as Van Bur	the Christian philosophers consideration		
RS 511	Modern Trends in Catechetics 2 credits Cathechetics will deal with the problem of faith com- munication and education, integrate the summer's course in the context of catechetics and develop modern trends in the difficult field of religious	RS 545	The Church as Historically Developing Community How the Church arose in the first cen human processes. What the New Tes central to the Church and what is cond times. The development of the Chur history, especially as this is affected	tament says is ditioned by the ch throughout ed by diverse		
-	education. Required SUMORE core course.		political systems, thought processes conditions of the ambient world.	and economic		
	Introduction to Pastoral Ministry 2 credits The meaning of ministry and of pastoral ministry, with further investigation into different styles of ministry now present in the Church, both in traditional ministries and in emerging new ministries.	RS 550	Religious Perspectives in Anthropology Man as the creator of culture and the culture create . Religion as a human p different times and cultures and the this for Catholicism. Anthropological different cultures to which the relig	henomenon in mplications of analysis of the		
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 555	directs the gospel message. Modern Moral Problems Exploration of the basic premises of la ty in the moral dimensions of the Ch ethics and other moral concerns of m Century; understanding the theolo needed for personal and social mora	3 credits w and authori- urch; situation han in the 20th ogical posture		
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 560	Sacraments: Their Existential Character	2 credits		
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.		Adolescent Psychology Theology of Hope Theology of Change Problem of God	2 credits 2 credits 2 credits 2 credits		
		RS 568	Theory of Transactional Analysis	2 credits 2 credits		
RS 530	Christ in the Gospel and Tradition 5 credits The development of Christology in the primitive Church, culminating in the theologies of the Synop- tics, John and Paul. The Church's growing un- derstanding of these doctrines through controversy and concilar definition. The development of dogma. Contemporary theologies of Jesus the Christ.	RS 569 RS 570 RS 571 RS 572 RS 573 RS 574 RS 575	Seminar Seminar Seminar Seminar Seminar Seminar	2 credits 2 credits 2 credits 2 credits 2 credits 2 credits 2 credits		
RS 532	Pauline Theology3 creditsAn advanced study of the development of Paul'sthought as traced mainly in the great epistles. Cer-tain Pauline themes and motifs will be selected forspecial study.	RS 576 RS 577 RS 578 RS 579 RS 580	Old Testament Seminar New Testament Seminar: Gospels New Testament Seminar: Epistles and other writings Seminar Practicum Research Thesis	2 credits 2 credits 2 credits 3 credits 3 credits 3 credits		
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;	RS 590 RS 591 RS 592 RS 596	Special Topics Special Topics Special Topics Directed Readings in Religious Education	1-6 credits 1-6 credits 1-6 credits 2-5 credits		
	poverty, underdevelopment, prejudice, alienation, revolution and counter-culture.	RS 597 RS 598	Independent Research Independent Study	2-5 credits 2-5 credits 2-5 credits		



<u>දුක්රි දික්රි දික්රි</u> දික්රි

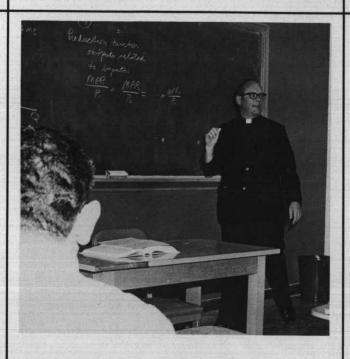
The Library was established on campus in 1931 in the Garrand Building; from 1931 to 1934, the Library and Bookstore were in joint quarters. During these years the library grew considerably and had to be relocated in the basement of the building. It remained in the Garrand Building until 1941 when it was moved to the third floor of the Liberal Arts Building. In November 1966, books and periodicals were moved to the new five-story A. A. Lemieux Library.

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ALBERS SCHOOL OF BUSINESS Gerald L. Cleveland, Ph.D., Dean J. W. McLelland, M.A., Associate Dean







Albers School of Business

Professors: Gerald L. Cleveland Margaret Mary Davies Khalil Dibee Arthur C. Earl, S.J. (Emeritus) John W. McLelland Theodore J. Ross

Associate Professors:

Julian B. Andersen Kenneth W. Cubbage John D. Eshelman Hildegard R. Hendrickson Virginia L. Parks Harriet B. Stephenson

Assistant Professors:

Frank Case, S.J. C. Patrick Fleenor John M. Harding Keith W. McMaster Darrell A. McNabb Susan B. Ogden Ronald A. Peterson Jerry Standal David E. Tinius Barbara M. Yates

Instructor: Donald B. Walter

Objectives

Collegiate education for business should prepare students for business careers, not simply for jobfinding. 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 Albers 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 of Bachelor of Arts in Business Administration

American Assembly of Collegiate Schools of Business.

Organization

The Albers 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) Master of Science in Accounting (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.

and the second second	gree Requirements thelor of Arts in Business Administration — Stu- dents seeking this degree complete a program with the following components: Requirements in arts and sciences75 credits	Sophomore year Business 211, 230, 231, 270 Economics 271, 272 Mathematics 214 Philosophy 220 Theology and religious studi
	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 and religious studies selected from two different areas; five credits in natural science; and ten credits chosen with the direction of an adviser.	Junior year Business 310, 340, 350, 380 Business major (300-499) Theology and religious studi Electives other than busines and economics
2.	Business core requirements60 credits	Senior year Business 482
	Business 170 or Economics 100; Business 211, 230, 231, 270, 310, 340, 350, 380, 482; Economics 271, 272.	Business major (300-499) Philosophy Electives
3.	Specialization in a major area of concentration20 credits	
13	Accounting, finance, general business, manage- ment or marketing.	Accounting
4.	Electives from any undergraduate offerings of the University25 credits	Virginia L. Parks, Ph.D., C.P.A., A Objectives
Gra	Total 180 credits	The work of the accountant indispensable service in Professionally trained accoun of private business and go determination, financial acc

- 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.
- Master of Science in Accounting-The degree requires 45 graduate credits beyond the foundation in business and economics courses. A research paper must be completed in an area of specialization. The program is designed to prepare graudates for professional responsibilities in the following areas of specialization: financial accounting, managerial accounting and taxation. This program is designed to accommodate those with baccalaureate degrees in accounting, in other fields of business, and in 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 or 3831	0 credits
Mathematics 118, 1301	
Natural Science	
Philosophy 110	5 credits
Social Sciences (Psychology 100 and	
Sociology 101 recommended)1	0 credits

Business 211, 230, 231, 27020	credits
Economics 271, 27210	
Mathematics 214 5	
Philosophy 220 5	
Theology and religious studies 5	
Junior year	
Business 310, 340, 350, 38020	credits
Business major (300-499) 10	credits
Theology and religious studies 5	credits

Business major (300-499)	
Theology and religious studies	5 credits
Electives other than business	
and economics	10 credits

Senior year Business 482	5	credits
Business major (300-499)	10	credits
Philosophy		
Electives	25	credits

Total . . . 180 credits

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Ph.D., C.P.A., Adviser

e accountant is firmly established as an service in the world of business. rained accountants serve in many areas iness and government, such as cost 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, 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 management of assets for financial institutions and individuals.

Requirements for the finance major are: Bus 341, 343, 441 and Ec 372. Ec 472 and 473 are 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, 343, 352, 370, 375, 381, 383; Ec 372, 374, 377, 471, 472, 473 and 476.

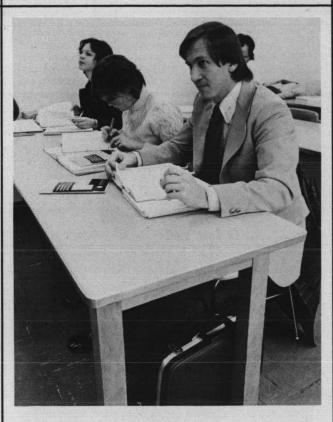
Harriet I Object The ger adminis It includ goals of make manage careers	neral area of management is conce stration of private business or publ des relating the goals of an enterp i those individuals and groups of ind the enterprise a continuing pre- ement major is designed for stud in administration, personnel	rned with the ic enterprise. orise with the dividuals who rocess. The ents seeking	Computer-Based ManagementInformation Systems5 creditsData processing applications for business. Introduc- tion to information systems. Planning, designing and implementing commercial systems. Development of computer-based management information systems and consideration of associated problems. Prere- quisite: Mt 214.Cost Accounting5 credits Determination of manufacturing costs in job order, process and standard cost systems; introduction to
Require 38 37	s in business or government. ments for the management majo 31, 383 and at least 10 credits fro 75; Ec 372, 374, 377, 472, 473 an ceting	om Bus 370, Bus 332	methods of cost control. Prerequisite: Bus 231. Intermediate Accounting I 5 credits Examination of the theory and development of generally accepted accounting principles; evolution of theory as relates to the current state of accounting for the assets of the entity and the measurement and
	. McNabb, M.P.A., Adviser		reporting of periodic income. Prerequisite: Bus 231. (fall, spring)
to ultimi in mark and re	ives ng is the study of the flow of goods ate consumers and users. Career of eting are found in manufacturing, stailing, marketing research ional areas of advertising and pers	and services opportunities , wholesaling and in the	Intermediate Accounting II 5 credits Examination of the theory and development of generally accepted accounting principles; evolution of theory as relates to the current state of accounting for liabilities and owners' equities. Prerequisite: Bus 332. (winter, summer)
35	quirements for the marketing ma 52, 353, 451 and 452. Ec 374, 472 rongly recommended.		Federal Income Tax I 5 credits Tax returns of individuals; gross income and deduc- tions; use of a tax service and research in tax problems. Prerequisite: Bus 332.
Busine	ss Courses	Bus 340	Business Finance 5 credits
Bus 170	Economic and Social Environment Survey of the significance and effect and social environmental factors on sector; role and responsibilities of modern society; career opportunities inter-relationships of major functio business.	the business f business in s in business;	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. Prere- quisites: Ec 271, Bus 231. (fall, winter, spring)
Bus 211	Business Statistics Basic statistics, probability concepts, p tributions, expectation, sampling, hypothesis testing, index numbers an to simple linear models. Prerequisite	, estimation, d introduction : Mt 130. (fall,	Principles, policies and practices of investing. Analysis of public and private industries and securities, individual and institutional viewpoints. Prerequisite: Bus 340.
Bus 230	winter, spring) Principles of Accounting I (Financial Introduction to financial accounting emphasis on the development of the st) 5 credits concepts with tudent's ability	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.
	to understand and interpret financial business entities. (fall, winter, spring)	1 Dus 550	Introduction to Marketing 5 credits Survey of institutions and essential functions in the
Bus 231	Principles of Accounting II (Manager Introduction to the use of accounting in planning, control, and decision makin organizations. Prerequisite: Bus 230	nformation for ng in business	marketing system. Analysis of the marketing mix; product, place, promotion and price strategies. Prerequisites: Junior standing, permission. (fall, winter, spring)
Bus 270	spring) Law & Business Nature and development of law; struc tions of the courts; civil and criminal p of attorneys and an introduction to the tracts.	Bus 352 5 credits ture and func- rocedure; role	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
	Special Topics Special Topics Special Topics	1-5 credits 1-5 credits 1-5 credits	of price policies by manufacturers, wholesalers and retailers. Legal aspects of pricing under anti-trust

	Advanced Law and Business5 creditsCommercial law, including contracts, businessstructures and property relationships; legal aspectsof government and business, including credit andenvironmental legislation. Prerequisite: Bus 270.Economics of Profit Sharing5 creditsSurvey of the philosophy, economics and law in thefield of profit sharing; analysis of profit sharing plans		Marketing Management5 creditsCase studies of corporate problems and decision- making within marketing departments. Student par- ticipation in various roles of marketing, executive ac- tion involving organization planning, execution and control of marketing programs. Prerequisites: Bus 231 and 451. Seniors only.Business Policy and Organization5 credits
Bus 380	in use by industry today. Prerequisites: Bus 231, Ec 271. 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 482	Business Policy and Organization 5 credits Case studies of formation of policy and administra- tion 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 381	Organization Theory 5 credits	Bus 491	Special Topics 2-5 credits
	Study of administrative setting and roles of super- visory personnel as determinates of the scope and techniques of management functions; involves in- terpersonal relations, communication, leadership, organization structure, individual behavior and motivation. Prerequisite: Bus 380.	Bus 499	Independent Study 1-5 credits Supervised individual research. Open to senior business majors with the approval of the student's adviser.
Bus 383	Personnel Management 5 credits	Gradua	ite Courses
	Management of human resources to achieve the goals of the firm and its personnel in times of change in technology and personal preferences. Prerequis- ite: Bus 380.	Bus 501	Descriptive and Analytical Statistics 3 credits Basic statistics, probability concepts, probability dis- tributions, expectations, sampling, estimation, hypothesis testing, index numbers, introduction to simple linear models.
Bus 431	Advanced Accounting I 5 credits Special accounting problems associated with partnerships and business combinations. Particular emphasis on consolidated financial statements and price-level adjusted financial statements. Prere- quisite: Bus 333.	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 433	Seminar in Accounting Theory 5 credits Critical examination of accounting theories; con- cepts, postulates and principles related to income measurement, assets, liabilities and equities. Prere- quisite: Bus 333.	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 435	Auditing 5 credits Introduction to the purpose, scope, concepts and methods used in examining and attesting to financial statements, with emphasis upon generally accepted	Bus 504	Marketing Principles 3 credits Introduction to marketing and its functions. Ex- amination of contemporary problems and issues in marketing of goods and services.
Bue 426	auditing standards and accounting principles. Con- sideration given to current issues concerning professionalism, and the developing role of the public accountant. Prerequisite: Bus 333. Federal Income Tax II 3 credits	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 preserva- tion of society's values; limits of the law's ability to
Dus 450	Tax returns of partnerships and corporations; problems related to installment sales, cash basis and accrual basis. Prerequisite: Bus 336.		produce change. Illustrations of above principles from criminal and family law, contracts and property law.
		Bus 506	Macroeconomics 3 credits Determinants of the aggregate level of income,
Bus 441	Case Problems in Finance 5 credits Variables relevant to financial problems; skill, techniques and judgment necessary to make finan-		employment and prices. Stabilization problems and policies.
	cial decisions. Prerequisite: Bus 340.	Bus 507	Administrative Practices 3 credits Analysis of traditional processes of management: planning, organizing, directing, coordinating and
Bus 451	Marketing Research 5 credits Purpose, methods and techniques of marketing research. Prerequisites: Bus 211, 352, 353.		controlling. Emphasis on analytical skills needed by the manager and the integration of individuals within organizations.

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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 manage- ment information systems and associated problems.	Bus 527	Intermediate Accounting I 3 cred Examination in depth of the theory and development of generally accepted accounting principles; evolution of theory as it relates to the current state of a counting for the assets of the entity and the measurement and reporting of periodic income.
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	Bus 528	Intermediate Accounting II 3 cred Examination in depth of the theory and developme of generally accepted accounting principles; evo tion of theory as it relates to the current state of a counting for liabilities and owners' equities.
	area. Prerequisite: Bus 501.	Bus 530	Managerial Accounting 3 cred Concepts of managerial accounting; attention-c
Bus 511	Advanced Statistical Analysis 3 credits Probability distributions, sampling, analysis of variance, multiple correlation and regression, time series analysis, non-parametric statistics and in-		ecting 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 co
	troduction to linear programming. Prerequisite: Bus	Bus 531	record keeping. Prerequisite: Bus 502. Management Control Systems 3 cred
	501.		A study of the nature, structure and processes management control systems, considering su
Bus 512	Operations Research 3 credits	an use	issues as organization structure, organization obje
	Philosophy and methodology of operations research, linear programming, inventory models, simulation, queuing theory, game theory and in- troduction to dynamic programming. Prerequisite: Bus 511.		tives, key economic variables, and performan analysis in both profit and not-for-pro organizations. Text, cases, readings and guest pra titioners are used to explore the key issues. Pre- guiste: Bus 530.
		Bus 532	Advanced Cost Accounting 3 cred
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; oppor- tunity for field research problems. Prerequisite: Bus 511.		A study of selected accounting topics, such methods of cost estimation, cost for decisi models, variance analysis, cost allocations, produ costing, direct costing, transfer pricing, produ pricing, and the behavioral aspects of budgeting a planning, decision making and control. Coverage conventional practices and exploration of proposi for change. Lectures, problem solving, and discu sion. Prerequisite: Bus 530
Bus 519	Research in Quantitative Methods 3 credits Prerequisite: Permission of adviser. 3	Bus 533	Contemporary Accounting and
Bue 520	Federal Tax Procedure 3 credits		its Environment 3 cred Examination of the role of accounting in society; e
Dus 320	Analysis of federal tax procedure at the ad- ministrative level and in litigation. Consideration of treasury regulations, administration regulations, assessments, compromise agreements, and referred claims; pretrial, trial and appellate processes; tax collection, penalties, and prosecution		sentials of accounting measurement; formulation accounting concepts, interaction of accounting w other disciplines with which it has the greatest it terplay—economics, law, mathematics, informatic systems, communication theory and behavior sciences. Prerequisite: Bus 502.
	of the taxpayer.	Bus 534	Seminar in Accounting 3 cred
Bus 521	Federal Income Taxation of Individual 3 credits Analysis of federal income tax laws as they pertain to the individual taxpayer with emphasis on tax plan- ning techniques.		Current topics in accounting with emphasis on are of interest to seminar participants. Examples of su topics are development of accounting principle audit responsibility, international accounting governmental accounting, information system human resource accounting, and the regulator
Bus 522	Federal Income Taxation of Corporations3 credits Analysis of federal income tax laws as they pertain to the corporate taxpayer and shareholders with		agencies impacting upon accounting informatic Prerequisite: Bus 502, and the permission of structor. Prerequisite for Bus 539.
	emphasis on tax planning techniques.	Bus 535	Advanced Auditing 3 cred Examination of the changing business environme
Bus 523	Taxation of Capital Assets 3 credits Analysis of federal income taxation of capital assets, utilizing statutes, selected materials and cases to ex-		of the auditor and the impact of these changes auditing philosophy, objectives and methodology
	amine special code provisions pertaining to capital assets treatment.	Bus 537	Special Topics 3 cred
	asotio il calinoni.	Bus 538	Special Topics 3 cred Advanced courses in taxation, managerial accou
Bus 524	Tax Research and Decision Making 3 credits Examination of materials and methods of tax research for use in tax planning and policy making.		ting, financial accounting and auditing. The courses will be listed in the quarterly class schedu as offered.

Bus 539	Research in Accounting	3 credits
	Prerequisite: Bus 534 and permission	of instructor.

- Bus 540 Managerial Finance 3 credits Case 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 aproach 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 Managerial Economics 3 credits Theory of the consumer, the firm, and the industry, with emphasis on applications to business decision making. Prerequisite: Bus 506.
- Bus 574 Advanced 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 in-
LVAL SA DON	cluding the working of the foreign exchange market.
1.	National policies and international institutions.
12 1 1 1 1 1 1 1 1 1 1	Foreign branches and subsidiaries. Multinational
THE PROPERTY	corporations. Centrally planned economies.
100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100	Developing nations. Prerequisite: Bus 506.
Bus 576	International Finance and
	Investment 3 credits
CENER DA	Balance of payments. International investment. Ex-
	change controls. Liquidity and adjustment
New York Party	problems. I.M.F. and possible developments.
mint of Version	American payment problems. Special drawing
	rights. Proposals for international payments
Sector Sector	systems. Eurodollar market. Prerequisite: Bus 506;
	575 recommended.
Bus 578	Legislative Regulation of the
	Modern Corporation 3 credits
1.1.1	Influence of modern legislation, regulations, and
	court decisions, with special emphasis on labor law
的历史学习的	and labor relations. Additional illustrative material
	from anti-trust and consumer regulation.
Bus 579	Research in the Environmental Area 3 credits
	Prerequisite: Permission of adviser.
Bus 580	Organizational Structure and
a ferrer	Behavior 3 credits
19月1日 我们	Conceptual understanding of organization structure
the marrie of	and functioning. Provides examination of various
No section	forces operating in an organization. Examines re-
N. S. F. HR	search studies from various disciplines to under-
ALCOUNT OF A SHARE	stand the organizational functional and dysfunc-

tional aspects. Explores introduction of change.

Prerequisite: Bus 507.

1. 1. 1.		
Bus 581	Administrative Social Communication 3 credits	E
	Analysis of socio-psychological theory and research,	-
	decision making, group structure, dynamics and leadership and how these influence social com-	Jo
	munication in small groups and the formal organiza-	0
	tion. Emphasis is on the understanding of theory and	TI
	the practice of communication skills in class.	st
	Prerequisite: Bus 580.	p
		SC
Bus 582	Decision Theory 3 credits Study, analysis and discussion of the total decision	te
	making process. Particular emphasis is accorded	0
	the interdisciplinary aspect of decision making and	a
	the concept of rational decisions. Prerequisite: Bus	p
	510, 580.	CO
B 500	Management Philippenhu	pi di
Bus 583	Management Philosophy 3 credits Review, analysis and discussion of managerial	1 "
	values, ideology, motivation and objectives. The	
	power of managers and their social responsibilities	
	are examined through the evolution of management	B
	thought and the theories ot technological "deter-	
	minism". Prerequisite: Bus 580.	G
Bue 594	Comparative Administration 3 credits	S
Dus 364	Examination of differences which exist in managing	01
	various types of organizations and institutions.	th
	Analysis of different managerial approaches to	tio
	public issues affecting business. Prerequisite: Bus	hi
	580.	1
	Management of Change 2 gradity	-
Dus 202	Management of Change 3 credits Analysis of the process of social change in American	
	society, its impact on the public and organizations,	B
	especially the corporation. Problems of technology	
	and culture, ecological awareness, poverty, con-	Jan Z
	sumer law, new life styles and new attitudes toward	
	work. Prerequsite: Bus 580	1
Bus 586	Small Business Management 3 credits	U
	Procedures and problems in starting and operating	
	a successful small business enterprise. Prerequisite:	
	Bus 530, 540, 550, 580.	
D 500	Research in the Behavioral	
DUS 203	Area 3 credits	B
	Prerequisite: Permission of adviser.	F
		E
Bus 590	Special Topics 1-3 credits	H
	Prerequisite: Permission of adviser.	P
	and the second	P
	Ballow and Branners	E
Bus 595	Policy and Processes 3 credits	
	Analysis of policy problems faced by chief ad- ministrative officers of business firms. Determination	S
	of objectives; development of policies to achieve	B
	objectives; organization of executive personnel to	EP
	implement policies; coordination of the organization;	S
	and adjustments to changes in environment. Case	Ē
	study seminars with simulation (business gaming).	1
	This course integrates and builds upon the work of the Core. Should be scheduled toward the end of the	J
	student's course work. Prerequisites: Nine of Manage-	E
	ment Core (9 courses beyond Foundation), which is	P
	to include: Bus 530, 540, 550, 570, and 580 and at	
	least one course from the 4 Areas of Concentration,	E
	(Quantitative, Functional, Environmental, Behavioral).	s
		E
Bus 599	Research 1-3 credits	1

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 not including EC 100 (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

riesinnan year	
English 100 and core option	.10 credits
History 231 and core option	
Mathematics 118, 130	.10 credits
Philosophy 110	
Political Science 160	5 credits
Elective	

Sophomore year

oopnomore year		
Business 211, 230	10	credits
Economics 271, 272		
Philosophy 220		
Social Science core option		
Electives		

Junior year

Economics 372, 374 and electives	cradite
Philosophy core option 5	credits
Theology core options10	credits
Electives10	credits

Senior year

Economics 479 and electives	 credits
Electives	 credits

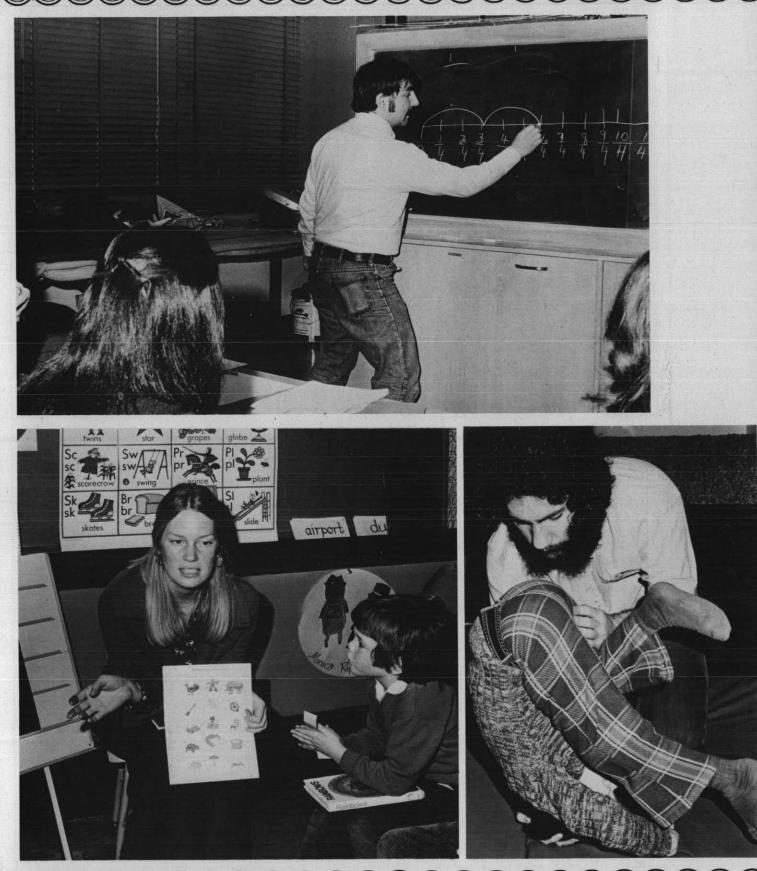
Total . . . 180 credits

Economics Courses Ec 379 Environmental Economics 5 credits Ec 100 Nature of Economic Society 5 credits Economic analysis of mains difficion, with emphasis on market capitalism, its critics and problems, past and problems of heurisms, past and problems of heurisms, past and problems of heurisms, particular settings, problems of heurisms, and past past, problems of heurisms, past and problems of heurisms, past problems, past past past problems, past past past past past past past past				BUSINESS 99 Economics
 Ec 100 Nature of Economic Society 3 credits environment; problems of pollution of economic institutions, with emphass on government and the privale sector. Ec 271 Principles of Economics - Macro 5 credits Programation, operation and control of the American economy in the listicate and socio-anditicate settings of protocols and sealer spreament Finance and conservation of teach, stars economic transmission of the sector. Ec 272 Principles of Economics - Macro 5 credits Protocols and sealer spreament Finance and conservation of teach, stars economic transmission of the sector. Ec 273 Principles of Economics - Macro 5 credits on prices, wages, production and distribution of income and wealth; problems of the work do economy problems. Ec 275 Economics of Poverty 5 credits Economic growth of the United States within the United States of Nater Alevender Conomic Comparis the Conomic Comparative perfo	Econo	mics Courses	Ec 379	
 Ec 271 Principles of Economics - Macro S credits Revenues, expenditures and debts of federal, state and local government; economic theories; constitutional initiations; government finance as means for social reform; shifting and incidence of taxes. Prerequisites: Ec 271, 272. Ec 272 Principles of Economics - Micro S credits on prices, wages, production and distribution of incomic growth of the United States in the light of the Oregonal and social trends of the United States in the light of the United States in the light of the Oregonal or United Priorities and International Insult for the public and private, in the area of housing, welfars public and private, in the area of housing, welfars the problems of the enciment of legislation related to poverty. Coen to majors and non-majors. No prerequisites. Ec 273 Netonal developments in economic thought from ancient to contemporary finance. An economic thought, mercantiliam and labor legislation. Prerequisite: Ec 271. Ec 37 Mistorial developments in economic thought from ancient to contemporary finance. An economic thought, mercantiliam and labor legislation. Prerequisite: Ec 271. Ec 37 Mistorial developments in economic thought from ancient to contemporary finance. An economic thought, mercantiliam and labor legislation. Prerequisite: Ec 271. Ec 37 Mistorial developments in economic thought from and economics. Contains and problems. Differences in structure and operation. Contrains proving of automation; development in the United States of public policy with theory: application to the development in actualities. Correlise S credits Development in the United States of public Policy. Prerequisite: Ec 271. Ec 37 Mistorial developments in economic thought; mercantiliam and labor legislation. Prerequisite: Ec 271.		Nature of Economic Society 5 credits Evolution of economic institutions, with emphasis on market capitalism, its critics and problems, past and present. Changing roles and responsibilities of	E. 471	environment; problems of pollution, maintenance of the ecological balance and conservation of natural resources. Prerequisite: Ec 272.
Operation of the American economy with emphasis on prices, wages, production and distribution of distribution come and wealth; problems of the world economy. and Development 5 credits Ec 273 American Economic History 5 credits Fundamentals of International Institutions. European Common Market. Multinational cor- porations. Centrally planned economies. Developing countries. Possible limits to growth. Prerequisite: Ec 271. Ec 275 Economics of Poverty 5 credits Ec 276 Scommics of Poverty 5 credits Balance of payments, International institutions. European controls and prevents, the religisation re	Ec 271	Organization, operation and control of the American economy in its historical and socio-political settings; problems of inflation, unemployment, taxation, the		Revenues, expenditures and debts of federal, state and local governments; economic theories; con- stitutional limitations; government finance as means for social reform; shifting and incidence of taxes.
 Ec 273 American Economic proving of the United States in the light of the political and social trends of the times. Stresses the historical background of contemporary problems. Ec 275 Economics of Poverty 5 credits Examination of poverty in the United States with particular emphasis on urban poverty. The roles of technology, region, race, esc and educational level on the incidence of poverty are studied. Also analyzed is the extent of success of various programs, public and private, in the areas of housing, weffare payments and occupational training, as well as the problems of the enactment of legislation related to poverty. Open to majors and non-majors. No prerequisites. Ec 293 Special Topics 1-5 credits Major historical developments in economic thought from ancient to contemporary times. Christian influence on economic thought from ancient to contemporary times. Christian influence on economic thought from ancient to contemporary times. Christian influence on economic thought from ancient to contemporary times. Christian influence on economic thought from ancient to contemporary times. Christian influence on economic thought from ancient to contemporary times. Christian influence on economic thought isates faire; German and Austrian schools, Marx and the various socialists; Keynes an neurophyment of automation; development and prices. Problems of unamployment and prices. Problems of automation; development in the United States of public utilities. Prerequisite: Ec 272. Ec 373 Mistory of Commic Thought 5 credits Determination of levels for stabilization and growth. Prerequisite: Ec 271. Ec 374 History of Economic Thought 5 credits Determination of levels on stabilization and growth. Prerequisite: Ec 271. Ec 375 Gov	Ec 272	Operation of the American economy with emphasis on prices, wages, production and distribution of in-	Ec 472	and Development 5 credits Fundamentals of international trade. Balance of payments and the foreign exchange market.
 Examination of poverty in the United States with par- ticular emphasis on urban poverty. The roles of technology, region, race, sex and educational level on the incidence of poverty are studied. Also analyz- ed is the extent of success of various programs, public and private, in the areas of housing, welfare payments and occupational training, as well as the problems of the enactment of legislation related to poverty. Open to majors and non-majors. No prerequisites. Ec 281 Special Topics 1-5 credits Ec 283 Major historical developments in economic thought from ancient to contemporary times. Christian in- fluence on economic thought. The canditism and laissez faire; German and Austrian schools, Marx and the various socialists; Keynes and neo- Keynesian analysis. Ec 372 National income Analysis 5 credits Determination of levels of national income, employ- ment and prices. Problems of unemployment and in- flation. Prolicies for stabilization and growth. Prere- quisite: Ec 271. Ec 377 Comparative Schools, Marx and the various socialists; Keynes and neo- Keynesian analysis. Ec 377 Antional income Analysis 5 credits Determination of levels of national income, employ- ment and prices. Problems of unemployment and instatos. problems of unemployment and instatos. Problems of unemployment and in- flation. Prolicies for stabilization and growth. Prere- quisite: Ec 271. Ec 377 Government and Busines 5 credits society. Prerequisite: Ec 272. Ec 377 Government and Busines 5 credits revelopment 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 utilitive. Prerequisite: Perreguisite: Ec 272.	Ec 273	Economic growth of the United States in the light of the political and social trends of the times. Stresses the historical background of contemporary		European Common Market. Multinational cor- porations. Centrally planned economies. Developing countries. Possible limits to growth. Prerequisite: Ec
 Ec 291 Special Topics 1-5 credits Ec 293 Special Topics 1-5 credits Ec 293 Special Topics 1-5 credits Ec 371 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 372 National Income Analysis 5 credits Determination of levels of national income, employment and prices. Problems of unemployment and infigure. Ec 271. Ec 374 Intermediate Price Theory 5 credits Demand, supply, costs and market prices under competitive and insperfectly 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. 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. Prerequisite: Ec 272. Ec 479 Senior Research 5 credits An advanced course providing the opport unity for students to pursue topics in breadth and depth and apply the tools of economic policy. Prerequisite: Ec 272. Ec 479 Senior Research 2 credits An advanced course providing the opport of instructor. 	Ec 275	Examination of poverty in the United States with par- ticular emphasis on urban poverty. The roles of technology, region, race, sex and educational level on the incidence of poverty are studied. Also analyz- ed is the extent of success of various programs, public and private, in the areas of housing, welfare payments and occupational training, as well as the problems of the enactment of legislation related to poverty. Open to majors and non-majors. No		and Investment 5 credits Balance of payments. International investment. Ex- change controls and payments policies. I.M.F., Special Drawing Rights, the reform of the inter- national monetary system and the position of gold. Eurodollar market. Oil prices. Financial problems of multinational corporations. Prerequisite Ec 271. Ec 472 recommended.
 Major historical developments in economic thought from ancient to contemporary times. Christian in-fluence on economic thought; mercantilism and hastrian schools, Marx and the various socialists; Keynes and neokeynesian analysis. Ec 372 National Income Analysis 5 credits Determination of levels of national income, employment and prices. Problems of unemployment and industrialization; rich nations and poor nations; growth of authoritarian socialist societies. 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 478 Senior Research 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: Ec 272. Ec 478 Senior Research 2.5 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: Ec 272. Ec 479 Senior Research 2.5 credits 	Ec 292	Special Topics1-5 creditsSpecial Topics1-5 creditsSpecial Topics1-5 credits1-5 credits1-5 credits	Ec 476	Survey of the economics of industrial relations; effects of industrial changes on labor; hours and wages; employment and unemployment; trade un-
 Ec 372 National Income Analysis 5 credits Determination of levels of national income, employ- ment and prices. Problems of unemployment and in- flation. Policies for stabilization and growth. Prere- quisite: Ec 271. Ec 374 Intermediate Price Theory 5 credits Demand, supply, costs and market prices under competitive and imperfectly competitive market con- ditions. Relationships between price and costs; in- come 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 491 Special Topice 225 credits 	Ec 371	Major historical developments in economic thought from ancient to contemporary times. Christian in- fluence on economic thought; mercantilism and laissez faire; German and Austrian schools, Marx and the various socialists; Keynes and neo-	Ec 477	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
quisite: Ec 271.Types of economic systems — capitalist, democratic socialist, totalitarian socialist, fascist, mixed types. Common factors and problems. Differences in struc- ture and operation. Comparative performance. Marxian philosophy and economics. Prerequisites: Ec 271, 272.Ec 377Government and Business control of industry and commerce and its application to mergers, business concentration and restrictive business practices, regulation of public utilities. Prerequisite: Ec 272.Ec 479Senior Research search5 credits S creditsEc 479Senior Research subsiness concentration and restrictive business practices, regulation of public utilities. Prerequisite: Ec 272.Senior Research 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 372	Determination of levels of national income, employ- ment and prices. Problems of unemployment and in-	Ec 478	Prerequisite: Ec 271.
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. Ec 479 Senior Research 5 credits Prerequisite: Ec 272. Ec 479 Senior Research 5 credits Control of industry and commerce and its application and vanced 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: Ec 272. Ec 491 Special Topics 2-5 credits	Ec 374	quisite: Ec 271. 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		Types of economic systems — capitalist, democratic socialist, totalitarian socialist, fascist, mixed types. Common factors and problems. Differences in struc- ture and operation. Comparative performance. Marxian philosophy and economics. Prerequisites:
E 270 Uniter Economico E condito Ec 491 Special Topics 2-5 credits	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.	Ec 479	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.
Ec 378 Orban Economics Screents The causes and consequences of the in- terdependencies of firms, individuals, households and governmental units within the constrained space of urban areas. Problems of land, housing, transpor- tation, labor and public services. Independent Study 2-5 credits Supervised individual research. Open to senior economics majors with the approval of the departmental advisers. Supervised individual research. Open to senior	Ec 378	terdependencies of firms, individuals, households and governmental units within the constrained space		Independent Study 2-5 credits Supervised individual research. Open to senior economics majors with the approval of the



The University's second academic unit, the School of Education, was established in 1935. Students, above, make use of the Reading Room in the Garrand Building Library.

SCHOOL OF EDUCATION John A. Morford, Ed.D., Dean Gary H. Zarter, Ph.D., Associate Dean





School of Education

Professors: Winfield S. Fountain John A. Morford Ralph K. O'Brien

Associate Professors: Margaret Haggerty Mary C. Pirrung Mary Lou Wyse Charles A. Yackulic

Assistant Professors: Dorothy G. Blystad Bonnie J. Denoon R. Michael O'Connor Gary H. Zarter

Instructor: Karla Marken

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 and adult education.

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 are programs to train Montessori school teachers or teachers of the mentally retarded.

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 Programs

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 unconditional 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 upperdivision 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:

- 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.

 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.

 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. 104 EDUCATION

General Program Requirements Bachelor of Education Elementary **Bachelor of Arts in Education** Secondary Bachelor of Arts in Education (middle school, junior Bachelor of Education (elementary, middle school, junior high school or Montessori school teaching — 1) All University core requirements: 60 credits. high school, or senior high school teaching) — 1) All University core requirements as found on page 24: 60 credits, 2) A teaching major or of at least 45 credits in any subject commonly taught in secon-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, dary schools. (See departmental sections of the bulletin for exact requirements in each teaching major. Where no requirements are shown in a geography, literature, speech and physical education needed by all elementary and middle school teachers. 3) A teaching major of at least 25 departmental section, an individualized program must be developed jointly). 3) Professional educa-tion courses: 45 credits. 4) Electives: 40 credits. Students are advised to use electives to complete credits and a teaching minor of at least 20 credits in subjects or areas commonly taught in elemen-tary or junior high schools. Junior high can-didates must take the 25 hour teaching major in a additional teaching fields. For recommendation to Comprehensive Social specific subject taught at the junior high level. 4) Professional education courses: 50 credits. 5) Electives: 10 credits. These vary slightly for students seeking either special education or Montecerit in the seeking either special education or students. Studies the following are required: 1) a major in one of the social studies fields, 2) at least 25 hours in history, including American, Western, and non-Western, and 3) a minimum total of 70 quarter Montessori training. credits in the social studies, including courses in at least three social studies areas in addition to his-Ten of the 190 credits required for the degree and tory. provisional certification also count toward the standard certificate teachers must earn once they begin teaching. Students interested in Montessori teaching should confer with the Montessori Program Director early in their studies. 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. Elementary **Typical Program Typical Program** Freshman year Freshman year English core (include American Literature) .10 credits History core (include U.S. History)10 credits English core options10 credits Philosophy core option 5 credits Sophomore year Theology core options......10 credits Major or electives10 credits Junior year Education 200, 32510 credits Junior year Education 200, 325, 330, 33720 credits course in teaching of major)25 credits Senior year Education 438 3 credits Senior year Education 439 3 credits

Total . . . 190 credits

Total . . . 190 credits

Typical Program

Elementary with Montessori Emphasis

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 area15 credits
Sonhomore year

Art 370, Music 11410	credits
Biology 205: Mathematics 20010	
Education 322 5	
Philosophy core options10	credits
Theology core options10	credits

Junior year

Education 323, 328, 32915	credits
Physical Education 5	credits
Education 336 and 34010	credits
Teaching subject and electives15	credits

Senior year

Student teaching (1/2 day for a year)20	credits
Education 436, 437, 44215	
One of Ed 374, Hs 341, or Sph 320 5	
Teaching subjects15	

Total . . . 190 credits

Typical Program

Special Education: Teaching Mentally Retarded Freshman year

English core (include American Literature) 10 cred	tits
History core (include U.S. History)10 cred	
Philosophy core option 5 cred	
Social Science core option 5 cred	lits
Teaching subject or supporting area15 cred	lits

Sophomore year

Art 370, Music 114	10	credits
Biology 205; Mathematics 200	10	credits
Education 322	5	credits
Philosophy core options	10	credits
Theology core options		

Junior year

Education 200 and 32510	credits
Education 330, 336, 34015	credits
Education 438 and 425 6	
PE 352 and 410 6	credits
Teaching subjects13	credits

Senior year

Student teaching1	2 credits
Education 424, 426, 427	9 credits
One of Education 372 or 374	5 credits
Teaching subjects and elective2	4 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.)

- a) Elementary teaching provisional certification,
- b) Secondary teaching provisional certification,
- c) Montessori teaching certification.

For bachelor's or master's degree holders with teacher certification or its equivalent:

- a) Standard certification (fifth-year); may be either a non-degree program or combined with a master's degree.
- b) 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.
- c) 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.

 d) 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. This flexible program permits a variety of specializations, e.g., Reading Specialist, Learning—Language Disabilities and Montessori education.

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 postbachelor and fifth year programs leading to provisional or standard teaching certificates **and** post-masters

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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, Public Service 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.

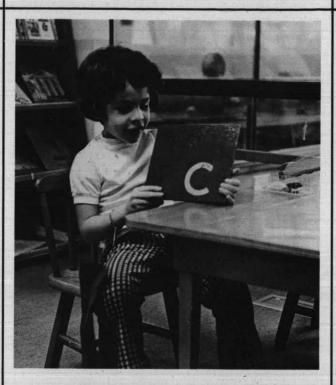
Admission Requirements

- Relevant Post-Bachelor's work experience, 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.
- 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.)
- 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.
- 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 Adviser.
 - 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. M. Ed. candidates must complete at least 48 credits; M.A. candidates must complete at least 45 credits, including either a three credit project or a 10 credit thesis.
- c) In the programs involving a required practicum or internship there are two evaluation points beyond initial admission: at candidacy and just prior to the practicum or internship to further determine the candidate's capabilities to function effectively in the practicum or internship role.
- 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

- 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 indepen-dent 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 certificate.

(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
4. One of:	Ed 522—Child Psychology-Learning Ed 523—Adolescent Psychology-Learn- ing

Typical	Maj	or	Courses:	
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- Ed 583 School Finance
- Ed 584 School Law
- Ed 586 School Personnel
- Ed 596 Administrative Graduate Project
- Ed 590 Administrative Internship I
- Ed 591 Administrative Internship II Ed 592 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 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 Graduate Stud		Research	and
2	One of	Ed	501 - Philos	ant	v of Educat	ion

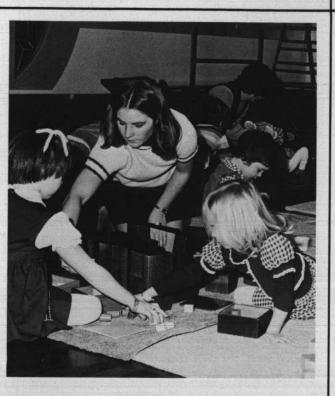
- Ed 502 History of Education Ed 503 - Comparative Education
- 3. Ed 572 Foundations in Adult Education

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.	Psv 465	- Industrial Psychology
14.	Ed 506	 Educational Statistics
15.	Ed 540	- Fundamentals of Curriculum Development
An el	ective sective section the section of the section o	quence in Alcohol Studies may be inco his program.



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 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 Counsel-
- ing
- 6. Ed 5201 Counseling Internship I and II 7. Ed 527 Measurement in Psychology and Education
- 8. Ed 528 Psychological Tests
- 9. Ed 551 Counseling Practicum 10. Ed 559 Guidance Graduate Project

Typical Electives:

- Ed 519 Group Counseling PE 497 The Drug Scene Psy 494 Behavior Modification

- Ed 506 Educational Statistics Ed 515 Guidance and Multicultures
- Ed 522 Child Psychology-Learning

An elective sequence in Alcohol Studies may be incorporated into this program.

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
- 4. One of: Ed 522—Child Psychology-Learning Ed 523—Adolescent Psychology-Learnina

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. Specialty areas such as reading, 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.)
- b. Courses from other graduate Education majors: Administration, Guidance, Adult Education.
- c. An academic area such as English, foreign language (French abroad with intern teaching), history, business, art, physical education. Courses must be 400level or above.

Reading Specialist or Learning/ Language Disability Specialist

Specializations in reading or learning/language disability may be completed as part of the master's degree program described in Curriculum and Instruction. Each may also be pursued as a non-degree area of specialization leading to a university certificate of completion upon the completing of the following:

Reading Specialist (12-15 hours)

- 1. Ed 532 Field Practicum in Reading
- 2. Ed 533 Reading Diagnosis and Evaluation
 3. Ed 534 Seminar in the Teaching of Reading
 4. Ed 535 Reading in Content Fields

Learning/Language Disabilities Specialist (18-21 hours)

- 1. Ed 424 Introduction to L/LD
- Ed 425 Psych of the Exceptional Child
 Ed 547 L/LD Diagnosis
- 4. Ed 552 L/LD Special Methods 5. Ed 554 Seminar in L/LD 6. Ed 555 Practicum: L/LD

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Educa	tion Courses	Ed 336	Fundamentals of Reading Instruction —
Ed 101 Ed 102 Ed 103	College Study Skill Development I 5 credits College Study Skill Development II 5 credits College Study Skill Development III 5 credits Sequential development of essential college skills emphasizing reading comprehension, retention and vocabulary building, effective study plans and cor- relation with the basic university curriculum. Prere- quisite: Permission of instructor. (I. fall, II. winter, III. spring)	Ed 337	Elementary 3-5 credits 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) Fundamentals of Reading Instruction — Secondary 3-5 credits
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)		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 ex- perience component.) (fall, winter, spring)
to substand	summery	Ed 340	Fundamentals of Mathematics Instruction — Elementary 5 credits
Ed 291 Ed 292 Ed 293 Ed 304	Special Topics 1-5 credits Multi-Culture — Rural and		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.
	Urban Education 3 credits The nature, problems and status of education in the minority culture.	Ed 342	Pacific Science Center Internship 3 credits Laboratory experience working with a teaching team in mathematics or science, grades 2-8. Prere- quisites: Ed 340 and selective interview by Science
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)	Ed 372	Center staff prior to quarter. Teaching Geography and Social Studies 5 credits Survey of modes, methods, media and materials for instruction in a Social Studies program with basic
Ed 323	Child Psychology 5 credits Development from birth through the sensitive stages of adolescence, emphasizing the growth of the total child — emotional, intellectual, physical, psy- chological and spiritual (character). (winter)	Ed 373	concepts from geography as the core. Story Telling — Primary 3 credits Selection and interpretation of kindergarten-primary grade literature. For Kindergarten-primary grade teachers and elementary school librarians.
Ed 325	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	Ed 374	Selection, introduction and student use of literature for preschool, kindergarten, primary and in- termediate grades. (winter)
E4 000	to four weeks field experience. Prerequisite: Ed 322; corequisite: Ed 200. (fall, winter, spring, summer) Montessori Orientation 5 credits	Ed 375	Literature for Early Childhood 3 credits Survey of the present field of literature for early childhood and primary education. (summer)
Ed 328	Basic philosophy, principles and procedures of en- vironmental learning within a "prepared en- vironment." Perceptual-motor education as utilized by everyday living and learning experiences of the young child.	Ed 376	Literature for Youth 3 credits Survey of junior books and an analysis of adult books suitable for intermediate grade children and early adolescence. (summer)
Ed 329	Experience with the education of the senses in isola-	Ed 378	Literature for Later Childhood 3 credits Survey of literature for children in grades 4-8.
	tion. Also a study of the acquisition of practical skills within the child through his absorptive and imitative tendencies which lead gradually to abstraction.	Ed 391 Ed 392 Ed 593	
Ed 330	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	Ed 401 Ed 407	School Methods (summer) 3 credits Workshop in Television Teaching 3 credits
Ed 33	field experience. Prerequisites: Ed 200, 325; core- quisites: Ed 336 and 340 or 337. (fall, winter, spring) 5 Early Childhood — Kindergarten 3 credits Principles, organization and methods of teaching. (summer)	Ed 420	Teaching Elementary School Subjects 5 credits General methods of teaching in specific subjects, areas and levels of the elementary school to include the total curriculum. Normally taken concurrently with student teaching. Prerequisite: Ed 330. (fall, winter, spring)
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Ed 424	History and current practices in diagnosis and	Ed 445	Student Teaching — Secondary 12 credits One quarter of full-day supervised teaching ex-
	remediation of learning disabilities.		perience on the secondary school level. Prere- quisite: Ed 330 and permission of the Dean. (fall, winter, spring)
Ed 425	Psychology of the Exceptional Child 3 credits 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.	Ed 446 Ed 460	copponentially of to credita
Ed 426	Special Education — TeachingSeverely Retarded Children3 creditsMaterials and techniques for educating the severelyretarded child.	Ed 491 Ed 492 Ed 493 Ed 493	Special Topics 1-5 credits Special Topics 1-5 credits Special Topics 1-5 credits Independent Study 1-5 credits
Ed 427	Special Education—Teaching Moderately Retarded Children 3 credits Materials and techniques for educating the moderately retarded child.	Ed 498 Ed 499	Independent Study 1-5 credits Independent Study 1-5 credits
Ed 430	Teaching Secondary School Subjects 5 credits General methods of teaching in specific subjects, areas and levels of the secondary school. Prere- quisite: Ed 330; corequisite: Ed 445.	Gradu Ed 500	late Courses
Ed 436			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)
	mathematical mind, its use of geometrical space relationships, the growing ability to calculate in the basic mathematical operations — first in the con- crete, finally in the abstract. (winter)	Ed 501	Philosophy of Education3 creditsPhilosophical foundations of education.(fall, winter,summer)History of Education3 credits
Ed 437	Comparative and Observational Study of Early Education 5 credits Current trends of Open Classroom structures will be		Great educators, theories and systems from the Hebrews, Greeks and Romans to the present. (summer)
	compared and related to the Montessori approach to learning. British Infant and Integrated Day, Free School, Individualized systems. Observation — 30 clock hours.	Ed 503	Comparative Education 3 credits Investigation and comparison of the leading national and cultural systems of education of the world. (spr- ing, summer)
Ed 438 Ed 439	Laboratory Experience — Elementary 1-6 credits (fall, winter, spring) Laboratory Experience — Secondary 1-6 credits	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 440	(fall, winter, spring) Student Teaching — Elementary 12 credits One quarter of full-day supervised teaching ex- perience on the elementary school level. Prere-	Ed 506	Educational Statistics 3 credits Specialized utilization of statistical data analysis and application to research. (winter)
Ed 441	quisite: Ed 330 and permission of the Dean. (fall, winter, spring) Montessori/Public School	Ed 510	Fundamental Counseling 3 credits Focus on basic counseling skill training through in- tensive small group practice. Designed to com- plement Education 513, Counseling Theories, which
Ed 442	Student Teaching20 creditsSupervised teaching within a Montessori preschooland public school (if needed for certificate). Studentteaching is done for a half day (daily) session in anapproved or credentialed school under an experienced Montessori teacher. (10 credits in fall; 5credits in other quarters.)Cosmic Environmental Learning5 credits	Ed 511	should be taken concurrently. (fall, summer) 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. (fall)
	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. (spr- ing)	Ed 512	Informational Services in Guidance 3 credits Study of the occupational development; sources of information necessary for effective guidance. (spr- ing, summer)

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		Counseling Theories 3 credits	Ed 530	Seminar: Curriculum Design in
-	Ed 513	Counseling Theories 3 credits Emphasis on theoretical foundations of major coun- seling approaches with opportunities for in-class practice in simulating counseling interview situations. Designed to complement Education 510, Fundamental Counseling Skills, which should be taken concurrently. (fall, summer)		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 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)	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 515	Guidance and Multicultures 3 credits Examination of Chicano, Indian, Black and Asian cultures and their relationship with the impact on helping professions. (winter)	Ed 532	Field Practicum in Reading 3-6 credits Supervised field experience in diagnosis and teaching of reading. Prerequisite: Ed 533 or equivalent.
	Ed 519	Group Counseling — Theory and Procedures 3 credits Emphasis on the theory and practice of group counseling. Opportunities for group experience will	Ed 533	Reading Diagnosis and Evaluation 3 credits Diagnosis of reading difficulties; tests, reading in- ventories, classroom techniques and materials; clinical programs and approaches. Prerequisite: Ed 534 or equivalent. (summer)
		be provided to integrate theory with procedures. Graduate students only. Prerequisites: Ed 510, 513. (winter)	Ed 534	Seminar in Teaching of Reading 3 credits Development of reading skills at all levels; examina- tion and evaluation of current reading practices and programs. Prerequisite: Ed 336 or 337 or equivalent.
	Ed 520 Ed 521	Counseling Internship I3 creditsCounseling Internship II3 creditsSupervised experiences in a school or agency.Prerequisites: Course work in guidance and permission two quarters prior to the internship. Taken during final two quarters of graduate program. (fall, winter, spring, summer)	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 522	Child Psychology Learning 3 credits Investigation of various theories of child develop- ment and learning.	Ed 536	Supervision of Instruction 3 credits Improvement of instruction through supervisory leadership. (spring, summer)
	Ed 523 Ed 525	Adolescent Psychology Learning3 creditsInvestigation studies in adolescent psychology and learning.3 creditsPsychology of Learning Seminar3 creditsInvestigation, analysis and reporting on original	Ed 537	Curriculum Independent Study 1-4 credits Intensive library research in curriculum. Ap- proximately 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,
		studies in the field of learning; includes a report on an investigation of some specific phase or problem. Prerequisite: Ed 325.	Ed 538	summer) 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. Prere-
and the second	Ed 527	Measurement in Psychology and Education 3 credits Theoretical foundations of modern measurement practices in education and related fields; taught with		quisite: Approval of Coordinator. (fall, winter, spring, summer)
		the cooperation of the Psychology department for prospective guidance specialists. Prerequisite: Ed 506. (winter, summer)	Ed 539	Curriculum Graduate Project 3 credits Scholarly graduate project designed to improve some aspect of education. Prerequisites: Graduate core requirements and approval of Coordinator. (fall, winter, spring, summer)
	Ed 528	Psychological Tests 3 credits Application of principles of psychological measure- ment in the critical examination of representative standardized tests with opportunities for scoring and interpretive practice. Prerequisite: Ed 527. (spring, summer)	Ed 540	
	Ed 529	Teaching Values in American Schools 3 credits Psychological foundations of character develop- ment, will-training, values, nature of morality, the relation of character to education and studies in character education.	Ed 541	Elementary Curriculum Seminar 3 credits Investigation and analysis of changes and trends, in- cluding a personal intensive report on some phase of curriculum on the elementary school level. Prerequisite: Ed 540. (winter, summer)
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Ed 542	Junior High School/Middle School Curriculum Seminar 3 credits Investigation and analysis of changes and trends, in- cluding a personal intensive report on some phase of curriculum on the junior high school and middle school levels. Prerequisite: Ed 540. (winter, summer)	Ed 555	and science, speech, music, art, physical education Evaluation of new techniques, approaches and materials. Practicum: Learning Disabilities 3-6 credits Diagnostic and prescriptive teaching with children who have learning disabilities. A laboratory course
Ed 543	Secondary Curriculum Seminar 3 credits Investigation and analysis of changes and trends, in- cluding a personal intensive report on some phase of curriculum on the senior high school level. Prerequisite: Ed 540. (spring, summer)	Ed 557	Guidance Independent Study 1-3 credits Intensive reading and field research in a topic mutually agreed on by adviser and student. Ap- proximately 30 hours of work for each credit. Com-
Ed 544	Methods 3 credits Provides an opportunity for experienced workers in elementary/secondary education to pursue in-		pletion reports will include analysis and critical ap- praisal of findings. Graduate students only. Prere- quisite: permission of adviser. (fall, winter, spring, summer)
Ed 546	dividual studies in curriculum, teaching methods and related fields. Special Education Seminar 3 credits	Ed 559	Guidance Graduate Project 3 credits Scholarly investigation of some practical aspect of the counseling field. Mandatory for Master of Arts in Education degree. Prerequisite: permission of ad-
	Investigation, analysis and reporting on original studies and trends in education of the mentally retarded.		viser. Graduate students only. (fall, winter, spring, summer)
Ed 547	Learning Disabilities: Diagnosis 3 credits Comparison of various methods used in the	Ed 561 Ed 562 Ed 563	Special Topics3 creditsSpecial Topics3 creditsSpecial Topics3 credits3 credits3 credits
	diagnosis of learning problems. Selection, ad- ministration, and analysis of tests.	Ed 567	Seminar in On the Job Training 3 credits Opportunity is provided to discuss the computer
Ed 548	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		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 549	or permission.	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.
	Theory, objectives, design and administration of learning resource centers. Individualized application to specific school settings. Prerequisite: Ed 330 or permission.	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
Ed 550	Practicum in Group Processes 3 credits Supervised off-campus experience co-leading groups. Offered spring quarter with limited enroll-	Ed 570	gathering techniques, education and public relations are used as the instruments of planned change. Seminar on the American
	ment. Prerequisite: Ed 513, 519. Graduate students only. (spring)		Community College 3 credits Consideration of the college parallel, vocational, technical and community service roles; history,
Ed 551	Counseling Practicum 3-6 credits Supervised counseling experience wherein the counselor candidate is responsible for actual		status and projected development of community colleges; staffing needs and qualifications. (summer)
	counseling cases. With supervision. Prerequisite: Ed 510, 513. Graduate students only. (fall, winter, spring, summer)	Ed 571	Seminar on Community CollegeInstructional Problems3 creditsIdentification of instructional programs pertinent to the community college; contrasts with and
Ed 552	Learning Disabilities: Special Methods 3 credits Focus is on methods of instruction of children with		similarities to problems associated with senior in- stitutions; trends in curricula, personnel and selec- tion. (summer)
	extreme learning problems including diagnosis and prescriptive teaching, multisensory systems, phonic systems, language development systems.	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 Masters in Adult Education. Ad-
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 573	ministration. (fall, summer) Special Problems of the Adult Learner 3 credits Characteristics of various adult groups and related
Ed 554	Seminar in Learning Disabilities 3 credits Emphasis on curriculum for the learning disabled child with major focus on adapted language, math		instructional problems with suggested approaches. Skill acquisition, transfer of training principles, alcohol and other addictions are studied. (winter, summer)

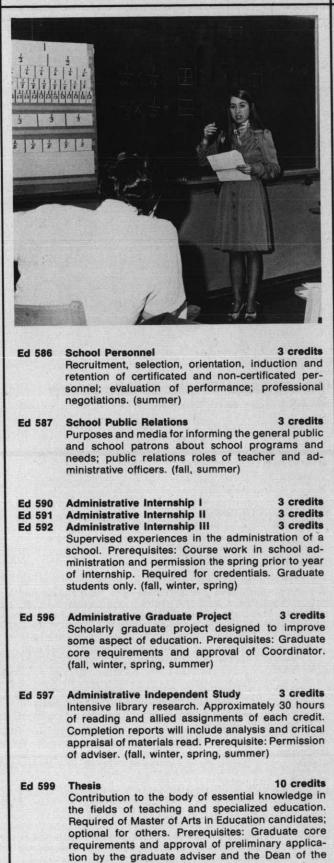
	Problems relating to the development, financing, staffing, supervision and evaluation of instructional programs for adults. (spring, summer)	$\frac{\frac{1}{2}}{\frac{1}{2}\left[\frac{1}{2}\right]\frac{1}{2}}$	
Ed 575	Course Development and Instructional Resources 3 credits Organizing a course of instruction 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)	· [字] 字 字 子 · [字] 字 字 字 · [字] 字 字 子 · [字] 字 · [字] 字 · [字] 字 · [字] 子 · [字] 字 · [字] · [字] · [字] · [· [] · [] · [] · [] · [] · [] · []	
Ed 576	Job and Task Analysis 3 credits Study of Job and Task Analysis as it applies to oc- cupational classification, selection and promotion in industry and government. Construction and review of Task Inventories. Implications for career ladders, career counseling, curriculum development, per- sonnel 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 586	School Personnel 3 crea Recruitment, selection, orientation, induction a retention of certificated and non-certificated p sonnel; evaluation of performance; professio
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 587	negotiations. (summer) School Public Relations Purposes and media for informing the general pul and school patrons about school programs a needs; public relations roles of teacher and
Ed 579	Adult Education Graduate Project 3 credits Scholarly graduate project designed to improve some aspect of education. Prerequisites: graduate core requirements and approval of Coordinator. (fall, winter, spring, summer)	Ed 590 Ed 591 Ed 592	Administrative officers. (fall, summer) Administrative Internship I 3 cred Administrative Internship II 3 cred Administrative Internship III 3 cred
Ed 580	Contemporary problems and trends; analysis and evaluation. Graduate students only. (summer)		Supervised experiences in the administration of school. Prerequisites: Course work in school a ministration and permission the spring prior to y of internship. Required for credentials. Gradu students only. (fall, winter, spring)
Ed 581	Elementary School Administration 3 credits Duties of administrators; criteria; administrative process; case studies. (fall, summer)	Ed 596	Administrative Graduate Project 3 created Scholarly graduate project designed to impresome aspect of education. Prerequisites: Graduate
Ed 582	Secondary School Administration 3 credits Duties of administrators; criteria; administrative process; case studies. (fall, summer)		core requirements and approval of Coordina (fall, winter, spring, summer)
. Ed 583	School Finance 3 credits Historical development; balanced taxation; school support program; problems and controversies. Graduate students only. (spring, summer)	Ed 597	Administrative Independent Study 3 creat Intensive library research. Approximately 30 ho of reading and allied assignments of each creat Completion reports will include analysis and crit appraisal of materials read. Prerequisite: Permiss of adviser. (fall, winter, 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. (summer)	Ed 599	Thesis 10 cre Contribution to the body of essential knowledge the fields of teaching and specialized educat Required of Master of Arts in Education candida
Ed 585	School Plant Planning 3 credits Plant requirement projections; site selections; staff and patron planning; leadership of principal.		optional for others. Prerequisites: Graduate of requirements and approval of preliminary appl tion by the graduate adviser and the Dean of Graduate School. (fall, winter, spring, summer)

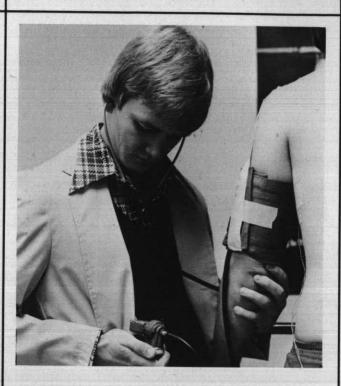
Administration of Adult Education

3 credits

Ed 574

Programs





Health and Physical Education Joseph T. Page, Ph.D., Chairman

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Associate Professors: Reba Y. Lucey J. Thomas Page

Assistant Professor: Lawrence E. Vance

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.

Degrees Offered

Bachelor of Arts in Education Master of Education Master 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.

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.
- Minor in Athletic Coaching 27 credits which must include PE 210, PE 220, PE 320, 5 credits of approved Major Activities and 8 credits selected from coaching theory classes which must include PE 408 or PE 409. This sequence is recommended for teachers of any subject matter with an interest in assuming coaching responsibilities in elementary or secondary schools.
- Master's Degree in Curriculum and Instruction Emphasis in Physical Education — Graduate study is structured within the area of Curriculum and Instruction. A total of 18 credits (6 courses) out of 45 required is devoted to the Physical Education course area. The entire sequence is described below.

Bachelor of Arts in Education

Freshman year

English 100 and core option10	credits
History core option10	credits
Major, minor or electives21	credits
Mathematics/Science core option 5	credits
Social Science core option 5	credits

Sophomore year

Education10	credits
Major, minor or electives20	credits
Mathematics/Science core option	credits credits

Junior year		
Education		credits
Major, minor or electives		
Philosophy core option	5	credits

Senior year	1
Education 44515	credits
Major, minor or electives20	credits
Theology core options10	

Total . . . 190 credits

Masters Program in Curriculum and Instruction with Emphasis in **Physical Education**

Joseph T. Page, Ph.D., Chairman

Typical Program—45-Hour Plan **Required Courses:**

- 1. Ed 500 Introduction to Research and Graduate Study
- 2. One of: Ed 501—Philosophy of Education Ed 502—History of Education Ed 503—Comparative Education
- 3. Ed 540 Fundamentals of Curriculum Development
- 4. One of: Ed 522—Child Psychology—Learning Ed 523—Adolescent Psychology

Typical Major Courses:

- 5. Ed 530 or 531*-Seminar in Curriculum Design

- Ed 536—Supervision of Instruction
 Ed 537*—Curriculum Independent Study
 Ed 541, 542, or 543—Curriculum Seminar
 Ed 539*—Curriculum Graduate Project * Study and research in these courses can be oriented toward Physical Education.

Physical Education Emphasis:

10. PE 480-Current Issues in Physical B	Educ	nation
11. PE 500—Administrative Process		
Education		allen and the
12. PE 550—Practicum Experience Education	in	Physical
13-15. Three Selected From:		
PE 482—Historical Foundations Education	of	Physical

PE 484—The Drug Scene

PE 486—Women in Sport PE 488—Sports and American Culture PE 410—Perceptual Motor Development PE 525—Seminar: Motor Learning

Health and Physical Education Courses

Basic instructional courses in activities indicated are designed to meet the physical and recreational needs of college men and women.

PE 120	Badminton	1 credit
PE 121	Bowling	1 credit
PE 122	Golf	1 credit
PE 123	Gymnastics	1 credit
PE 124	Swimming	1 credit
PE 125	Tennis	1 credit
PE 126	Volleyball	1 credit
PE 129	Skiing	1 credit
PE 130	Paddle Sports	1 credit
PE 131	Archery	1 credit
PE 132	Handball—Squash	1 credit
PE 135	Fencing	1 credit
PE 138	Conditioning	1 credit
PE 139	Basketball—Men	1 credit
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PE 140	Soccer-Men	1 credit
PE 142	Developmental Physical Education— Men	1 credit
PE 143	Modern Dance	1 credit
PE 146	Scuba Diving	1 credit
PE 147	Folk-Square Dance	1 credit
PE 148	Self-Defense-Men and Women	1 credit
PE 149	Synchronized Swimming	1 credit
PE 152	Golf-Intermediate and Advanced	1 credit
PE 153	Gymnastics — Intermediate and Advanced	1 credit
PE 154	Swimming — Intermediate and Advanced	1 credit
PE 155	Fencing — Intermediate and Advanced	1 credit
PE 200	Personal and Community Health Comprehensive course covering all bas health education; personal health prob health programs; community health a problems. (spring)	lems: school
PE 210	Anatomy and Kinesiology Foundation science course combining s function. Emphasis on muscular, circ cardio-respiratory bodily systems. (spr	culatory and
PE 220	Physiology of Exercise Study of physical changes as the result activity; the muscular, circulatory a respiratory systems. Prerequisite: BI 20	and cardio-

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teaching	ctivities: Concentrated study of skills, teo methodologies pertinent to elementary sical education activities.	
PE 250	Major Activities I Badminton, Volleyball, Golf and Tennis	5 credits
PE 251	Major Activities II Movement Exploration, Gymnastics	5 credits
PE 252	Major Activities III Track, Soccer, Football and Speedball	5 credits
PE 253	Major Activities IV Wrestling and Weight Training, Baseba Basketball	5 credits all,
PE 254	Major Activities V Folk-Square Dancing, Bowling and Arc	5 credits chery
PE 255	Major Activities VI Swimming, Life Saving, WSI	5 credits
PE 256	Major Activities VII Basketball - Women, Track and Field	5 credits
PE 257	Major Activities VIII Recreational Games	5 credits
PE 258	Major Activities IX Field Sports - Women	5 credits
PE 291 PE 292 PE 293	Special Topics Special Topics Special Topics	1-5 credits 1-5 credits 1-5 credits
PE 320	Care and Prevention of Athletic Injuries Common athletic injuries and pro emphasis on prevention. Includes pre jury care, such as taping and condition	and post in-
PE 330	Test and Measurements in Physical Education Utilization of available testing procedure education; evaluation of student ach terms of objectives. Includes statistica data. (winter)	ievement in
PE 350	Principles and Practices in Physical Education Concentrated analysis and study of the principles of physical education. Applica principles to problems in curriculum, m administration and evaluation. (fall)	ation of these
PE 352	Orientation to Health and Physical Education — Elementary Curriculum purposes, procedures and includes legal liability, evaluation. Rec elementary education majors. (fall, wi	quired of all

summer)

Instructor-Standard First Aid and

Personal Safety 3 credits Skills, knowledge, teaching methods. American Red Cross standards and certification. (winter)

PE 230

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)

2 credits PE 398 **Modern Dance** Activity courses for physical education majors only. (winter)

3 credits PE 408 Officiating of Women's Sports Philosophy and techniques applicable to girls' and women's sports in schools and colleges. (fall)

5 credits PE 409 **Psychology of Coaching** 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)

3 credits Perceptual Motor Development PE 410 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)

Coaching Courses: Concentrated study of the philosophy, practice, organization, theory and techniques of coaching interscholastic athletics.

PE 470	Football Coaching	2 credits
PE 471	Basketball Coaching	2 credits
PE 472	Baseball Coaching	2 credits
PE 473	Track and Field Coaching	2 credits
PE 474	Gymnastics Coaching	2 credits
PE 475	Wrestling Coaching	2 credits
PE 476	Swimming Coaching	2 credits
PE 477	Golf Coaching	1 credit
PE 478	Tennis Coaching	1 credit
PE 480	Current Issues in Physical Education	3 credits
FE 400	Trends and factors influencing physica and other movement-oriented prog	al education

plications for meeting student and community needs in implementing relevant programs in schools and colleges.

PE 482	Historical Foundations of	
	Physical Education	3 credit
	Traces the historical development of	
	tion and athletics from the early soc	
	culture. Emphasis on current applic	cations.



PE 486 Women in Sport 3 credits A historical, sociological and biophysical approach to women in sport with emphasis on concepts, impacts and implications related to American and World culture, past, present, and future.

PE 488 Seminar: Sports and American Culture 3 credits Reviews development and purposes of intercollegiate, interscholastic and professional sports. Focuses on issues, problems, opportunities and challenges, particularly for minorities.

PE 491 1-5 credits **Special Topics** (fall, winter, spring, summer)

1-5 credits PE 498 **Independent Study**

Administrative Process in PE 500 **Physical Education 3 credits** Organizational patterns of physical education in secondary and higher education. Stress on management processes and techniques essential administrative action. Prerequisite: Permission of instructor.

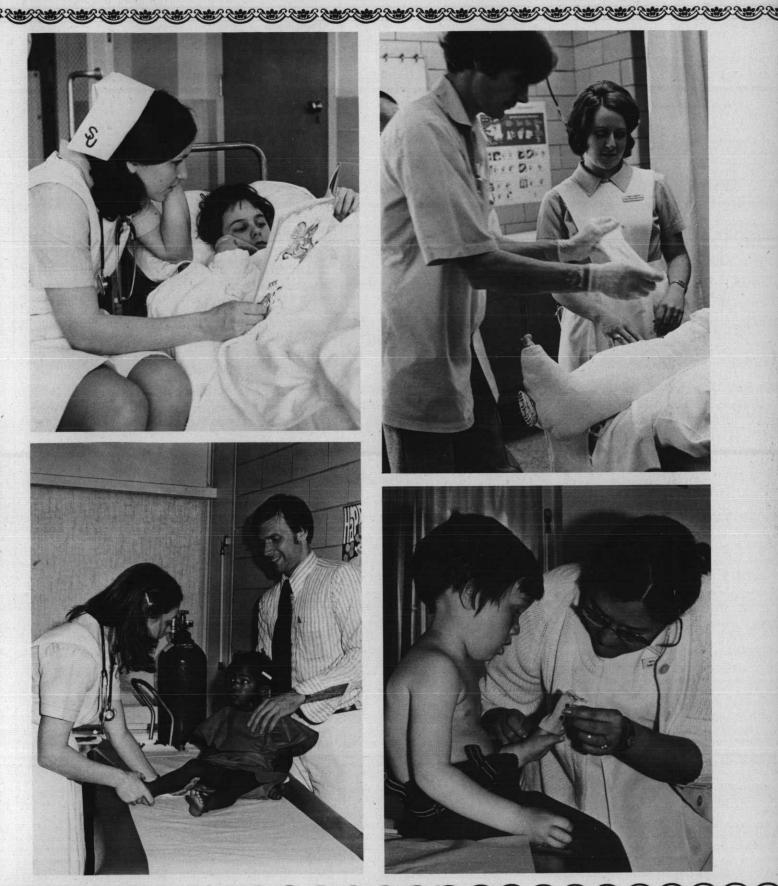
- **3 credits PE 525** Seminar: Motor Learning Exploration of theories of Human Motor Learning, motor-learning models and research relating to learning of perceptual motor skills. Prerequisite: Perceptual Motor Development or equivalent.
- PE 550 **Practicum Experience in 3 credits Physical Education** Selected individual responsibilities with youth groups ranging from pre-school to University population. Prerequisite: Permission of Instructor.

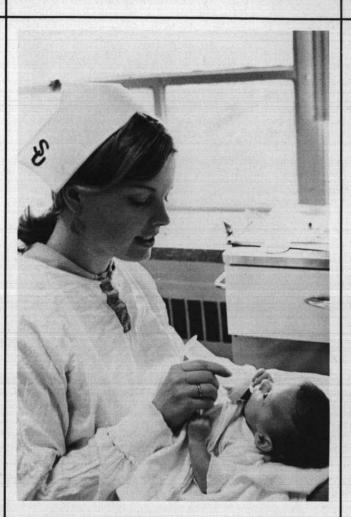


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The foundations for the School of Nursing started in 1931 when a two-year program was established in connection with Seattle's Providence Hospital. The Seattle College School of Nursing was established in 1940 and, in 1948, became the Seattle University School of Nursing.

SCHOOL OF NURSING Eileen M. Ridgway, Ph.D., Dean





School of Nursing

Professor: Eileen M. Ridgway

Associate Professors: Mary C. Bartholet N. Jean Bushman Janet M. Claypool Rosario De Gracia Patricia A. Ferris Helon Hewitt Dolly Ito

Assistant Professors: Verelle M. Davis Jane P. LaFargue Anna Marie Payne Kathleen M. Treseler

Instructors: Shirley M. Hanson Sue B. Jackson Nancy K. Mauss Gail Nank Sue Ellen Ries

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 concepts and principles from 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. The School is a distinct and independent degree recommending unit, offering an undergraduate program in nursing.

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 selfdirected learning and professional development, and as a basis for graduate education and research.

The professional portion of the curriculum includes study of man with a variety of health problems requiring different modalities of care with a focus on the individual, the family and the community. Clinical experience is provided through cooperating teaching units which include Children's Orthopedic Hospital and Medical center; Group Health Cooperative; Northgate Clinics; Marycrest Villa; the Mason Clinic; Northwest Hospital; Overlake Memorial Hospital; Providence Hospital; Seattle King County Health Department; Seattle King County Visiting Nurse Service; United States Public Health Service Hospital; Veterans Administration Hospital, and selected health agencies.

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 cumulative academic grade point average of 2.50 or above from high school or another college or university is required for admission into the School of Nursing.

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 grade of C or above in the 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 the program. Specific requirements for progression may be obtained from faculty adviser.

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. It is strongly recommended that students have adequate health insurance coverage.

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 Social Science core options 5 credits Speech 201 5 credits	
Sophomore yearBiology 200, 210, 22015 creditsNursing 205, 206, 30015 creditsPhilosophy 2205 creditsPsychology 3225 creditsTheology core option5 credits	
Junior year Nursing 312, 314, 316, 330, 332, 335, 337, 340, 34145 credits	NILLING CONTRACTOR
Senior yearNursing 406, 407, 426, 427, 478Philosophy core option5 creditsTheology core option5 creditsElectives10 credits	
Total 180 credits	



Nursing Courses

N 205 N 206	Basic Nursing I 5 credits Basic Nursing II 5 credits Introduction to the scope of nursing practice and role of the nurse in a variety of settings. Utilizing the nursing process, man's health and needs as a con- sumer of health services are analyzed. Assessment and psychomotor skills to promote safety and com- fort are demonstrated. Supervised practice in simulated laboratory settings; and in a variety of health care settings. Principles of pharmacology and drug therapy are integrated.
N 300	Pathophysiology5 creditsStudy of the functional changes of the body which accompany illness and form the basis for nursing in- tervention.
N 312	Health Appraisal 5 credits Basic techniques and skills necessary to assess and describe a person's health state. It draws from a growth and development framework to help under- stand physiological and behavioral assessment. Beginning competency in the measurement of major physiologic parameters is expected. Practice in tak- ing a nursing history and in health assessment is provided.
N 314	Mental Health Concepts 5 credits Concepts basic to assisting self and others to cope with reactions to the stress of illness; Organized around behavioral science principles which promote the nursing skills necessary for developing the in- herent capabilities of the student and the patient.

N 316 Contemporary Nursing Issues 5 credits Combines a study of the major legal, ethical and professional issues confronting the nurse with such concepts as power, authority and responsibilities in present and emerging health care patterns. The nurse's role as a client advocate to promote effective delivery of health care is emphasized.



N 330 N 332	Medical-Surgical Nursing I 3 credits Medical-Surgical Nursing II 3 credits Nursing problems assocated with physiological dysfunctions at various ages; organized around the nursing care necessary to assist individuals to regain health or adapt to chronic illness.	•	health as well as the provision for nur mentally ill, both acute and chronic. O is planned to promote the application cepts in a manner which facilitates g structive problem solving in both p dent.	Clinical practice n of these con- rowth and con-
N 335	Nursing Care of Children7 creditsExperiences are aranged in a variety of settings, selected to provide opportunities to apply concepts and principles from theory courses.	N 426 N 427	Community Nursing Practicum in Community Nursing Study of the dynamics of individual fa larger social system. Includes an en	amilies and the nphasis on the
N 337	Nursing Care of Adults7 creditsExperiences are arranged in a variety of settings, selected to provide opportunities to apply concepts and principles from theory courses.		helping process with people who ar predicaments in living. Each studer with one or two families from the c with a group of patients from either a extended care facility. In all settings	nt involves self community and n acute care or skill in working
N 340 N 341	Maternal-Child Nursing I 4 credits Practicum in Maternal-Child Nursing I 6 credits	T IN	with patients and collaborating with or sonnel is stressed. A community ass pected from one of the clinical expe	essment is ex-
	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 set- tings, including hospital maternity services, clinics	N 428	Leadership and Management in Nursing The study of theories and function of and of leadership roles in providing r groups of patients in a variety of se	nursing care for
	and community agencies serving families.	N 490	Independent Study Prerequisite: Senior status and permi	2-5 credits ission required.
N 406	Psychiatric Nursing 4 credits			
N 407	Practicum in Psychiatric Nursing 6 credits	N 492	Special Topics	1-5 credits
	Study of psychological and psychiatric nursing prin- ciples which can be applied to the nursing care of emotionally disturbed individuals in a variety of set-	N 493	Special Topics	1-5 credits
	tings. The emphasis is on the promotion of mental	N 499	Independent Study	2-5 credits

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NURSING



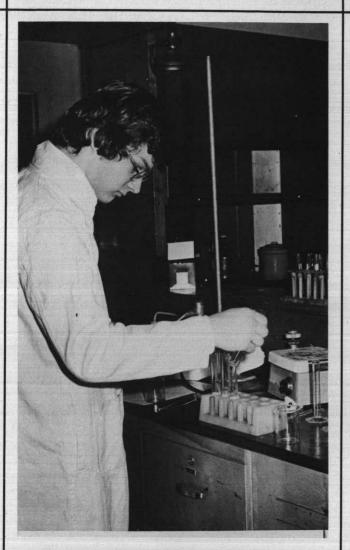


FRE SERVERS FRE SERVERS

The School of Engineering was established in 1941 and, in the same year, the Seattle Transit Company car barn, which adjoined the campus, was acquired by the School for use as laboratory facilities.

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 Assocation

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. Students interested in other scientific, technical, and health-related careers, such as medicine or dentistry, may enroll for suitable pre-professional programs prior to transfer to the appropriate professional training center.

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 certain major programs.

Degrees Offered

- Bachelor of Arts with a major in Biology, Chemistry, Mathematics or Physics
- Bachelor of Science with a major in Biology, Mathematics or Physics
- Bachelor of Science in Biology, Chemistry, Clinical Chemistry, General Science, Mathematics, Medical Technology or Physics

Bachelor of Health Information Services

Bachelor of Engineering

- Bachelor of Civil Engineering
- **Bachelor of Electrical Engineering**

Bachelor of Mechanical Engineering

Co-Operative Work Study Program

Students in good standing may elect to enter the cooperative 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.

General Program Requirements

Students seeking the Bachelor's degree in the School of Science and Engineering must complete 180 credits, including the University core requirements shown on page 24 of this bulletin. The history and social science core requirements have been modified for several of the more technical degrees, as described in the individual departmental sections of this bulletin. Students also must complete the specific departmental requirements for their particular degree.

SCIENCE AND ENGINEERING 127 Biology

Biology Lewis E. Aldrich,

Lewis E. Aldrich, Jr., Ph.D., Chairman

Professors:

Eugene A. Healy, S.J. George Santisteban Leo A. Schmid, S.J. (Emeritus)

Associate Professors: Lewis E. Aldrich, Jr. Paul P. Cook, Jr. George D. Davis

Assistant Professor: Margaret L. Hudson

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 for English, philosophy and theology and religious studies. Core requirements for history and social science are as follows: for the Bachelor of Arts degree, 20 credits in history or social science, including Psychology 100; Bachelor of Science degree, 15 credits in history or social science; and Bachelor of Science in Biology degree, 10 credits in history or social science.

Departmental Requirements

- Bachelor of Arts 50 credits of biology which must include BI 160, 170 and 171 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 160, 170, and 171 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 160, 170 and 171; at least 30 credits of biology courses at the 300-499 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 160, 170 and 171 and 30 credits of approved electives. Elementary: 25 credits in biology which must include BI 160, 170, 171, 370, 371 and 275.

Undergraduate Minor — 30 credits of biology selected at direction of a biology adviser.

128 SCIENCE AND ENGINEERING Biology		
Bachelor of Arts Freshman year Biology 160, 170, 171 15 credits English 100 and core option 10 credits Mathematics 112 5 credits Philosophy 110, 220 10 credits Psychology 100 5 credits Sophomore year 15 credits Biology electives 15 credits Chemistry 114, 115, 116 15 credits History or Social Science core options 10 credits Philosophy core option 5 credits	Chemis Philoso Theolo Senior Biology Physics Theolo	velectives
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 10 credits Biology electives 10 credits Electives 35 credits	Biolog BI 101	y Courses Life Science 5 credits Important areas of biology, beginning at the cellular level and culminating with a consideration of interac- tions and changes in natural populations. Five lec- ture hours per week. (spring)
Total 180 credits	BI 160	General Botany 5 credits Structure, function, taxonomy and ecology of plants. Three lecture and four laboratory hours per week. (spring)
Bachelor of Science Freshman year Biology 160, 170, 171 Biology 110, 220 Biology 110, 220 Biology electives Biology ele	BI 170 BI 171	General Zoology I 5 credits General Zoology II 5 credits A two quarter, sequential introduction to the animal kingdom. Examples of the phyla and major classes will be examined, with special attention to those types which best illustrate animal activities and relationships. Prerequisite: 170 for 171. (I-fall, II- winter)
Philosophy elective	BI 180	Human Genetics5 creditsThe pattern of biological inheritance in man. Creditsnot applicable for biology major. (summer)
Science or mathematics electives 10 credits Theology core options 10 credits Electives 10 credits Senior year 10 credits Biology electives 15 credits Electives 30 credits	BI 190	Principles of Physical Anthropology 5 credits The evidence for primate evolution from the fossil record and from the morphological, physiological, genetic and behavioral variability of living primate forms. Relationships of human genetics to the evolu- tion of modern populations is also presented. Two 3 hour lecture-laboratory sessions per week. (fall)
Total 180 credits	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)
Bachelor of Science in Biology Freshman year Biology 160, 170, 171 Biology 170, 170, 171 <t< td=""><td>BI 205</td><td>Biophysical Principles 5 credits Lecture and laboratory method to show the inter- relationships between biology, earth science and physical science as applied to the teaching of elementary level science. Credits not applicable for biology major. Three lecture and four laboratory hours per week. (fall, winter)</td></t<>	BI 205	Biophysical Principles 5 credits Lecture and laboratory method to show the inter- relationships between biology, earth science and physical science as applied to the teaching of elementary level science. Credits not applicable for biology major. Three lecture and four laboratory hours per week. (fall, winter)
Sophomore year Biology electives	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)

SCIENCE AND ENGINEERING Biology

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5 credits

-		BI 275	General Physiology Chemical and physio organisms. Three lea per week. Prerequis
Z		BI 280	Cell Physiology Fundamental life pr cells. Three lecture week. Prerequisite: I
		BI 291 BI 292 BI 293	Special Topics in B Special Topics in B Special Topics in B Directed reading laboratories on top Prerequisite: Permis spring)
1		BI 300	Microbiology Morphology, physio organisms. Three le per week. Prerequ (winter)
		BI 301	Modern Biology for Principles and cond tured to fit the class grades 1 through 12 geared to the every teacher. (summer)
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 310	Comparative Vertet Early development sideration of the ea Three lecture and f Prerequisites: BI 17
BI 231 BI 232	Invertebrate Zoology I 5 credits Invertebrate Zoology II 5 credits I. Integrated study of the anatomy, morphology, tax- onomy, natural history and ecology of invertebrate phyla from protozoa through the pseudocoelomate minor phyla. II. The coelomate phyla. Three lecture and four laboratory hours per week. Prerequisite: Bl	BI 315	Bioethics Indepth look at the highly complex te toward questions for being sought. Lectureadings. (summer)
BI 241	171, 231 for 232. (I-fall, II-winter) Vertebrate Zoology 5 credits Structure, physiology, ecology and behavior of Hemichordata and Chordata. Three lecture and four	BI 321	Vertebrate Natural Ecology, behavior, vertebrate animals, Pacific Northwest. T hours per week. Pro-
BI 251	Iaboratory hours per week. Prerequisite: BI 171. (fall)Plant Morphology5 creditsStudy of plant form, structure and development.Three lecture and four laboratory hours per week.Prerequisite: BI 160 (spring, 1977)	BI 325	History of Biology Consideration of the philosophical origin scientific technol historical relationsh
BI 252	Taxonomy of Flowering Plants5 creditsNative flora as an introduction to taxonomy, involving the principal orders and families of flower- plants. Three lecture and four laboratory hours per week. Prerequisite: Bl 160. (spring, 1975)	BI 326 BI 327	Comparative Anato the Vertebrates I Comparative Anato the Vertebrates II I. Comparative study
BI 270 BI 271	Human Structure and Function I 5 credits 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. II. Digestion and metabolism, the excretory, endocrine and reproduc-		muscular systems of parative study of the system, excretory culatory system, ne of selected vertebe laboratory hours per winter, II-spring)
	tive systems. Introduction to regional anatomy. Prerequisites: BI 171, Ch 101, 102 for 270; 270 for 271. Students with credit in BI 200 and 210 may not receive credit for 270 and 271. (I-fall, II-winter)	BI 330	Comparative Vertel Study of fundament and four laboratory Permission of instru-

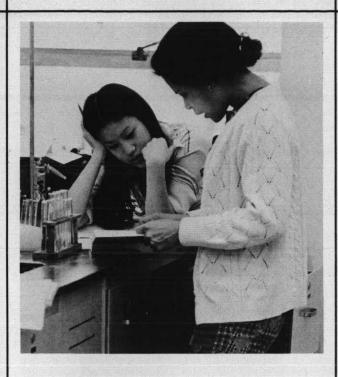
	organisms. Three lecture and four laboratory hours per week. Prerequisite: BI 171 or permission. (fall)
	Cell Physiology 5 credits Fundamental life processes in plant and animal cells. Three lecture and four laboratory hours per
	week. Prerequisite: BI 275. (winter)
	Special Topics in Biology1-5 creditsSpecial Topics in Biology1-5 creditsSpecial Topics in Biology1-5 creditsDirected reading and/or lectures and/orlaboratories on topics at the lower division level.Prerequisite: Permission of instructor. (fall, winter, spring)
	Microbiology 5 credits Morphology, physiology and distribution of micro- organisms. Three lecture and four laboratory hours per week. Prerequisite: Permission of instructor. (winter)
	Modern Biology for Teachers 5 credits Principles and concepts in modern biology struc- tured to fit the classroom environment for teachers, grades 1 through 12. Lectures and demonstrations geared to the everyday problems of the classroom teacher. (summer)
	Comparative Vertebrate Embryology 5 credits Early development of the frog and chick with con- sideration of the early development of the human. Three lecture and four laboratory hours per week. Prerequisites: BI 171.
	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)
	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 171. (spring)
	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.
	Comparative Anatomy of
The state	the Vertebrates I 5 credits Comparative Anatomy of the Vertebrates II 5 credits
	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 171.(Iwinter, II-spring)

330 Comparative Vertebrate Histology 5 credits Study of fundamental body tissues. Three lecture and four laboratory hours per week. Prerequsite: Permission of instructor. (spring)

130	SCIENCE AND ENGINEERING Biology		•
BI 340	Microtechnique 3 credits Preparation of slides of animal tissue by the paraffin method; techniques of staining procedures. One lec- ture and four laboratory hours per week. Prere-	BI 435	Comparative Neurology 4 credits Study of the phylogenetic history of the central nervous systems. Prerequisite: BI 310 or 326.
BI 350	quisite: BI 330 or concurrently. Genetics 5 credits Classical and molecular principles of heredity. Four lecture and two laboratory hours per week. Prerequisite: One year of Biology. (winter)	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. Permission of instruc-
BI 352	Biophysical Chemistry 5 credits Application of the principles of physical chemistry, thermodynamics, kinetics, structure and radioactivi- ty to topics of biological interest. Four lectures and three laboratory hours per week. Prerequisite: Ch 219, or permission of instructor. (spring)	BI 450	tor. (fall, 1976) Advanced Invertebrate Zoology 5 credits Advanced studies of the invertebrate phyla. Three lecture and four laboratory hours per week. Prere- quisites: BI 231, 232.
BI 360	Parasitology5 creditsStudy of parasitic protozoa, helminths and arthropods. Three lecture and four laboratory hours per week. Prerequisite: BI 171; Recommended: BI	BI 455	Biochemistry 5 credits Composition and metabolism of carbohydrates, lipids, proteins, enzymes and body fluids. Prere- quisite: Ch 236. (spring)
BI 365	232. (spring, 1977) Introduction to Oceanography 5 credits A nontechnical course designed to give a broad general background, and to demonstrate the relationship between this field and others. Prere- guisite: Sophomore standing. (fall)	BI 460	Limnology 5 credits Study of freshwater systems and the plants and animals inhabiting them, with emphasis on the in- vertebrate animals. Three lecture and four laboratory hours per week. Prerequisite: BI 171; recommended: BI 470. (fall, 1976)
BI 370	Population Biology: Ecology 3 credits Study of ecology and evolution with emphasis on population ecology. Three lecture hours per week. Prerequisites: BI 171 and permission of instructor. (winter)	BI 465	Population Biology: Evolution4 creditsStudy of ecology, population genetics and evolution, with emphasis on evolution. Four lecture hours per week. Prerequisite: one year of Biology; recommended BI 350. (spring)
BI 371	Field Ecology 2 credits Techniques used in ecological research and analysis. Three weekend field trips. Prerequisite: Permission of instructor and BI 171. (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 171. (fall, 1977)
BI 375	Marine Biology5 creditsStudy of the marine environment and the animalsand plants inhabiting it. Three lecture and fourlaboratory hours per week. Prerequisites: Bl 232.(spring, 1976)	BI 480 BI 481 BI 482	Nuclear Medical Technology 15 credits Internship I 15 credits Nuclear Medical Technology 15 credits Internship II 15 credits Nuclear Medical Technology 15 credits
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, 1977)		Clinical practicum for nuclear medical technology. Prerequsite; Permission of the Medical Technology Program Director. (fall, winter, spring)
	(Aninia)	BI 491 BI 492 BI 493	Special Topics in Biology1-5 creditsSpecial Topics in Biology1-5 creditsSpecial Topics in Biology1-5 creditsDirected reading and/or lectures and/or1-5 creditsIboratories on topics at the advanced undergraduate1-5 creditsIevel. Prerequisite: Permission of instructor. (fall, winter, spring)1-5 credits
	A CAR	BI 494 BI 495 BI 496	Seminar1 creditSeminar1 creditSeminar1 creditProblems in modern biology. Prerequisite: Permission of instructor. (fall, winter, spring)
		BI 497 BI 498 BI 499	Research1-5 creditsResearch1-5 creditsResearch1-5 creditsLiterature and laboratory investigation of a basicresearch problem. Preparation of a written report.Prerequisite: Permission of instructor. (fall, winter, spring)

SCIENCE AND ENGINEERING 131 Chemistry



Chemistry Vincent S. Podbielancik, Ph.D., Chairman

Professors:

Ernest P. Bertin, S.J. Donald C. Malins (Research) David H. Read Bernard M. Steckler Usha Varanasi (Research)

Associate Professor: Gary A. Zimmerman

Assistant Professor: David L. Thorsell

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

General Program Requirements

Students in chemistry must satisfy the core requirements of the University given on page 24 of this Bulletin for English, philosophy and theology and religious studies. Core requirements for history and social science are as follows: Bachelor of Arts degree, 10 credits in history and 10 credits in social science; Bachelor of Science in Chemistry degree, 10 credits in history or social science; and Bachelor of Science in Clinical Chemistry, 10 credits in history or social science.

Departmental Requirements

Bachelor of Arts—45 credits of chemistry which must include Ch 114, 115, 116, 219, 235, 236 and either 352 or 361, 363 plus electives from the following: Ch 237, 238, 291, 292, 293, 360, 362, 364, 415, 436, 455, 461, 491, 492, 493, 497, 498 and 499. Fifteen credits of mathematics in sequence including calculus. For students interested in biochemistry, the following courses are recommended: Bl 170, 171, 275 and 300.

Bachelor of Science in Chemistry—60 credits in chemistry which must include Ch 114, 115, 116, 219, 235, 236, 237, 326, 360, 361, 362, 363, 364, one year of calculus (Mt 134, 135, 136), computer programming (Mt 114), and one year of calculusbased physics. A student is eligible for certification of the degree with the American Chemical Society if Ch 238 and 415 are taken and nine additional credits of advanced work from the following courses: Ch 436, 461, 497, 498, and 499. This certification is recommended for students planning graduate work. The following courses are strongly recommended as electives. Mt 116, Ph 290, Mt 233 and Mt 234.

Bachelor of Science in Clinical Chemistry—65 credits in chemistry which must include Ch 114, 115, 116, 219, 235, 236, 361, 362, 363, 364, 455, 461, 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, 360; Bl 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 either 352 or 361, 363. Additional courses in physics (Ph 105, 106, 107) a year of college mathematics and courses in biology are highly recommended.

132 SCIENCE AND ENGINEERING Chemistry

Bachelor of Arts

Chemistry 114, 115, 116	15 credits
English 100 and core option Philosophy 110	10 credits
Electives	15 credits

Sophomore year	
Chemistry 219, 235, 23615	credits
Mathematics 112, 134, 13515	credits
Philosophy 220 and core option10	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
Social Science core option	5	credits
Theology core option	5	credits

Senior year

Chemistry elective Social Science core option	55	credits
Electives	35	credits

Total . . . 190 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 235, 236, 23713	credits
Mathematics 114 3	credits
Philosophy 110 5	credits
Physics 201, 20210	credits
Electives14	credits

Junior year

Chemistry 219, 360, 361, 362, 363, 36418	credits
History or Social Science 5	credits
Philosophy 220 5	credits
Theology core options10	credits
Electives 7	credits

Senior year

Chemistry 326	5	credits	
History or Social Science	5	credits	
Philosophy core option	5	credits	
Electives	30	credits	

Bachelor of Science in Clinical Chemistry

Freshman year	
Biology 5	credits
Chemistry 114, 115, 11615	credits
English 100 and core option10	credits
Mathematics 134, 135, 13615	credits

Sophomore year	
Chemistry 235, 236, 45515	credits
Physics 105, 106, 10715	credits
Philosophy 110, 22010	credits
Mathematics 114 3	credits
Elective	credits

Junior year

Biology 270, 27110	credits
Chemistry 219, 361, 362, 363, 36415	credits
History or Social Science elective5	credits
Physics 290 5	credits
Theology core options10	

Senior year

Chemistry	461,	470,	471,	472,	475.	476.	481.	
100 10					1000		00	2

History or Social Science elective10	credits
Philosophy elective 5	credits
Electives10	credits

Total . . . 180 credits

Chemistry Courses

Ch 100 Science, Technology and the Quality of Life

5 credits

oradita

Study of selected scientific information and the opportunities and responsibilities for its generation and application, 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 115 General Inorganic Chemistry II Ch 116 General Inorganic Chemistry III

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. (fall)

133 SCIENCE AND ENGINEERING Chemistry

resonance spectra; laboratory work in problemoriented, 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 or 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. (spring)

- Ch 291 **Special Topics** 1-5 credits
- **Special Topics** Ch 292 1-5 credits Ch 293 **Special Topics** 1-5 credits
 - Directed reading and/or lectures at a lower division level. Prerequisite: Permission of instructor.
- 3 credits Ch 324 Analytical Chemistry I 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: One year of physical chemistry or permission.
- Ch 352 **Biophysical Chemistry** 5 credits Application of the principles of physical chemistry, thermodynamics, kinetics, structure and radioactivity, to topics of biological interest. Four lectures and three laboratory hours per week. Prerequisite: Ch 219, or permission of instructor.

Ch 360 **Physical Chemistry I** Ch 361 **Physical Chemistry II** Ch 362 **Physical Chemistry III**

3 credits 3 credits 3 credits

I. Quantum chemistry, spectroscopy, photochemistry, and the solid state. II. Gases, thermodynamics, introduction to statistical mechanics, changes of state, solutions. III. Chemical equilibrium, electrochemistry, kinetic molecular theory, reaction kinectics. Three lecture hours per week. I may be taken either before or after II and III. Prerequisites: Ch 116, Mt 135 and one year of physics for 360; Ch 219, Mt 135 and one year of physics for 361; 361 for 362. (I-fall, II-winter, III-spring)

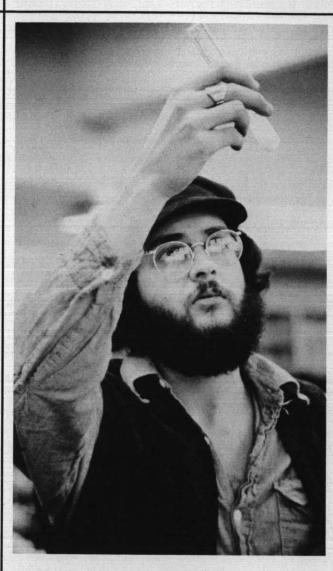
Ch 363 **Physical Chemistry Laboratory I** 2 credits Ch 364 **Physical Chemistry Laboratory II** 2 credits Quantitative measurements of physical chemical phenomena, detailed data analysis, evaluation. Four laboratory hours per week. Ch 361 is a prerequisite or co-requisite for 363; 363 is a prerequisite for 364. (I-winter; II-spring)

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 in-

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

per week. Prerequisite: Ch 235. (winter)

vestigations. Four lecture and three laboratory hours



Ch 415	Advanced Inorganic Chemistry 3 credits Advanced topics in inorganic chemistry with par- ticular attention to bonding, thermodynamics, spec- tral and magnetic properties of the transition metals and their compounds, the interesting and unusual chemistry and bonding of boron and its com- pounds, the electron bond theory of solids, and other selected topics. Prerequisites: Ch 360, 361 or permission.	Ch Ch Ch
Ch 436	Advanced Organic Chemistry 3 credits Spectrometric identification of organic compounds: mass spectrometry; nuclear magnetic resonance; in- frared; ultraviolet and visible; physical organic treat- ment of factors influencing evaluation and significance of thermodynamic variables. Directed reading and/or lectures. Prerequisite: One year of physical chemistry or permission.	Ch Ch Ch
Ch 455	Biochemistry 5 credits Composition and metabolism of carbohydrates, lipids, proteins, enzymes and body fluids. Four lec- ture and three laboratory hours per week. Prere- quisite: Ch 236 (spring)	Ch Ch Ch

Ch 460	Advanced Physical Chemistry Quantum chemistry, vibrational and energies, absorption and emission o molecular symmetry, group theory, elect tra. Prerequisite: One year of physical che	rotational f radiation, tronic spec-
Ch 461	Radiochemistry Theory of radioactivity, use of radioi studying chemical reactions and structur ture and four laboratory hours per we quisite: One year of physical chemistry sion. (fall)	re. Two lec- eek. Prere-
Ch 470 Ch 471 Ch 472	Clinical Chemistry I Clinical Chemistry II Clinical Chemistry II Clinical Chemistry III 1. Statistics and normal values in t laboratory; theory and techniques trophotometry, atomic absorption spe flame photometry, fluorimetry and infrare electrophoretic techniques and densitor tein diffusion and immunological tech Automated analyses in clinical labor critical comparison of analytical method carbohydrates, lipids, electrolytes, hemoglobins and porphyrins, with emph biosynthesis, metabolism, analytical method ditions leading to abnormalities. III. steroids, catecholamines, radiomm techniques, renal function testing, hepar testing, cerebrospinal fluid. Three lectures week. Prerequisite: Ch 362, 364 or per instructor. (Offered in sequence: fall, win	of spec- ectroscopy, d analyses; metry; pro- niques. II. atory use; lologies for enzymes, asis on the hods of im- ogical con- Toxicology, nunoassay tic function e hours per mission of
Ch 475 Ch 476	Clinical Chemistry Laboratory I Clinical Chemistry Laboratory II Practical experience in instrumental tech analytical methodologies of importan clinical chemist, including colorimetry, sorption, gas chromatography, infrared, assays and statistical treatment of d laboratory hours per week. Pre Simultaneous enrollment in Ch 470 o (Offered in sequence: fall, winter)	ce to the atomic ab- enzymatic ata. Three requisite:
Ch 481 Ch 482 Ch 483	Clinical Practice Clinical Practice Clinical Practice Practical experience in approved hosp laboratory. Six laboratory hours per we quisite: Permission of instructor.	2 credits 2 credits 2 credits ital clinical eek. Prere-
Ch 491 Ch 492 Ch 493	Special Topics	2-5 credits 2-5 credits 2-5 credits advanced tructor.
Ch 497 Ch 498 Ch 499	Undergraduate Research Undergraduate Research Undergraduate Research Literature and laboratory investigation research problem. Six laboratory hours Prerequisite: Permission of department of	per week.

SCIENCE AND ENGINEERING 135 Engineering Programs



Engineering Programs

Bachelor of Engineering — Students seeking the Bachelor of Engineering degree must satisfy the core curriculum requirements of the University as given on page 24 of this Bulletin for English, philosophy and theology and religous studies. 10 credits of humanities electives satisfy the core requirements on history and social science. The degree requires a minimum of 55 credits of engineering subjects, 25 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.

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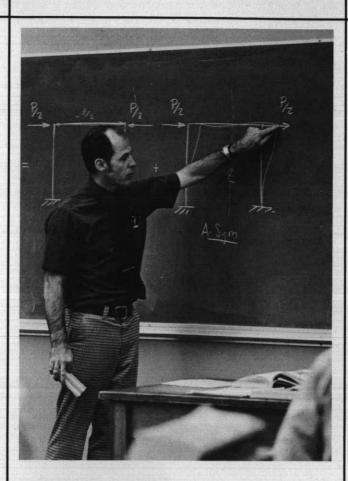
English 100 and core option10	credits
Mathematics 112, 114, 116, 13415	credits
Mechanical Engineering 105, 11310	credits
Philosophy 110 5	
Physics 200 5	

Sophomore year Chemistry 114, 115 Engineering Electives Mathematics 135, 136 Mechanical Engineering 281 Philosophy 220 Physics 201	10 credits 10 credits 10 credits 5 credits 5 credits
Junior year Engineering electives Philosophy core option Science electives Theology core options	
Senior year Engineering electives Humanities electives Electives	
	otal 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 Mechanicial 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., Chairman

Associate Professor:

Richard T. Schwaegler

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 the core curriculum requirements of the University as given on page 24 of this Bulletin for English, philosophy and theology and religious studies. Ten credits of humanities electives satisfy the core requirements in history and social science.

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

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English 100 and core option10	credits
Mathematics 134, 135, 13615	credits
Mechanical Engineering 105, 11310	credits
Philosophy 110 5	credits
Physics 200 5	credits

Sophomore year

Chemistry 114 5	credits
Civil Engineering 211, 21010	credits
Humanities Electives 5	credits
Mathematics 233, 23410	
Mechanical Engineering 281 5	credits
Philosophy 220	credits
Physics 2015	credits

Junior year

Civil Engineering 321, 323, 331, 335,	
337, 351, 353, 38131	credits
Philosophy elective 5	credits
Theology electives10	credits

Senior year

Civil Engineering 401, 402, 492, 496,

497, 498 and electives	credits
Engineering or Science electives 0-10	credits
Humanities elective 5	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. May be taken four times.

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. (winter)

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)

SCIENCE AND ENGINEERING 137 Civil Engineering

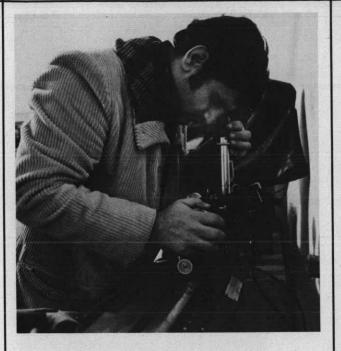
Special Topics Special Topics 1-5 credits CE 291 1-5 credits CE 292 1-5 credits **Special Topics** CE 293 0 credits CE 300 Cooperative Work Study Assignment Field experience in an approved job assignment in industry or government. The assignment will be selected for its value in advancing the professional education of the student. May be taken four times. 5 credits Strength of Materials I CE 321 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. Five lecture and one laboratory period per week. Prerequisite: ME 113, Ph 200. (fall) 5 credits CE 323 Strength of Materials II Continuation of the mechanics of solid deformable bodies. Additional beam topics, stability of columns, combined stresses and strains, fatigue and energy relationships are considered. Five lecture and one laboratory period per week. Prerequisite: CE 321. (winter) **5 credits** CE 331 **Fluid Mechanics** 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; develop-ment 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 CE 381 notation. Prerequisites: ME 281, Mt 136. (fall) **3 credits Applied Hydraulics** CE 335 Weekly student projects in the field of incompressible flow; pump design, hydrographic studies, graphical analysis of overflow or spillway design, **CE 400** model studies, varying flow analysis, economic design of pipeline projects. Prerequisite: CE 331. (winter) 2 credits CE 337 **Fluids Laboratory** Experimental calibration of various flow meters, loss CE 401 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 402 **3 credits Engineering Geology** CE 351 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 445 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)



	138	SCIENCE AND ENGINEERING Electrical Engineering	
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	CE 447 CE 449	JCIEUIIS	$Z(s)=0=s^{2}+\frac{s}{L}R+\frac{1}{LC}-Character}{tgn}$
	CE 471 CE 472	Environmental Law I 3 credits Environmental Law II 3 credits I. Detailed survey of Federal legislation and case history as it relates to land use and development in the State of Washington. II. State legislation and case history as it relates to land use and develop- ment in the State of Washington. Local, county, and municipal legislation. (I. winter, II spring)	
	CE 485 CE 486	Sanitary Engineering I 5 credits Sanitary Engineering II 5 credits I. Examination of water and waste. Physical treat- ment processes. Laboratory experiments in microbial, bacteriological and chemical examination of water and wastes. Chemical and biological treat- ment, 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 lec- tures per week plus selected field trips. Prere- quisites: Ch 114 for 485; 485 for 486. (I. fall, II. spring)	Electrical Engineering Francis P. Wood, SJ, M.S., Chairman
	CE 491	Special Topics 1-5 credits	Professor:
	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)	Francis P. Wood, S.J. Associate Professor: Richard L. Turner Assistant Professor:
			Mark L. Neudorfer
		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.	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
	CE 496 CE 497 CE 498	Seminar I 2 credits Seminar II 2 credits 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.)	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.
		Thesis 1-5 credits Problem in analysis or design at the level of un- dergraduate research. Prerequisite: Senior stan- ding.	The curriculum includes material in networks, elec- tronics, radio, communication, and power apparatus and systems. Hence the student interested in elec- tronics, in automatic control, or in any other specialty is given adequate scientific training in a well-balanced educational program.

	SCIENCE AND ENGINEERING 139 Electrical Engineering
Degree Offered Bachelor of Electrical Engineering General Program Requirements	EE 233 Introduction to Discrete Systems 5 credits Linear, time invariant, discrete systems; finite mov- ing average and recursive digital filters; Z-trans- form; discrete Fourier transform; fast Fourier trans- form. (fall)
Students in electrical engineering must satisfy the specific core curriculum requirements of the University as given on page 24 of this Bulletin for English, philosophy and theology and religious studies. Ten credits of humanities electives satisfy the core requirements in history and social science.	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 1
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	selected for its value in advancing the professional education of the student. May be taken four times. EE 301 Electrical Circuits I 5 credits FE 303 Electrical Circuits II 5 credits
courses. Bachelor of Electrical Engineering	Fundamental concepts and units; energy and power; Kirchoff'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.
Freshman year Electrical Engineering 105	EE 311 Seminar 0 credits Attendance required for junior year Electrical Engineering students. (winter)
Sophomore year Mathematics 233, 234 Mechanical Engineering 281 or Physics 310 Philosophy 110, 220 and core option 15 credits Physics 201, 202, 203 Junior year Electrical Engineering 233, 301, 303, 311, 451	Engineering students. (winter)
Physics 330, 361 10 credits Theology core options 10 credits Humanities elective 5 credits Senior year 5 credits 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 EE 105 Digital Operations and Computation 5 credits Processing of information and data in digital forms. Number systems, logic variables and Boolean Algebra, registers, counting and arithmetic operations, organization of computers, storage and memory. Includes simple programming at machine language level and an introduction to FORTRAN programming. Five one-hour lectures per week. Im- portant and useful for anyone in science or engineering areas. (winter)	
EE 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. May be taken four times.	

140	SCIENCE AND ENGINEERING Electrical Engineering		
EE 321	Linear Analysis 5 credits Laplace transform techniques; functions in the com- plex frequency place; analytic functions; the inver- sion integral; expansion of functions in series; inver- sion integral evaluation by residues; conformal field mapping. Application of frequency plane analysis to electronic networks; introduction to nonlinear analysis and to network synthesis. Prerequisite: EE 303. (spring)	EE 443	Semiconductor Circuits II 5 credits Linear power amplifiers; push-pull, complimentary symmetry and load coupling circuits. Feedback amplifiers; gain-frequency characteristics and fre- quency 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 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 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. (spr- ing)
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. May be taken four times.	EE 446	Electrical Engineering Laboratory I 2 credits Laboratory problems based on characteristics of electron devices; amplifier, rectifier, and digital cir- cuits. One lecture and one four-hour laboratory per week. Prerequisite: EE 443. (fall)
EE 411	Seminar 2 credits Each student is required to prepare a technical paper and to present it orally to the class. Prere- quisite: Senior standing in Electrical Engineering. (winter)	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 or dis- sipative systems. Four lectures and one four-hour laboratory per week. Prerequisites: Ph 330 and EE
EE 435 EE 441	Electromechanics5 creditsElectromechanical energy conversion principles; tranformers, rotating machines, electromechnical energy conversion devices such as electromagnets, loud speakers. Four lectures and one four-hour laboratory per week. Prerequisite: EE 321. (fall)Semiconductor Circuits I5 credits	EE 461	303. (winter)
	Linear equivalent circuit models of solid state and vaccum circuit elements. Elementary amplifiers; biasing techniques, thermal stability, s-plane fre- quency characteristics, frequency compensation, coupling and bypassing circuits. Cascaded amplifier circuits; gain-frequency characteristics and bandwidth control. Prerequisite: EE 321. (fall)	EE 462	Systems Laboratory 2 credits Comprehensive systems laboratory utilizing com- ponents from electronics, energy conversion devices, filters and magnetics; emphasis on integra- tion of components into a complete system. One lec- ture and one four-hour laboratory per week. Prere- quisite: EE 461 (arranged).
n tinta Alterna	and the second s	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 modula- tion; characterization of noise; noise sources; effects of noise on electronic systems; comparative analysis of information transmission systems. Prerequisite: EE 321. (winter)
		EE 489 EE 490	Special Topics 1-5 credits Special Topics 1-3 credits Current topics in Electrical Engineering not normally covered in the undergraduate curriculum. Prere-



Mechanical Engineering Harry Majors, Jr., M.S., Chairman

Professors:

Harry Majors, Jr. Lewis Filler Stephen B. Robel Robert F. Viggers

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 given on page 24 of this bulletin for English, philosophy and theology and religious studies. Ten credits of humanities electives satisfy the core requirements in history and social science.

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 134, 135, 136	
Mechanical Engineering 105, 113	10 credits
Physics 200	5 credits
Philosophy 110	5 credits

Sophomore year

Chemistry 114	5 credits
Humanities Elective	5 credits
Mathematics 233, 2341	0 credits
Mechanical Engineering 281	5 credits
Philosophy 220	5 credits
Physics 201	5 credits
Physics 202 or Chemistry 115	5 credits
Theology core option	5 credits

Junior year

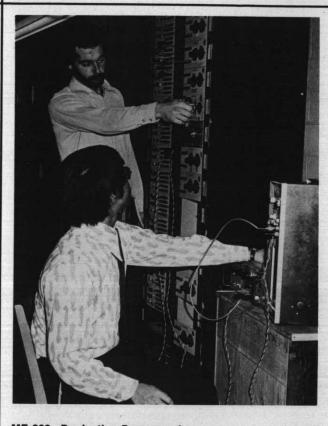
Civil Engineering 321, 323, 331, 33717	credits
Electrical Engineering 301 5	credits
Mechanical Engineering 321, 371 or	
Chemistry 361, 363, and ME 38013	credits
Philosophy core option 5	credits
Theology core option 5	credits

Senior year

Civil Engineering 402 3	credits
Humanities Elective 5	credits
Mechanical Engineering 425, 426, 430, 472,	
473, 484, 485, 496, 497, 49837	credits
Total 180	credits

Mechanical Engineering Courses

- ME 105 Engineering Graphics & Analysis 5 credits Methods of Engineering Communication. Use of drafting instruments, lettering, orthographics, isometrics, free-hand sketching, and dimensioning. Introduction to descriptive geometry. Application of scaled vectors to solutions of problems in statics, kinematics, and electricity. Students must attend offday sessions until they are able to pass examinations on engineering computations. Four two-hour sessions per week. (fall)
- ME 113 Statics 5 credits Application of vectors to equilibrium of forces and moments on bodies, trusses, and frames. Introduction to distributed forces on bodies, beams, cables; and hydrostatics, friction and virtual work. Four lectures and a one-hour problem session per week. Prerequisite: Mt 135 (or concurrent).
- 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. May be taken four times.



ME 269 ME 270	Production Processes I Production Processes II Study of the processes used in formin engineering materials; lectures, demon laboratory work on machinging proces ture and three laboratory hours per quisite: Sophomore standing, ME 269 II-winter)	nstrations and sses. One lec- week. Prere-
ME 281	Dynamics Application of vectors to solutions of kinematics and kinetics. Translation, plane motion of a particle, system of rigid bodies; relative motion. Analysis particles and bodies in motion. Impuls laws, work and energy. Four lecture ho hour problem session. Prerequisites: 135. (winter)	rotation, and particles and s of forces on se-momentum ours and one-
ME 291 ME 292 ME 293	Special Topics Special Topics Special Topics	1-5 credits 1-5 credits 1-5 credits
ME 300	Cooperative Work Study Assignment Field experience in an approved job a industry or government. The assign selected for its value in advancing the education of the student. May be take	assignment in ment will be professional
ME 321	Engineering Thermodynamics I Introduction to the law of conservation applied to ideal and real gases, liquids mixtures of gases and vapors. Property sociated with processes and cycles. O thermal energy to work in heat engine pumps. Concept of power and efficien Diesel, Brayton, and Rankine cycles. pressible gases. Prerequisite: CE 331.	, vapors, and v relations as- Conversion of nes and heat ency in Otto, Flow of com-

ME 371		3 credits
Contraction of the	Relation of engineering fundamenta	ils and proper-
	ties of materials to the design, layou	t and details of
	specific machines; computation tech	niques and use
Action in the	of digital and analogue computers.	Prerequisites:
	ME 281, CE 323, 331. (spring)	
ME 380	Heat Transfer I	5 credits
1.	Introduction to transfer of heat by co	nduction in one
N. 5. 20-2	and two dimensional flow, steady s	
	sient. Principles of thermal radia	tion heat ex-
No Leader	change. Analysis of convection-natu	
	with change of phase, with application	on to design of
The extens	heat exchangers. Four lecture hours	
No.	laboratory per week. Prerequisite: M	E 321. (spring)
ME 400		nt 0 credits
a strange	Field experience in an approved job	assignment in
	industry or government. The assig	nment will be
1.1.1.1.1.1.1.1.1	selected for its value in advancing the	
	education of the student. May be tak	ken four times.
ME 425	Power Plants I	5 credits
	Application of thermodynamics to t	
	ideal and actual power cycles. Study	of internal and
	external combustion engines, fans,	blowers, com-
	pressors, and nozzles. Design of g	as and vapor
	refrigeration systems; liquifaction of	gases, and air
	conditioning systems. Four lecture	and one four
	hour laboratory periods per week. Pr	rerequisite: ME
	321. (fall)	
ME 426	Power Plants II	5 credits
	Application of thermodynamics, hea	at transfer and
A Harden	fluid mechanics to selection, location	
A. Strand	a modern thermal power station and	
51654	economic and ecologic integration i	
	Northwest Power System. Four lec	
	four-hour laboratory periods per week	k. Prerequisite:
	ME 425. (winter)	
ME 428	Environmental Engineering	4 credits
	Man-machine systems; psychologi	cal and phy-
	siological principles of the interrelat	
	human and his surroundings; envi	
	quirements for equipment and hum	nan habitation;
	engineer's approach to the multi-d	isciplinary as-
	pects of environmental control. Three	e lecture and
	four laboratory hours per week. Pre 426.	erequisite: ME
ME 430	Principles of the Properties of	
	Materials I	5 credits
	Atomic structure of elements. The	metallic bond.
	Structure of metals and non-metal	s. Equilibrium
	diagrams. Time-dependent transform and plastic deformations. Relation of	ations. Elastic
	properties. Three lecture and four la	poratory hours
	per week.	boratory nours
		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
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 ap	
	comprehensive design project; planni	
	and leading an engineering project; ex	
	ment and considering economic facto	is. III. Instruc-

tion 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 sigularities, two and three dimensional flow examples. Conformal transformation: complex potential, complex celocity, Blasius theorem, flow about cylinders and air foils. Free streamline flow; Schwartz-Christoffel theorem. Vortex motion. Prerequisite: Permission of instructor.

ME 481 Heat Tranfer II 5 credits Advanced topics in conduction, convection, and radiation with emphasis on computer applications to multi-dimensional and transient problems. Introduction to mass transfer and diffusion. Four lecture and four laboratory hours per week. Prerequisite: ME 380. (fall)

ME 484 Linear Systems Analysis 5 credits A study of the dynamics of linear systems. Topics include: Derivation of differential equations; classical and transform methods of differential equation analysis; experimental methods including similarity and dimensional analysis; and analog and digital computer methods. Four lecture and four laboratory hours per week. Prerequisites: ME 321, 371. (winter)

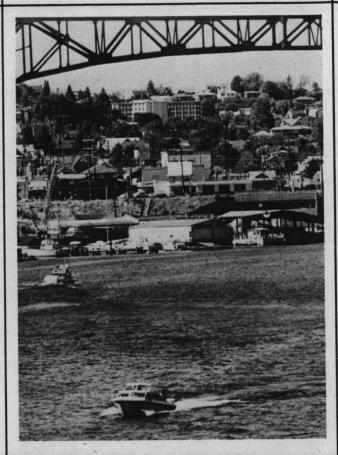
ME 485 Control Systems I 5 credits A first course in feedback control system analysis designed to follow "Linear Systems Analysis". Topics include: Typical system elements and their transfer functions; block diagram and signal flow graph manipulatin; root locus; Nyquist criterion; Bode plots; analog and digital computer simulation. Four lecture and four laboratory hours per week. Prerequisite: ME 484. (spring)

ME 491	Special Studies	2-5 credit
	Special Studies	2-5 credit
	Special Studies	2-5 credit

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
ACTIVITY AND AND A	Seminar	2 credits
		ding. (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 to 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 fields 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.

144 SCIENCE AND ENGINEERING General Science

Courses especially recommended for persons interested in environmental problems are: Biology 101, 170, 171, 370, 371; Chemistry 100; Mathematics 114, 116; Physics 101, 110, 475, Civil Engineering 210, 351, 471, 472; Sociology 101; Psychology 100; Economics 271, 379 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 170, 171	10	credits
Chemistry 114, 115, 116	.15	credits
English 100 and core option	.10	credits
Mathematics 112, 134	.10	credits

Sophomore year

Biology 370, 371 5	credits
Chemistry 235, 23610	credits
Philosophy 110, 220 and core option15	credits
Physics 105, 106, 107 or 200, 201, 20215	credits

Junior year

Chemistry 219, 361, 362, 363	
364, 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

Total . . . 180 credits

Environmental Studies

Bachelor of Engineering

Dachelor of Engineering	
Freshman year 10 c English 100 and core option 10 c Mathematics 112, 114, 134 13 c Mechanical Engineering 102, 111, 12 c Philosophy 110, 5 c Physics 200 5 c	redits redits
Sophomore year	
Chemistry 114, 115 10 c Civil Engineering 210 5 c Mathematics 135, 136 10 c Philosophy 220 and core option 10 c Physics 200, 201, 202 10 c	redits redits
Junior year	
Biology 170, 171, 370, 371	redits
Engineering 321 5 c Engineering electives	redite
Senior year Civil Engineering 485, 486 Economics 271 5 cr Engineering electives 15 cr Political Science 160	redits redits
Theology of the second se	redits

Theology core electives10 credits

General Science Ernest P. Bertin, S.J., Ph.D., Program Director

Professor:

Ernest P. Bertin, S.J.

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 requirements of the University as given on page 24 of this bulletin for English, philosophy and theology and religious studies. At least 15 credits in humanities or social science electives are required. 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, 20 credits in a second field, and 10 credits in mathematics. Three fields must be represented by at least one course. At least 15 credits must be from 300- or 400-level courses.

Environmental Studies

Freshman year

Chemistry 114, 115, 116	.15	credits
English 100 and core option		
Mathematics 112, 134		
Philosophy 110, 220	10	credits

Sophomore year

Biology 170, 171, 370, 37115	credits
Chemistry 235, 23610	credits
Philosophy 220	credits
Physics 105, 106, 107 or 200, 201, 20215	credits

Junior year

Chemistry elective 5	credits
Civil Engineering 210, 35110	credits
Biology or Physics elective 5	credits
Theology core options10	credits
Electives15	credits

Senior year

Science, Mathematics or	
Engineering electives10	credits
Humanities/Social Science electives15	credits
Electives	credits

Total . . . 180 credits

Bachelor of Science in General Science

Engineering Concentration

Freshman year

English 100 and core option10	credits
Mathematics 112, 114, 116, 13415	credits
Mechanical Engineering 105, 11310	credits
Philosophy 110 5	credits
Physics 200 5	credits

Sophomore year

Chemistry 114, 11510	credits
Civil Engineering 210 5	credits
Electrical Engineering 301 5	credits
Mathematics 135, 13610	credits
Philosophy 220 5	credits
Physics 200, 20210	credits

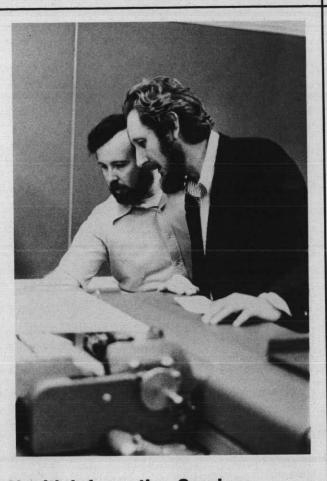
Junior year

Chemistry or Physics electives	credits
Engineering electives10	credits
Philosophy core option 5	credits
Theology core options10	credits
Electives10	credits

Senior year

Humanities/Social Science electives15	credits
Electives	credits
	and a state of

Total . . . 180 credits



Health Information Services

Mary Alice Hanken, R.R.A., Chairman

Assistant Professors:

Mary Alice Hanken Kathleen Waters

Instructors:

Eileen O'Donnell Janet L. Stevenson Linda K. Weiland

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. Special attention is given to computerization of health information. Students who complete the program are eligible for registration with the American Medical Record Association.

Degree Offered

Bachelor of Health Information Services

146 SCIENCE AND ENGINEERING Health Information Services	
General Program Requirements Degree candidates in Health Information Services must satisfy the core curriculum requirements of the Univer- sity as given on page 24 of this bulletin. Students who have completed a program for medical record technicians, which has been approved by the American Medical Association, are evaluated and placed in the appropriate advanced courses. A certificate program is available to students who already possess a bac- calaureate degree.	Philosophy core option 5 credits Psychology or Sociology 201 5 credits Elective 5 credits Senior year 5 credits Health Information 402, 403, 422, 425, 426, 440, 441, 450, 455, 470, 494 and 495 36 credits Electives 9 credits
Departmental Requirements Bachelor of Health Information Services — 46 credits which must include HI 401, 402, 403, 422, 425, 426, 430, 440, 441, 450, 455, 470, 494 and 495; 30 credits of science and mathematics; and 15 credits of business courses.	Total 180 credits Health Information Services Courses HI 401 Introduction to Health Records 5 credits 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
Bachelor of Health Information Services Freshman year Chemistry 100	statistics, record retrieval and disease coding. Pre-requisite: BI 200, 210 or permission of instructor. (fall, spring) HI 402 Analysis, Design and Implementation of Health Record Systems
Mathematics 101 or elective 5 credits Philosophy 110 5 credits Psychology 100 5 credits Elective 5 credits Sophomore year 5 credits Business 270 5 credits	of Health Record Systems 5 credits Application of health record science and manage- ment skills in the coordination of record systems and information centers in health facilities. Prerequisites: HI 401. (fall, winter)
Economics 100 5 credits Health Information Services 430 5 credits Mathematics 214 5 credits Philosophy 220 5 credits Theology core options 10 credits Elective 10 credits	HI 403 Professional and Governmental Influences on Health Record Administration 5 credits 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 ad- ministration. Prerequisites: HI 401 and 402. (winter, spring)
Junior year Biology 200, 210 and 220 or 300 15 credits Business 310, 380	HI 422 Medical Terminology 3 credits Prerequisite BI 200, 210 or permission of instructor. (fall, spring)

SCIENCE AND ENGINEERING Mathematics

HI 425 HI 426 Medical Science I I. The problem-oriented approach to nature and cause, treatment and management of patients covering circulatory, respiratory, hemic and hymophatic musculoskeletal integumentary

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. Prerequisite BI 200, 210 or permission of instructor. (I. winter II. spring)

HI 430 Health Care Delivery System 5 credits 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. (winter, spring)

HI 440 Practicum 1-5 credits HI 441 Practicum 1-5 credits Practicum is designed to help students develop themselves through utilizing opportunities to participate in current health information activities with professional medical record administrators and

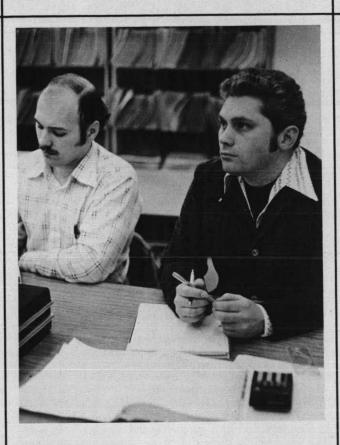
ticipate in current health information activities with professional medical record administrators and other professionals in the health field. Prerequisite to HI 440-HI 401. (fall, winter, spring, summer)

HI 450 Development of Management Resources 3 credits 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. Prerequisite HI 401. (fall, winter)

- HI 455 Comprehensive Communication Skills 3 credits 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. (winter, spring)
- HI 470 Legal Concepts for Health Fields 3 credits Principles of law as applied to the health field, with particular reference to all phases of medical record practice.
- HI 475 Health Information Computer Systems 5 credits Data processing with stress on the important aspects of computer science and their relationship to problem solving in health information science.
- HI 475 Data Processing 3 credits Data processing systems and the application of newer techniques in handling information in medical institutions.

HI 491Special Topics2-5 creditsHI 492Special Topics2-5 credits

- HI 494 Current Topics Seminar 2 credits Organizational patterns in health facilities and their role in the community, career opportunities. (winter)
- HI 495 Problem Solving and Decision Making—Seminar 2 credits (winter, spring) 2
- HI 497 Independent Study 1-6 credits Prerequisites: Senior standing; permission. (fall, winter, spring)



Mathematics Andre L. Yandl, Ph.D., Chairman

Professors: Burnett R. Toskey Andre L. Yandl

Associate Professors: Chu Chiu Chang Alan Troy

Assistant Professors: Mary B. Ehlers Leonard B. Goodisman John E. Vinson

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 147

148 SCIENCE AND ENGINEERING Mathematics

General Program Requirements

Students in mathematics must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin for English, philosophy and theology and religious studies. Additional core requirements are as follows: for the Bachelor of Arts degree, 10 credits in history, 10 credits in social science and 15 credits in physical or life science, psychology or economics; Bachelor of Science degree, 15 credits in history or social science; and Bachelor of Science in Mathematics degree, 15 credits in history or social science. 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 for additional requirements.

Advanced Placement in Calculus

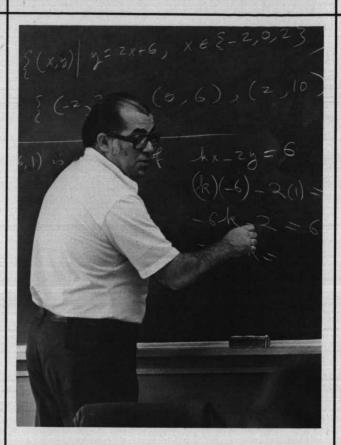
Students who have completed a college level course in calculus in high school and have taken the Advanced Placement test in calculus of the College Entrance Examination Board may petition the department for placement on the basis of their test results. Advanced placement and credit may be granted to 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).

Bachelor of Arts

Freshman year English 100 and core option 10 cred History core option 10 cred Mathematics 134, 135, 136 15 cred Philosophy 110 5 cred Social Science core option 5 cred	lits lits
Sophomore year Mathematics 233, 234 and elective	lits
Junior year French or German 105, 106	its its
Senior year Mathematics 411 or 431 5 cred Electives	its

SCIENCE AND ENGINEERING Mathematics

100		200
	 -	

Bachelor of Science Freshman year Mathematics English 100 and core option 10 credits Philosophy 110 and 220 10 credits Physical Science, Psychology or Economics 10 credits Sophomore year	Mt 114 Elementary Electronic Computer Programming 3 credits 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)
Mathematics	Mt 116 Computer Applications 2 credits Techniques for problem solving; implementation of various formulas of mathematics, statistics, and the sciences; linear algebra. Assignments will require use of Computer Center equipment. Corequisite: Mt
Mathematics	114. (winter, spring) Mt 118 College Algebra for Business 5 credits Sets, subsets; real numbers; relations and functions, graphing; linear, quadratic, exponential,
Electives	logarithmic functions; systems of linear equations; inequalities; systems of inequalities and linear programming; applications to business and economics. Prerequisite: Mt 101 or qualifying ex- amination. (fall, winter, spring)
Bachelor of Science in Mathematics	Mt 130 Elements of Calculus for Business 5 credits Rate of change; derivative, basic differentiation for-
Freshman year English 100 and core option	mulas, applications of the theory of extrema; area under a curve; limits of sequences; the definite in- tegral and applications. Prerequisite: Mt 118. (fall, winter, spring)
Sophomore yearMathematics 233, 234, and 315 or 38115 creditsPhilosophy 220 and core option	Mt 134Calculus and Analytic Geometry I5 creditsMt 135Calculus and Analytic Geometry II5 creditsMt 136Calculus and Analytic Geometry III5 creditsI.Review of precalculus subjects; limits and derivatives; applications of limits and derivatives. II. Theory, technique, and applications of integration; differentiation and integration of trigonometric, ex- ponential and logarithmic functions. III. Indeter- minate forms; improper integrals; infinite series; Taylor's theorem; vectors, polar coordinates; solid analytic geometry. Prerequisites: Mt 112 or qualify- ing examination for 134; 134 for 135; 135 for 136. (All three offered fall, winter, spring)
Senior year Mathematics 431-432-433 or 411-412-413 and electives	Mt 175 Mathematics for the Liberal Arts Student 5 credits Elementary logic; sets, relations and functions; topics chosen from geometry, abstract algebra, linear algebra and computer; statistics and probability. (fall, winter, spring)
Mathematics Courses	
Mt 101 Intermediate Algebra 5 credits Introduction to elementary logic and sets. Review of the fundamental operations of algebra; laws of ex- ponents; linear and quadratic equations; ine- qualities; systems of equations. Prerequisite: one unit each of high school algebra and geometry. (fall, winter, spring)	Mt 200 Theory of Arithmetic 5 credits Systems of numeration; elementary logic; sets; relations, equivalence relations, equivalence classes; number systems and the integration of these concepts. Prerequisite: Mt 101 or 175, or equivalent. (fall, winter, spring)
Mt 112 College Algebra and Trigonometry 5 credits Sets; functions and relations; the algebra of func- tions; exponential and logarithmic 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)	Mt 214 Principles of Digital Computers and Coding 5 credits Fundamentals of commercial and scientific com- puter 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)

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	Mathematics	

		Mt 351	Probability 5 credits Basic concepts and theorems in probability theory; the binomial, Poisson, normal and other fundamen- tal probability distributions; moments; limit theorems. Prerequisite: Mt 233. (fall)
1		Mt 371	Introduction to Numerical Methods 5 credits 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 Com- puter Center equipment. Prerequisites: Mt 114 and 136 or permission.
1		Mt 381	Elementary Topology 5 credits Set theory; topology of the real line; topological spaces; compactness; connectedness; product spaces; metric spaces. Prerequisite: Mt 233. (spring of alternate years)
Mt 233	Multivariable Calculus and Linear Algebra 5 credits Partial derivatives, multiple integration and ap- plications; introduction to differential equations; matrices and determinants. Prerequisite: Mt 136. (fall, winter, spring)	Mt 411 Mt 412 Mt 413	Introduction to Abstract Algebra I 5 credits Introduction to Abstract Algebra II 5 credits Introduction to Abstract Algebra III 5 credits Theory of groups, rings, fields and field extensions; vector spaces and linear transformations; special
Mt 234	Vector Calculus and Differential Equations 5 credits Vector spaces; linear transformations; eigenvalues; linear differential equations; systems of differential equations; power series solutions. Prerequisite: Mt		topics. Prerequisites: Permission for 411; 411 for 412; 412 for 413. (offered in sequence: fall, winter, spring of alternate years)
	233 (winter, spring)	Mt 431 Mt 432 Mt 433	Introduction to Real Analysis I 5 credits Introduction to Real Analysis II 5 credits Introduction to Real Analysis III 5 credits
Mt 291 Mt 292 Mt 293	Special Topics 1-5 credits Special Topics 1-5 credits Special Topics 1-5 credits		Rigorous introduction to real analysis; limits, con- tinuity, differentiation of real functions; functions on metric spaces; applications of compactness and connectedness; Riemann-Stieltjes integrals; se- quences and series of functions; elements of
Mt 300	Methods for Secondary School Mathematics 5 credits Special topics in mathematics relevant to the high school curriculum; emphasis on basic concepts and procedures for teaching them. Prerequisite: Mt 136 or particulation of instructor (characteristic function)		Lebesque theory. Prerequisites: Permission for 431; 431 for 432; 432 for 433. (Offered in sequence: fall, winter, spring of alternate years)
Mt 315	or permission of instructor. (spring of alternate years) Number Theory 5 credits Divisibility and the Euclidean algorithm; the Euler Phi-function; congruences; quadratic reciprocity law; numerical functions; the Mobius inversion for-	Mt 437	Introduction to Complex Variables 5 credits The complex number system, analytic functions, in- tegrations, series, residues, conformal mapping. Prerequisite: Mt 234.
	mula. Prerequisite: Mt 135. (spring of alternate years)	Mt 471	Numerical Analysis 5 credits Matrix inversion; systems of linear equations; a fixed point theorem and its applications; initial and boun-
Mt 321	Foundations of Euclidean Geometry 5 credits Introduction to the axiomatic foundations of Eucli-		dary value problems; methods of Runge-Kutta and Hermite; finite differences.
	dean geometry; ruler and compass constructions and the famous problems of antiquity; the 5th postulate and non-Euclidean geometries. Prere- quisite: Mt 135. (winter of alternate years)	Mt 491 Mt 492 Mt 493	Special Topics in Mathematics2-5 creditsSpecial Topics in Mathematics2-5 creditsSpecial Topics in Mathematics2-5 creditsMay be repeated for a maximum of 12 credits.
Mt 322	Topics in Geometry 5 credits Selected topics from among convexity, applications of geometry, geometry in other subjects and	Mt 497	Prerequisite: Permission.
	transformation groups from the geometric view- point. May be repeated for credit with permission. Prerequisite: Mt 233 or permission. (winter of alter- nate years)	Mt 497 Mt 498 Mt 499	Independent Study 1-5 credits Independent Study 1-5 credits Independent Study 1-5 credits May be repeated for a maximum of 10 credits. Prerequisite: Permission.

SCIENCE AND ENGINEERING 151 Medical Technology

Medical Technology

George D. Davis, M.S., Adviser

Associate Professor:

George D. Davis

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 for English, philosophy and theology and religious studies. Fifteen credits of history or social science are required.

Degree Requirements

Three years must be spent in academic work on campus and a fourth year of internship in an approved hospital. Those who sucessfully 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 ininternship 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 170, 171 and elective15	credits
English 100 5	
History/Social Science core options10	credits
Mathematics 112, 13410	credits
Philosophy 110 5	credits

Sophomore year

Biology 275, 280 and 330 or	
270, 271 and option15	credits
Chemistry 114, 115, 11615	credits
Philosophy 220 and core option10	credits
Theology core option 5	

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a description					

Biology 300 and electives Chemistry 219, 235, 236	15 credits
History/Social Science core option Theology core option	5 credits 5 credits
Senior year	

Total . . . 180 credits

Bachelor of Science in Medical Technology Nuclear Option

Freshman year

Biology 170	5 credits
English 100 and core option10	0 credits
Mathematics 112, 134, 1351	
Physics 105, 106, 1071	5 credits

Sophomore year

Biology electives15	credits
Chemistry 114, 115, 11615	
Philosophy 110, 220 and core option15	credits

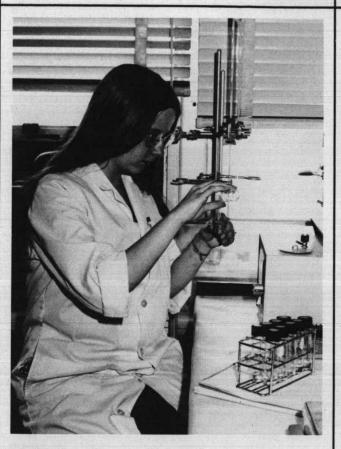
Junior year

Biology electives1	0	credits
Chemistry 235, 2361	0	credits
Physics 375 or Chemistry 461 and		
Physics elective1	0	credits
Theology core option1	0	credits
Electives	5	credits
Senior year		

Internship45 credits

Total . . . 180 credits

152 SCIENCE AND ENGINEERING Physics



Bachelor of Science in Medical Technology Cytotechnology Option

Freshman year

Biology 170, 171 and elective15	credits
English 100 5	credits
History/Social Science core options10	credits
Mathematics 112, 13410	credits
Philosophy 110 5	credits

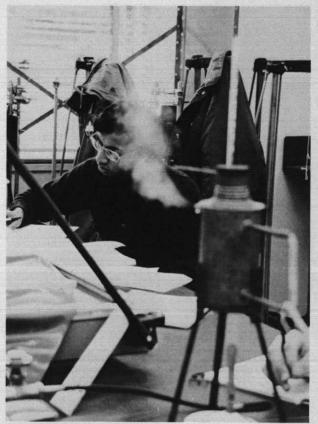
Sophomore year

Biology 275, 280, 330 or	
270, 271 and elective	credits
Chemistry 114, 115, 11615	credits
Philosophy 220 and core option10	credits
Theology core option 5	credits

Junior year

credits
credits
credits
credits
credits

Total . . . 180 credits



Physics David Ehlers, Ph.D., Chairman

Professors:

James J. Cowgill, S.J. Frank Valente (Emeritus)

Associate Professors: David H. Ehlers Reed A. Guy

Objectives

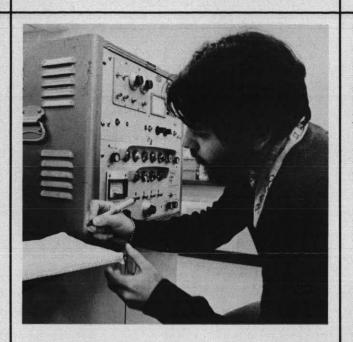
The Physics department offers three programs leading to degrees. For those who wish a career in physics, the Bachelor of Science in Physics program takes the student from classical mechanics through quantum mechanics, with the inclusion of advanced laboratory courses emphasizing nuclear and nuclear reactor physics. This curriculum is designed to prepare students for advanced work in pure and applied physics or for graduate study. 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.

Degrees Offered

Bachelor of Arts Bachelor of Science Bachelor of Science in Physics

General Program Requirements Bachelor of Science Students in physics must attarty the core curriculum requirements of the University as given on gase 24 of this builetin for English. philosophy, and theology and social science are as follows: for the Bachelor of Arts degree. 0 credits of Science is credits of history or social science. English 100 and core option 10 credits freeman year Bachelor of Arts — 45 credits of history or social science. Schemore year Schemore year 5 credits Bachelor of Arts — 45 credits in physics which must include Ph 200, 201, 202 at 203; 30 credits in mathematics or science electives. Schemore year 5 credits Bachelor of Science in Physics — 70 credits in physics which must include Ph 200, 201, 202 at 203; 30 credits in mathematics or science electives. Sinior year Science in Physics or endits Bachelor of Science in Physics — 70 credits in physics which must include Ph 200, 201, 202 at 203; 30 credits in mathematics or 33, 361, 375, 481, 485 and 470 or 475, Mathematics 134, 135, 136, 238 and 234 are required. Sinior year Science in Physics freeting year Bachelor of Arts Freeting year Science in Physics freeting year Science in Physics freeting year Bachelor of Arts Freeting year Science in Physics freeting year Science in Physics freeting year Bachelor of Arts Freeting year Scredits freeting year Scredits freeting year		SCIENCE AND ENGINEERING 153 Physics
Bachelor of Arts — 45 credits in physics which must include Ph 200, 201, 202, 203, 200, 310, 330 and 375. A minimum of 15 additional credits in a re- lated science is required. Junior year 5 credits Bachelor of Science — 60 credits in physics which in mathematics or science electives. 30 credits Philosophy core option 5 credits Bachelor of Science in Physics — 70 credits in physics which must include Ph 200, 201, 202, a03, 290, 310, 311, 330, 331, 451, 351, 542, 233 and 234 are required. 5 credits Senior year Teaching Major (School of Education) — 45 credits in physics and mathematics; 30 credits in physics which must include Ph 105, 106, 70, 110, and 10 and cone core options. 10 credits Bachelor of Arts Freshman year Ergish 100 and cone core options. 10 credits Bachelor of Arts Sphomore year 10 credits Freshman year Thology core options. 10 credits Bachelor of Arts Sphomore year 10 credits Freshman year 11, 14, 116, 134, 10 credits Physics 201, 202, 203, 290, 200 credits 10 credits Physics 201, 202, 203, 290, 200 credits 10 credits Physics 201, 202, 203, 290, 200 credits Physics 201, 202, 203, 290, 200 credits Bachelor of Arts Seriedits Freshman year Physics 201, 202, 203, 290, 200 credits <td>Students in physics must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin for English, philosophy, and theology and religious studies. Core requirements for history and social science are as follows: for the Bachelor of Arts degree, 10 credits of history and 10 credits of social science; Bachelor of Science and Bachelor of Science in Physics degrees, 15 credits of history or social</td> <td>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 15 credits History or Social Science core options 15 credits Mathematics or Science electives 10 credits</td>	Students in physics must satisfy the core curriculum requirements of the University as given on page 24 of this bulletin for English, philosophy, and theology and religious studies. Core requirements for history and social science are as follows: for the Bachelor of Arts degree, 10 credits of history and 10 credits of social science; Bachelor of Science and Bachelor of Science in Physics degrees, 15 credits of history or social	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 15 credits History or Social Science core options 15 credits Mathematics or Science electives 10 credits
Bachelor of Science in Physics — 70 credits in physics which must include Ph 200, 201, 202, 203, 290, 475. Mathematics 134, 135, 136, 233 and 234 are required. Total	 include Ph 200, 201, 202, 203, 290, 310, 330 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 and 203; 30 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 15 credits
physics The required 15 credits in mathematics must include 10 credits in calculus and computer. (Mt. 114, 116, 134).Physics 201, 202, 203, 29020 creditsBachelor of ArtsFreshman year English 100 and core option10 credits Physics 310, 311, 330, 331, 361, 37530 creditsJunior year Physics 200Senior year Philosophy 110, 220CreditsSophomore year Mathematics 136, elective10 credits Physics 201, 202, 203, 29020 creditsJunior year Philosophy core option5 creditsJunior year Philosophy core option5 creditsJunior year Philosophy core option5 creditsJunior year Philosophy core option5 creditsPhilosophy core option5 creditsSocial Science core option5 creditsSenior year Philosophy core option5 creditsPhilosophy core option5 creditsPhilosophy core option5 creditsSocial Science core option5 creditsPhilosophy core o	 which must include Ph 200, 201, 202, 203, 290, 310, 311, 330, 331, 361, 375, 481, 485 and 470 or 475. Mathematics 134, 135, 136, 233 and 234 are required. 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 	Electives
Sophomore year Mathematics 136, elective10 creditsPhysics 201, 202, 203, 29020 creditsPhilosophy 110, 22010 creditsTheology core option5 creditsElectives10 creditsJunior year Philosophy core option5 creditsPhilosophy core option5 creditsSocial Science core option10 creditsSocial Science core option5 creditsElectives10 creditsSocial Science core option10 creditsElectives15 creditsPhysics 330 and elective10 creditsScience electives10 creditsScience electives15 creditsNon-calculus survey of classical mechanics. Statics, kinematics, and dynamics of particles and systems;	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	Philosophy 110, 120 10 credits Elective 5 credits Junior year 5 credits Philosophy core option 5 credits Physics 310, 311, 330, 331, 361, 375 30 credits Theology core options 10 credits Elective 5 credits Senior year 5 credits Philosophy core option 5 credits Theology core option 5 credits Philosophy core option 5 credits Physics 481, 485, and 470 or 475 15 credits
Senior year Ph 105 Mechanics and Sound 5 credits Physics 330 and elective 10 credits Non-calculus survey of classical mechanics. Statics, kinematics, and dynamics of particles and systems;	Mathematics 136, elective 10 credits Physics 201, 202, 203, 290 20 credits Philosophy 110, 220 10 credits Theology core option 5 credits Electives 10 credits Junior year 10 credits Philosophy core option 5 credits Physics 310, 375 10 credits Social Science core option 10 credits Theology core option 5 credits	Total 180 credits Physics Courses Ph 101 Energy Sources and Uses 5 credits Past, present, and projected energy demand and patterns of use in the United States and world wide. Survey of current and proposed methods of energy production; theoretical, technical, environmental and economic considerations. Fuel resources of the planet. Energy transmission and storage. Principles of energy conservation. Power use and resource
Total 180 credits and one three-hour laboratory per week. Prere- quisite: Mt 112 or equivalent. (fall)	Physics 330 and elective	Ph 105 Mechanics and Sound 5 credits Non-calculus survey of classical mechanics. Statics, kinematics, and dynamics of particles and systems; harmonic motion, waves, and sound. Four lectures and one three-hour laboratory per week. Prere-

154	SCIENCE AND ENGINEERING Physics		
Ph 106	Electricity and Magnetism 5 credits Survey of electromagnetism. Electrostatics, mag- netostatics, electromagnetic fields, and d-c circuits. Four lectures and one three-hour laboratory per week. Prerequisite: Ph 105. Ph 105. (winter)	Ph 290	Measurement and Instrumentation Fundamentals 5 creat Principles of measurement of quantities such flow, position, strain, radiation, velocity, curre power, temperature, voltage. Conversion by trai ducers into electrical signals and processing
Ph 107	Survey of Modern Physics 5 credits Introduction to thermodynamics and optics. Selected topics in atomic, nuclear, solid state, and biological physics. Four lectures and one three-hour laboratory per week. Prerequisite: Ph 106. (spring)	Ph 291	recording, observation or control. Recognition a interpretation of physical data. Four lectures a one three hour problem/laboratory session p week. Prerequisite: Mt 134 and Ph 106 or 201. Special Topics 1-5 cred
Ph 110	Introduction to Astronomy of the Solar System 5 credits Descriptive survey of the solar system; historical development of man's investigation of the planets,	Ph 292 Ph 293	Special Topics 1-5 creat Special Topics 1-5 creat Directed reading and/or lectures at a lower divis level. Prerequisite: Permission of instructor. Precederation
	sun, moon, and minor members of our solar sys- tem. Opportunity to observe the sun, moon, and planets through small telescopes is made available. Core science option.	Ph 310	Intermediate Mechanics I 5 cred Vector calculus and kinematics of a particle; of dimensional motion of a particle subject to non-co stant forces; two and three dimensional dynamics a particle; moving reference systems; central ford and celestial mechanics. Prerequisites: Ph 200, 234. (fall)
Ph 111	Introductory Stellar Astronomy 5 credits Physical properties of stars, their configurations and their evolution. Properties of galaxies and the struc- ture of the universe. Quasars, pulsars, black holes, and the search for intelligent life in the universe. Prerequisite: Ph 110 or permission of instructor. Core science option.	Ph 311	Intermediate Mechanics II 5 cred Dynamics of a system of particles; mechanics rigid body motion in a plane; general motion o rigid body; Lagrange's equations; Hamilto equations; theory of small vibrations. Prerequis Ph 310. (winter)
Ph 200	Mechanics 5 credits Introduction to vector mathematics; kinematics; con- servation of momentum and collisions; relative mo- tion and reference frames; force and Newton's laws; work, energy, and power; rotational dynamics; rigid body motion, gravitation. Four lectures and one three-hour laboratory per week. Prerequisite: Mt 134. (spring)	Ph 330	Electricity and Magnetism I 5 cred Elements of vector calculus; electrostatic for Coulomb's law and the electric field; electric flux a Gauss' law; electrostatic energy and potential; co ductors, dielectrics, and capacitance; Poisson's a Laplace's equations; the steady magnetic field; tim varying fields and Maxwell's equations. Pre quisites: Ph 201, Mt 234. (winter)
Ph 201	Electricity and Magnetism 5 credits Electric charge, forces, and fields; electric flux and Gauss' law; electric potential; conductors, dielec- trics, and capacitance; electric current and resistance; DC circuits; magnetic forces and fields; inductance; oscillatory systems; AC circuits. Four lectures and one three hour laboratory per week. Prerequisites: Ph 200 and Mt 135 or permission. (fall)	Ph 331	Electricity and Magnetism II 5 cred Inductance; magnetic materials; electromagnet waves, waveguides and transmission lines; int action of electromagnetic waves with matt selected applications of electromagnetic theo Prerequisite: Ph 330. (spring)
Ph 202	Waves, Optics and Thermodynamics 5 credits Introduction to wave phenomena, both mechanical and electromagnetic, including reflection, refrac- tion, dispersion, interference, diffraction and polarization. Temperature, the macroscopic proper- ties of a gas, kinetic theory, thermal properties of solids and liquids, the second law of thermody- namics. Four lectures and one three-hour laboratory per week. Prerequisite: Ph 201. (winter)	Ph 361	Solid State Physics and Devices 5 cred Basic coverage of solid state physics with spec emphasis on semiconductors: Crystal structure a crystal defects; interatomic binding; thermal a electrical properties; energy bands, carrier statist and carrier transport phenomena. Semiconduc devices: P-N junction devices; diodes and tra sistors; basic device technology; Schottky diod field effect devices; Optoelectronic devices. Pre- quisite: Ph 360. (spring)
Ph 203	Modern Physics 5 credits Special relativity; particle aspects of radiation; wave aspects of matter; uncertainty principle; Schrodinger equation; atomic, nuclear, and elementary particle physics. Five lectures per week. Prerequisites: Ph 202, Mt 136. (spring)	Ph 375	Nuclear Instrumentation 5 cred Integrated laboratory and classroom work in an tensive study of ionizing radiation. Emphasis is pla ed on nuclear decay processes, the interaction radiation with matter, and instrumentation for t detection of photons, charged particles, a neutrons. Three lectures and two three-ho laboratories per week. Prerequisite: Ph 107 or 202. (fall)



Ph 391	Special Topics	1-5 credits
Ph 392	Special Topics	1-5 credits
Ph 393	Special Topics	1-5 credits

Ph 470 Nuclear Physics 5 credits A study of physics at the subatomic level emphasizing the properties and structure of nuclei and elementary particles; symmetries and conservation laws; electromagnetic, weak, and hadronic interactions; nuclear models. Prerequisite: Ph 485. (spring)

Ph 475 Nuclear Fission and Fusion Reactors 5 credits Basic physics of nuclear fission and fusion reactors; experiments on the essential operational parameters of nuclear fission reactors. Brief discussion of Environmental impact. Four lectures and one three-hour laboratory per week. Prerequisites: Ph 203 and junior standing or permission.

Ph 481 Theoretical Physics 5 credits Selected topics in mathematical physics, including matrices and determinants, Fourier series, integral transforms, tenson analysis, functions of a complex variable, coordinate transformations, partial differential equations, special functions. Prerequisite: Mt 234. (fall)

Ph 485 Quantum Mechanics 5 credits 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. (winter)

Ph 491	Special Topics	1-5 credits
Ph 492	Special Topics	1-5 credits
Ph 493	Special Topics	1-5 credits
Ph 497	Undergraduate Research	1-5 credits
Ph 498	Undergraduate Research	1-5 credits
Ph 499	Undergraduate Research	1-5 credits

Premedical and Predental

George A. Santisteban, Ph.D., Adviser

Students wishing to enter professional schools of human, dental, or veterinary medicine or graduate school in biomedical studies, should matriculate in a program of studies leading to a bachelor's degree in any academic field which will give a broad training in the liberal arts and allow them to fulfill the proper premedical requirements in the physical and biological sciences. Premedical students may choose any academic major; most students elect biology, chemistry, physics, general science or psychology. Within the framework of any one of the degree programs, students obtain strong backgrounds in the liberal arts and humanities, as set up in the core curriculum. For further clarification of degree requirements and the core curriculum, see page 24 of this bulletin.

Most medical, dental or veterinary schools require the following undergraduate science sequences: Chemistry 114, 115, 116, 235, 236; Biology 170, 175, 310 and 326, 327 or 280, 330 (Bl 300 is required for predental students); and Physics 105, 106, 107. Professional schools also recommend calculus, biochemistry, or physical chemistry. Students are advised to consult the bulletins of the professional schools to which they wish to apply to acquaint themselves with specific requirements other than those listed. Students should plan to complete preprofessional requirements by the end of their junior year. Students should apply to the professional school during the summer or fall of the senior year. The Committee for premedical and predental studies at Seattle University interviews the student following receipt of the MCAT or DAT scores and prepares a composite recommendation which is sent to the school to which the student has sent an application.

Preoptometry

Ernest P. Bertin, S.J., 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.

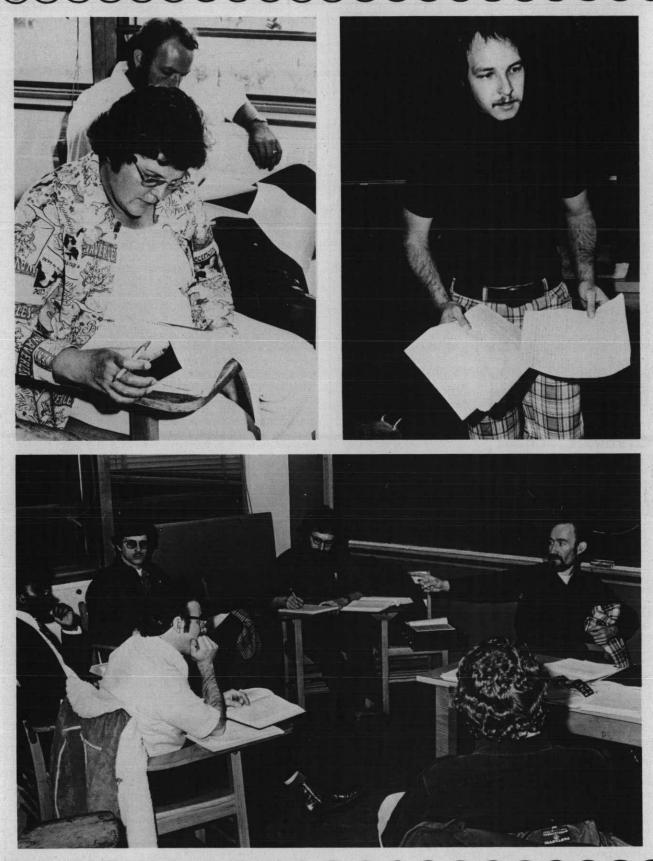
Program

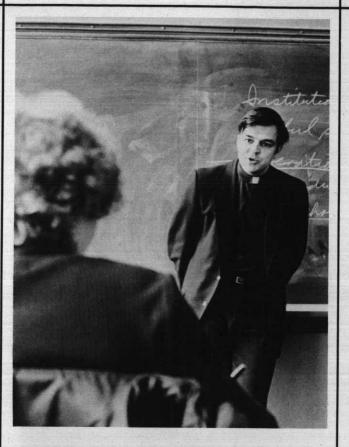
All students who desire a career in optometry should consult with the preoptometry adviser before their first registration in the program and as needed thereafter. There are several choices of fields open to the students, but in general, a broad background in biology, chemistry, mathematics and physics 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.





GRADUATE SCHOOL James J. Cowgill, S.J., 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 Committee of the school or department and the University 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 graduate program director 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.

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. In those programs which require over 35 credits, only 35 credits are required for those candidates who already have earned a master's degree in a related area.

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. 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 approved 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 Dean of the Graduate School. 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.

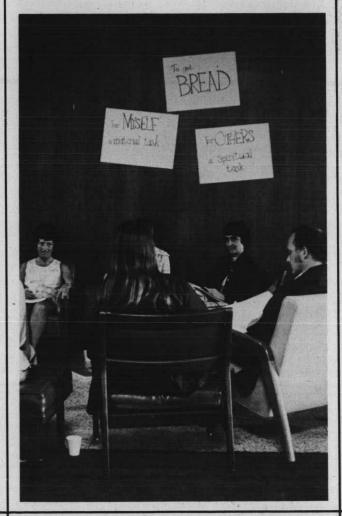
An oral examination on the content of the thesis, cognate literature and available source material may be held before a board appointed by the departmental chairman and approved by the Dean of the Graduate School.

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 1 preceding the June in which the degree is to be received. 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.

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.

Provisional admission to the Graduate School is granted to an applicant who must fulfill a special requirement to qualify for formal admission to graduate standing.

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 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—Rehabilitation Master of Arts in Teaching—English Master of Religious Education (summer only)

BUSINESS

Master of Business Administration Master of Science in Accounting

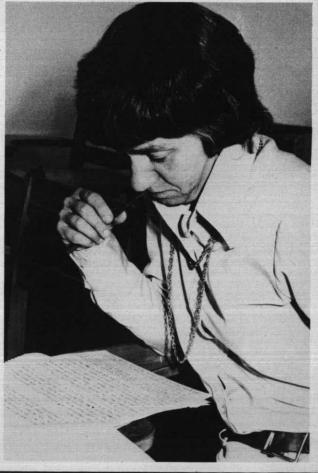
EDUCATION

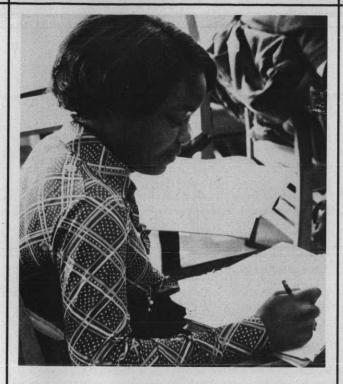
Master of Arts in Education Master of Education

These two degrees may be earned with specialization in the following areas: administration, curriculum and instruction, curriculum and instruction (with emphasis in physical education), guidance and counseling and adult education administration.

PUBLIC SERVICE

Master of Public Service





Master of Public Service

Typical Program

First Year

I Hot I cal		
Pub 501 Applied Quantitative Analysis	3	credits
Pub 505 Legal Environment	3	credits
Pub 515 Bureaucracy and the		
Policy Process	3	credits
Pub 520 State and Local Government		
Systems	3	credits
Pub 525, 526, 527 Human Perspective		
in Public Service	3	credits
Pub 550 Urban Planning	3	credits
Pub 571 Public Finance	3	credits
	125	107 - Constanting of the second
Total 2	21	credits

Second Year

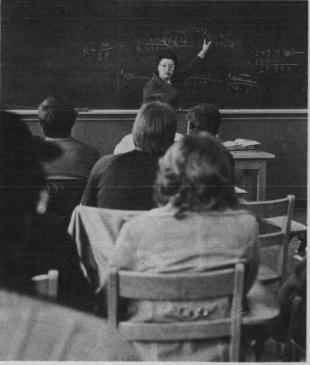
Pub 560 Criminal Justice Theory and Systems
Pub 580 Principles and Perspectives in Public Management
Other electives
Pub 588 Problem Oriented Project 9-12 credits
Total 24 credits

Public Service Courses

Pub 450 Introduction to Research 3 credits Introduction to research skills and literature in students' fields. Includes an orientation to graduate studies.

Pub 460 Introduction to Economics 2 credits Basic economic concepts and techniques of analysis. Organization, operation and control of the American economy. Preparation for Pub 571—Government Finance.

Pub 470	Readings in Public Service 2 credits Selected readings in intergovernmental relations, re- cent political theory, constitutional law and public administration and policy development. Seminar meetings based upon readings to analyze material and synthesize as foundation for interdisciplinary perspective.
Pub 491 Pub 492 Pub 493	Special Topics1-3 creditsSpecial Topics1-3 creditsSpecial Topics1-3 credits
Pub 501	Applied Quantitative Analysis 3 credits Statistical analysis and problems of public adminis- tration. Statistical analysis expectations, estimation, hypothesis testing, index numbers, simple linear models. Regression analysis.
Pub 505	Legal Environment 3 credits Objectives of American legal system, structure, procedures, courts and regulatory commissions. Relationship of law to social change and society's value. Contract, anti-trust and manufacturer's liabili- ty law.
Pub 515	Bureaucracy and the Policy Process 3 credits Overview and analysis of the public policy process; relationship between public agencies and elective bodies. Historic development and current trends in administration including systems analysis and or- ganizational development.
Pub 520	State and Local Government Systems 3 credits Interdisciplinary approach to the nature and rela- tionships of local government systems. Con- stitutional and legal powers, limitations, special problems in urban economics, issues of ur- ban/suburban politics, metropolitan-regional government.





Master's in Public Service Leonard B. Mandelbaum, Ph.D., Director

Assistant Professor: Leonard B. Mandelbaum

Instructor: Derek Mills

Objectives

The Institute of Public Service is an interdisciplinary graduate center which provides a Master's degree in Public Service to students who aspire to be public service professionals. The Institute's program is designed to provide: (1) an understanding of the principles and dynamics of the political process and the role of administrative agencies in that process; (2) analytic and research skills; (3) some familiarity with problems in public management. The Institute is committed to the public welfare and creates a favorable climate for students who seek to improve public policy making, planning and the delivery of public services.

Degree Offered

Master of Public Service

Admission Requirements

Applicants must meet the basic requirements of the Graduate School. A bachelor's degree from an approved college or professional school, and academic records and credentials which indicate ability to pursue graduate work are essential. Professional experience will be considered where such experience suggests ability to pursue the particular programs at the Institute. Maturity sufficient to work independently on the Problem Oriented Project is another criterion for admission. Motivation will also be considered inasmuch as the Institute is conceived as a developer of committed, mature and able public servants, rather than a certifying institution or a program for the refinement of narrow vocational skills. Applicants should submit two letters of reference (one attesting to potential for graduate work) and a letter of intent (two pages) discussing career objectives and interest in the program. While grade point average will not be used as a fixed guide, it is considered; some students may be admitted on probation for two quarters (maximum of 12 credits) after which they must be approved for regular status.

General Program Requirements

There are four elements to the program:

- Foundation Courses: Depending upon previous education, students may be required to take foundation courses to gain the prerequisite knowledge to qualify them for the core courses and for the problem oriented research project. Foundation courses are not credited toward the 45 credit degree requirement. These foundation courses are: PUB 450, PUB 460 and PUB 470.
- 2. Core Courses: Pub 501, 505, 515, 520, 525-527, 550 and 571. Electives may be substituted whenever a student has the equivalent in experience or graduate work at another school.
- Electives: All courses other than core courses are electives.
- 4. Problem Oriented Project, Pub 588.
- Anyone electing an area of concentration must take at least one elective in another of the areas of concentration.

Areas of Concentration

The electives and Problem Oriented Research (PUB 588) may be combined into an area of concentration. The following are available:

Public Management Criminal Justice Systems Community-Urban Planning, Services and Policy Making

Students, who have completed the Alcohol Studies Certificate Program at Seattle University, may apply for nine credits to be applied to the Master's in Public Service. GRADUATE SCHOOL 163 Institute of Public Service

Pub 527 Human Perspectives in Public Service III 1 credit Fiduciary responsibilities of public service, the primacy of constitutional principles, human dignity and ethical precepts. Pub 535 Planning, Performance, Budgeting and Program Evaluation **3 credits** Planning process, planning analysis and the essentials of program budgeting and program evaluation. **Pub 545 Comparative Public Service 3 credits** Analysis of criminal justice, welfare, human resource (elderly, juveniles, family) planning and administrative systems of other nations. Pub 550 Urban Planning **3 credits** Overview of the planning process. Urban and metropolitan problems, physical and social plan-ning; impact of national policies and programs on planning. Pub 552 Planning for Human Resources Programs3 credits Theory and practice of planning as applied to social programs; application to programs for mental health, elderly, youth and Title XX. Client needs, program planning and organization, implementation, evaluation. **Pub 553 Housing and Policy and Planning 3 credits** Analysis of the housing market. History, analysis and effects of government intervention. How local agencies plan for housing needs. **Pub 555 Employment Policy and Economics 3 credits**

Pub 525 Human Perspectives in Public Service I 1 credit Pub 526 Human Perspectives in Public Service II 1 credit

Analysis of the labor market. Evolution of employment policy, economics and social goals. Analysis of federal legislation, man-power agencies. Problems of minority groups and the non-affluent.

Pub 557 Health Systems, Planning and Service Delivery 3 credits Analysis of the components of the health care system, patients, services and facilities. Emphasis on health manpower, public health and long term care.

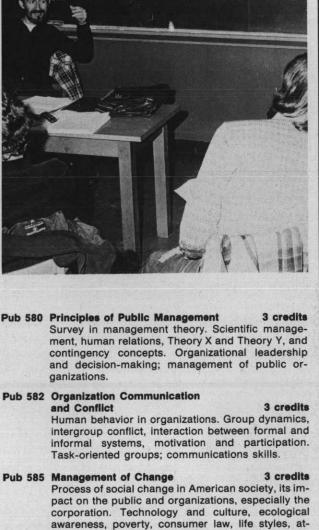
Pub 559 Environmental Regulation and Land Use Planning 3 credits Survey of approaches to environmental control. Environmental impact analysis, shoreline management, strip mining legislation. Land use planning and control systems impact on business, labor, environment and quality of life.

Pub 560 Criminal Justice Theory and Systems 3 credits Major components of the criminal justice agencies viewed as an interdependent system. Required of students who select Criminal Justice area of concentration.

 Pub 565
 Criminal Justice Planning
 3 credits

 Alternative strategies to meet public safety priorities in juvenile delinquency and corrections.
 3

Pub 571 Government Finance 3 credits Revenues, expenditures and debts of federal, state and local governments; economic theories; constitutional limitations; government finance as means for social reform.



Pub 587 Systems Theory and Management Techniques 3 credits Survey of contemporary tools designed to provide administrators with an improved understanding of problems and strategies. General systems theory. Delphi method. Critical Path Method and GANTT charts. Prerequisite: Pub 535 or Pub 580 or permission of instructor.

titudes toward work.

- Pub 588
 Problem Oriented Project
 3-15 credits

 Research and design in a student's special sphere of interest.
 Problem design will require comprehension of the following areas: A major phase of public management; the policy process; and human/community sensitivity.
 Prerequisite: Pub 501.

 Pub 590
 Special Topics
 1-5 credits
- Pub 594Internship in Community-Urban
Planning3 creditsPub 595Internship in Criminal Justice3 creditsPub 596Internship in Public Management3 credits

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of Business	Edmund W. Robinson, B.A. in Ed. Assistant Director of Financial Aid/Admissions
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College Planning	Paul D. Seely, M.Ed. Director of Admissions
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Faculty

The dates following faculty names indicate initial and subsequent appointments or return from leave to the University faculty. Asterisks preceding names denote faculty members on leave of absence. Daggers (†) following names indicate Graduate School faculty members.

Clarence L. Abello, B.Econ. (1953)

Chairman, Foreign Languages Department Associate Professor of Spanish B. Econ., 1933, University of London; Contador Publico Nacional, 1937, Universidad Nacional de Buenos Aires, Facultad de Ciencias Economicas.

Josef C. Afanador, Ed.D., (1975) Assistant Professor of Rehabilitation B.A., 1963, Butler University; M.S., 1967, Purdue University; Ed.D., 1971, University of Arizona.

Lewis E. Aldrich, Jr., Ph.D. (1968) Chairman, Biology Department 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)[†] Associate 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; 1955; 1971)† 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. Louis 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.

Francis X. Bisciglia, S.J., M.A. (1963) Associate Professor of Classical Languages A.B., 1938, M.A., 1939, Gonzaga University; S.T.L., 1947, St. Louis University; M.A., 1952, Fordham University. Roger E. Blanchette, S.J., M.A. (1966)† Chairman, Theology and Religious Studies Assistant Professor of Theology and Religious Studies A.B., 1957, M.A., 1959, Gonzaga University; S.T.B., 1965, Alma College; M.A., 1965, University of Santa Clara.

Dorothy G. Blystad, B.A. (1963) Assistant Professor of Education B.A., 1947, Colorado University.

Hamida H. Bosmajian, Ph.D. (1966; 1974)† Associate Professor of English B.A., 1961, University of Idaho; M.A. 1962, Ph.D., 1968, University of Connecticut.

Archille O. Bourque, Jr., Lt. Col., M.B.A. (1974) Chairman, Military Science Department Professor of Military Science B.S.B.A., 1969, St. Benedict's College; M.B.A., 1972, University of Kansas.

Jack L. Brown, SSG (1975) Supply Sergeant

Robert Michael Brown, Ph.D. (1974) Assistant Professor of Psychology B.A., 1967, Seattle University; M.Sc., 1971, University of Calgary; Ph.D., 1974, University of North Carolina.

Susanne M. Bruyere, Ph.D. (1975)

Assistant Professor of Rehabilitation B.A., 1970, D'Youville College; M.S.Ed., 1972, University of Southern California; Ph.D., 1975, University of Wisconsin.

John P. Burke, M.A. (1967)†

Assistant Professor of Philosophy B.A., 1965, Gonzaga University; M.A., 1967, St. Louis University.

Norma Jean Bushman, M.N. (1960) Associate Professor of Nursing B.S.N., 1959, M.N., 1960, University of Washington.

J. Gerard Bussy, S.J., Ph.D. (1948)† Professor Emeritus L.Ph., 1933, S.T.L., 1937, Gregorian; M.A., 1952, Seattle University; Ph.D., 1957, University of Washington.

David Michael Butler, M.A. (1975)

Assistant Professor of Drama B.A., 1966, Seattle University; M.A., 1970, University of Washington.

Robert J. Carmody, S.J., Ph.D. (1943)†

Professor Emeritus A.B., 1931, M.A., 1932, Gonzaga University; S.T.L., 1939, Alma College; Ph.D., 1949, University of Washington.

Walter R. Carmody, Ph.D. (1947)

Professor Emeritus B.S., 1923, University of Washington; M.S., 1924, Ph.D., 1926, Catholic University. *Emmett H. Carroll, S.J., M.A. (1973) Assistant Professor of English B.A., 1955, Gonzaga University; M.A., 1963, Gregorian University; M.A., 1966, Rutgers University.

Frank E. Case, S.J., M.A. (1975) Assistant Professor of Business A.B., 1962, M.A., 1965, Ph.L., 1965, St. Louis University; S.T.M., 1970, University of Santa Clara.

Ben Cashman, Ph.D. (1962; 1967) Chairman, Political Science Department Associate Professor of Political Science B.A., 1949, University of Washington; M.A., 1950, Fletcher School of Law and Diplomacy; Ph.D., 1969, University of Washington.

Chu Chiu Chang, M.A. (1956)† Associate Professor of Mathematics A.B., 1942, Central Political Institute, Chungking, China; M.A., 1956, University of Washington.

Louis K. Christensen, Ph.D. (1965) Professor of Music B.A., 1954, M.A. (Mus.) 1956, Ph.D., 1961, University of Washington.

Alene B. Cisney, M.L. (1966) Associate Librarian B.A., 1962, Reed College; M.L., 1966, University of Washington.

Janet M. Claypool, M.N. (1966) Associate Professor of Nursing B.S.N., 1959, M.N., 1960, University of Washington.

Geraid L. Cleveland, Ph.D. (1967) Dean, School of Business Professor of Accounting B.S. 1953, University of South Dakota; M.B.A., 1957, University of Minnesota; Ph.D., 1965, University of Washington.

Sister Mary Cobelens, O.P., M.L. (1971) Assistant Librarian B.A., 1959, Central Washington State; M.L., 1971, University of Washington.

William J. Codd, S.J., Ph.D. (1947)[†] Director, Montessori Studies Center Professor of Education A.B., 1936, M.A., 1938, Gonzaga University; S.T.B., 1944, Alma College; Ph.D. 1958, University of Washington.

James V. Connors, S.J., M.A. (1961; 1972) Assistant Professor of Drama A.B., 1953, Gonzaga University; S.T.B., 1958, University of Santa Clara; M.A., 1960, San Francisco State College.

Paul P. Cook, Jr., Ph.D. (1962) Associate Professor of Biology B.A., 1951, M.A., 1952, University of Kansas; Ph.D., 1962, University of California.

Robert H. Cousineau, S.J., Docteur Associate Professor of Philosophy B.A., 1953, M.A., 1954, Boston College; Ph.L., 1954, Weston College; S.T.L., Woodstock College; Docteur, 1969, University of Paris. *Marie J. Cowan, M.S. (1972) Assistant Professor of Nursing B.S., 1964, M.S., 1972, University of Washington.

James J. Cowgill, S.J., Ph.D. (1950; 1953)[†] Dean, Graduate School Professor of Physics B.S., 1938, M.S., 1939, Gonzaga University; S.T.L., 1946, Alma College; Ph.D., 1957, University of Notre Dame.

Kenneth W. Cubbage, D.B.A. (1974) Associate Professor of Business B.B.A., 1952, M.B.A., 1957, University of Washington; D.B.A., 1968, University of Colorado.

Thomas W. Cunningham, Ph.D. (1959; 1965) Professor of Psychology B.A., 1956, Seattle University; M.S., 1959, Ph.D., 1966, University of Portland.

Nikolas J. Damascus, M.F.A. (1951) Professor of Art B.F.A., 1944, M.F.A., 1947, Art Institute of Chicago.

Margaret Mary Davies, Ph.D. (1955; 1971) Professor of Economics A.B., 1938, Ph.D., 1960, University of Washington.

George D. Davis, M.S. (1969) Associate Professor of Biology Adviser, Medical Technology B.S., 1956, M.S., 1960, University of Tulsa.

Verelle M. Davis, M.S. (1972) Assistant Professor of Nursing B.S., 1959, University of Washington; M.S., 1970 Catholic University.

William H. Davis, SSG, A.A. (1975) Sergeant Major A.A., 1974, Fort Steilacoom Community College.

Rosario T. DeGracia, M.S. (1963) Associate Professor of Nursing B.S.N., 1954, University of the Philippines; M.S., 1959, Western Reserve University.

Eugene P. Delmore, S.J., S.T.M. (1970) Campus Ministry A.B., M.A., 1963, Gonzaga University; S.T.M., 1970, St. Mary's University.

Bonnie Jean Denoon, Ph.D. (1975) Assistant Professor of Education B.A., 1961, M.Ed., 1966, Wichita State University; Ph.D., 1975, Peabody College.

Khalil (Charles) Dibee, Ph.D. (1964)[†] Professor of Finance B.S., 1956, University of Detroit; M.B.A., 1958, Ph.D., 1962, University of Texas.

Joseph P. Donovan, S.J., Ph.D. (1948; 1966)[†] Professor of History A.B., 1938, Gonzaga University; M.A., 1940, Georgetown University; Ph.D., 1948, University of Pennsylvania. William J. Dore, Jr., M.A. (1963) Chairman, Fine Arts Department Associate Professor of Drama B.A., 1954, M.A., 1957, University of Washington.
Thomas E. Downey, Ph.D. (1957)[†]

Professor Emeritus A.B., 1932, M.A., 1934, Loyola University, Chicago; Ph.D., 1944, University of California.

Jerome R. Dunham, Ph.D. (1974) Assistant Professor of Rehabilitation Services B.A., 1946, M.A., 1947, University of Michigan; Ph.D., 1964, Texas Technological College.

Arthur C. Earl, S.J., M.A. (1944) Professor Emeritus B.S., 1929, Creighton University; M.A., 1937, Gonzaga University.

*Robert J. Egan, S.J., Ph.D. (1964; 1972) Assistant Professor of Theology and Religious Studies B.A., 1965, Gonzaga University; S.T.L., 1963, College of the Immaculate Conception; M.A., 1963, St. Mary's University; Ph.D., 1973, Fordham University.

David H. Ehlers, Ph.D. (1973) Chairman, Physics Department Assistant Professor of Physics B.A., 1964, Western Washington State College; Ph.D., 1970, Washington State University.

Mary B. Ehlers, Ph.D. (1974) Assistant Professor of Mathematics B.A., B.A. in Ed., 1964, Western Washington State College; M.A., 1966, Ph.D., 1969, Washington State University.

David K. Elder, M.Ed. (1964) Director, Counseling and Testing Center B.A., 1960, M.Ed., 1961, Western Washington State College.

Kenneth F. Enslow, S.J., M.L. (1972) University Librarian B.A., 1952, Gonzaga University; B.A., 1960, University of Santa Clara; M.L., 1965, University of Washington.

John D. Eshelman, Ph.D. (1969)† Associate Professor of Economics B.S., 1963, Harding College; M.A., 1967, Ph.D., 1971, University of Washington.

Patricia Ann Ferris, Ph.D., (1967) Associate Professor of Nursing B.S., 1951, St. Mary's College, Indiana; M.S., 1958, Western Reserve University; Ph.D., 1972, University of Washington.

*Lewis Filler, D. Eng. Sci. (1962) Professor of Mechanical Engineering B. Aero Eng., 1953, M. Aero. Eng., 1954, D. Eng. Sci., 1958, New York University.

Alice L. Fisher, M.S.P.H. (1950) Professor Emeritus B.S.N., 1930, University of Minnesota; M.S.P.H., 1936, University of Michigan.

C. Patrick Fleenor, M.B.A. (1973)† Assistant Professor of Business B.A., 1969, Boise State College: M.B.A., 1970, University of Washington. Donald J. Foran, S.J., Ph.D (1975) Assistant Professor of English A.B., 1966, M.A., 1967, Gonzaga University; S.T.M., 1975, Jesuit School of Theology; Ph.D., 1973, University of Southern California.

Winfield S. Fountain, Ed.D. (1947)[†] Professor of Education B.A., 1939, North Idaho College of Education; M.Ed., 1953, Ed.D., 1956, University of Washington.

Louis Gaffney, S.J., Ph.D. (1956) Professor of Psychology A.B., 1942, M.A., 1943, Gonzaga University; S.T.L., 1950, Alma College; Ph.D., 1956, University of Minnesota.

James P. Goodwin, S.J., M.A. (1950; 1966)† Chairman, Sociology Department Professor of Sociology B.A., 1937, M.A., 1938, Gonzaga University; M.A., 1950, Harvard University.

Gary I. Green, M.B.A. (1974) Assistant Professor of Business B.A., 1966, University of Colorado; M.B.A. 1970, Seattle University.

James K. Griffin, Capt., B.Ed., (1975) Assistant Professor of Military Science B.Ed., 1968, Seattle University.

Padmini Gulati, M.S.W. (1971) Assistant Professor of Community Services B.A., 1965, University of Ceylon; M.S.W., 1968, University of Washington.

William A. Guppy, Ph.D. (1952) Academic Vice President Professor of Psychology Ph.B., 1950, Seattle University; M.A., 1953, Ph.D., 1959, Loyola University, Chicago.

Reed A. Guy, Ph.D. (1975) Assistant Professor of Physics B.S., 1966, University of Alabama; Ph.D., 1970, University of Virginia.

Karen G. Guyot, M.S.J..S. (1969) Associate Librarian B.A., 1966, State University of New York, Harpur College; M.S.L.S., 1968, University of North Carolina.

Margaret M. Haggerty, Ph.D. (1971)† Associate Professor of Education B.S., 1957, College of St. Teresa; M.A., 1964, Ph.D., 1967, Catholic University.

Thomas B. Hamilton, M.A. (1963) Assistant Professor of Psychology B.A., 1961, Seattle University; M.A., 1963, University of Portland.

J. Hutchinson Haney, M.S. (1963) Assistant Professor of Rehabilitation B.A., 1966, University of Denver; M.S., 1968, University of Arizona. Mary Alice Hanken, M.Ed. (1972) Chairman, Health Information Services Assistant Professor of Health Information Services B.S., 1963, M.Ed., 1973, Seattle University.

Shirley M. Hanson, M.A. (1975) Instructor in Nursing B.N., 1960, Pacific Lutheran University; B.E., 1963, University of Alaska; M.A., 1966, University of Washington.

John M. Harding, J.D. (1975) Assistant Professor of Business B.A., 1942, Yale University; J.D., 1948, Yale Law School.

Vernon J. Harkins, S.J., B.A., S.T.L. (1958; 1963) Assistant Professor of Philosophy B.A., 1951, Gonzaga University; S.T.L., 1957, Alma College.

Charles R. Harmon, M.A. (1953)[†] Associate Professor of History B.S.S., 1950, Seattle University; M.A. 1957, University of Washington.

Eugene A. Healy, S.J., Ph.D. (1952; 1967) Professor of Biology A.B., 1936, M.A., 1937, B.S., 1945, Gonzaga University; S.T.L., 1944, Alma College; M.S., 1948, Fordham University; Ph.D., 1952, Columbia University.

Hildegard R. Hendrickson, Ph.D., (1967)† Associate Professor of Economics and Finance B.A., 1958, M.B.A., 1959, Ph.D., 1966, University of Washington.

Marvin T. Herard, M.F.A. (1960) Associate Professor of Art B.A., 1954, University of Washington; M.F.A., 1960, Cranbrook Academy of Art.

Montie T. Hess, Capt., M.A. (1976) Assistant Professor of Military Science B.G.S., 1974, Chaminade College; M.A., 1975, Central Michigan University.

Helon E. Hewitt, M.N. (1965) Associate Professor of Nursing B.S., 1959, M.N., 1961, University of Washington.

Lee Hodson, M.L.S. (1957) Assistant Librarian B.A., 1939, University of Redlands; M.L.S., 1942, University of California.

Ray W. Howard, Ph.D. (1967) Professor Emeritus B.A., 1931, M.A., 1940, Ph.D., 1949, University of Washington.

Margaret L. Hudson, Ph.D. (1974) Assistant Professor of Biology B.S., 1968, Ph.D., 1974, University of Washington.

Jeanette A. Hulburt, M.L. (1964) Associate Librarian B.A., 1950, Seattle University; M.L., 1964, University of Washington. Gladys M. Hunter, M.Ed. (1955) Professor Emeritus B.A., 1936, Valley City Teachers College; M.Ed., 1947, Teachers College, Columbia University.

Dolly Ito, D.N.S. (1959; 1970) Associate Professor of Nursing B.S., 1951, Gonzaga University; M.A., 1958, University of Washington; D.N.S., 1970, University of California at San Francisco.

Sue B. Jackson, M.S. (1975) Instructor in Nursing B.S., 1970, St. Louis University; M.S., 1973, Boston College.

Louis G. Jeannot, M.A. (1966) Assistant Professor of Theology and Religious Studies A.B., 1953, University of Portland; M.A., 1971, Marquette University.

Dolores M. Johnson, Ph.D. (1964)† Assistant Professor of English B.A., 1960, M.A., 1964, Ph.D., 1971, University of Washington.

Warren B. Johnson, Ph.D. (1962)[†] Associate Professor of History B.A., 1947, M.A., 1952, Ph.D., 1962, University of Washington.

Herbert M. Kagi, Ph.D. (1974) Director, Community Services and Police Science and Administration Assistant Professor of Community Services and Police Science A.B., 1955, M.A., 1963, Ph.D., 1963, Syracuse University.

Leo B. Kaufmann, S.J., Ph.D. (1967)[†] Professor of Philosophy B.A., 1944, M.A., 1945, Gonzaga University; S.T.L., 1952, Alma College; Ph.D., 1957, St. Louis University.

Michael M. Kelliher, S.J., D. Crim. (1972) Assistant Professor of Sociology A.B., 1960, Gonzaga University; S.T.B., 1968, University of Santa Clara; M.Crim, 1969, D. Crim., 1972, University of California at Berkeley.

Louis E. Kelly, M.Ed. (1970) Assistant Professor of Music B.Mus.Ed., 1952, University of Portland; M.Ed., 1958, Linfield College.

James W. King, S.J., S.T.D. (1959) Associate Professor of Community Services Diploma, Volce, 1942, Sherwood Music School, Chicago; M.A., 1952, Gonzaga University; S.T.B., 1957, Alma College; Diplome, 1958, Institut Gregorien de Paris; S.T.D., 1971, San Francisco Theological Seminary.

John L. Kite, Ph.D. (1974) Assistant Professor of Rehabilitation B.S., 1966, M.Ed., 1968, Trinity University; Ph.D., 1974, University of Arizona.

Harry H. Kohls, S.J., Ph.D. (1966)† Associate Professor of Philosophy A.B., 1935, M.A., 1936, Gonzaga University; Ph.D., 1952, Georgetown University.

Kenneth D. MacLean, M.A. (1961)† Stephen R. Kuder, S.J., Ph.D. (1975) Assistant Professor of English Associate Professor of English A.B., 1966, Gonzaga University; M.A., 1970, Boston Col-B.A., 1952, M.A., 1957, University of Washington. lege; Ph.D., 1975, Graduate Theological Union, Berkeley. Harry Majors, Jr., M.S. (1958) Chairman, Mechanical Engineering George D. Kunz, Ph.D. (1971) Professor of Mechanical Engineering Chairman, Psychology Department B.S., 1935, University of California; M.S., 1939, Califor-Assistant Professor of Psychology nia Institute of Technology; Registered Professional A.B., 1960, Gonzaga University; M.A., 1964, Marquette Engineer. University; Ph.D., 1975, Duquesne University. Donald C. Malins, Ph.D. (1971) Charles S. LaCugna, Ph.D. (1947) **Research Professor of Chemistry** Professor of Political Science B.A., 1953, University of Washington; B.S., 1956, Seattle A.B., 1937, Manhattan College; M.A., 1944, Fordham University; Ph.D., 1960, University of Washington. University; Ph.D., 1967, University of Aberdeen. Leonard B. Mandelbaum, Ph.D. (1973)† Jane P. LaFargue, M.N. (1969) Director Institute of Public Service Assistant Professor of Nursing Assistant Professor of Business B.S., 1968, Boston University; M.N., 1969, University of B.A., 1954, Washington Square College; J.D., 1957, Yale Washington. Law School; M.A. 1966, Ph.D., 1974, American University. Val M. Laigo, M.F.A. (1965) Assistant Professor of Art Albert B. Mann, M.A. (1960)† Associate Professor of History B.Ed., 1954, Seattle University; M.F.A., 1964, University of Washington. A.B., 1951, Gonzaga University; M.A., 1957, University of Washington. Gordon A. Larson, Capt., B.S. (1972) Assistant Professor of Military Science R. Maxime Marinoni, M.A. (1964)† B.S., 1965, U.S. Military Academy. Associate Professor of French Licence, 1961, Universite de Grenoble; M.A., 1965, James Robert Larson, Ph.D. (1952)† Ph.D., 1975, University of Washington. Professor of Sociology A.B., 1949, Seattle University; Ph.D., 1958, University of Karla J. Marken, M.A. (1975) Washington. Instructor in Education Director, Montessori Teacher Training B.A., 1961, Hamline University; M.A., 1975, Seattle Paula J. Laschober, M.A. (1975) University. Instructor in Foreign Languages B.A., 1970, Seattle University; M.A., 1973, University of Nancy Kay Mauss, M.N. (1975) Washington. Instructor in Nursing B.S., 1972, Stanford School of Nursing; M.N., 1975, Mary Alice Lee, A.B. (1957) University of Washington. Registrar A.B., 1949, Saint Louis University. David D. McCloskey, Ph.D. (1971; 1975) Assistant Professor of Sociology Albert A. Lemieux, S.J., Ph.D. (1948; 1968) B.S., 1968, University of Oregon; M.A., 1970, Ph.D., Professor of Philosophy 1975, New School-Social Research. B.A., 1931, M.A., 1932, Gonzaga University; S.T.L., 1939, Alma College; Ph.D., 1945, University of Toronto. Alexander F. McDonald, S.J., M.A. (1969) Chairman, English Department William F. LeRoux, S.J., M.A., S.T.D. (1958) Assistant Dean for College Planning Associate Professor of English M.A., 1941, Gonzaga University; M.A., 1942, University Professor of Theology and Religious Studies of Detroit; S.T.L., 1948, Alma College; M.A., 1952, Ox-B.A., 1946, M.A., 1947, Gonzaga University; S.T.L., ford University. 1954, Alma College; S.T.D., 1959, Gregorian. James B. McGoldrick, S.J., Ph.D. (1931) Francis J. Lindekugel, S.J., M.A., S.T.L. (1946)† **Professor Emeritus** Associate Professor of Theology and Religious Studies A.B., 1923, M.A., 1924, Gonzaga University; S.T.D., 1931, Gregorian; Ph.D., 1935, University of Washington. A.B., 1937, M.A., 1938, Gonzaga University; S.T.L., 1945, Alma College. James T. McGuigan, S.J., M.A., S.T.L. (1946; 1965) Francis A. Logan, S.J., M.A. (1939) **Professor Emeritus Professor Emeritus** A.B., 1929, M.A., 1930, Gonzaga University; S.T.L., A.B., 1925, M.A., 1926, Gonzaga University; Diplome, 1937, Alma College. 1955, de l'Institut de Phonetique de l'Universite de Paris. J.W. McLelland, M.A. (1947) Reba Y. Lucey, M.Ed. (1969) Associate Dean, School of Business Assistant Professor of Physical Education Professor of Finance B.S., 1949, M.Ed., 1957, Sam Houston State Teachers B.S., 1941, Seattle College; M.A., 1949, University of College. Washington.

Sister Mary Roberta McMahon, O.P., Ph.D. (1962)[†] Associate Professor of Philosophy B.A., 1936, M.Ed., 1953, University of Washington; Ph.D., 1963, St. Louis University.

- Keith W. McMaster, D.B.A. (1973)[†] Assistant Professor of Business B.A., 1964, University of Washington; M.B.A., 1965, D.B.A., 1970, University of Oregon.
- Darrell A. McNabb, M.P.A. (1972)† Assistant Professor of Business B.S.B.A., 1962, M.P.A., 1963, University of Denver.
- Arthur L. McNeil, S.J., Ph.D. (1970)[†] Professor Emeritus A.B., 1931, M.A., 1932, Gonzaga University; Ph.D., 1936, Catholic University of America; S.T.B., 1946, Alma College.
- James C. McWaters, MSG (1972) Operations Sergeant
- Paul B. Milan, Ph.D. (1966)† Associate Professor of French B.A., 1964, Seattle University; M.A., 1966, Ph.D., 1972, University of Washington.
- Derek M. Mills, B.A. (1975) Instructor in Public Service B.A., 1973, University of Washington.
- Joseph B. Monda, Ph.D. (1955; 1961; 1968) Director, Summer School Professor of English A.B., 1949, St. Martin's College; M.A., 1950, Marquette University; Ph.D., 1968, University of Colorado.
- John A. Morford, Ed.D. (1973)† Dean, School of Education Professor of Education B.Ed., 1955, Gonzaga University; M.Ed., 1961, Ed.D., 1963, University of Idaho.
- George O. Morris, S.J., Docteur (1973) Assistant Professor of French B.A., 1961, Gonzaga University; M.A., 1969, University of Notre Dame; M.A., 1970, St. Mary's Halifax; Docteur, 1973, Universite de Paris.
- Gail Nank, M.A. (1974) Instructor in Nursing B.S., 1964, Columbia University; M.A., 1968, University of Washington.
- Mark Neudorfer, Ph.D. (1974) Assistant Professor of Electrical Engineering B.S., 1965, M.S., 1966, Ph.D., 1971, University of Washington.
- Edward J. O'Brien B.C.S. (1958) Director of Athletics B.C.S., 1953, Seattle University.
- Ralph K. O'Brien, Ed.D. (1953)[†] Professor of Education B.S., 1939, Cortland State Teachers College; M.S.Ed., 1941, Syracuse University; Ed.D., 1954, University of Washington.
- R. Michael O'Connor, Ph.D. (1974) Assistant Professor of Education B.A., 1962, M.Ed., 1969, University of Washington; Ph.D., 1974, University of Minnesota.

*Eileen J. O'Donnell, B.S. (1972) Instructor in Health Information Services B.S., 1972, Seattle University.

Susan B. Ogden, M.B.A. (1975) Assistant Professor of Business B.S., 1966, M.B.A., 1968, University of Southern California.

- Cornelius J. O'Leary, S.J., M.A., S.T.B. (1953; 1971) Associate Professor of Theology and Religious Studies A.B., 1943, M.A., 1944, Gonzaga University; S.T.B., 1951, Alma College.
- Joseph T. Page, Ph.D. (1955) Chairman, Physical Education Department Associate Professor of Physical Education B.A., 1950, M.S., 1951, Springfield College, Mass.; Ph.D., 1965, University of Oregon.
- Adele T. Palmberg, Ph.D. (1974) Assistant Professor of Foreign Languages B.A., 1964, Michigan State University; B.A., 1965, Middlebury College; Ph.D., 1974, University of Illinois.
- Virginia L. Parks, Ph.D. (1972)[†] Associate Professor of Accounting and Economics B.B.A., 1961, University of Texas; M.B.A., 1966, Ph.D., 1971, University of Houston.
- James E. Parry, M.A. (1961, 1968)† Associate Professor of History B.A., 1960, Seattle University; M.A., 1963, University of Washington.
- Giuseppe G. Patelli, D.C.S., C.P.A. (1950) Professor Emeritus D.C.S., 1925, Bocconi University, Milan, Italy.
- Anna Marie Payne, M.N. (1972) Assistant Professor of Nursing B.S.N., 1968, University of Arkansas; M.N., 1972, University of Washington.
- Margaret Penne, M.A. (1971) Director, Speech Program Assistant Professor of Speech B.A., 1967, M.A., 1972, Seattle University.
- Ronald A. Peterson, J.D. (1950; 1963)† Assistant Professor of Business and Law A.B., 1943, University of Omaha; J.D., 1948, Creighton University; Member, Nebraska and Washington Bar.
- Ekkehard J. Petring, Ph.D. (1972) Chairman, Rehabilitation Assistant Professor of Rehabilitation B.A., 1961, University of California at Santa Barbara; M.S., 1964, California State University, Los Angeles; Ph.D., 1972, University of Arizona.
- Mary C. Pirrung, M.A. (1962)† Associate Professor of Education B.A. 1947, Western Washington State College; M.A., 1953, Columbia University.
- Vincent S. Podbielancik, Ph.D. (1947)[†] Chairman, Chemistry Department Professor of Chemistry B.S., 1938, Seattle University; M.S., 1958, Ph.D., 1966, University of Washington.

James G. Powers, S.J., Ph.D. (1966) Dean, College of Arts and Sciences Associate Professor of English B.A., 1956, Ph.L., 1956, M.A., 1960, Gonzaga University; S.T.M., 1963, S.T.L., 1963, University of Santa Clara; Ph.D., 1966, University of Colorado. Sister Christopher Querin, S.P., Ph.D. (1960)

Professor of Political Science B.S.S., 1950, Seattle University; Ph.D., 1961, St. Louis University.

David H. Read, Ph.D. (1948; 1954) Professor of Chemistry B.S., 1942, Seattle University; M.S., 1944, University of Illinois; Ph.D., 1949, University of Notre Dame.

James B. Reichmann, S.J., Ph.D. (1955; 1965)[†] Chairman, Philosophy Department Professor of Philosophy B.A., 1946, M.A., 1948, Gonzaga University; S.T.L., 1954, Ph.D., 1960, Gregorian.

Eileen M. Ridgway, Ph.D. (1963) Dean, School of Nursing Professor of Nursing B.S.N.E., 1944, St. Mary College, Kansas; M.S.N.E., 1957, St. Louis University; Ph.D., 1963, Catholic University.

Sue Ellen Ries, B.S. (1974) Instructor in Nursing B.S., 1971, University of Oregon.

James Riley, S.J., M.A. (1973) Instructor in Philosophy B.A., 1961, M.A., 1963, Gonzaga University; M.A., 1969, St. Mary's University; M.A., 1973, Northwestern University.

Stephen B. Robel, M.S. (1948) Professor of Mechanical Engineering B.S., 1948, Seattle University; M.S., 1951, University of Notre Dame.

Theodore J. Ross, M.B.A., C.P.A. (1947) Professor Emeritus B.S., 1932, University of California; M.B.A., 1946, University of Chicago.

James E. Royce, S.J., Ph.D. (1948) Director, Alcohol Studies' Program Professor of Psychology A.B., 1939, M.A., 1940, Gonzaga University; S.T.L., 1948, Alma College; Ph.D., 1945, Loyola University, Chicago.

Erlinda F. Rustia, Litt.D. (1972)† Assistant Professor of English Litt.B., 1941, M.A., 1948, Litt.D., 1969, University of Santo Tomas.

Robert D. Saltvig, Ph.D. (1962)† Chairman, History Department Associate Professor of History A.B., 1954, University of Portland; M.A., 1959, Ph.D., 1966, University of Washington.

George A. Santisteban, Ph.D. (1964) Professor of Biology B.A., 1945, Montana State University; M.A., 1949, Ph.D., 1951, University of Utah. Louis A. Sauvain, S.J., M.A., S.T.B. (1955; 1965)† **Campus Ministry** Associate Professor of Theology and Religious Studies A.B., 1940, Seattle University; M.A., 1948, Gonzaga University; S.T.B., 1953, Alma College. Leo A. Schmid, S.J., Ph.D. (1934; 1947) **Professor Emeritus** A.B., 1932, M.A. 1933, Gonzaga University; S.T.B., 1941, Alma College; M.S., 1942, Marquette University; Ph.D., 1947, Fordham University. Richard T. Schwaegler, Ph.D. (1959; 1967) Chairman, Civil Engineering Associate Professor of Civil Engineering B.S., 1957, M.S., 1958, Massachusetts Institute of Technology; Ph.D., 1968, University of Washington. John S. Schwarz, S.J., M.A. (1970; 1972) Instructor in History B.A., 1951, M.A., 1958, Gonzaga University; M.A., 1964, University of Santa Clara. Mary A. Linden Sepulveda, M.L. (1973) Junior Librarian B.A., 1972, M.L., 1973, University of Washington. Francis J. Smedley, B.S. (1949)† Associate Professor Emeritus B.S., 1933, U.S. Naval Academy. Edward H. Spiers, M.A. (1949)† Professor of English Ph.B., 1948, Seattle University; M.A., 1949, University of Washington. Jerry T. Standal, Ph.D. (1975) Assistant Professor of Business B.A., 1959, Washington State University; M.A., 1967, Ph.D., 1974, University of Washington. James L. Stark, D.A. (1972) Assistant Professor of German B.A., 1964, University of Portland; M.A., 1968, D.A., 1972, University of Washington. Bernard M. Steckler, Ph.D. (1961) † Professor of Chemistry B.S., 1953, St. Martin's College; Ph.D., 1957, University of Washington. Harriet B. Stephenson, Ph.D. (1967)† Associate Professor of Management B.A., 1961, M.B.A., 1962, Ph.D., 1966, University of Washington. Janet L. Stevenson, B.H.I.S. (1974) Instructor in Health Information Services B.H.I.S., 1974, Seattle University. William J. Sullivan, S.J., Ph.D. (1975) Provost Professor of Theology and Religious Studies A.B., 1948, Ph.L., 1955, A.M., 1955, Saint Louis University; S.T.L., 1962, Faculte de Theologie; M.A., 1967, M.

Phil.-Religious Studies, 1967, Ph.D., 1971, Yale Univer-

sity.

John R. Talevich, M.A., (1955) Chairman, Journalism Department Associate Professor of Journalism A.B., 1949, Seattle University; M.A., 1952, Marquette University.

Ronald R. Talmage, Ph.D. (1975) Assistant Professor of Philosophy B.A., 1969, Seattle University; Ph.D., 1974, St. Louis University.

Michael J. Taylor, S.J., S.T.D. (1961; 1965; 1971) Professor of Theology and Religious Studies A.B., 1947, M.A., 1949, Gonzaga University; S.T.L. 1955, Alma College; S.T.D., 1961, Woodstock College, Lilly Post-Doctoral Fellowship, 1964-65.

William Taylor, M.A. (1963; 1969) Associate Professor of English B.A., 1956, Seattle University; M.A., 1966, University of Washington.

John K. Thompson, Ph.D. (1973) Assistant Professor of Rehabilitation B.A., 1966, Muskingum College; M.S., 1970, San Diego State College; Ph.D., 1972, University of Arizona.

David L. Thorsell, Ph.D. (1974) Assistant Professor of Chemistry B.A., 1964, University of Minnesota; Ph.D., 1971, Ohio State University.

David E. Tinius, M.B.A., C.P.A. (1970)† Assistant Professor of Accounting B.S.M.E., 1960, M.B.A., 1964, University of Washington.

Henrietta B. Tolson, M.S.W. (1971) Assistant Professor of Community Services B.A., 1960, Seattle University; M.S.W., 1962, University of Washington.

L. John Topel, S.J., Ph.D. (1971)[†] Director, SUMORE Assistant Professor of Theology and Religious Studies B.A., 1958, M.A., 1959, Gonzaga University; S.T.M., 1966, Santa Clara University; S.S.L., 1969, Pontifical Biblical Institute; Ph.D., 1973, Marquette University.

Burnett R. Toskey, Ph.D. (1958; 1968)† Professor of Mathematics B.S., 1952, M.A., 1958, Ph.D., 1959, University of Washington.

Michael T. Toulouse, S.J., M.A. (1950) Associate Professor of Philosophy A.B., 1935, M.A. 1936, Gonzaga University.

John P. Toutonghi, Ph.D. (1963)† Associate Professor of Physics B.S., 1957, Seattle University: Ph.D., 1963, University of Washington.

Sister Rosaleen Trainor, CSJ, Ph.D. (1965)† Director, Honors Program Associate Professor of Philosophy B.Ed., 1958, Seattle University; M.A., 1963, Ph.D., 1966, St. John's University. Kathleen M. Treseler, M.N. (1968) Assistant Professor of Nursing B.S., 1946, Seattle College; M.N., 1965, University of Washington.

Alan Troy, Ph.D. (1970) Associate Professor of Mathematics B.A., 1950, B.S., 1953, University of Chicago; M.S., 1956, Ph.D., 1961, University of Illinois.

Richard L. Turner, Ph.D. (1963) Associate Professor of Electrical Engineering B.S.E.E., 1946, M.S.E.E., 1952, Drexel Institute of Technology; Ph.D., 1962, University of Washington.

Donald S. Ulm, Major, B.A. (1972) Assistant Professor of Military Science B.A., 1959, Virginia Military Institute.

Frank A. Valente, Ph.D.(1966)† Research Professor Emeritus B.S., 1922, M.Sc., 1924, Ph.D., 1939, New York University.

Lawrence E. Vance, M.S. (1973) Assistant Professor of Physical Education B.S., 1961, Bradley University; M.S., 1967, Indiana State University.

Usha S. Varanasi, Ph.D. (1971) Research Professor of Chemistry B.SC., 1961, Bombay University; M.S., 1963, California Institute of Technology; Ph.D., 1967, University of Washington.

Robert F. Viggers, M.S. (1949) Professor of Mechanical Engineering B.S., 1944, University of Washington; M.S., 1950, Oregon State College; Registered Professional Engineer.

John E. Vinson, M.S. (1969) Assistant Professor of Mathematics B.A., 1958, M.A., 1961, Oregon State University; M.S., 1965, Stanford University.

Donald B. Walter, M.B.A. (1975) Admissions Officer, Graduate Business Programs Instructor in Business B.S., 1969, Ohio State University; M.B.A., 1974, Seattle University.

J. Kevin Waters, S.J., D. Mus. Arts (1969) Associate Professor of Music A.B., 1957, M.A., 1958, Gonzaga University; B.A., 1964, University of Washington; M.A., 1965, Santa Clara University; D. Mus. Arts, 1970, University of Washington.

Kathleen A. Waters, M.Ed. (1969) Assistant Professor of Health Information Services B.S., 1958, M.Ed., 1973, Seattle University.

Linda K. Weiland, B.S. (1975) Instructor in Health Information Services B.S., 1971, Seattle University.

William L. Weis, M.B.A. (1973)[†] Instructor in Business B.S.B.A., 1969, M.B.A., 1971, Bowling Green State University.

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Charles A. Wollesen, S.J., Ph.D. (1960)† Associate Professor of English A.B., 1945, M.A., 1946, Gonzaga University; S.T.L. 1953, Alma College; M.A., 1959, Fordham University; Ph.D., 1970, University of Washington.

Francis P. Wood, S.J., M.S. (1952) Chairman, Electrical Engineering Professor of Electrical Engineering A.B., 1940, Gonzaga University; S.T.L., 1948, Alma College; M.S., 1952, Stanford University.

Marylou Wyse, Ph.D. (1965; 1969)† Associate Professor of Education B.A., 1953, M.Ed., 1965, Seattle University; Ph.D., 1969, Western Reserve University.

Charles A. Yackulic, M.A. (1964)[†] Associate Professor of Education B.Sc., 1948, B.Ed., 1950, University of Alberta; M.A., 1951, Eastern Washington College.

William L. Yam, S.J., M.S.L.S. (1972) Assistant Librarian A.B., 1963, Ateneo de Manila; M.S.L.S., 1968, Catholic University of America.

Andre L. Yandl, Ph.D. (1956; 1966)† Chairman, Mathematics Professor of Mathematics B.S., 1954, M.A., 1956, Ph.D., 1965, University of Washington.

Barbara M. Yates, Ph.D. (1970)† Assistant Professor of Economics B.A., 1962, College of Wooster; M.A., 1963, Ph.D., 1969, University of Michigan.

James Young, SSG (1975) Operations Sergeant

Anita Yourglich, Ph.D. (1946)[†] Professor of Sociology B.S., 1945, Seattle University; M.A., 1948, St. Louis University; Ph.D., 1961, University of Oregon.

Gary H. Zarter, Ph.D. (1973)† Associate Dean, School of Education Assistant Professor of Education B.A., 1960, St. Norbert College; M.A., 1969, San Francisco State; Ph.D., 1973, University of Washington.

Gary A. Zimmerman, Ph.D. (1964)[†] Dean, School of Science and Engineering Associate Professor of Chemistry B.S., 1960, California Institute of Technology; Ph.D., 1965, University of Wisconsin.

University Lecturers

Catherine E. Boroughs, B.A. (1964) Lecturer-Supervisor B.A., 1939, Western Washington College.

Harvey Chamberlin, J.D. (1974) Lecturer in Police Science and Administration B.A., 1970, J.D., 1974, Unviersity of Washington. Lawrence A. Clarke, M.S.W. (1975) Lecturer in History B.S., 1964, Wilberforce University; M.S.W., 1967, Wayne State University.

John D. Denney, M.D. (1972) Clinical Assistant Professor in Nuclear Medical Technology B.A., 1962, University of Washington; M.D., 1966, Cornell University Medical College.

Arthur A. Jacobovitz, Rabbi, B.A. (1961) Lecturer in Theology and Religious Studies B.A., 1953, Yeshiva University.

Wen-Kai Kung, M.A. (1974) Lecturer in Foreign Languages B.A., 1952, National Taiwan University; M.A., 1957, University of South Carolina; M.A., 1964, University of Pennsylvania.

Mary Jo Lara, M.N. (1968; 1973) Lecturer in Nursing B.S., 1963, College of St. Catherine; M.N., 1967, University of Washington.

Raymond Marty, M.D. (1972) Clinical Assistant Professor in Nuclear Medical Technology B.A., 1952, University of California; M.D., 1959, University of Lausanne, Switzerland.

Michael R. McKamey, Ph.D. (1972) Clinical Assistant Professor in Nuclear Medical Technology B.S., 1965, Seattle University; Ph.D., 1973, University of Washington.

Rita K. Monahan, B.S. (1975) Acting Instructor in Health Information Services B.S., 1970, Seattle University.

Gretchen C. Murphy, M.Ed. (1973) Lecturer in Health Information Services B.S., 1964, Seattle University; M.Ed., 1973, University of Washington.

Marilyn Price, M.S.N. (1973) Lecturer in Nursing B.S.N., 1965, St. Louis University; M.S.N., 1970, The Catholic University of America.

H. E. Slape, M.S.W. (1975) Lecturer in Community Services B.A., 1961, Texas Wesleyan; M.S.W., 1971, University of Washington.

Thomas W. Steinburn, Ph.D. (1974) Lecturer in Health Information Services B.A., 1951, M.A., 1958, Ph.D., 1965, University of Washington.

William C. Towner, M.S. (1969) Lecturer-Supervisor B.S., 1947. M.S., 1950, University of Washington.

John R. W. Wilby, M.Sc. (1967)† Lecturer in Business B.Sc., 1928, M.Sc., 1929, University of Leeds.

James A. Wyse, S.J., M. Ps. (1975) Lecturer in Psychology B.A., 1952, Gonzaga University; M.A., 1960, University of Santa Clara; M.Ps., 1966, University of Ottawa.

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Correspondence relating to the general interest of the University President

Curriculum, scholastic problems, degree programs The Dean of the particular school, Academic Vice President or the Provost

Admission Director of Admissions

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Career Planning, Placement, and job finding assistance Director of Career Planning and Placement Ulm, Donald S., Major, 62, 173

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Where to Write

There is a central mail room on the campus. Information on specific items may be obtained by writing to the offices listed below and adding: Seattle University

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or, by calling the main switchboard at (206) 626-6200. Mail for student residence halls must be addressed to their respective locations.

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