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SEATTLE UNIVERSITY

1993-1994 Undergraduate
Bulletin of Information

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

As a general rule, students follow the academic programs contained in the Bulletin of Information in effect at the time of their matriculation. However, students who withdraw from the university for more than one calendar year are subjected to the requirements for their school and major and for university core curriculum in effect at the time that they are readmitted.

Seattle University does not discriminate on the basis of religion, race, color, national or ethnic origin, sex or the presence of any sensory, mental or physical disabilities in the administration of its admissions policies and in its scholarship, loan and work study programs.

Inquiries relating to these policies may be referred to the university's assistant vice president for human resources and affirmative action officer.

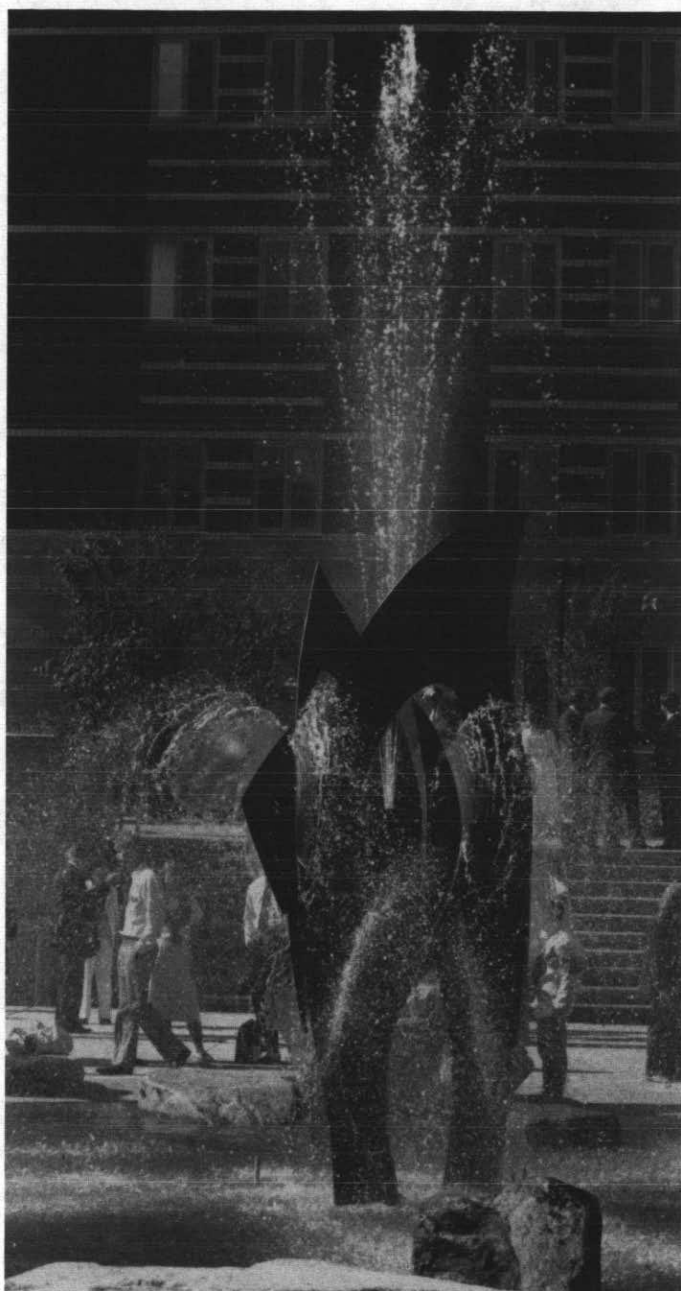
Information concerning continuing studies, graduate and summer school programs may be obtained in supplementary bulletins.

Seattle University
Broadway and Madison
Seattle, WA 98122-4460
(206) 296-6100

Cover photo by Chris Nordfors



**Seattle
University**
FOUNDED 1891



1993-1994 Undergraduate
Bulletin of Information

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Purpose and Scope

Seattle University's purpose is to foster the discussion, interpretation and transmission of knowledge, ideas and values. The university is dedicated to the extension of the frontiers of knowledge by critical and exhaustive investigation and experimentation. Thorough, intelligent training in theory and principles provided by Seattle University prepares students for professional careers and a lifetime of service.

Well into its second century of educational service, Seattle University is dedicated to its historical mission of:

- teaching and learning
- education for values
- preparation for service
- personal growth

As a comprehensive institution of higher learning, Seattle University brings this four-fold purpose to bear on all its activities and programs, on its relations to its students, its own community of educators and on the various publics it serves.

Conducted under the auspices of the Society of Jesus (the Jesuits), Seattle University supports Christian ideals and values. It affirms the belief in the unity and totality of all human knowledge, whether experiential, speculative or divinely revealed. As a community inspired with the Spirit of Christ, the campus atmosphere inside and outside the classroom encourages the development of an unbiased, truly liberated and enlightened intelligence in its faculty and student body.

History

Founded in 1891, Seattle University offers a value-based education in the Jesuit tradition. The university's development as one of the Northwest's leading centers of higher education is closely woven with the history of Seattle and the Puget Sound area. It is a story of relentless effort on the part of the university to serve the educational needs of a growing metropolitan community.

Seattle University had a humble and unpretentious beginning. In 1890, Father Aegidius Junger, bishop of what was then called the Nisqually Diocese, concerned over the lack of educational opportunity for Catholic youth in the Seattle area, sent repeated requests to the Jesuits of the Rocky Mountain Mission territory to establish both a parish and a school in the young city. In response to the intrepid bishop's appeals, Fathers Victor Garrand and Adrian Sweere arrived from the Yakima station in the spring of 1891.

The two Jesuits immediately leased St. Francis Hall, a building that had been constructed at 6th and Spring in downtown Seattle the previous year by Father Francis X. Prefontaine, the area's first resident priest. Rededicating the building as the Parish and School of the Immaculate Conception, and aided by two Holy Names sisters serving as full-time teachers, the good fathers began their modest educational effort.

With the advice and assistance of Father Prefontaine, the mission procurator purchased property that ultimately became the present campus. In 1893, the cornerstone of the first building was laid and the new parish and

school was opened for classes in September 1894.

Growth continued with the introduction of the first "academic" or high school-level class in 1898 and the filing of articles of incorporation changing the parish school for boys into Seattle College. These were also years of struggle and disappointment. Nevertheless, overcoming the still prevailing frontier mentality that saw little need for higher education other than in the professions, a college department in humanities was instituted in 1900. In 1909, the first three graduates were awarded bachelor of arts degrees.

A temporary casualty of World War I, college classes at Seattle College were suspended from 1918 to 1922. In 1919, the successful high school department moved to a new seven-acre campus on Interlaken Boulevard, a gift of Thomas C. McHugh. On its reinstatement in 1922, following the war, the college department was also housed at the new campus, and three baccalaureate degrees were granted in 1925.

In 1931, with an enrollment of less than 50 students, Seattle College returned to a partially renovated building at the present Broadway and Madison campus, a move that proved beneficial to both levels. Within two years, women were enrolled in credit courses, and in 1936, the first women received their degrees. Just prior to that, the first professional degree program was established with the introduction of the School of Education. In 1937, the college was fully accredited by the Northwest Association of Secondary and Higher Schools. The School of Nursing was officially opened in 1940 and the School of Engineering followed in 1941.

Returning World War II veterans in 1945 discovered the newly established School of Commerce and Finance, Seattle College's fifth major academic unit. By 1948, the enrollment in all programs neared 3,000 students. Appropriately that year, an amendment to the articles of incorporation officially changed the institution's name to Seattle University.

Rapid expansion of both the physical boundaries and educational facilities of Seattle University marked the decades of the 1950s and 1960s. With just three permanent buildings and three war surplus structures in 1950, the university added or converted 12 major buildings over the next 20 years. Most of the development occurred under the direction of Father A.A. Lemieux, president of the university from 1948 to 1965.

Extensive curriculum expansion highlighted the 1970s with innovative new schools and programs. Chief among these additions were the School of Science and Engineering (1972), and the Matteo Ricci College (1977).

Continually seeking new and better ways to serve, Seattle University frequently introduces new degree programs. The doctorate in educational leadership, the university's first doctoral degree program, was instituted in 1976.

Institutional innovations include master-level programs in software engineering and in therapeutic psychology, along with a baccalaureate degree in computer science. The Institute for Theological Studies was initiated in 1985. Programs in communication studies and international business were implemented in 1988.

The introduction of new academic programs has accelerated since 1990, when the university offered for the first time a master's in teaching degree, master's degrees in adult education and training, bachelor's

degrees in international studies and biochemistry and the region's only bachelor degree in civil engineering with an environmental track.

In fall 1992, master's degrees in student development and applied economics were added, with a specialized master's degree in transforming spirituality for students in the Institute for Theological Studies.

The undergraduate business program also added a concentration in operations management in 1993, allowing students to pursue one of four tracks: purchasing, quality systems, operations planning and control or general operations tracks. A master of science in finance was added to the graduate business program in 1993.

Teaching and Service

Teaching is the first priority at Seattle University. Courses are taught by qualified professors, not graduate students. Throughout its history, Seattle University has distinguished itself with an emphasis on teaching excellence. Most of the full-time faculty members have earned doctoral degrees, and are often recognized by academic and scholarly organizations and their professional peers.

A Seattle University education can be put to work through internships as degree completion nears. The university's graduates are well-received by corporate, institutional and public-sector employers.

Students from all majors are encouraged to expand their understanding of other countries and cultures by studying, working or doing community service outside U.S. borders. University academic programs are available in Grenoble, France; in Graz, Austria; in Caracas, Venezuela; in Tokyo Japan; and in Taejeon, Korea. Voluntary service opportunities are organized in India, in addition to local and regional projects.

Organization

As an independent, coeducational institution, Seattle University is incorporated under the laws of the state of Washington and operated by its own board of trustees. The university, administered under the auspices of the Society of Jesus, is one of 28 Jesuit institutions of higher education in the United States. Like other Jesuit institutions, Seattle University derives its tradition and objectives from the academic experience and educational ideals of the Society of Jesus and the Christian tradition.

The university is composed of seven major academic units:

College of Arts and Sciences

The college is comprised of 12 departments: Communication/Journalism; Criminal Justice; English; Fine, Applied and Performing Arts; Foreign Languages; History; Military Science; Philosophy; Political Science/Public Administration; Psychology; Sociology; and Theology and Religious Studies. Program divisions include: addiction studies; honors; international studies; liberal studies; prelaw and premajor.

Albers School of Business and Economics

The school offers degrees in accounting, economics, finance, general business, international business, management, marketing and operations.

School of Education

The graduate degrees offered by the School of Education qualify students for teaching certificates, principal's certificates and counseling certificates issued by the Office of the Superintendent of Public Instruction. There is no longer an undergraduate teacher preparation program at Seattle University. For information about the graduate degrees, consult the *Graduate Bulletin of Information*.

Matteo Ricci College

This is the three-year university phase of a program that integrates high school and university level studies, enabling students to complete their high school and university education in six or seven years, rather than eight.

School of Nursing

A baccalaureate degree in professional nursing is offered, which qualifies students for registration through state licensure. Registered nurses who intend to complete requirements for the bachelor of science in nursing degree are also admitted to the program.

School of Science and Engineering

The school includes the departments of biology, chemistry, computer science, diagnostic ultrasound, general science, mathematics and physics, as well as civil and environmental engineering, electrical engineering, mechanical engineering and software engineering.

Graduate School

Master's degrees are available in business, applied economics, education, finance, ministry (Institute for Theological Studies), psychology, public administration (Institute of Public Service), religious education, student development administration and software engineering. An educational specialist degree can be earned in administration or educational diagnostics/school psychology. A doctor of education degree with a major in educational leadership is also offered. For additional information about graduate programs consult the *Graduate Bulletin of Information*.

Office of Evening Programs

The Office of Evening Programs is an academic/administrative unit which assists the major academic units described above in providing undergraduate degree programs at night by coordinating course scheduling and the provision of student services, and helping to recruit new students.

Accreditation

Seattle University is accredited by, and is a member of, numerous academic and professional bodies. Seattle University 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

Accreditation Board for Engineering and Technology

(civil, electrical and engineering)

American Assembly of Collegiate Schools of Business
 American Chemical Society (chemistry)
 Committee on Allied Health Education and Accreditation
 (Diagnostic Ultrasound)
 Council on Rehabilitation Education
 National Council for Accreditation of Teacher Education
 National League for Nursing

The university is approved by:
 Washington State Board of Education
 Washington State Board of Nursing

The university is a member of:
 American Association of Colleges of Nursing
 American Association of Colleges for Teacher Education
 American Association of Collegiate Registrars and Admissions
 Officers
 American Council on Education
 Association of Higher Education
 Association of Jesuit Colleges and Universities
 Council for Advancement and Support of Education
 Council of Baccalaureate and Higher Degree Programs
 Independent Colleges of Washington
 NAFA: Association of International Educators
 National Commission on Accrediting
 National League for Nursing
 Northwest Association of Colleges
 National Association of Intercollegiate Athletics
 National Intramural and Recreation Sports Association
 Commission for Higher Education

Campus

With the natural splendor of Puget Sound providing a breathtaking backdrop, Seattle University offers all the educational advantages of a metropolitan area college. The 46-acre campus on historic First Hill is nestled on the edge of downtown Seattle, one of the nation's most picturesque cities.

The campus is growing to serve the needs of more than 4,800 students and 300 faculty members. The Centennial Fountain, designed by George Tsutakawa, is located in the center of campus. The fountain and Quadrangle provide an artistic atmosphere in an open-air setting, a favorite meeting place for the campus community. In the Thomas J. Bannan Center for Science and Engineering, teaching and research laboratories feature state-of-the-art equipment for undergraduates. The Bessie Burton Sullivan Skilled Nursing Residence is an integral part of the service orientation of the campus. It is intended to develop excellence in education and in the care of older persons.

Lemieux Library, constructed in 1966 and named after one of the university's most beloved presidents, is the primary academic resource for faculty and students. In addition to a collection of approximately 270,000

volumes and seating for more than 1,000 students, there is an excellent staff dedicated to service. Librarians help individuals find information in the local collection and, through the use of computers, access external databases.

On-campus housing is provided in three coed residence halls: Bellarmine Hall, Xavier Hall and Campion Tower.

Under one roof in the University Services Building are the offices for enrollment services, enrollment research, Undergraduate Admissions, Graduate Admissions, Financial Aid, the Registrar and Controller, as well as the Book Store.

The Connolly Center, an indoor sports and recreation facility, features two swimming pools, basketball, badminton, tennis and racquetball courts, a weight room and dance area. All home games for the men's and women's basketball teams are played on the north court. The Connolly Center is also headquarters for Seattle University's innovative intramural program, which offers a wide variety of activities, including flag football, basketball, co-rec softball and indoor soccer. Clinics designed to improve skills in volleyball, tennis, golf and swimming are also offered.

Beyond textbooks and term papers, students may participate in student government or work on the student newspaper. Seattle University offers 60 campus clubs, honoraries and professional organizations. Honor groups range from Alpha Kappa Psi, for business students, to Sigma Theta Tau, the national nursing honorary. The popular Hawaiian Club sponsors an annual luau, and students from other countries hold an all-campus international dinner with entertainment.

A unique opportunity called Pathways is offered for new and returning students at Seattle University. Pathways encourages self-assessment and reflection, one-on-one relationships and small communities to help students' personal growth.

Seattle University competes in varsity intercollegiate athletics at the NAIA level in men's and women's basketball, soccer, tennis and cross country. The Chieftain teams were very successful during the 1992-1993 athletic year. The women's soccer team finished the 1992 season ranked eighth in the final NAIA national soccer poll. The men's and women's tennis teams received national recognition. The men's team ranked 10th nationally while the Lady Chieftain netters ranked 18th. The 1992 Lady Chieftain basketball team qualified for the NAIA national tournament in Jackson, Tennessee, for the first time in team history.

Students never have to look long for a place to study, relax, socialize or play. The campus has quiet corners, green lawns, impromptu volleyball games and places to sit and talk.

Your Seattle University education is an investment for life. It's more than going to classes and taking tests. At Seattle University, it means growing as an individual in a learning and caring community.

Student Development

One of the primary aims of the educational mission at Seattle University is the total development of students. This holistic growth process is enhanced by integrating opportunities for social, emotional, cultural, physical and spiritual development, in addition to intellectual growth. The

Division of Student Development is committed to providing programs and services conducive to fostering an educational environment that will assist students in achieving their full potential.

Located in the McGoldrick Student Development Center, the Student Union, the Connolly Center, the Child Development Center, the International Student Center, Pigott and the three university residence halls, the professionals who comprise the Student Development staff are committed to meeting the developmental needs of Seattle University's diverse student population.

The Office of the Vice President for Student Development provides the administrative leadership for the Division of Student Development, and serves as a source of information and help for many of the students' non-academic needs.

Pathways is a program that brings the concept of "growth of persons" to life by out-of-class learning experiences. Students assess the areas in which they want to grow, pair up with a faculty or staff mentor, or join a discovery group and participate in a series of discussions, outings and service projects that help students learn and form lasting friendships.

The **Center for Leadership and Service** includes student activities, clubs and organizations, Student Union programs, the Volunteer Center, Associated Students of Seattle University (ASSU), new student programs and the Campus Assistance Center. This office provides leadership development programs for all students.

The **Campus Ministry** team is committed to the personal and spiritual growth of students, and to supporting the diversity and richness of faith traditions reflected in our university community. In collaboration with Jesuit priests, lay faculty, staff and students, Campus Ministry offers opportunities for building friendships and community through worship, retreats, pastoral counseling, community service, sacramental preparation, education for peace and justice, and fellowship. The Search Program is specifically for students and provides a unique weekend opportunity to explore values and faith in a supportive community environment.

The **Counseling Center** offers confidential counseling. There are opportunities for individuals, couples and groups who may be experiencing stress, relationship problems, depression or other concerns that may be interfering with personal or academic functioning. Vocational interest (Strong Campbell) and self awareness testing (Myers Briggs) are available. The Counseling Center also sponsors various workshops offered throughout the school year on subjects such as stress management, assertiveness training, weight control, coping skills, conflict resolution, life change adjustments, relationships, self esteem and other topics of interest to students.

The **Career Development Center (CDC)** helps students prepare for and find employment in their particular fields of expertise. The CDC provides career counseling and workshops that equip students with the skills needed to build successful careers and plan satisfying lives. Students are encouraged to assess their values, interest and abilities, and weigh them against occupational requirements and descriptions. Self-marketing

and effective job search strategies are among many workshops offered. Career development services include:

- personal career counseling
- campus interviews with employers
- job fairs and career nights
- workshops and career-planning skills
- computerized career exploration
- resume preparation
- job interview preparation
- job-ready skills assistance
- career resource library
- alumni network

The **International Student Center**, located on the corner of 11th and Cherry, serves 350 students from approximately 45 countries around the world. We seek to serve a dual purpose; to enable students to achieve success at Seattle University and, through the contribution of their unique cultures and perspectives, to enrich the entire university community. The International Center serves as a focal point for activities and programs of a cultural, educational or social nature, and as a gathering place for students and student organizations.

The **Minority Student Affairs Office** works toward the understanding and appreciation of the cultural diversity within our campus community. Ongoing programs emphasize the academic, social and personal success of the ethnic American student through supportive counseling and advising. Programs include Black History Month, Asian Pacific Islander Orientation, Dr. Martin Luther King Jr. Week, Cinco de Mayo, the Chief Sealth Pow Wow and Our Lady of Guadalupe Celebration and Lunch.

The **Child Development Center** is open to children of students and employees of Seattle University, and supports the university's community efforts by also serving children from the surrounding community.

The **Learning Center** provides academic support and skill enhancement to all Seattle University students. Experienced learning specialists and graduate interns take time to explore specific academic needs and assist in designing an individual educational plan. The Learning Center can provide tutors, assessments of learning styles and study strategies, and individual consultation to help design strategies to improve time management, reading comprehension, test preparation/taking and note taking.

Resources for Students with Disabilities is a component of the Learning Center that provides academic counseling, support, advocacy and referrals for students with physical and learning disabilities. This resource can help with:

- interpreters
- notetakers
- readers
- testing adaptations
- test proctors
- room changes
- adaptive/auxiliary aids
- braille
- phonic ear (FM classroom system)

- tape recorder (variable speed)
- TDD (telecommunication device for the deaf)
(Written documentation of a student's disability from a qualified professional must be submitted before accommodation can be provided.)

The **Student Union Building** is the hub of campus activities. It offers the Chieftain dining area and student lounges. Student Development administrative offices, the Associated Students of Seattle University (student government), the *Spectator* (student newspaper), and various club and organization offices are located there. The Campus Assistance Center, Center for Leadership and Service, the Pathways Office and Volunteer Center are also located in the Student Union Building.

The **Campus Assistance Center** is a one-stop information, resource and referral service available for all students. This center, in cooperation with the Undergraduate Admissions Office, also coordinates campus visits for prospective students.

The **Volunteer Center** assists students with community service requirements in selected courses, volunteer service and community action projects. Through the Volunteer Center, students work with homeless people, abused and neglected children, the elderly, refugees and many others in the community, the nation and other nations.

Orientation programs are sponsored each summer and fall to facilitate the social and academic adjustment of new freshmen and transfer students. Orientation is also held during winter and spring quarters.

The **Early Success Program** is designed for freshmen who do not meet standard admissions requirements but show academic promise. The program prepares students for the academic rigors of Seattle University by providing them with the opportunity to elevate academic skills in preparation for university admission. As participants in the program, students establish individual relationships with Seattle University faculty, students and staff; this support system helps ESP students as they progress through new learning experiences in the university.

During the summer session, students take English 101 and Freshman Seminar, classes designed to help students determine what is expected of college level students. Since writing and reading are critical components of an academic career, English 101 and Freshman Seminar focus heavily on learning to read and write critically. In these courses, students learn how to critique their own writing to make it competent and forceful. The instructors function as learning coaches, and the classes are interactive and discussion oriented. The summer session also includes off-campus trips, computer projects, tutoring sessions, and time for study and meeting new people. During fall quarter, students enroll in English 110 (Freshman Composition) and one or two other five-credit core courses, such as science, math, history or fine arts. Academic support continues during fall quarter and features tutoring, peer support groups, weekly study sessions, social functions and mentoring.

The **Culture and Language Bridge Program** is a comprehensive, quarter-long, 12-credit immersion experience and is offered summer and fall quarters only. It focuses on the development of all phases of language literacy, speaking, listening, writing and reading. It is designed to help international students and non-native speakers of English overcome cultural

barriers that prevent them from full participation in the Seattle University experience.

All non-native speakers of English whose TOEFL (Test of English as a Foreign Language) score is below 550 are required to enroll in the Culture and Language Bridge Program during their first quarter at Seattle University. The minimum TOEFL score for admission is 520. Students must successfully complete the five credit English 101 course as part of the total 12 credits of the program. The remaining seven credits of communication skills and language lab work do not count toward a degree program or graduation requirements.

Student Clubs and Organizations

Seattle University students enjoy many opportunities to develop leadership skills, broaden their social and professional backgrounds and make a significant contribution to both the university and the community. The Associated Students of Seattle University (ASSU), student publications, preprofessional organizations, service clubs, scholastic honoraries and community outreach programs are among the varied groups in which students may choose to participate.

Student Health Center

The center is open to all enrolled students. In addition to providing assistance for routine and acute medical problems, the Health Center provides information and wellness programming to help students create and maintain a healthy lifestyle. Full-time students and their dependents are also eligible to participate in the university's health insurance program.

University Sports

Seattle University is a member of the National Association of Intercollegiate Athletics. The university competes in soccer, basketball, tennis, cross country and skiing for men and women. The university places a high priority on its intramural and recreation programs, and provides a wide variety of indoor, outdoor and off-campus activities. The Connolly Center serves as the major sports facility for intercollegiate athletics, intramurals and recreation activities. A three-acre field complex provides outdoor facilities for soccer, flag football, softball and jogging. University Sports offers opportunities for students of all ages and skill levels.

University Food Service

Meals are provided at four locations on campus. The Marketplace is the main university dining room and is located in Bellarmine Hall. The Chief-tain specializes in fast food, and is located in the Student Union Building. The Cave is a convenience store located in Campion Tower. Bannan Hall houses a small food service cart, specializing in coffee, soda and a variety of muffins, donuts and chips.

Students living in Bellarmine and Xavier are required to purchase a meal plan. A meal plan is optional for students living in Campion. Meal plans are accepted at any campus food service location, except for the cart in Bannan. Students who do not live on campus are welcome to purchase a meal plan. For more information, contact the Food Service Office, Bellarmine Hall, room 115, (206) 296-6310.

Residential Life

Residence Requirement

Seattle University requires full-time freshman students under 21 to live in university residence halls unless they are married, living with parents or have been granted an advance waiver by the director of Residential Life.

Residence Halls

There are three residence hall communities on campus, each with its own personality and traditions. Bellarmine Hall, centrally located on campus, houses 350 students. Campion Tower is located on the south side of campus and houses 400 students. Xavier Hall is located at the north end of campus and houses 170 students.

Each hall offers quiet study areas, lounges and recreation rooms, kitchens and a limited number of storage lockers. Students may choose traditional lifestyle floors, quiet floors, over-21 floors, floors dedicated to health and wellness issues or to the freshman year experience.

Residence halls offer many opportunities for leadership development in residence hall student government, as a paraprofessional staff member or resident assistant, in activity preparation and many other ways.

Each hall is staffed with a professional staff person (residence hall director), and one faculty or staff moderator on each floor.

For more information about Residential Life, visit the Residential Life Office, on the first floor of Bellarmine Hall, or call (206) 296-6274.

Applicat on for Residence Halls

Requests for on-campus student housing are made through the director of Residential Life. A deposit is required for reservations. See the Costs section of this bulletin for housing cost information. Cancellation of reservations must be received by the director of Residential Life no later than August 1, or the deposit will be forfeited. Residents who terminate their stay in university residence halls before the end of the academic year will suffer a financial loss.

Other Student Services

Academic advisement is coordinated through the various schools within the university by the deans and department chairpersons for each academic major. Adviser assignments are normally made during the fall orientation period.

The **Book Store** is the source of all required textbooks and course-related supplies. In addition, it offers computers and software, and a selection of apparel and gift items with Seattle University imprinting. Other sections include greeting cards, snack foods and sundries. Any book not in stock may be special ordered, film may be left for processing, and, at the end of each quarter, used books may be sold back for cash.

Safety and Security Services provides 24-hour security for the campus community and its facilities. Security personnel are available to assist students in a variety of ways, including first aid, escort services, crime prevention, lost and found, and assistance with vehicles with dead batteries or keys locked inside. Security persons are uniformed and easily recognizable should assistance be needed. For service or information, call (206) 296-5990 (24 hours). Emergency only, call 296-5911 (24 hours).

Admission

Admission Policy

Regulations in this bulletin are supplemented by memoranda that set forth policy in greater detail. References to applicable policy statements are noted parenthetically. Copies of these policy memoranda may be obtained from the Registrar's Office.

Seattle University selects for undergraduate admission those students who have demonstrated in their prior studies an ability to achieve a level of academic performance necessary to earn a degree. The university admission policy is administered by the provost and the dean of admission. Acceptance of an admissions offer implies adherence to the university policies and code of conduct. All academic documents 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 requirements in the individual colleges or schools of the university. Such information will be found in the section of the bulletin pertaining to a specific college or school.

Undergraduate admission may be granted to qualified applicants for any of the four quarters of the academic year. The dean of admission reserves the right to withdraw an offer of admission for academic or personal reasons. All applicants for admission must remit an application fee to the university. Inquiries concerning undergraduate admission should be addressed to the Undergraduate Admissions Office, Seattle University, Seattle, WA 98122-4460.

Special Consideration

Students who show 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. All admissions decisions in these cases are made by the provost and the university's review board for undergraduate admissions.

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

Seattle University does not discriminate on the basis of handicap, in conformity with section 504 of the Rehabilitation Act of 1973, in admission or access to its programs and activities, or in its employment policies or practices. Denis Ransmeier, vice president for Finance and Administration, is the responsible employee designated by Seattle University to coordinate its effort to comply with section 504 of the Rehabilitation Act of 1973.

This constitutes the official notice called for in Section 504, No. 84.8, Paragraph a.

Admission from Secondary Schools

To be considered for admission to the university as an undergraduate student, you must meet the following entrance requirements:

- Have graduated or will graduate from an accredited high school;
- Have a high school grade point average in the recommended 16 college preparatory units noted below of 2.50 or above as measured on the 4.00 scale, or rank in the upper 50 percent of the senior class;
- Have completed 16 units of college preparatory courses; or
- Have submitted scores from one of the following examinations: Scholastic Aptitude Test (SAT) or American College Test (ACT).

Applicants with a grade point average below 2.50 as computed by the Undergraduate Admissions Office will be reviewed by the university's review board for undergraduate admissions. Applicants with a grade point average below 2.00 will not be admitted to the university on either a regular or probationary status.

Course Recommendations

Admission is granted subject to graduation from an accredited high school, with a recommended minimum of 16 academic units, distributed as follows (one unit equals one year of study):

English	4
Mathematics (algebra, geometry)*	2
Social Studies	2
Laboratory Science*	1
Foreign Language+	2
Academic Electives (approved)**	5

* Applicants for most science and engineering degrees must have completed three units of mathematics and two units of laboratory science.

+ Foreign language study is strongly recommended, since students in the College of Arts and Sciences must complete a foreign language III course or demonstrate competence at this level to meet their degree requirements. Transfer students are also strongly advised to include foreign language study as part of their associate of arts program.

** Electives may be reduced by requirements in other categories.

Application

In the state of Washington, application forms for those wishing to enter as freshmen may be obtained by writing the Undergraduate Admissions Office, Seattle University, Seattle, WA 98122-4460, or from any high school counseling office in the state. Out-of-state applicants may obtain forms by writing to the Undergraduate Admissions Office.

To apply for admission, follow these procedures after completion of at least the sixth semester of high school.

1. Complete section I and II of the application for undergraduate admission and leave the entire form with your counselor to have section III completed and forwarded directly to the Undergraduate Admissions Office.
2. Have the teacher recommendation form completed and forwarded directly to the Undergraduate Admissions Office.

3. Submit a non-refundable application fee of \$35 to the Undergraduate Admissions Office, payable to Seattle University.
4. Have your high school transcript and transcripts of any post-secondary course work you have completed sent to the Undergraduate Admissions Office. Only official transcripts are acceptable. Official transcripts must arrive in the Undergraduate Admissions Office in a sealed envelope from the issuing institution.
5. Have your scores from one of the following examinations sent to the Undergraduate Admissions Office: Scholastic Aptitude Test (SAT), or American College Testing Program (ACT).

Notification of acceptance or denial for fall quarter begins December 1 of the previous year and continue as space is available. 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 specified information is received.

Fall quarter high school students should apply for admission by May 1. Applications submitted after May 1 are considered on a space available basis only. All admission credentials should be postmarked by May 1 for fall quarter, and no later than one month before the beginning of winter, spring and summer quarters.

Advanced Placement

(Policies 75-16 and 75-17)

Entering students may seek advanced placement in college courses by taking the Advanced Placement (AP) Tests of the College Board. You can find out more about these tests from your high school counselor or by writing to the Educational Testing Service. At your request the Educational Testing Service will forward test results directly to Seattle University. A score of three or better on an AP examination may earn 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 Board. To receive course credit through CLEP, you must submit your official test results to the Registrar's Office one month before the quarter you plan to enroll.

Early Admission

High school students with a grade point average of 3.3 or above on the 4.0 scale who are recommended by their high school principal and their high school counselor may be considered for enrollment after completing their junior year in high school.

Early Decision Plan

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

International Baccalaureate

The university grants course credit and advanced placement for any upper-level subject in the International Baccalaureate program passed with a grade of 5 or higher. Subsidiary level courses will be reviewed on a case-by-case basis and may earn advanced standing recognition. Depending on grades, diploma recipients may receive up to one full year of credit.

Placement Examinations

Placement tests in mathematics and foreign languages are administered by the respective departments during orientation. Entering freshmen have the opportunity to show the extent of their preparation, and the departments can determine the level at which entering freshmen begin college work.

Probationary Admission

Students accepted under probationary status must achieve regular status by the end of their first year or be subject to dismissal from the university. Students on probation may be admitted to the school of their chosen area of study.

Running Start Program

(Policies 75-16 and 75-17)

Students who have participated in a Washington Community College Running Start Program must submit their community college transcript as well as their high school records. Transfer credits will be considered according to usual guidelines. (See *Transfer of Credit from Other Institutions*.)

The university will classify as first-time freshmen: a) all students who graduated from high school in the current year and have accrued 44 credits or fewer; and, b) students attending college for the first time or who have 20 or fewer credits, no matter when they graduated from high school.

Freshmen transfers are considered to be students who have graduated in any year other than the current one and have accrued 21 to 44 credits.

Admission from Other Post-Secondary Institutions

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

1. Submit to the Admissions Office an application for admission, an application fee of \$35 payable to Seattle University and one official copy of a transcript from each postsecondary institution previously attended. Failure to furnish complete previous post-secondary records when applying for admission or readmission places students under penalty of immediate dismissal. The university has the option to declare all credit not presented at the time of application as non-transferable.

2. Present a minimum 2.50 academic grade point average (or the minimum required by a school/college; see appropriate sections of this bulletin) for post-secondary work attempted prior to transfer. Courses completed at 1.0 (or D) are acceptable for transfer, to fill core or electives, but cannot fill major requirements in many departments. No transfer applicant will be admitted with a grade point average below 2.00.
3. Transfer applicants who have completed less than one full year (45 quarter or 30 semester hours of transferable credit) at another postsecondary institution must fulfill secondary school unit requirements for admission to the freshman class. In such cases, an official copy of the high school transcript must also be submitted.

Transfer students who have been suspended or dismissed will not be eligible for admission unless one calendar year has elapsed since the dismissal or suspension. At the end of this period, admission may be granted only by the undergraduate board of admissions. In such cases, two letters of recommendation are required.

In assessing students' records for admission, grades in non-credit courses will not be counted. For work done in postsecondary institutions in which academic standing is unknown/or for work with private teachers, admission and advanced credit will be granted only upon examination. Examinations to establish credit for such work may be taken only after the completion of 15 credits in residence. (See Credit by Examination section of this bulletin.)

(Policies 77-1 and 79-1)

For the purpose of guidance and registration, the academic evaluation unit in the Registrar's Office will make a tentative evaluation of transfer credits at the time of admission to Seattle University. All evaluations are subject to the approval of the provost and the dean of the appropriate school. (See Transfer of Credit from Other Institutions in this bulletin for additional information.)

Audit Students

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

Elderaudit

Persons age 60 and over may audit classes on a space-available basis with the permission of the instructor and the department chair. Details may be obtained at the Registrar's Office.

International Students

(Policy 76-6)

Specific admission requirements and procedures for all international students are listed on the university's undergraduate international student application form. These criteria differ from those applied to United States citizens. International applicants should read carefully the International Student Application.

Permanent Resident Students

Students whose official immigration status is that of permanent resident must submit Test of English as a Foreign Language (TOEFL) results if English is their second language.

Special Students

(Policy 75-25)

The special student designation may be granted to students who do not meet the standard admission requirements. This is a temporary, but matriculated, status and is available for undergraduate courses only with the approval of the dean of admission or the dean of the school or college. Special students must complete 30 Seattle University credits and an acceptable grade point average before they can declare a major and have transfer credit accepted.

Transitional Students

Admission as a transitional student is granted for a maximum of two quarters to a student in good standing at any recognized college or university who meets Seattle University's admission standards. Students must be enrolled in a degree program to receive financial aid.

By special arrangement, superior high school students may be admitted to specific courses with transitional student status.

University credit will be awarded for successful completion of courses taken as a transitional student. Such credit may be applied toward a degree from Seattle University only after admission to a degree program.

Financial Aid

Seattle University offers a variety of strategies and resources to lower the cost of a university education. All families are urged to complete a financial aid application regardless of their income level. Financial aid professionals will then have the information necessary to discuss all options available for parents and students. The financial aid application is the common form with which students may apply for all campus-based programs (Federal Perkins Loan, Nursing Student Loan Program, Federal Supplemental Educational Opportunity Grants, Federal Work Study) and at the same time apply for the Federal Pell Grant, the Washington State Need Grant, the Educational Opportunity Grant, State Work Study and the Federal Stafford Loan. The Financial Aid Office will help students identify sources for financing a higher education. These sources include, but are not limited to, family, student, state government, federal government and private sources.

Although students must be admitted as regular degree-seeking students to receive an award, they should apply for financial aid as soon after January 1 as possible.

Students are expected to arrive on registration day with sufficient funds to cover any portion of tuition, books, room, board and other fees not covered by financial aid. If a student is late in applying for a Federal Stafford Loan, or if for some other reason a shortage of funds occurs at the time of registration, students should make arrangements to secure short-

term loans from relatives, employers or other funding sources. All students should bring sufficient funds to allow them to eat and purchase classroom materials for the first week of school.

Payment of Awards

All awards, except work study earnings, Federal Stafford Loans, Federal Supplemental Loans for Students, Washington State Need Grants, Educational Opportunity Grants and funds from outside agencies, are disbursed to students by means of a direct credit to their account. Each quarter, transfer is dependent upon the final approval of the director of Financial Aid. Each student must acknowledge receipt of the awards before they are credited to a student's account. Only when a student's file is complete can aid be transferred to the account.

Types of Financial Aid

1. Grant or Scholarship - An award that does not require repayment.
2. Loan - Low interest loans with flexible, liberal repayment periods.
3. Work Study - An opportunity to work on or off campus while attending school.

Application Procedure

1. Apply for admission to Seattle University as a degree-seeking student as early as possible. Financial aid will not be awarded until students are formally admitted. Students who have applied for admission by February 1 will receive maximum consideration for financial aid.
2. File the Free Application for Federal Student Aid (FAFSA) as soon as possible in January 1993, indicating Seattle University in the college release section. Students do not need to be formally admitted to submit this application.
3. All students must submit copies of their 1992 federal tax returns. Parent tax returns are also required for dependent students. All transfer students must request financial aid transcripts from any schools previously attended, whether or not they received financial aid from that school. Based on their application, some students will also need to complete additional documents.
4. Upon receipt of an official award letter, students must notify the Financial Aid Office of their plans by the date indicated, by accepting or rejecting the funds offered. Students neglecting to return their award letters by the date specified will have their financial aid cancelled. They must also reserve their space in the class by submitting their advance deposit.
5. Students must reapply for financial aid each year. Tax returns for the previous calendar year are also required each year.
6. Students and parents are advised to make a file for each application year and to retain copies of all materials submitted.

The preferred date for receipt of all materials to the Financial Aid Office is February 1 for the following academic year. Aid application processing is on a rolling basis. The earlier Seattle University receives the financial aid application, the greater the opportunity to obtain the best possible financial aid package.

Eligibility for Federal Student Aid

Applicants for a Federal Pell Grant, Federal Perkins Loan, Federal Supplemental Educational Opportunity Grant, Federal Work Study, Federal Stafford Loan, Federal Parent Loan, Federal Supplemental Loan, or any other federal aid must meet the following criteria:

1. Be a U.S. citizen, national or permanent resident.
2. Be attending at least half-time and enrolled in a regular degree-seeking program. Students enrolled less than half time may be considered for the Federal Pell Grant only.
3. Must maintain satisfactory progress in the course of study. Satisfactory progress for full-time undergraduates means that a student must earn 36 credit hours each academic year in order to continue to receive need-based financial aid in the future. (This requirement should not be confused with minimum hours required each quarter to receive aid for that particular quarter.)

Satisfactory progress is explained in more detail on a form titled student responsibilities and conditions of award, which is mailed to students along with their award letter. In addition, students must have a minimum cumulative GPA of 2.0 after their second year of postsecondary attendance. The following standards are applied to all undergraduate full-time federal aid recipients:

Number of Hours Completed	Grade Point Average	Years to Complete
0 to 36	N/A	1
37 to 72	2.0	2
73 to 108	2.0	3
109 to 144	2.0	4
145 to 180	2.0	5
181 to 225	2.0	6

If, at the end of the spring quarter, the Financial Aid Office determines that a student has not met the standards, the student will be required to attend summer session. The student will remain ineligible for assistance until the standard has been met. The grade point average standard must be met at Seattle University since credits at other colleges and universities do not alter the Seattle University grade point average. Students who do not meet the credit hour standard may make up the credits elsewhere with permission from the Financial Aid Office. The requirement to attend summer session may be waived or financial aid continued in spite of non-compliance with eligibility standards, if a student's written appeal to the financial aid committee is granted.

4. Must not be in default on a student loan or obligated to pay a refund on a previous federal aid program.
5. Must establish need by filing a financial aid application.
6. Must be an undergraduate student who has not previously received a bachelor's degree. Graduate students may receive aid from the loan programs and work programs only.
7. With the exception of the Federal Stafford Loan, must not be a member of a religious community, society or order who by direction or with

permission of the community, society or order is pursuing a course of study at Seattle University and who receives support and maintenance from the community, society or order in an allowance or in kind.

Financial Aid Programs

A financial aid package may include assistance from any one or more of the following sources. The Financial Aid Office is required to coordinate funding from all sources. The student's total resources cannot exceed the cost of education as set by Seattle University, whether or not the funds are considered need based.

Sullivan Leadership Awards, Presidential Leadership Awards and Seattle University Leadership Awards are awarded by the Sullivan Leadership Award Committee through an in-person competition. The scholarship competition is named for William J. Sullivan, SJ, president of Seattle University, who has established as a primary goal the preparation of students for leadership roles in society. Students nominated by the secondary school administration are required to submit separate application materials. There are various tiers of competition culminating with an interview and speech. Awards are renewable for four years with appropriate leadership activities, 45 credit hours, and a 3.0 cumulative grade point average. Students must also attend full time for each quarter the award is received.

Presidential and Trustee Scholarships based on achievement are available to students with superior academic ability. The Admissions Office will nominate students at the time the admission decision is made. Scholarships ranged from \$3,300 to \$6,300 for 1992-93. Students must attend full time to receive the award for any quarter. Each award is for one academic year but is renewable for four years with the completion of 45 credit hours per academic year and a 3.0 cumulative grade point average.

Matteo Ricci Grants are awarded to full-time students participating in the Matteo Ricci Program who have demonstrated above-average academic ability. These awards are automatically renewed for the second year. Renewal for the third year requires the completion of 90 credit hours and a 3.0 cumulative grade point average. Renewal for the fourth year requires completion of 45 credits for the previous year and a 3.0 cumulative grade point average.

Regents' Awards were as high as \$2,700 for 1992-93 to qualified African American, Hispanic or Native American students attending full time. A special application is required. It is available from the Undergraduate Admissions Office. Renewal requirements include the completion of 36 credit hours per academic year and a 2.0 cumulative grade point average.

Seattle University scholarships and awards may also be awarded in various forms through the Honors Program, University Sports, Residential Life, ROTC, the Associated Students of Seattle University (student government), the Institute for Theological Studies and the *Spectator* (student newspaper). University Sports may offer talent awards, athletic grants and room grants. Residential Life provides awards for work as resident assistants. The ROTC program offers incentive awards and room grants to some of the exemplary students who are also receiving a federal ROTC scholarship. Students who are elected to certain positions in the Associated Students of Seattle University receive compensation for services in the form of a direct

credit to their account. The Institute for Theological Studies makes awards to students with exceptional circumstances. The editor of the *Spectator* and some of the staff receive direct credits to their accounts for service.

Scholarships and Grants

Seattle University offers special awards in recognition of outstanding achievement. Students apply for these scholarships by submitting a financial aid application. All applicants for financial aid are considered for these awards.

Most of the following scholarships are awarded to continuing students only, based on their financial aid application. New freshmen may be considered for the Alpac Corporation Scholarship and the Pacific Coca-Cola/Thriftway Stores Awards of Excellence by completing a special application available from the Undergraduate Admissions Office. Freshmen may also be considered for the Cherberg Scholarship and the Washington Mutual Great Teachers Minority Merit Award by completing an application available from the Financial Aid Office.

Restricted Scholarships

Alliant Tech Systems
Alpac Corporation Scholarship Program
Alpha Sigma Nu Scholarship
Arthur Andersen Scholarship Fund for Asian Americans
Boeing Company Corporate Scholarship
Ben B. Cheney Scholarship
John and Betty Cherberg Scholarship Fund
Chevron Awards
Continental Mills
Continental Mills, Inc. Dean's Fund-Business
Louella Cook Scholarship
Esco Engineering Scholarship
Farmers Insurance Group Scholarships
First Interstate Bank of Washington Scholarship
Future Teacher Scholarship
Geneva Foundation Drama Scholarship
Justice Charles Horowitz Award
Archbishop Hunthausen Scholarship
Investors Guaranty Life Insurance Aid-To-Education
ITS Scholarship
Harold A. Lemon Memorial Fund
Palmer G. Lewis Co. Crane Fund
Lockwood Foundation Scholarships
MBA Scholarship
Theiline Pigott McCone Memorial Scholarship
Nursing Conditional Scholarship
Ohio State Life Insurance Company Scholarship
Pacific Coca-Cola/Thriftway Stores Awards of Excellence
Paul Douglas Teacher Scholarship
ROTC Scholarships
Jimmy Santoro Athletic Scholarship

Science Scholarship
Security Pacific Bank of Washington
Tillie and Alfred Shemanski Scholarships
Sirach Capital Management Business Scholarship
Barbara A. Trachte Honors Scholarship
United Parcel Service
Washington State Automobile Association Achievement Award
Westinghouse Hanford Scholarship
Bill Zuvela Business Scholarship

Endowed Scholarships

The Jack and Patricia Baird Endowed Scholarship Fund was established in 1990 through a generous donation from the Bairds. It supports talented students with financial need who are physically challenged or differently abled.

The Father Gerald Beezer Scholarship Fund was established in 1978 in memory of Edward P. Beezer. It is a renewable award for science, chemistry or pre-med majors.

The Blume Family ITS Scholarship Fund was established in 1961 and has had additional family member donations. Students with financial need in the Institute for Theological Studies program are selected by the director of ITS.

The Tim Brandt-Guy Marsh Honors Scholarship was established in 1988 for an outstanding student in honors with an interest in theology and a minimum grade point average of 3.5. Selection is made by the director of the Honors Program.

The Alphonse and Mary Brenner and John Brenner Scholarship was established in 1973 as a one-year non-renewable scholarship for a Catholic freshman with financial need from the Yakima Diocese.

The Alma and Gill Centioli Scholarship was established in 1984 to provide annual scholarships to students preparing for spiritual service to others. Selection is made by the director of the Institute for Theological Studies.

The Sigmond and Theresa Chapin Memorial Scholarship was established in 1981 as a renewable fund for deserving students with financial need as selected by the faculty.

The Woodrow R. Clevinger Scholarship was established in 1976 to memorialize Professor Clevinger, who taught marketing in the School of Business, by recognizing an outstanding junior business student. The recipient is chosen annually in April by committee.

The William J. Codd, SJ, Memorial Scholarship was established in 1980 for an education student in the final year of studies. Selected by the dean of the School of Education and committee.

The Jeannette Standaert Conlon Memorial Scholarship was established in 1991 from the bequest of Annette Garrett for needy and deserving psychology students interested in counseling.

The Diane Cothrin Fund was established as a renewable scholarship based on need to help juniors and seniors of any major as selected by the Financial Aid Office.

The **John R. Dijulio Scholarship Fund** was established in 1982 for meritorious undergraduate students with financial need.

The **John C. Erickson Memorial Scholarship Fund** was established to honor outstanding junior civil engineering students with financial need.

The **Blanche Ernst Memorial Scholarship** was established in 1986 through a gift from the Blanche Ernst Trust for students with financial need.

The **Alice Fisher Scholarship Fund** was established in 1971 to honor Alice Fisher, on her retirement, by the faculty of the School of Nursing. Junior or senior nursing students with financial need are eligible.

The **C. Pearl Fleenor Scholarship** was established in 1981 as a renewable award to support an outstanding undergraduate business student with financial need.

The **Wendelin Gruber, SJ, Scholarship** was established to provide partial scholarships for participants in the overseas study program. Recipients are selected from applications by the Foreign Language Department.

The **Della Caldirola Guilfoil Scholarship** was established in 1991 by Mrs. Guilfoil for psychology students with financial need.

The **Agnes Handley Memorial Scholarship** is awarded to students based on need, academic performance, leadership, and school and community involvement.

The **Hearst Foundation Scholarship** was established in 1982 by the William Randolph Hearst Fund for meritorious journalism students with financial need.

The **Igoe Scholarship** was established as a renewable fund for students of any major with financial need.

The **Henry T. Ivers Memorial Scholarship** was established in 1979 as a memorial to the former regent and 1925 graduate. Recipients are selected based on merit and financial need from any undergraduate major.

The **Richard and Kathie Ann Jones Charitable Trust Scholarship** was established in 1983 as a non-renewable fund for deserving juniors with financial need. Recipients must not be affiliated with the Bank of California.

The **Dr. Harry Kinerk Memorial Scholarship** was established through the estate of this former math faculty member and his brother Louis. Recipients are selected from the fields of science and engineering based on financial need.

The **Jeremiah F. Lavell Journalism Scholarship** was established in 1990 through a bequest. A committee will select junior journalism majors to receive the award in their senior year.

The **William F. LeRoux, SJ, ITS Scholarship** is awarded by the director of the Institute for Theological Studies to a master of divinity student maintaining a 3.25 grade point average.

The Joseph A. Maguire, SJ, Scholarship was established by Jack and Edna Maguire of Wenatchee in honor of Father Maguire. Recipients are selected from the Albers School of Business and Economics based on financial need.

The McCleary Scholarship in Education was established in 1985 by Martha McLellan in memory of her father, William McCleary, for students with financial need in the School of Education.

The McGoldrick Alumni Scholarship was established to encourage allegiance to Seattle University for generations. Eligible students must be admitted, have a 3.0 grade point average, be involved in extra curricular activities, and have at least one parent who attended Seattle University for at least one year. Applications are secured through the Alumni Relations Office. Students must reapply each year.

The McLellan Scholarship in Nursing was established by Martha McLellan in memory of her husband, Lawrence McLellan, for meritorious students in the School of Nursing with financial need.

The Reverend Edmund B. McNulty, SJ, Scholarship Fund was established in 1983 for needy and meritorious engineering students. The first scholar was named in 1991.

The Medak/Bishop Endowment Scholarship was established to help fund meritorious students of any major with financial need.

The George R. Murphy Engineering Scholarship was established to honor the memory of George R. Murphy by assisting meritorious students with financial need in the School of Engineering.

The Naef Scholars program was established through a gift from the Sue M. Naef estate. Recipients are selected by committee from juniors and seniors with a grade point average of 3.4 or greater. Juniors are eligible to be funded in their senior year.

The Nelson Scholarship was established through the John J. and Margaret E. Nelson Memorial Fund for worthy students with financial need studying engineering, nursing or pre-medicine.

The Mildred O'Neal Scholarship was established to provide funding for financially needy fine arts students.

The Paul Pigott Memorial Scholarship was established through the estate of Paul Pigott for a freshman with financial need.

The Mary C. Pirrung Fund for Master's Candidates in Reading was established in 1985 to provide funding to a master's candidate in reading. Applications are secured through the School of Education.

The Stuart Stephen Reed Scholarship was established in 1990 through the Anita M. Reed estate to provide funding for a worthy engineering or pre-medical student with financial need.

The Father James B. Reichmann Scholarship was established to honor a junior or senior philosophy student with outstanding scholastic ability by the Department of Philosophy.

The Sauvage Scholarship was established to recognize nursing students entering the third year of their program who have been actively involved in Seattle University campus activities.

The Albert A. Schafer Memorial Scholarship was established in 1961 through the estate of Albert A. Schafer. Recipients are selected based on financial need and academic achievement.

The Seattle University Guild Endowment Scholarship was established through fund raising activities by the Seattle University Guild. The guild is currently inactive, but six past members serve on a selection committee to review and select recipients based on academic achievement, community involvement and financial need. Applications for this non-renewable fund are available at the Financial Aid Office after January 1.

The Paul B. Shorett Memorial Scholarship was established from the Paul B. Shorett Trust through Metropolitan Savings for students with financial need majoring in science and engineering.

The Friendly Sons of St. Patrick Scholarship Fund was established in 1981 to recognize students of Irish-American heritage. Selection is made by the officers of Friendly Sons of St. Patrick based on financial need, grade point average and an essay on heritage.

The William J. Sullivan, SJ, Leadership Awards were established to support full-tuition scholarships and room grants to entering freshmen who demonstrate effective leadership through a competition. Funding is provided through gifts from Mary Alice Romano and Mrs. John A. McCone. Selection is made through committee from worthy Washington applicants and is renewable yearly for four years as long as the student maintains leadership potential, involvement and academic excellence, and continues to reside in the residence halls.

The G. Robert Truex Scholarship was established as a memorial by the family of G. Robert Truex, who worked for Security Pacific Bank. The recipient is selected by the Financial Aid Office and the Minority Student Affairs Office from minority students majoring in business.

The US Bank Scholarship was established in 1992 through a pledge from US Bank to fund disadvantaged students with financial need. Preference given to students in the Albers School of Business and Economics.

The Frank A. Valente Scholarship was established to honor the memory of Dr. Valente for students with financial need majoring in physics.

The Bert Vigfusson Scholarship was established in 1990 through the will of this resident of Iceland for all students at Seattle University with financial need.

The Jerry J. Ward Memorial Scholarship Fund was established originally from a gift of the Jerry J. Ward estate and has had regular contributions from his son, Richard Ward, MD, '72. Recipients are selected from any major based on merit and financial need.

The Frank and Anne West Science Scholarship was established in 1987 as a renewable fund for science majors based on financial need and merit.

The Ronald Wilby Endowed Scholarship For International Business was established in 1989 to honor Professor Wilby, formerly an international business faculty member of the Albers School of Business and Economics. The international business faculty select from worthy junior and senior applicants.

Loans

Loans are an integral part of the financial aid award package offered to students. Some loans do not require payment of principal 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 and family to assume part of the cost of education. The student must be a U.S. citizen, a resident of a trust territory, or have permanent resident status, approved by the Immigration Department, to be eligible for loans that involve federal funds.

Federal Perkins Loan

The Federal Perkins Loan is a long-term loan based on financial need. Eligible students may borrow a total of \$15,000 for undergraduate education or \$30,000 for combined undergraduate and graduate education. Repayment begins nine months after the student graduates, drops to less than half time or leaves school. The annual interest rate is 5 percent and repayment may extend 10 years, but payments may not be less than \$40 per month. The Federal Perkins Loan repayment program also includes limited deferment provisions and cancellation features.

Federal Stafford Loan

A Federal Stafford Loan is a long-term need-based loan arranged with a lender selected by the student. Commercial banks, credit unions and savings and loan associations are possible lenders. Federal Stafford Loans are guaranteed by the Northwest Education Loan Association or equivalent agency.

Students applying for Federal Stafford Loans must qualify on the basis of financial need and must be enrolled at least half-time. The student's financial need for the loan will be determined through the use of the financial aid application. The determination of financial need for the loan will be calculated by Seattle University and reported on the student's Federal Stafford Loan application form. All first-time recipients at Seattle University are required to have an entrance interview before receiving their first check. All checks, when signed, must first be applied to the student's account.

Annual loan limits are \$2,625 to \$5,500 for undergraduate students and \$7,500 for graduate students. Students may borrow up to \$23,000 during their undergraduate years. Graduate and professional students may borrow \$65,500 for their undergraduate and graduate career.

Per federal regulation, first-time freshman borrowers will have their first loan check held for 30 days after the start of the quarter.

All Federal Stafford Loans will be charged a 5 percent loan origination fee by the lender, as well as a guarantee fee of up to 3 percent. An amount up to 8 percent of the student's Federal Stafford Loan is used by the federal government to offset the interest charged on the student's loan while the student is enrolled. With the exception of the origination and guarantee fees, the student does not have to pay any other interest charges while enrolled as a full-time student.

Repayment of the loan begins six months after the student ceases to be at least a half-time student. Repayment is generally monthly, with interest varying depending on when the student borrowed his or her first Federal

Stafford Loan. Students who receive their first loan disbursement on or after October 1, 1992, will pay a variable interest rate based on the 91-day T-Bill, plus 3.10 percent, which is capped at 9 percent. Students who received first disbursements before October 1, 1992, will pay interest of 8 percent for the first four years of repayment and 10 percent for the remainder of the repayment period. Students who first borrowed prior to July 1, 1988, will have an interest rate based on the promissory note that was in effect at that time.

Students are required to make payments of at least \$50 per month. Early application for the Federal Stafford Loan is advised, since processing of the loan paperwork may take from six to eight weeks.

Payment deferrals and cancellations are available in some limited circumstances. See the Financial Aid Office or talk to your lender for more information. The Financial Aid Office will discuss this information during loan entrance interviews for first-time borrowers.

Nursing Student Loan

Nursing Student Loan (NSL) is a long-term loan based on financial need. Eligible students may borrow up to \$2,500 for each of their first two academic years and \$4,000 per year for junior and senior years. However, the maximum that may be borrowed under this program is \$10,000. Repayment begins nine months after the student drops to less than half time, leaves school or changes to a non-nursing major. The annual interest is 5 percent and repayment may extend 10 years. Payments may not be less than \$15 per month and will usually be \$30. The NSL also has limited deferment provisions.

Gene E. Lynn Rural Nursing Endowment Fund

The Federal Nursing Student Loan Program is available for Seattle University students through the generosity of Gene E. Lynn, who, in conjunction with the university, provides matching funds to participate in the program.

Grants

Federal, state and institutional grants do not require repayment. Students who have received a baccalaureate degree are not eligible for grants. Need, rather than grade point average, is the primary consideration for eligibility.

The Federal Supplemental Educational Opportunity Grant (SEOG) is awarded to needy students who are also eligible for the Federal Pell Grant.

The Federal Pell Grant is awarded to the neediest of students, based on the financial aid application.

Washington State Need Grants (WSNG) and Educational Opportunity Grants (EOG) are designed to assist needy and/or disadvantaged Washington state residents in obtaining postsecondary education. EOGs are available to transfer students who have an associate degree or achieve junior standing. Religion and theology majors are not eligible.

ROTC Grants Army/Air Force/Navy-Marines

U.S. Army awards are made to selected high school seniors and college freshmen, sophomores and juniors who enroll in the Army Reserve Officer Training Corps. These are two-, three- and four-year merit scholarships covering 80 percent of tuition and fees, textbook allowance and a \$100 per month tax-free subsistence allowance. Room and board grants are also available to scholarship students. An annual subsistence stipend of \$100 per month is paid to all advanced course students. Write to: Professor of Military Science, Seattle University, Broadway and Madison, Seattle, WA 98122-4460 for information on application procedures.

The United States Air Force awards scholarships to selected students enrolled in the Air Force ROTC programs. Write to the Professor of Aerospace Studies, DU-30 University of Washington, Seattle, WA 98195. See the Military Science section under College of Arts and Sciences in this bulletin for additional information.

The United States Navy awards scholarships to selected students enrolled in the Navy ROTC programs. Write to Professor of Naval Science, DU-40 University of Washington, Seattle, WA 98195. Navy scholarships are similar to Army/Air Force scholarships offered above, however 100 percent of tuition, books and academic fees are covered.

Veterans, Widows and War Orphans Education 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 counselor in the Registrar's Office.

Student Employment

A financial aid award frequently includes work study eligibility along with a loan and/or a grant. Work study eligible students earn wages by being employed under the work study program. This earned income is used to pay either tuition or living costs. It is important to note that wages earned during the academic year under the work study program are not yet available at the time of fall quarter registration. Therefore, bills due at that time must be paid with other money.

Work study eligible students are not required to work, nor is employment guaranteed. The Financial Aid Office assists students in obtaining employment on or off campus.

Federal Work Study provides part-time employment in on-campus positions for students with established financial need.

Washington Work Study provides part-time employment in positions with employers off campus for students who qualify under the financial need formula.

The Financial Aid Office maintains a listing of employment available on campus and with Seattle area employers.

There is a full-time student employment coordinator in the Financial Aid Office to assist students in locating part-time employment.

Tuition and Fees

Tuition Rates 1993-94

Regular Courses (fall, winter, spring) \$270 per credit hour

Full-Time Student Annual Tuition \$12,150
45 credit hours per year (15 credit hours per quarter)

Addiction/Drug Studies Certificate \$235 per credit hour

Military Science 311, 312, 313, 412, 413, 419 ... \$270 per credit hour

Auditors Tuition \$85 per credit hour

A tuition prepayment of \$100 is required of all new undergraduate students admitted for fall quarter. This prepayment will apply toward tuition and is not refundable if the student decides after May 1 not to enroll at the university.

Laboratory Fees 1993-94 (usually per course)

Private Music Lessons \$63

Science and Engineering Laboratory Courses \$58

Psychology 304, 306 \$58

Education 460 \$44

Nursing 200 \$44

Nursing 302, 303, 319, 329, 339, 349, 411, 413, 423

(per credit hour) \$26

Nursing 385 \$114

Other Fees (non-refundable) 1993-94

Application — graduate \$45

Application — undergraduate \$35

Application — transitional students \$35

Late Registration/Payment (see page 37)

Matriculation — undergraduate and graduate \$65

Credit by Examination — per credit hour \$65

Validation of Field Experience — per credit hour \$65

Removal of Incomplete — per course \$35

Graduate tuition and fee rates are published in the *Graduate Bulletin of Information*.

Residence Charges 1993-94

Double Occupancy \$3,030 for academic year
\$1,010 per quarter

Single Occupancy \$4,071 for academic year
\$1,357 per quarter

Deposit \$100

Board

Alternate a la carte meal plans are available, ranging in price from \$1,130 to \$1,650. All residence hall students, except those living in Campion, are required to purchase a plan. Campion students can use existing kitchen facilities and choose not to purchase a plan. For information contact the director of Residential Life, 296-6274.

Controller's Office

The Controller's Office offers the following services: student account statements, receipt of student payments, answers to questions about student accounts, disbursement of Stafford, SLS and WSNG checks, signing of Perkins, nursing and institutional loan documents, monitoring the repayment process and collection of Perkins, nursing and institutional loans and delinquent student accounts, receipt and processing time sheets for student payroll, and issuing student payroll checks. The normal operating hours are 8:30 a.m. to 7:00 p.m., Monday and Tuesday; and 8:30 a.m. to 4:30 p.m., Wednesday through Friday.

Tuition and Fees

Payment of tuition and fees includes library and health service fees, student newspaper, student organization allotments, building fund and admission to athletic events. International students will automatically be charged for insurance. An insurance waiver can be obtained from the International Student Center upon proof of insurance coverage.

Official Withdrawal

Until a student officially withdraws from a class with the Registrar's Office, it is the student's responsibility to pay for all fees in full whether or not the student attended the course(s).

Tuition Payment

Tuition and fees are due and payable on or before:

Fall quarter	September 15
Winter quarter	December 15
Spring quarter	March 15
Summer quarter	June 15

Payment methods include:

1. **By mail:** Send your check for the total amount due to the Controller's Office, Seattle University, P.O. Box 84107, Seattle, WA 98124-5407.
2. **By charge card:** (VISA or MasterCard) complete the credit card information section on your statement and send it to the above address.
3. **By phone:** Credit card payments can be made by calling (206) 296-5880 during normal office hours.
4. **By drop-box:** Place your check or credit card information in the drop-box adjacent to the Controller's Office door; available 24 hours a day, seven days a week.

5. AMS Payment Plan

Fee \$50 for yearly/nine-month plan
\$30 for six-month plan

Termsmonthly payments

Interest waived with this plan

Insuranceincluded with this plan

Call the Controller's Office for more information at (206) 296-5880.

6. University Payment Plan

Fee\$100 handling fee per quarter

Terms per quarter

First installment.....one third of tuition, fees and the handling fee
due on tuition due date.

Second installment ..one third of tuition, fees and accrued interest due 30 days after tuition due date.

Final installment balance of tuition, fees and any remaining accrued interest due 60 days after tuition due date.

Interest 1.5 percent per month; continues to accrue until balance is paid in full.

Call the Controller's Office for an application form at (206) 296-5880.

Without a signed payment plan on file with the Controller's Office, tuition balances paid after the due date are subject to all late registration/payment and refund policies.

Seattle University reserves the right to change its charges at any time without previous notice.

Late Registration/Late Payment

If a registered student fails to make payment pursuant to an approved payment method (1 through 6 above), a one-time late fee of \$200 and interest of 1.5 percent on any balance due at the end of the month will be charged. If a signed payment plan is on file with the Controller's Office, the late fee will be waived. If the terms and conditions of the plan are not met, all applicable late fees will be applied retroactively.

A service fee of \$15, in addition to the late fee, will be charged to a student's account for all checks not honored by banks and returned unpaid to Seattle University.

Past Due Accounts

Failure to pay in full all tuition and other fees for any quarter (or session) will result in a hold being placed on the academic transcript, and will prevent further registration until resolved/paid in full. All costs, expenses and fees (including, but not limited to attorney fees, court costs and other out-of-pocket expenses) incurred by the university in collecting or attempting to collect a past-due account are the responsibility of the student, and shall be charged to the student's account.

Family Tuition Plan

Two or more members of a family living in the same household, dependent upon a common support and attending the university may apply for a tuition discount. Further information on the family tuition plan can be obtained from the Financial Aid Office.

Refunds

Withdrawals (full or partial)

1 to 5 class days	100 percent
6 to 10 class days	80 percent
11 to 15 class days	70 percent
16 to 20 class days	60 percent
21 to 25 class days	50 percent
26 to 30 class days	40 percent
Thereafter	No refund

Refunds are based on the number of consecutive days from the first class day of the term until the official date of withdrawal or reduction in class load occurs. The official date is considered to be the date the student submits the withdrawal or change form to the registrar. A refund to a financial aid recipient is applied first to the student's financial aid source(s). The balance, if any, is remitted to the student upon request. Financial aid recipients will, therefore, in all likelihood, not receive refunds.

Stafford Loan proceeds are returned directly to the lender. A check for a credit balance can be issued upon request by the Controller's Office. Otherwise, any credit balance will automatically be applied to the next quarter's tuition.

Petitions for tuition adjustment and fee waiver will be approved only to correct university error.

Tuition refund insurance is available and will cover tuition charges if a student must withdraw for medical reasons. Contact the Controller's Office for an application form.

Academic Regulations

Program of Study

Students, with the help of their academic advisers, are responsible for satisfactory completion of their program of study.

Students should not rely on oral representations of degree requirements or waivers thereof; they should obtain information from the designated level of authority and see that all agreements are entered in writing in their official academic file in the Registrar's Office.

The Academic Council has discretionary powers for all cases not covered by the rules and regulations listed in this section.

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 cancel any class that does not meet the required minimum enrollment.

The university reserves the right to change any requirement and to ask a student to withdraw at any time.

Regulations in this bulletin are supplemented by policy memoranda that set forth policy in greater detail. References to applicable policy statements are noted parenthetically. Copies of these policy memoranda may be obtained from the Registrar's Office.

Academic Conduct

There are two documents which govern student academic conduct, the Academic Honesty Code and the Academic Grievance Procedure. Both are published in the *Student Handbook* and students are responsible for knowing them. Individual schools may have policies that further specify the Academic Honesty Code; students should also consult their school policy.

Academic Terms

Accredited

Certified as fulfilling standards set by regional or professional accrediting agencies. Indicates that course work is generally transferable to other colleges and universities. The university's accreditation is listed on page 9 of this bulletin.

Advanced Placement

The university encourages advanced placement of students entering from high school through approved departmental examinations or by the Advanced Placement Examination of the College Entrance Examination Board.

Adviser

A member of the faculty designated to assist a student in planning a program of study.

Auditor

A student who is permitted to register for courses without obtaining college credit. Auditors must be admitted and must obtain permission from the faculty. (The Alumni Audit program is available to alumni through the Alumni Relations Office.)

Certificate

A document awarded by the university upon completion of a series of courses in a professional specialty.

College

An academic division within the university in which academic departments reside.

Core Curriculum

A program of liberal study which is the foundation of Seattle University's undergraduate program.

Corequisite

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

Credit by Examination

Examination for advanced credit in courses offered by the university for work done in private study or work not transferable to the university. Forms for approval of credit by examination are available in the Registrar's Office.

Credit Hour

The unit by which the university measures course work. One credit hour is awarded for a class meeting 50 minutes a week over the period of a quarter; in laboratory and activity courses, two or more hours a week over a period of a quarter are required.

Curriculum

An established program of study leading to a degree in a particular subject field.

Degree

An award by the university upon completion of a program of study.

Department

An instructional or administrative division of a school or college within the university which concentrates on a specific subject field.

Elective

A course chosen by a student which is not a requirement in the program of study.

Fifth-Year Student

A student who has completed a baccalaureate degree and is admitted for further undergraduate study toward a second baccalaureate degree, teacher certification, or no specific objective.

Full Time

For academic reporting purposes, 12 credits is full time for undergraduate students and eight credits is full time for graduate students.

Grade Point Average (GPA)

An average computed on the basis of numerical values assigned to grades; the grade point average is equal to quality points (numerical point value multiplied by the credit value for each course) divided by credits attempted.

Cumulative GPA

The grade point average, based on all Seattle University work. Transfer credit is not included in the cumulative GPA.

Major GPA

The grade point average based on all Seattle University work used to complete course and credit requirements of the major as well as the supporting courses in allied fields specifically required by the program.

Major

A principal field of study. Majors are described in the school and college sections of this bulletin.

Matriculate

Enrollment at the university for the first time to pursue a degree, professional or fifth-year program.

Minor

A secondary field of study. Minors are described in the school and college sections of this bulletin.

Part Time

For academic reporting, a program of fewer than 12 credits is considered part time for undergraduate students; half time is six credits. For graduate students, eight credits is a full-time load; four credits is half time.

Placement Tests

Tests in specific fields, such as mathematics and foreign languages, given to entering students to determine their level of achievement for placement in college courses.

Prerequisite

A course which must be completed before a student may register for a more advanced course.

Probation

Status resulting from academic performance below the minimum university requirement.

Provisional Student

One who is admitted by special action with an entrance requirement unsatisfied. Enrollment beyond the first quarter is contingent upon the satisfaction of that requirement.

Quarter

The term of instruction at Seattle University. There are three quarters in the regular academic year: fall, winter and spring. Summer quarter extends from June through early September.

Re-admission

Procedure whereby a student who has not been registered for one or more quarters requests permission to re-enroll.

Registration

Official enrollment in the university in which a student sees an adviser, selects courses and secures spaces in those courses each quarter.

Regular Student

A matriculated student pursuing a degree.

Special Student

The special student designation may be granted to students who do not meet the standard admission requirements. This is a temporary status and is available for undergraduate courses only with the approval of the dean of the school or college.

School

An academic division within the university in which academic departments reside.

Transcript

A copy of the student's permanent record at Seattle University.

Transfer Credit

Credit awarded to a student for work completed at another accredited college or university.

Transfer Student

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

Transitional Student

A non-matriculated student admitted for no more than two quarters to take undergraduate course work. Transitional students who wish to continue enrollment after two quarters must apply for regular status.

Withdrawal

Official notification to the university by a student that he or she will not complete a course. Withdrawals are filed with the registrar.

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.

Change of Major

To transfer from one school of the university to another, or from one major to another, a student must obtain a change of major form from the registrar, notify the former department by obtaining the chairperson's signature and present the change of major form to the new department chairperson for approval. Students must meet the minimum entry requirements of the new major. They must also satisfy any additional requirements of the new school or college in order to earn the new degree. The approved form is returned to the registrar by the department and the student's record will be adjusted to show the new major.

Classification of Students

(Policy 82-2)

Regular undergraduate students are classified as follows:

Freshman	0 to 44 credits completed
Sophomore	45 to 89 credits completed
Junior	90 to 134 credits completed
Senior	135 or more credits completed

Other students are classified as follows:

Fifth-year

Post-baccalaureate students not seeking an advanced degree but seeking a second bachelor's or a certificate.

Graduate

Post-baccalaureate students admitted to Graduate School for a master's, educational specialist, or doctoral degree program.

Special

An undergraduate student awaiting approval for regular status.

Transitional

Non-matriculated students registering for two quarters only.

Auditors

Non-matriculated students registering for audit only.

Commencement with Deficiencies

(Policy 83-1)

Undergraduate students who have not completed all degree requirements may participate in Commencement exercises under the following conditions:

1. Students must be 10 or fewer credits short of degree requirements, with all minimum grade point average requirements satisfied.
2. Students commencing with deficiencies are not eligible for honors until they complete all degree requirements.
3. All degree requirements must be met within 12 months after commencing with deficiencies.
4. Applications for commencement with deficiencies must be filed in the Registrar's Office on or before the closing date for regular graduation applications (December 1).

Concurrent Enrollment at Two Colleges

(Policy 75-6)

Seattle University regulations require students to seek written permission to be enrolled simultaneously at another institution. Credits completed at a second institution are not transferable unless, prior to enrolling elsewhere, an academic action authorizing dual enrollment is approved by the dean.

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 is required to register for courses numbered 500 or above)

Credit by Examination

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

1. Student must be currently registered at Seattle University.
2. No student may take an examination in a course in which he/she has already been registered.
3. The maximum number of credits obtainable by such examinations is 30, of which not more than 15 may be obtained in one subject matter field. All credits obtained by examination will be counted as extension credit and included in the maximum 45 extension credits allowed.
4. No credit will be granted unless the applicant has earned a minimum of 15 resident credits with a minimum grade point average of 2.50.
5. No student within a given field of study may receive advanced credit in subject matter more elementary than that for which credit has previously been earned.
6. No student will be permitted to repeat an examination.
7. A maximum of 15 credits may be earned through credit by examination in a single term. Exceptions are granted only for NLN examinations in nursing courses.
8. Credit by examination is not granted for lower-division foreign language courses in the student's native language.
9. Students who wish to qualify for credit by examination must apply to the dean, registrar and controller for approval.
10. No graduate credit is given by examination.
11. Nursing students who are graduates of hospital diploma programs may, under special circumstances, earn credit by examination for courses specified in Policy 85-1.
12. The grade will be posted CR (credit) or NC (no credit) and will have no effect on the grade point average. The minimum achievement level for receiving credit will be 'C'. Core requirements may be satisfied through credit by examination.

Credit Load

The normal load for undergraduates is 15 credits per quarter. No student may carry an excess of 18 credit hours without permission from the dean of the school, except in the School of Science and Engineering, where 21 is the maximum.

Students on academic probation may be required by the dean of their school to carry less than the normal credit load.

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 absent from a scheduled examination without justifiable cause will receive a failing grade for the examination.

Forgiveness Policy

(Policy 77-6)

Former Seattle University students with poor academic records may resume their studies without the encumbrance of previously earned poor grades. After being absent from school for at least eight years, former Seattle University undergraduate students may apply for forgiveness at the time of readmission or during the first quarter resumed at Seattle University. For further information consult the Registrar's Office.

Grade Changes

Once a grade is recorded it can be changed only through a request of grade change form, which should be completed by the instructor and countersigned by the department chair and dean of the school. Errors in grades must be reported within six months of the date of issue of grade reports.

Grading System

Effective in fall 1988 the university began using the following system of grading 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	4.0 Superior performance
A-	3.7
B+	3.3
B	3.0 Good performance
B-	2.7
C+	2.3
C	2.0 Adequate performance
C-	1.7
D+	1.3
D	1.0 Poor performance
D-	0.7
E	0.0 Failing

The grades of CR, I, M, N, NC, P, Q, R, S, W, Y or YW have no quality point value.

CRCredit

Grade assigned in a course which is designated by the department to be only graded CR/E. Minimum acceptable performance is D-. Failure to meet that minimum results in a grade of E, which is reflected in the grade point average. Satisfactory performance results in credit completion but does not affect the grade point average.

Also grade assigned in a course through credit by examination. Students who pass the examination with an achievement level of C or better will have a CR posted to the record and credit is granted. Performance below the level of C results in an NC and no credit is granted. Neither CR nor NC will affect the grade point average.

IIncomplete

A temporary grade indicating that work in the course was acceptable, although a critical portion of it was not completed because of illness or other serious circumstances beyond the student's control. The I grade may not be used for the convenience of the faculty member or student. When the instructor assigns an I grade, a notice of incomplete grade form must be filed with the dean. This form will state what work remains to be completed to obtain a final grade. The student has six weeks after the beginning of the next quarter to complete the specified work. If the specified work has been completed, the student must file an official incomplete removal form to have the final grade posted to the transcript. If the grade is an E, the final grade will be posted without student payment. (I grades assigned spring quarter must be removed by six weeks after the beginning of the fall quarter).

While on the transcript, I grades will carry no penalty; i.e., they will not be counted in credit or grade point average computations.

MMissing

Symbol used on grade reports to inform student that grade has not been received from instructor or on the academic transcript to indicate work in progress.

NNo Grade

A suspended grade for courses in which work is not scheduled for completion until after the quarter closes, e.g., 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, per the schedule given below. Once the closing date has passed, reregistration and payment of regular tuition is required in order to obtain credit for the work completed.

NGrades

Received	Must be Removed Before
Summer term	August 1 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

NCNo Credit

Grade assigned when credit by examination has been attempted and student did not achieve acceptable performance level of at least C. There is no effect on the grade point average.

P Pass

Grade assigned when student passes a course after electing the pass/fail grading option. A maximum of 10 credits may be selected for this option and the P grade has no effect on the grade point average. Failure to achieve at the minimum D- level results in a grade of E, which will affect the grade point average.

QA Suspended Grade

For courses at the 600 level only, in which work is not scheduled for completion until after the quarter closes. Because of the nature of these courses, which often extend beyond a year, no four-quarter time limit is required.

RResearch in Progress

Doctoral program only.

SSatisfactory

A satisfactory grade that may be given for thesis, research, independent study, off-campus courses, field-experience type courses and in non-credit courses.

W Withdrawal

Official withdrawal

YAudit

A course for which no credit is given.

YWAudit Withdrawal

Student registered, as an auditor, but did not attend through end of course.

Grading Alternatives

Pass/Fail Option (P/E)

Undergraduate students may elect a pass/fail option in free elective courses only, and under the following conditions:

1. Student must elect the pass/fail option at the time of registration and may change to or from P/E only during the drop/add period.
2. Ten quarter credits graded P/E, regardless of number of courses, is the maximum acceptable toward a bachelor's degree.
3. The P/E grading option is not allowed for major or college requirements or university core. Should the student elect a course P/E and then change majors so that the course would be required, the student's dean will make final determination as to applicability of the credit toward graduation.
4. Only one P/E course may be selected in a given quarter.
5. No graduate courses (500-699) are open to P/E grading. Courses elected as P/E will appear on the student's permanent record and will be graded: P (Pass) - Minimum passing grade equivalent to D-; E (Fail).

Courses in which a P grade is given will be counted as completed credits, but will be excluded from computation of the grade point average. An E, or failing grade, will be reflected in the grade point average and the course will not be counted as completed.

A minimum of 90 credits graded A through D- must be completed at Seattle University to qualify for graduation with honors. Courses graded P/E do not count toward this total of 90.

Mandatory Credit/Fail (CR/E)

Music practice courses, some field experiences, internships and independent study in the Albers School of Business and Economics and other courses so designated by individual departments are only graded credit (CR) or fail (E). When passed with the minimum acceptable standard of D- or above, the course will be graded CR and credit will be granted. There will be no effect on the grade point average. Should the student fail to satisfy the instructor's minimal expectations, the course will be graded E and will be included in the computation of the grade point. To qualify for graduation with honors, a minimum of 90 credits must be completed at Seattle University graded A through D-. Credits from mandatory CR/E courses will not count toward the 90 minimum.

Credit/No Credit (CR/NC)

The CR/NC grading mode is reserved for credit by examination. Minimum achievement level for receiving credit is C. Neither CR nor NC affects the grade point average. See Credit by Examination section of this bulletin.

Grade Point Average

(Policy 75-2)

Seattle University requires that undergraduate students maintain a C average, which is equivalent to a cumulative 2.00 grade point average on a 4.00 scale. Requirements of professional schools may be higher and individual programs may have special grade requirements.

The grade point average is computed by dividing the total number of quality points achieved by the total number of credit hours attempted in which the student earns a letter grade.

Graduate students must maintain a B average, which is equivalent to a cumulative 3.00 grade point average on a 4.00 scale.

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.

Majors

Major requirements within each department or school are outlined in this bulletin under departmental requirements or degree requirements.

Minors

(Policy 84-1)

Departments or schools offering undergraduate minors outline specific requirements in this bulletin under departmental requirements or degree requirements. Students wishing to have a minor posted to their academic records must file a request for minor form, which outlines the composition of the minor, with the registrar. Minors are granted with the following conditions:

1. Minors will be posted to a student's record concurrent only with a first undergraduate degree.
2. Minors cannot be earned within the 135 credit Matteo Ricci II program.
3. A minor cannot be earned using more than 15 credits in courses which comprise the major in the liberal studies degree.
4. The bulletin under which the student receives an undergraduate degree will stipulate course work for a minor.
5. Minors must include at least 30 quarter credits, including a minimum of six courses.
6. A maximum of 15 quarter credits of course work graded C (or 2.0 on the decimal grading system) or better may be transferred from other regionally accredited post-secondary institutions.
7. No more than five quarter credits in a minor can be graded P. Additionally, the cumulative grade point average for all courses used in the minor can be no less than that applied to majors within the department sponsoring the minor.

Probation and Dismissal

(Policies 75-14, 75-3, 81-2, 81-3, 81-4 and 84-2)

A student who falls below the standard required for graduation may be placed on probation and given the opportunity to improve the quality of work before final dismissal. A student will be placed on probation if the cumulative grade point average falls below 2.0 or the minimum required by a professional school. Probation may be continued for a second quarter if the cumulative grade point average continues below the standard of the particular school or college.

Students who have two quarters of poor scholarship at Seattle University, i.e., who earn 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 grades, may be subject to dismissal. Students dismissed for academic reasons may request reconsideration through the appropriate dean in accordance with the policy of the individual school.

Re-Admission

(Policy 76-10)

Students who have been absent from Seattle University for one or more quarters are required to complete an application for re-admission. A re-entering student who has attended another post-secondary institution since withdrawing from Seattle University must submit an official transcript

before the application for re-admission can be considered. Credit for courses completed elsewhere may be transferred according to the conditions listed under Transfer of Credit from Other Institutions in this bulletin.

Students who have been absent from the university for one calendar year or more will be held to degree requirements in effect at the time of re-admission.

Students re-admitted to the university in fall 1991 and following who had completed the old core curriculum before taking a leave of absence, may graduate under that old core plan, even though they have been away from the university for one calendar year or more. Other students who return to complete their degrees after more than one year's absence will complete the university core curriculum as outlined in this bulletin.

Records

(Policy 76-9)

As required by federal legislation, Seattle University has a policy on the rights of students to privacy of their educational records and access to the information on file. Student directory information will be published by the university unless a student requests in writing that it not be released. Such requests must be filed with the registrar by the deadline as published in the official university calendar. Records policy includes the right of the university to place a hold against the transcript of a student with a financial obligation and to deny reregistration until all debts owed the university have been paid. The full policy statement, including right of appeal, may be obtained from the registrar.

Registration

All students must register on the dates published. No registrations are permitted after the last day to register, as published in the university calendar. A late registration fee is assessed according to the date announced in the quarterly *Schedule of Classes*. Students registering late are held responsible for absences thus incurred. No person may attend any university course unless officially registered.

Registration Changes

Students are held accountable to complete every course for which they register. If it is necessary to add or drop a course, the student must complete the appropriate touch-tone registration transaction on the last day such activity is allowed as published in the university calendar. Failure to officially withdraw from a course will result in a grade of E on the student's academic record.

Repeating a Course

(Policy 77-2)

An undergraduate student who receives a grade of C- or below in a course at Seattle University may repeat that course. Some schools and major departments require that students repeat a required course under some conditions. The grade earned the second time will be posted to the permanent record. The grade earned the second or most recent time will

be used in computing the cumulative grade point average, although course credits will be counted only once toward a degree. The original grade will remain on the record. No student will be allowed to register for any single required course more than three times, including registrations resulting in grades of NC, I and W.

If credit has been granted for a course taken at another institution and then the course is repeated at Seattle University, the transfer credit is revoked and the Seattle University credit and grade are granted. A transfer student who has registered three or more times for a course at another institution without successfully completing it will be allowed to register for the course at Seattle University only once.

The student must notify the registrar of the repeat by filing a notification of repeated course form.

Transcripts

(Policy 76-3)

Students may obtain official transcripts by submitting a written request to the Registrar's Office. No official transcript will be released for students with a financial obligation to the university.

Transcripts and other enrollment certifications should be requested at least one week before they are required. Transcripts cannot be issued during the period of registration, examinations or Commencement.

The university is not responsible for any error on a transcript that 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 of Credit from Other Institutions

(Policies 77-1 and 79-1)

Regular undergraduate students who have attended other colleges may have credits transferred to Seattle University under the following conditions:

1. An official transcript must be filed with the registrar.

Deadlines are as follows:

Courses completed summer term December 1

Courses completed fall term March 1

Courses completed winter term May 1

Courses completed spring term August 1

2. Work graded D (or 1.0 on the decimal grading system) or higher will be allowed for transfer except for departmental requirements in the Schools of Business and Economics, Engineering, Nursing and some departments in the College of Arts and Sciences, where C (or 2.0 on the decimal grading system) is the minimum.
3. Credit transferred from two-year colleges may be applied to university freshman and sophomore years only. Transfer of such credit may not exceed 90 quarter credits.
4. Once 90 credits have been accumulated from all schools, including Seattle University, additional community college credits may not be transferred. Courses taken at a community college beyond the 90 credit limit, if applicable to the Seattle University degree, will not have to be repeated and can fill content requirements, but credits do not

- transfer and such courses will not reduce the minimum additional 90 credits required for a Seattle University degree.
5. For admission with advanced standing, no more than 135 quarter credits 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 the core curriculum section for a listing of required courses in philosophy and religious studies.
 6. The transferable associate of arts degree granted by a Washington community college will bring certain benefits to the student who has completed the degree prior to first admission to Seattle University. The student will be admitted with junior status, with 90 credits, and will have fulfilled freshman and sophomore university core requirements except for philosophy, religious studies and requirements of professional programs.
 7. The final 45 credits of the degree must be completed at Seattle University.
 8. Credit earned through extension courses may be transferred if the course was sponsored for degree credit by an academic department of a regionally accredited institution. No more than 45 quarter credits of extension credit will be accepted. Credit earned through correspondence shall not exceed 12 quarter credits and must be included in the extension credit total of 45 quarter credits.
 9. Credits more than 10 years old will be reviewed to determine applicability of credit to the major.
 10. Since the Seattle University grade point reflects only work done at this university, the grade point average cannot be improved by repeating elsewhere a course failed at Seattle University.
 11. Credits from unaccredited and newly accredited schools and non-traditional programs are subject to additional review prior to being transferred. See Policy 79-1 for additional information.
 12. Credits may be granted for appropriate military schooling in accordance with Policy 75-26.

Withdrawal

The Registrar's Office must be officially notified by students when they withdraw from any course. The withdrawal form is obtained from the registrar and presented to the instructor and registrar, in that order, for approval and signature. Failure to officially withdraw from a course will result in a grade of E on the student's academic record.

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

Graduation/Commencement

Official Commencement exercises are held once a year in June. All responsibility for fulfilling the requirements for graduation rests with the individual student.

Academic Progress

Seattle University recognizes that students progress at different rates and their time to degree completion is often dictated by individual circumstances. However, all students (except those enrolled in the Matteo Ricci College) must complete a minimum of 180 credit hours of approved course work to be awarded a baccalaureate degree. (Note that some departments require more than 180 credits total.) All degree requirements must be completed within 10 years of the date on which the college work was begun.

Application for a Degree

Application for a degree must be made at the Registrar's Office within the period indicated in the university calendar or other official publications. Candidates for a degree normally file applications two quarters preceding their final registration.

Application for a Certificate

Application for a certificate must be made at the Registrar's Office within the first four weeks of the student's last quarter in a certificate program.

Bachelor Degree Requirements

(Policies 75-1 and 76-2)

Students are held to degree requirements in effect at the time of first enrollment. Students who are re-admitted after an absence of one calendar year or who change their majors are held to degree requirements in effect at the time of re-admission or change of major. Students may, by academic action, elect to graduate under degree requirements specified in subsequent *Bulletins of Information*; under no circumstances will the requirements from earlier *Bulletins of Information* be applied.

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 overall grade point average of 2.00 must be achieved and a grade point average of 2.00 is required in departmental requirements of the student's major. Higher grade point average requirements pertain in certain programs. See individual program section for requirements.
2. A minimum of 180 credits is required for the baccalaureate degree, except for graduates of the Matteo Ricci College, where 135 credits is the minimum, and all engineering degrees, which require a minimum of 192 credits.
3. A minimum of 15 credits in philosophy and 10 credits in theology and religious studies are required in all degree programs. See the Core Curriculum section of this bulletin 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. Such work is to be taken in the university under the direction of members of the faculty. In the case of Seattle University students enrolled in AFROTC at the University of Washington, this requirement

may be waived for aerospace studies. With specific permission from the dean and registrar, senior residency may be waived for an approved study abroad program.

5. All degree requirements must be completed within 10 years of the date on which the college work was begun.
6. Financial obligations toward the university must be satisfied.
7. 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 and complete all specific requirements of the new program or the new college. These 45 credits must be completed in residence at Seattle University. To satisfy core requirements, second degree students must:
 - a. Pass an upper-division ethics course or must take one at Seattle University;
 - b. Pass a religious studies core-type course or must take one at Seattle University;
 - c. Complete a senior synthesis course appropriate to the new degree.

Honors at Graduation

(Policies 75-12 and 75-21)

Graduation with honors requires completion of a minimum of 90 credits in residence at Seattle University in courses graded A through D. Should a student elect the P/E option for any one course or take a credit by examination as part of the 90 credit minimum, honors eligibility is forfeited. In programs where CR/E grades are mandatory for required courses, such courses may be allowed toward the minimum 90 credits, but no student may be considered for honors with fewer than 80 graded credits. Petitions for honors under this condition must be filed with the dean and the registrar six weeks prior to the anticipated completion date.

For students who matriculated in fall 1986 or after, and who graduated between August 1988 and February 1993:

Cum Laude—3.50 and at least 90 Seattle University graded credits

Magna Cum Laude—3.70 and at least 115 Seattle University graded credits

Summa Cum Laude—3.90 and at least 135 Seattle University graded credits

For students who complete degree requirements February 25, 1993 or later, at least 90 Seattle University graded credits are required:

Cum Laude—3.50

Magna Cum Laude—3.70

Summa Cum Laude—3.90

Special Award

The President's Award is given to the graduating senior who has maintained the highest scholarship throughout four years of college work, as determined by grades at Seattle University and in the judgment of the academic deans.

The Core Curriculum

David Leigh, SJ, Director

"A Jesuit liberal arts education assumes that you become what you desire. All the courses in art and literature, in mathematics and science, in history, economics or business, in philosophy or theology aim at helping you clarify, broaden and deepen your most important question in life: 'What do you really want?' When that question is deepened, most of us discover that what we really want is the knowledge, skills and power to build a world of justice and love."

—John Topel, SJ, Assistant to the President for Jesuit Identity

Objectives

Students at Seattle University take a basic program of liberal studies called the core curriculum. The university core curriculum introduces all Seattle University students to the unique tradition of Jesuit liberal education. The curriculum results from four years of discussion and work by more than 100 faculty members and administrators in response to a call by students and teachers for a more integrated way of learning. In accord with Seattle University's Mission Statement, the core curriculum has three aims:

1. To develop the whole person for a life of service.
2. To provide a foundation for questioning and learning in any major or profession throughout one's entire life.
3. To give a common intellectual experience to all Seattle University students.

This university core curriculum has several distinctive characteristics:

- It provides an integrated freshman year for all students.
- It gives order and sequence to student learning.
- It provides experience in the methods and content of the range of liberal arts, sciences, philosophy and theology.
- It calls in all classes for active learning, for practice in writing and thinking, and for an awareness of values.
- It encourages a global perspective, an intercultural and gender awareness and a sense of social and personal responsibility.

The university core curriculum provides this ordered experience in three phases.

Phase One Foundations of Wisdom

The first phase gives a student the basis to move from experience to understanding and then to critical judgment and responsible choices. The goal of this first phase is to develop several foundations of liberal learning:

- A. Foundational Habits—Facility in asking the right questions, in critical and creative thinking, in writing and speaking skills, and in mathematical literacy.
- B. Foundations of Culture—Familiarity with the basic ways of knowing through a study of Western and other civilizations, primarily in their history, literature, science and fine arts.

Phase Two

Person in Society

The second phase helps a student to expand horizons by confronting major modern issues. Here the student learns to interpret and to make judgments through the methods used in the human sciences, philosophy and religious studies. Building on the foundational skills and awareness of literature, history, science and fine arts (from Phase One), the student delves into the issues and questions raised by economics, political science, psychology and sociology. Along with this study, he or she also discovers the philosophical and theological assumptions which underlie the commonalities and differences of human experience in society today.

Phase Three

Responsibility and Service

The third phase is designed to help the student prepare more directly for a life of service in the light of authentic human and Christian values. The first course in this phase is an ethics course, which is followed by a second theology course. In addition, the student takes one interdisciplinary course that addresses a major contemporary problem from a number of approaches. Finally, the student concludes his or her university education with a senior synthesis, which ties together liberal learning with professional studies. What is special about Phase Three is its emphasis on evaluative activities that are an essential part of responsible service.

How do these parts of the core curriculum fit together? Since many of the courses are prepared by teams of teachers, the courses connect with one another and build in sequence so that the student gets a sense of putting things together. In Phase One, the courses in writing and critical thinking, as well as some courses in history and literature, are connected and taught in clusters or sequences of 10 credits each. The same connections are made in Phase Two between the philosophy of the person and the first social science course. Finally, the entire curriculum begins with an integrated freshman year and ends with an interdisciplinary course and a senior synthesis in the final year.

The University 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. All courses fulfilling core requirements must be taken for a letter grade. For each student, no individual course may fulfill more than one core curriculum requirement.

The following three-phased core curriculum is required of (a) all first-year students matriculating in 1987-88 or later; (b) all transfer students with freshman standing (less than 45 credits completed) matriculating in 1989-90 or later; and (c) all transfer students with sophomore standing (45-89 credits) matriculating in 1990-91 or later.

Phase One

Foundations of Wisdom

Writing/Thinking Sequence 10

EN 110 Freshman English 5

PL 110 Introduction to Philosophy and Critical Thinking 5

These two courses are to be taken in sequence in a 10-credit block during the fall and winter quarters of the freshman year.

History/Literature Sequence 10

EN 120 Masterpieces of Literature 5

Choose one of the following two courses:

HS 120 Origins of Western Civilization 5

HS 121 Studies in Modern Civilization 5

These two courses are to be taken in sequence or a cluster in a 10-credit correlated block during the winter and spring quarters of the freshman year. (Students in the School of Science and Engineering may take this sequence in spring of the first year and fall of the second year).

Please Note: Students in the College of Arts and Sciences must take HS 120 for core and may select 121 or 231 to fill the additional college history requirement.

Mathematics 5

Any five-credit course in mathematics on the 100 level (or above) for which the student is qualified.

Science 5

Any five-credit laboratory science course for which the student is qualified (physics, chemistry, biology or general science).

Fine Arts 5

FA 120 Experiencing the Arts 5

Phase Two

Person in Society

Study of Person Sequence 10

PL 220 Philosophy of the Human Person 5

Social Science I 5

(Choose one: PSY 120, SC 120, EC 120, PLS 120, ISS 120)

These two courses are normally to be taken in sequence or in a cluster in a 10-credit block.

Social Science II 5

Choose any five-credit course from among the following courses, as long as the discipline chosen is different from Social Science I taken in the preceding sequence:

EC 271 Principles of Economics: Macro 5

EC 272 Principles of Economics: Micro 5

PSY 210 Personality Adjustment 5

PSY 220	Individual and Society	5
SC 210	American Society and Culture	5
SC 222	Social Psychology	5
SC 230	Cultural Anthropology	5
PLS 205	Intro to American Politics	5
PLS 231	Diversity and Change	5
PLS 253	Intro to Political Philosophy	5
PLS 260	Intro to Global Politics	5

Students who major in one of the social science disciplines must take both the required core curriculum social science courses outside of their major department.

Theology and Religious Studies Phase II 5

Any approved five-credit course selected from RS 200-299.

Phase Three Responsibility and Service

Ethics 5

Choose one of the following options:

PL 312	Social Ethics	5
PL 345	Ethics	5
PL 351	Business Ethics	5
PL 352	Health Care Ethics	5
PL 353	Ethics in Science/Technology	5
PL 354	Ethics and Criminal Justice	5
PL 358	Communication Ethics	5
PL 359	Professional Ethics	5

Theology and Religious Studies Phase III 5

Any approved five-credit course selected from RS 300-399.

Interdisciplinary Course 3 to 5

Any three to five credits which deal with a contemporary issue from a multidisciplinary perspective. A list of approved interdisciplinary courses will be published each quarter and will usually be numbered 480.

Senior Synthesis 3

Any three-credit course or project approved by the student's major department as fulfilling the objectives of the senior synthesis requirement.

The two sequences in Phase One must normally be completed before taking courses in Phase Two. All of Phase Two must be completed before a student begins Phase Three. Exceptions to taking the core curriculum in sequence or in phases must have permission of the dean of the College of Arts and Sciences or the director of the university core curriculum.

Transfer Students

Since 1991-92, transfer students who matriculate with 90 or more credits are required to take the following modified new core curriculum:

I. Prerequisite Courses

All of Phase One (except PL 110), and Social Science I and II courses from Phase Two. These courses may be taken at Seattle University or by transferring equivalent credits. A transferable Washington state associate arts degree fulfills these prerequisite courses.

II. Bridge Courses

To be taken only at Seattle University:

PL 210	Philosophy of the Human Person	5
RS	Elective 200-level	5

Consult philosophy and theology departmental descriptions for specific requirements for entering other courses.

III. Essential Phase Three Courses

To be taken only at Seattle University:

Ethics	5
Interdisciplinary Course	3 to 5
Senior Synthesis	3

Consult each major for specific guidelines for courses that fulfill these essential Phase Three requirements.



College of Arts and Sciences

Joseph F. Gower, PhD, Dean

Objectives

The College of Arts and Sciences, the oldest and largest undergraduate division of Seattle University, is dedicated to the ideal that a liberal education in the arts and sciences best prepares a student for a rewarding and fruitful life. The central belief upon which the college is based is one which recognizes that its students must be prepared to make a living, but also live full and meaningful lives. All undergraduate students in the university take core courses in the college, for in them are found the intellectual, social, cultural and spiritual riches of human history.

The college aims at developing depth in some one area of knowledge, as well as the breadth of learning and understanding that is essential to an intellectually challenging human life. The student is led, by means of the various academic disciplines, to see the world in its major aspects of reality. Students are helped to discover the interrelationships of the physical, social and aesthetic dimensions of the world, along with their own relationship to the world—especially their power and responsibility to shape it for their future.

Organization

The college comprises 18 administrative subdivisions, of which 12 are departments in specific academic subjects. The departments are Communication; Criminal Justice; English; Fine, Applied and Performing Arts; Foreign Languages; History; Military Science; Philosophy; Political Science/Public Administration; Psychology; Sociology; Theology and Religious Studies.

The program divisions are Addiction Studies; Honors; International Studies; Liberal Studies; Prelaw; and Premajor. A certificate program is offered in Addiction Studies.

Each department chair or program director, in collaboration with the 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 chair 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. 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
Bachelor of Criminal Justice
Bachelor of Public Administration
Bachelor of Science

General Program Requirements

Students in the College of Arts and Sciences must satisfy the core curriculum requirements of the university given in this bulletin. An additional requirement of a second five-credit course in history chosen from either HS 121 or HS 231 is also required of all students.

All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations. It is strongly recommended that students fulfill this program requirement as early as possible in their studies, preferably in their first year.

A minimum cumulative grade point average of 2.5 must be obtained in the major courses taken at Seattle University for degrees in the College of Arts and Sciences.

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

Premajor

Premajor is a freshman and sophomore program for students who wish to explore academic programs and careers before committing themselves to a major program. See Premajor section for more information.

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.

Addiction Studies Programs

Joseph F. Gower, PhD, Director

Objectives

Addiction to alcohol and other drugs is the nation's major public health problem, with implications for family, business and industry, traffic safety, and the physical, mental and spiritual health of millions of persons. The objective of these courses is to provide a strong background for work in treatment and rehabilitation, in education and prevention, in industry or in referral centers. They also supplement the training of degreed professionals as well as students preparing to work in psychiatry or psychology, nursing, social work, rehabilitation, criminal justice, or allied fields.

Certificate in Alcohol/Drug Studies

This certificate program fulfills the academic requirements for professional certification as a chemical dependency counselor I (CCDC I) in the state of Washington.

Certificate candidates should seek regular admission status; others may register as transitional students. The certificate in alcohol/drug studies is a combination of classroom instruction (19 credits) and supervised field experience (six credits) under experienced counselors. A certificate program should be completed within three years.

In order to earn the certificate in alcohol/drug studies, students must complete the following:

I. Certificate Program Requirements

Twenty-five credits in addiction studies, including:

Choose one of the following two courses:

ADD 400	Survey of Alcoholism	3
PSY 490	Symposium on Alcoholism	2 to 5
ADD 401	Pharmacology/Physiology of Alcohol Use	2
ADD 402	Counseling-Alcohol and Drugs	4
ADD 407	Field Experience I	3
ADD 408	Field Experience II	3
ADD 412	Group Dynamics in Treatment	2
ADD 414	Case Management and Assessment	2
ADD 418	Addiction and the Family	2
ADD 424	Drug Abuse 1: Social Aspects	2
ADD 425	Drug Abuse 2: Physiological Aspects	2

Please Note: A minimum cumulative grade point average of 2.5 must be earned in all course work that applies to the certificate.

Advanced Certificate in Alcohol/Drug Studies

This certificate fulfills the academic requirements of professional certification as a chemical dependency counselor II (CCDC II), and certified chemical dependency counselor III (CCDC III), in the state of Washington.

An advanced certificate in Alcohol/Drug studies is granted upon completion of 16 credits beyond the 25 credits applied to the above certificate.

In order to earn the advanced certificate in alcohol/drug studies, students must complete the following:

I. Advanced Certificate Program Requirements

Forty-one credits in addiction studies, including:

Choose one of the following two courses:

ADD 400	Survey of Alcoholism	3
PSY 490	Symposium on Alcoholism	2 to 5
ADD 401	Pharmacology/Physiology of Alcohol Use	2
ADD 402	Counseling-Alcohol and Drugs	4
ADD 405	The Law and Alcohol	2
ADD 407	Field Experience I	3
ADD 408	Field Experience II	3
ADD 411	Advanced Counseling	2
ADD 412	Group Dynamics in Treatment	2
ADD 414	Case Management and Assessment	2
ADD 418	Addiction and the Family	2
ADD 424	Drug Abuse 1: Social Aspects	2
ADD 425	Drug Abuse 2: Physiological Aspects	2
ADD 426	Addiction and Mental Illness	2
ADD 427	Intervention Techniques	2
ADD 428	Ethics for Addiction Professionals	2
ADD	Electives	6

Please Note: A minimum cumulative grade point average of 3.0 must be earned in all courses that apply to the certificate.

Addiction Studies Courses

ADD 400 Survey of Alcoholism 3

History, scope, physiological, social, psychological and family aspects of alcohol problems. Drunk driving. Progression, symptoms, types of alcoholics. Nature of addiction disease: causality, treatment and prevention. This course will satisfy the core interdisciplinary requirement.

ADD 401 Pharmacology/Physiology of Alcohol Use 2

Ingestion, absorption, metabolism. Behavioral effects of different blood levels. Damage to brain, liver and other organs. Pre- or corequisite: ADD 400.

ADD 402 Counseling - Alcohol and Drugs 4

Legal and ethical responsibilities of alcohol/drug counselors. Patient-counselor relationships, principles and techniques. Intake and intervention vs. long-range therapy. Directive vs. non-directive counseling, motivation, confrontation. Role-playing, video-tape play-back. Prerequisite: ADD 400.

ADD 404 Agency Administration 2

Personnel policies and practices, budgeting, financing, office management, public relations, personnel ethics. Informational and educational policies and techniques. Relations with school systems, courts, other professions. Prerequisite: ADD 400.

ADD 405 The Law and Alcohol 2

Legal implications and consequences of alcohol-related offenses. Deferred prosecution. Uniform Alcoholism and Intoxication Act. Impaired driving laws. Court structure and jurisdictions. Prerequisite: ADD 400.

ADD 406 Cross-Cultural Counseling 2

Special problems and techniques, understanding of cultural background and instruction by members of minority groups. Prerequisites: ADD 400 and 402.

ADD 407 Field Experience I 3

Supervised work in an approved agency, clinic, rehabilitation center, referral center. Oral and written reports by student required. Prerequisites: ADD 400 and 402. Mandatory CR/E grading.

ADD 408 Field Experience II 3

Supervised work in an approved agency, clinic, rehabilitation center, referral center. Oral and written reports by student required. Prerequisite: ADD 407. Must be done in a setting different from the one used to fulfill ADD 407 requirements. Mandatory CR/E grading.

ADD 410 Individual Research 1 to 3

Open only to students with sufficient academic background to pursue independent study. Permission of director required.

- ADD 420 Alcoholism and Drug Abuse Seminar 2**
An advanced seminar on selected current topics in alcoholism and alcohol-related problems. Prerequisite: 10 credits in Addiction Studies, and permission of program director.
- ADD 421 Advanced Project or Research 2 to 5**
Replication, original research, or scholarly investigation which demonstrates mastery of basic fact-finding, experimental design, evaluation and presentation of results. A graduate project or master's thesis will substitute. Prerequisite: Basic certificate in alcohol/drug studies, and permission.
- ADD 422 Alcoholics Anonymous as a Resource for Professionals 1 to 2**
History, structure, traditions and program of Alcoholics Anonymous. Psychology of the 12 Steps. Use of 12 Step programs as a resource for treatment professionals.
- ADD 424 Drug Abuse 1: Social Aspects 2**
History, scope, classification of drugs, legal aspects. Patterns of use, abuse and addiction. Treatment, recovery and rehabilitation methods and strategies. Prerequisite: ADD 400.
- ADD 425 Drug Abuse 2: Physiological Aspects 2**
Pharmacology and physiology of drug action. Prescription and non-prescription drugs. Interactions among drugs, polydrug abuse. Actions of drugs on the central nervous system. Recovery from addiction. Prerequisite: ADD 401.
- ADD 426 Addiction and Mental Illness 2**
Dual diagnosis: when psychiatric disorders coexist with addiction. Psychiatric terminology, clinical symptoms of mental illness; use of DSM-III-R in differential diagnosis; treatment and referral. Prerequisite: ADD 402.
- ADD 427 Intervention Techniques 2**
Theory and practice of intervention when a patient is unable to recognize the need for treatment. Emphasis on framework, preparation, process and referral; legal and ethical implications. Prerequisite: ADD 402.
- ADD 428 Ethics for Addiction Professionals 2**
Common problems of counselors and administrators: rights of patients, confidentiality, discrimination, incompetence, fees, personal relationships with patients, inter- and intra-professional relationships. Cooperation with Alcoholics Anonymous and other 12 Step groups. Prerequisite: ADD 400.
- ADD 491 Special Topics 1 to 5**
ADD 492 Special Topics 1 to 5
ADD 493 Special Topics 1 to 5

Communication

Gary Atkins, MA, Chairperson

Objectives

The Communication Department provides courses designed to give students an awareness of the role of communication in society, as well as practical experience in developing their own talents in oral, written and visual communication. The communication studies courses offer a blend of theoretical understanding and practical experience in a variety of contexts, including interpersonal communication, small group communication, and organizational communication.

The journalism and mass communication courses develop students' competence in gathering and disseminating stories through the mass media, using reporting, writing and graphics skills. Journalism and mass communication majors can emphasize preparation for either journalistic careers in print or broadcast media, or public relations careers for government or organizations.

Degree Offered

Bachelor of Arts

Majors Offered

Communication Studies

Journalism and Mass Communication

(with specialties in news-editorial and public relations)

Minors Offered

Communication Studies

Journalism and Mass Communication

Teacher Education

The teacher preparation program is a graduate-level program only. Those students planning to become elementary teachers or secondary journalism or speech teachers must complete a bachelor's degree prior to beginning the teacher preparation program. They should discuss their major with their communication adviser to ensure that they are enrolled in the appropriate courses. A 24-credit second endorsement is available in journalism or speech. Students planning to become teachers must contact the School of Education for advising.

Bachelor of Arts

Major in Communication

In order to earn the bachelor of arts degree with a major in communication, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (satisfied by PL 358)	.....
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary Course	.....	3 to 5
Senior Synthesis (satisfied by COMC 490)	.....

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty credits in communication, including:

COMC 200	Media, Society and the Individual	5
COMC 230	Public Speaking	5
COMC 260	Interpersonal Communication	5
COMC 290	Dynamics of Communication	5
COMC 331	Persuasion	5
COMC 361/2	Small Group Communication	5

COMC 383	Organizational Communication	5
COMC 431	Communication and Motives: Advanced Rhetorical Theory	5
COMC 490	Images and Choices	5
COMC	Elective (300-level or above)	5

Advanced Writing Elective: Choose one of the following two courses:

COMJ	(300-level, prerequisites required)	5
EN	(300-level)	5

IV. Additional Requirements

PL 358	Communication Ethics (fills core ethics)	5
	*Communication-related courses outside major	5
	Elective (300-level or above, approved by academic adviser)	5

Please Note: *1. Should include, but are not limited to, communication performance-oriented offerings in drama, English, foreign language, psychology, sociology or business. Students are encouraged to take communication-related classes outside the department. 2. Students lacking the recommended core background should consult with the journalism and mass communication adviser before enrolling in advanced COMJ courses (300-level or 400-level). Preparatory work is required as a condition for admission to advanced COMJ writing courses.

Bachelor of Arts Major in Journalism and Mass Communication Journalism Track

In order to earn the bachelor of arts degree with a major in journalism and mass communication/journalism track, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
	Social Science I	5
	Social Science II (different discipline from Social Science I)	5
	Theology and Religious Studies Phase II (200-299)	5
	Ethics(satisfied by PL 358)	
	Theology and Religious Studies Phase III (300-399)	5
	Interdisciplinary Course	3 to 5

Senior Synthesis (satisfied by COMC 490)
See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty credits in communication, including:

COMC 200	Media, Society and the Individual	5
COMC 290	Dynamics of Communication	5
COMJ 210	Media Writing I	5
COMJ 220	Media Writing II	5
COMJ 300	Reporting Public Affairs	5
COMJ 360	Communication Rights and Law	5
COMJ 490	Senior Synthesis: Images and Choices	5
COMJ	Elective (300-level and above)	5

Choose a total of five credits from the following courses:

COMJ 280	Practicum I	1
COMJ 281	Practicum II	1
COMJ 282	Practicum III	1
COMJ 380	Practicum IV	1
COMJ 381	Practicum V	1
COMJ 496	Internship	1 to 5
COMJ 497	Internship	1 to 5
COMJ 498	Internship	1 to 5

Choose two of the following four advanced writing courses:

COMJ 305	Broadcast Writing	5
COMJ 310	Public Relations/Writing and Research	5
COMJ 315	Magazine and Feature Writing	5
COMJ 320	Persuasive and Critical Writing	5

Choose one of the following two advanced courses:

COMJ 330	Graphics and Editing: Print Media	5
COMJ 335	Production and Editing: Electronic Media	5

IV. Additional Requirements

PL 358 Communication Ethics (fills core ethics) 5

*Communication-related courses outside major 5

Elective (300-level or above, approved by academic adviser) 5

Please Note: *1. Should include, but not limited to, communication performance-oriented offerings in drama, English, foreign language, psychology, sociology or business. Students are encouraged to take communication-related classes outside the department. 2. Students lacking the recommended core background should consult with the journalism and mass communication adviser before enrolling in advanced COMJ courses (300-level or 400-level). Preparatory work may be required as a condition for admission to advanced COMJ courses. In addition to completing the necessary course work, majors who intend to pursue careers in journalism or public relations are expected to gain actual experience and to build a portfolio of work by participating in student media and in off-campus internships. 3. Students emphasizing electronic journalism must complete at least one approved course in public speaking; this course does not count as COMJ credit, but may count toward fulfillment of the other course requirements or electives.

Bachelor of Arts Major in Journalism and Mass Communications Public Relations Track

In order to earn the bachelor of arts degree with a major in journalism and mass communication/public relations track, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110 Freshman English 5

PL 110 Introduction to Philosophy and Critical Thinking 5

HS 120 Introduction to Western Civilization 5

EN 120 Masterpieces of Literature 5

MT (101, 107 or above) 5

Lab Science 5

FA 120 Experiencing the Arts 5

PL 220 Philosophy of the Human Person 5

Social Science I 5

Social Science II (different discipline from Social Science I) 5

Theology and Religious Studies Phase II (200-299) 5

Ethics (satisfied by PL 358)

Theology and Religious Studies Phase III (300-399) 5

Interdisciplinary Course 3 to 5

Senior Synthesis (satisfied by COMC 490)

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Modern Western Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty credits in communication, including:

COMC 200	Media, Society and the Individual	5
COMC 290	Dynamics of Communication	5
COMJ 210	Media Writing I	5
COMJ 220	Media Writing II	5
COMJ 360	Communication Rights and Law	5
COMJ 490	Senior Synthesis: Images and Choices	5
COMJ 310	Public Relations/Writing and Research	5
COMJ 370	Public Relations: Cases and Strategies	5

Choose five credits from the following courses:

COMJ 280	Practicum I	1
COMJ 281	Practicum II	1
COMJ 282	Practicum III	1
COMJ 380	Practicum IV	1
COMJ 381	Practicum V	1
COMJ 496	Internship	1 to 5
COMJ 497	Internship	1 to 5
COMJ 498	Internship	1 to 5

Choose two of the following four advanced courses:

COMJ 300	Reporting Public Affairs	5
COMJ 305	Broadcast Writing	5
COMJ 315	Magazine and Feature Writing	5
COMJ 320	Persuasive and Critical Writing	5

Choose one of the following two advanced courses:

COMJ 330	Graphics and Editing: Print Media	5
COMJ 335	Production and Editing: Electronic Media	5

IV. Additional Requirements

PL 358 Communication Ethics (fills core ethics) 5

*Communication-related course outside major 5

Elective (300-level or above, approved by academic adviser) 5

Please Note: *1. Should include, but not limited to, communication performance-oriented offerings in drama, English, foreign language, psychology, sociology or business. Students are encouraged to take communication-related classes outside the department. 2. Students lacking the recommended core background should consult with the journalism and mass communication adviser before enrolling in advanced COMJ courses (300-level or 400-level). Preparatory work may be required as a condition for admission to advanced COMJ courses. In addition to completing the necessary course work, majors who intend to pursue careers in journalism or public relations are expected to gain actual experience and to build a portfolio of work by participating in student media and in off-campus internships. 3. Students emphasizing public relations must complete at least one approved course in public speaking and at least one approved course in marketing. These courses do not count as COMJ credit, but may count toward fulfillment of the other course requirements or electives.

Minor in Communication Studies

In order to earn a minor in communication studies, students must complete 30 credits in communication, including:

COMC 200	Media, Society and the Individual	5
COMC 230	Public Speaking	5
COMC 260	Interpersonal Communication	5
COMC 290	Dynamics of Communication	5
COMC 361/2	Small Group Communication	5
COMC	Elective (300-level or above)	5

Minor in Journalism and Mass Communication

In order to earn a minor in journalism and mass communication, students must complete 30 credits in communication, including:

COMC 200	Media, Society and the Individual	5
COMJ 210	Media Writing I	5
COMJ 220	Media Writing II	5
COMJ 360	Communication Rights and Law	5
COMJ	Elective (300-level or above)	5

Choose at least one of the following four advanced writing courses:

COMJ 300	Reporting Public Affairs	5
COMJ 305	Broadcast Writing	5
COMJ 310	Public Relations/Writing and Research	5
COMJ 315	Magazine and Feature Writing	5
COMJ 320	Persuasive and Critical Writing	5

Communication Studies Courses

COMC 200 Media, Society and the Individual 5

Examination of the relationship between media and the individual in society; impact of mass communication upon interpersonal communication; development of the mass media and theories of its role; issues raised by the creation of "information societies."

COMC 230 Public Speaking 5

Theory and practice of constructing, presenting and analyzing speeches. Emphasis on audience adaptation and the development of critical listening skills. Performance-oriented course.

COMC 240 Communication for Business 5

The purpose of this course is to develop a required skill level in written and oral business presentations so that applications of those skills can be expected in all applicable business core and major courses, including a university specific common format for written executive summaries, for short oral presentations and for research reports. Prerequisites: EN 110.

COMC 260 Interpersonal Communication 5

Communication theory and its application between two or more people. Development of knowledge, skills and insights into interpersonal communication effectiveness.

COMC 290 Dynamics of Communication 5

Theoretical approaches to understanding the process of communication as it occurs in both interpersonal and media settings. Emphasis on models and methodologies of communication. Overview of the communication discipline and rhetorical tradition. Prerequisite: One lower division course in communication studies.

COMC 291 Special Topics 1 to 5

COMC 292 Special Topics 1 to 5

COMC 293 Special Topics 1 to 5

COMC 331 Persuasion 5

Basic concepts of persuasion, including definition, nature, functions and ethics of persuasion. Focus on processes of change and systems of thought, symbol and action in interpersonal and public arenas. Prerequisite: COMC 290 or permission of instructor.

COMC 361/2 Small Group Communication 5

Experiential-based course designed to improve communication skills and increase awareness of various communication styles in a variety of small group settings. Focus on small group theory, problem solving group behavior, individual communication styles, listening skills, nonverbal behavior, congruent messages. Prerequisite: junior or senior standing and COMC 290 or equivalent as approved by department chair.

COMC 383 Organizational Communication 5

Theories and processes of communication in organizations, including analysis of communication styles and modes in organizations, communication variables and strategies, coping with organizational situations. Prerequisite: COMC 290 or equivalent as approved by department chair.

COMC 384 Conflict Resolution 5

Theory and techniques of conflict resolution and the application of theory to situational contexts. Focus placed on styles of resolving conflicts, situational appropriateness and effectiveness of styles, mediation theory and games theory. Prerequisites: COMC 290 and junior level standing.

COMC 391 Special Topics 1 to 5**COMC 392 Special Topics 1 to 5****COMC 393 Special Topics 1 to 5****COMC 431 Communication and Motives: Rhetorical Theory 5**

Study of issues that have been prominent throughout the history and development of the theory, practice and criticism of rhetoric (the potency of thought in expression). Organized by a thematic exploration of the nature, function and scope of rhetoric as it responds and is related to various realms of inquiry and professional human endeavor. Prerequisites: COMC 200, 230, 290, 331 and senior standing.

COMC 460 Communication and Social Behavior 5

Advanced study of communication theory and its relation to the formation of self and society. Emphasis is placed on theories of symbolic interaction, meaning, semantics, and psycholinguistics. Prerequisites: COMC 290 and senior standing.

COMC 490 Senior Synthesis: Images and Choices 5

Develops the students' understanding and skill in interpreting and using visual images. Demonstrates how our society communicates, persuades, informs, identifies and bonds through the use of visual images. Prerequisites: COMC 200, 290 and senior level standing.

COMC 491 Special Topics 1 to 5**COMC 492 Special Topics 1 to 5****COMC 493 Special Topics 1 to 5****COMC 496 Independent Study/Internship 1 to 5****COMC 497 Independent Study/Internship 1 to 5****COMC 498 Independent Study/Internship 1 to 5****PL 358 Communication Ethics 5**

Ethical responsibilities of the communicator, in both interpersonal and media settings. Critical examination of ethical codes in establishing relationships and conducting communication in a democratic society. Topics covered include: lying, withholding information, conflicts of interest, objectivity, service to audiences. Prerequisites: At least one of the following: COMC 200, 260, 290 or COMJ 210.

Journalism and Mass Communication Courses

COMJ 210 Media Writing I

5

Narrative choices and styles common to the non-fiction mass media; using description and dialogue to effectively convey news and information; targeting stories for media audiences; writing with computers and on deadline; basic information gathering, using interviewing and library sources.

COMJ 220 Media Writing II

5

Techniques of writing and editing news and feature stories for the print media. Practice in writing, source development and coverage of beats. Prerequisite: COMJ 210.

COMJ 240 Introduction to Photography

5

Introduction to basic theory, techniques and history of black-and-white still photography. Emphasis on use of the camera as an effective tool of communication. Students must have use of adjustable 35 mm camera. Lab fee.

COMJ 280-

282 Practicum I, II, III

1,1,1

Supervised on-campus practice in writing and editing stories for media audiences.

COMJ 291 Special Topics

1 to 5

COMJ 292 Special Topics

1 to 5

COMJ 293 Special Topics

1 to 5

COMJ 300 Reporting Public Affairs

5

Reporting methods used to gather information as well as monitor power and decision-making in American society, including document research, power structure research, and survey methods; the role of the journalist and ethical responsibilities; examination of specialties within media reporting, including business, environmental and legal reporting. Advanced writing techniques for in-depth stories. Prerequisite: COMJ 220.

COMJ 305 Broadcast Writing

5

Techniques of writing news and features for the electronic media. Writing for sound and pictures. Broadcast media style considerations. Prerequisite: COMJ 210.

COMJ 310 Public Relations/Writing and Research

5

Introduction to research for public relations, including data base use, survey methods, marketing research. Techniques of special project writing: annual reports, media packages. Prerequisite: COMJ 210 and 370.

- COMJ 315 Magazine and Feature Writing 5**
Techniques of writing non-fiction articles for magazines; shaping stories for particular magazine markets and audiences; differences in writing for newspapers and magazines; aspects of freelancing. Prerequisite: For COMJ majors, COMJ 220. For non-COMJ majors, permission of instructor.
- COMJ 320 Persuasive and Critical Writing 5**
Principles of persuasive writing for a media audience; constructing editorials, opinion columns and critical reviews; study of classical and contemporary models. Prerequisite: COMJ 220 or EN 308.
- COMJ 330 Graphics and Editing: Print Media 5**
Techniques of communicating visually in the print media of newspapers, magazines, and newsletters through computer graphics. Fundamentals of visual literacy, typography, layout and design. Ethical issues facing the visual communicator. Prerequisite: junior or senior standing.
- COMJ 335 Production and Editing: Electronic Media 5**
Production and editing techniques for video. Ethical issues facing the electronic media editor as technical choices are made. This course provides a general knowledge of production equipment and techniques for the communication student, not a detailed training in production. Prerequisite: COMJ 305.
- COMJ 340 Advanced Photography 5**
Photographic "seeing" and printing technique. Individual projects emphasizing advanced topics in black-and-white photography. Ethical issues confronting photographers. Students must have use of adjustable 35 mm camera. Lab fee. Prerequisite: COMJ 240 or equivalent.
- COMJ 360 Communication Rights and Law 5**
Philosophy and law of freedom of expression in the United States; judicial and legislative approaches defining the right to communicate. The impact of technology on legal freedoms. Study of specific legal issues such as libel, the right to privacy, regulation of pornography, the right to gather information. Prerequisite: junior or senior standing.
- COMJ 370 Public Relations: Cases and Strategies 5**
Public relations as a management function; policies, procedures and problems; program analysis and case study. Ethical issues confronting public relations professionals. Prerequisite: junior or senior standing.
- COMJ 380 Practicum IV 1**
COMJ 381 Practicum V 1
Supervised work in writing, editing or graphics on campus media. Prerequisite: COMJ 280-2.
- COMJ 391 Special Topics 1 to 5**
COMJ 392 Special Topics 1 to 5
COMJ 393 Special Topics 1 to 5

COMJ 425 History of Mass Communication 5

Examination of the history of mass communications with an emphasis on the relationship of communication to the manner in which societies construe reality and channel power. The evolution of the concept of "news" and its changing structure; significant historical figures and institutions in the development of mass media. Prerequisite: junior or senior standing.

COMJ 430 Advanced Graphic Communication 5

Designing computer graphic strategies for projects and organizations; advanced layout principles and techniques. Prerequisite: COMJ 330.

COMJ 435 Advanced Television Production 5

Open only to journalism and mass communication majors who have taken COMJ 305 and COMJ 335. Preparation and presentation of news broadcasts including reporting, scripting, shooting visuals and tape editing. Student video packages will be submitted to public access cable channel.

COMJ 491 Special Topics 1 to 5**COMJ 492 Special Topics 1 to 5****COMJ 493 Special Topics 1 to 5**

Special courses examining the role of mass communications, journalism and the news media in promoting or hindering peace and the empowerment of people. Offerings vary, but may include: The mass media; war and peace; journalism and empowerment; terrorism, media and the law; communications and international development.

COMJ 496 Independent Study/Internship 1 to 5**COMJ 497 Independent Study/Internship 1 to 5****COMJ 498 Independent Study/Internship 1 to 5**

Special projects in mass communications. Internships in the mass media. For senior majors only. Permission of instructor and department chair required.

Criminal Justice

Michael M. Kelliher, SJ, DCrim, Chairperson

Objectives

The objective of the Criminal Justice Department is to give students an overview of the entire system, and then consider the component parts of that system. Course clusters are offered in the areas of research and planning, criminal law, enforcement, the offender, the victim and corrections. Field placements crown this effort by placing senior students in agencies related to their special interests in order that they might test their acquired knowledge in a professional setting and situation.

The Criminal Justice Department is designed to accommodate entering freshmen, transfer students and professionals. For professionals, especially corrections and police officers, we offer courses which may not have been covered in their academy training.

The driving spirit of the department is one which reflects the basic foundation of Jesuit education—reflection and action. We seek to develop a spirit of inquiry in students which asks “why not?” of things not tried and a facility for thinking critically and reflectively about the issues of justice and law, and the systems that deal with the offender and victim in our complex society.

Criminal justice graduates may qualify for careers in public and private law enforcement, crime prevention, juvenile justice facilities and programs, corrections, law enforcement training, education and planning, and other components of the criminal justice system, including law school and the subsequent practice of law.

Degree Offered

Bachelor of Criminal Justice

Major Offered

Criminal Justice

Minor Offered

Criminal Justice

Bachelor of Criminal Justice Major in Criminal Justice

In order to earn the bachelor of criminal justice degree with a major in criminal justice, students must complete 180 quarter credits with a cumulative grade point average of 2.0 and a major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Senior Seminar	.....	3 to 5
Interdisciplinary Core Course	.....	5

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty credits in criminal justice, including:

CJ 110	Introduction to Criminal Justice	5
CJ 200	Deviant Behavior	5
CJ 209	Criminological Theories	5
CJ 300	Society and Justice	5

CJ 312	Criminal Law	5
CJ 318	The Punishment Response	5
CJ	Electives	30

Please Note: Only 30 credits may transfer to the criminal justice major from a community college.

Minor in Criminal Justice

In order to earn a minor in criminal justice, students must complete 35 credits in criminal justice, including the following:

CJ 110	Introduction to Criminal Justice	5
CJ 200	Deviant Behavior	5
CJ 318	The Punishment Response	5
CJ	Electives	20

Criminal Justice Courses

CJ 110 Introduction to Criminal Justice 5

A survey of criminal justice processes from arrest through release, the relationships of police, prosecutor, defense, the courts and prison, as each integrates into a system. CJ 110 or equivalent is required for all majors.

CJ 200 Deviant Behavior 5

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. Biological, psychological and sociological models of deviancy will be discussed. CJ 200 is required for all majors. Also offered as SC 319.

CJ 209 Criminological Theories 5

A study of the theories from anthropology, biology, criminology, economics, political science, psychology and sociology, which are used to explain deviant and criminal behavior. CJ 209 is required for all majors.

CJ 211 Juvenile Offenders 5

An examination of the contemporary continuum of juvenile offenses, ranging from truancy to the drug scene. Juvenile crime as distinguished from adult crime will be discussed, as well as the interaction between the two.

CJ 213 Juvenile Corrections 5

An explanation of the complex problems involved in juvenile corrections, including probation, institutional care and aftercare.

CJ 215 Careers in Criminal Justice 5

An overview of the career choices for women and men in the field of criminal justice. Pertinent social and cultural barriers will be assessed - especially for career women in this field. Legal issues will be defined and evaluated; and career challenges and goals of successful people working in the criminal justice field will be examined.

- | | | |
|---|--|---------------|
| CJ 218 | Criminal Justice Research Methods | 5 |
| A review of statistical procedures and an introduction to the use of the computer in research. Introductory students will acquire knowledge of the basics of criminal justice research, as well as learn how to evaluate and think critically about the techniques of data collection, analysis and presentation. | | |
| CJ 291 | Special Topics | 1 to 5 |
| CJ 292 | Special Topics | 1 to 5 |
| CJ 293 | Special Topics | 1 to 5 |
| CJ 300 | Society and Justice | 5 |
| An analysis of the meaning of justice in Western culture, and its relationship to the criminal justice system. CJ 300 is required for all majors. | | |
| CJ 303 | Juvenile Justice Systems | 5 |
| Examination and study of contemporary police-juvenile operations. Theory and examination of the juvenile justice system. Relationship between the juvenile officer, crime prevention and community relations. | | |
| CJ 306 | Police and the Community | 5 |
| The role of the 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. | | |
| CJ 309 | Community Corrections | 5 |
| A study of community reintegration, community treatment centers, graduated release, and the use of volunteers and offenders as manpower sources, including current models of probation and parole. | | |
| CJ 312 | Criminal Law | 5 |
| Study of criminal law processes from detention to appeal. State and federal rules of criminal procedure. Understanding of policies, due process, self-incrimination, right to counsel, and other Constitutional issues. CJ 312 is required for all majors. | | |
| CJ 315 | Criminal Procedure | 5 |
| A review of U.S. Supreme Court rulings on search and seizure, due process, self-incrimination, right to counsel, and other Constitutional issues. | | |
| CJ 317 | The Criminal Trial | 5 |
| An examination of the positive and negative aspects of the criminal trial from the perspective of the judge, prosecutor, defense attorney, defendant, witnesses and jurors. | | |
| CJ 318 | The Punishment Response | 5 |
| A social history of the punishment response to the phenomenon of crime, considering the origins, principles, science and society's justification for punishment. CJ 318 is required for all majors. | | |

- CJ 321 Polygraph 5**
An introduction to the science of polygraph, including the history, validity and reliability, use in courts, techniques and ethics.
- CJ 324 Comparative Criminal Justice Systems 5**
Comparative analysis of criminal justice systems in the United States and selected foreign countries; emphasis on the organizational aspects and processes.
- CJ 391 Special Topics 1 to 5**
CJ 392 Special Topics 1 to 5
CJ 393 Special Topics 1 to 5
- CJ 400 Victimology 5**
A survey of the victim-offender relationship, including the origin and scope of victimology, the victim and society, the victim and the administration of justice and the social reaction to victimization.
- CJ 402 White Collar Crime 5**
A comprehensive overview of criminal activity in the upper echelons of American society; e.g., corporate offenses, consumer fraud, misuse of computers, illegal practice in the professions and political deviance.
- CJ 404 Career Offenders 5**
An analysis of professional crime and organized crime from the viewpoint of the sociology of work; the criminal's utilization of technological change and the response of the criminal justice system.
- CJ 406 Female Offenders 5**
A study of the classical and contemporary accounts of the etiology of female crime, patterns of female criminal behavior and the role and treatment of women in the criminal justice system.
- CJ 408 Violent Offenders 5**
A study of the history and theory of violence, including profiles of violent offenders in the United States. An analysis of the violent mind and legal implications.
- CJ 410 Sexual Deviance and the Law 5**
Analysis of definition, problems, formal, legal and social constraints, and the criminal justice system's reaction to deviants.
- CJ 412 Adult Corrections 5**
A study of the post-arrest treatment methods applied to adult offenders. An in-depth look at the history, philosophy and detention practices of adult prisons.

CJ 451 Criminal Justice Administration 5
Examination of police, courts and corrections from organizational perspectives. Issues of management and leadership applied to the administration of justice.

CJ 452 Criminal Justice Planning 5
Introduction to planning concepts and methods, with application to both the criminal justice system and its operational agencies. Special focus on crime trends that affect the future.

CJ 454 Criminal Justice Public Policies 5
Analysis of public policies designed to prevent and respond to crime. Critical examination of the controversies, interests and values that compete in the development of criminal justice policy.

CJ 456 The Computer and the Criminal Justice System 5
This non-programming course uses existing computer programs or program "packages" to solve statistical problems. The course consists of both lectures and laboratory experience at a computer terminal. Prerequisite: An introductory course in statistics, upper division standing and permission. Also offered as PSY 385.

CJ 458 Field Experience I 5

CJ 459 Field Experience II 5

Direct observation, supervised practical experience and academic study in a selected law enforcement agency of organization in the criminal justice system. Prerequisite: upper division standing and permission.

CJ 461 Senior Seminar 3 to 5

CJ 480 Interdisciplinary Core Course 3 to 5

Title and content change each term.

CJ 491 Special Topics 1 to 5

CJ 492 Special Topics 1 to 5

CJ 493 Special Topics 1 to 5

Prerequisite: upper division standing and permission.

CJ 496 Independent Study 1 to 5

CJ 497 Independent Study 1 to 5

CJ 498 Independent Study 1 to 5

Prerequisite: upper division standing and permission.

Economics

Barbara M. Yates, PhD, Chairperson

Objectives

The courses in economics are designed to acquaint students with the economy in which they live and to relate these courses to all other social sciences. The analytical approach in the economics courses provides the students with the tools of analysis necessary to solve problems and make decisions in the government and private sectors. The major courses cover topics such as efficient allocation of resources, economic fluctuations, income distribution, domestic and international finance, urban problems, labor relations and economic systems.

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

(See Albers School of Business and Economics section, page 213, for detailed information on degree program and the minor in economics.)

English

Stephen C. Rowan, PhD, Chairperson

Objectives

Interpreting texts requires the integration of many kinds of knowledge and the development of a wide variety of skills. In addition to what is known from disciplines such as history, psychology, philosophy and religious studies, the reader needs, for example, imaginative awareness, critical and analytical powers of interpretation and the ability to respond with sensitivity. Responding with texts of one's own requires skills of invention, arrangement, control of tone and mastery of style.

The English Department offers to its majors a program for learning how to understand, appreciate and use effectively the rich resources of the English language. Through its service to the core curriculum, the department helps all students to achieve these ends in some way.

The department thus contributes to the university's mission of developing persons through a liberal education, at the same time that it prepares its majors and others for service in many professions; among these are the law, social work, business, communications, teaching, politics and foreign service.

Degree Offered

Bachelor of Arts

Major Offered

English

Minor Offered

English

Policy for Honors Students

Graduates of the Honors Program who have completed all six of the literature courses in that program may earn an English minor by taking five more credits in English at the 300 or 400 level. They may earn an English major by taking 30 credit hours of English at the 300 or 400 level.

Teacher Education

The teacher preparation program is a graduate-level program only. Students planning to teach at the elementary or secondary school level must complete a bachelor's degree prior to beginning the teacher preparation program. For further information, contact the School of Education.

Second Endorsement for Teaching English

According to the Washington Administrative Code, teachers must meet minimum standards in a subject area in order to be qualified for a second endorsement in that subject area.

The standards for English include 24 quarter hours in the following

subject areas: American literature, English literature, comparative literature, linguistics or structure of language and writing/composition.

Bachelor of Arts Major in English

In order to earn the bachelor of arts degree with a major in English, students must complete 180 quarter credits, with a cumulative grade point average of 2.0 and a major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary Course	.....	3 to 5
Senior Synthesis	.....	3 to 5

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Fifty credits in English, including:

EN 255	Literary Studies I	5
EN 256	Literary Studies II	5
EN 257	Literary Studies III	5

Choose one directed elective from each of these areas:

Biblical/Classical or World	5
Medieval/Renaissance	5
18th/19th Century Studies	5

English Electives (300-level or above)	20
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Please Note: 1. See pages 89-93 and course codes listed below for courses that satisfy the directed elective requirements. 2. A required course may not be used to satisfy two requirements simultaneously. Moreover, requirements of the core (for example, EN 110, EN 120, interdisciplinary courses and senior synthesis) do not satisfy requirements for the English major.

Minor in English

In order to earn a minor in English, students must complete 35 credits in English, including:

EN 110	Freshman English	5
EN 120	Masterpieces of Literature	5
EN 255	Literary Studies I	5
EN 256	Literary Studies II	5
English Electives (300 to 400-level)		15

English Courses

Courses that fulfill requirements for the English major, the core curriculum and the second endorsement for teaching English are designated by the following code:

A	American
BC	Biblical/Classical and World
Co	Core
E	18th/19th Century Studies
L	Language
MR	Medieval/Renaissance
P	Pedagogy
W	Writing

EN 101 Basic Writing 5

Instruction and practice in basic writing skills with emphasis on generating, organizing and developing ideas in paragraphs and short essays. Emphasis, also, on control of sentence structure, punctuation and standard usage. Through focus on the writing process, the course aims to increase students' self-confidence as writers. Counts toward graduation, but does not satisfy core writing requirements. W

EN 110 Freshman English 5

Focuses on reading and writing as creative, interpretive and argumentative acts. Seeks to develop the rhetorical skills of invention, arrangement, style and correctness. W and Co

- EN 120 Masterpieces of Literature 5**
A study of narrative, drama and poetry, primarily of American and British authors. The student will learn to appreciate how these literary forms embody metaphoric, poetic and mythic ways of knowing; through writing assignments, the student will also learn how to respond to literature. Co
- EN 191 Special Topics 1 to 5**
EN 192 Special Topics 1 to 5
EN 193 Special Topics 1 to 5
- EN 201 Advanced Grammar and Vocabulary 5**
A study of traditional English grammar as a means of addressing issues of usage, structural correctness of the English sentence, clarity and rhetorical effect, and a study of the principles of word formation, usage and effective word choice. L
- EN 202 Advanced Grammar 3**
A study of traditional English grammar as a means of addressing issues of usage, structural correctness of the English sentence, clarity and rhetorical effect. May be taken in conjunction with EN 203. L
- EN 203 Vocabulary 2**
A study of the principles of word formation, usage and effective word choice. May be taken in conjunction with EN 202. L
- EN 255 Literary Studies 1: Forms of a Text 5**
EN 256 Literary Studies 2: Cultural Contexts 5
EN 257 Literary Studies 3: Texts and Versions 5
The following integrated, three-quarter sequence, required of English majors, develops the skills of literary analysis and interpretation of a variety of texts from different literary periods. In addition to teaching close reading of texts, the sequence raises theoretical questions about writers, readers, texts and contexts. A primary aim of the sequence is to develop the students' ability to become independent inquirers and interpreters of texts, both orally and in writing.
- EN 255 Literary Studies 1: The Writer, the Reader and the Text**
Explores the writer's choice of formal features that shape the text and create a reader response. Students will develop the skills of analysis and interpretation through close readings of texts and communicate their insights in class discussion and writing assignments, which will include a formal analytical-interpretive essay.
- EN 256 Literary Studies 2: Texts in Context**
Examines texts in the context of a range of historical and cultural situations that enable students to uncover ways in which both writer and reader are situated in time. In preparation for the documented inquiry paper, the major writing project in the course, students will also develop basic library skills and the skill of reading the critical essay.

EN 257 Literary Studies 3: Studies in Intertextuality

By examining the power of influence and the conventions of allusion, genre and archetype, Studies in Intertextuality explores how texts are shaped by the network of other texts. Writing assignments include a formal paper of intertextual analysis and an imaginative transformation of a literary text.

EN 291	Special Topics	1 to 5
EN 292	Special Topics	1 to 5
EN 293	Special Topics	1 to 5

EN 305 Writing Fiction 5

Students will learn the theory, techniques and practice of writing short stories by using their imaginations actively in order to present life and characters through fiction. W

EN 308 Advanced Writing: Argument and Persuasion 5

Argumentative writing for a public forum on issues of policy or other socially significant issues. Study of the rhetoric of argumentation with attention to the use of evidence, the internal logic of argument, and the appeal to an audience's sympathies. Development of a flexible prose style that can be adapted to a variety of rhetorical situations and audiences. Prerequisite: EN 110 and junior standing. W

EN 316 Writing Poetry 5

Study and practice in the modes and techniques of poetic composition. W

EN 317 Mythology 5

The study of the myths of ancient Greece as well as other cultures in order to understand their significance and meaning in the original cultural context and their enduring, archetypal implications. BC

EN 319 Children's Literature 5

Historical contexts and interpretations of folk and fairy tales as well as the study of traditional and contemporary modes of narrative for young readers. The course includes interpretive and creative writing assignments.

EN 320 The Bible as Literature 5

A study of the Jewish and Christian scriptures with emphasis on their status as texts which engage and shape a reader's response. Possible works to be studied include: Genesis, Exodus, 1 and 2 Samuel, Job, Isaiah, one of the gospels, Romans, and Revelation. BC

EN 323 The Literature of Greece and Rome 5

A study of the literature of the classical world, with emphasis on Greece and Rome, depending on the instructor. Texts may include such works as *The Odyssey*, *The Oresteia*, *Oedipus Rex*, *Antigone*, *The Trojan Women* and *Lysistrata* for the Greeks, and *The Aeneid*, selected plays by Plautus, the essays of Cicero and the satires of Juvenal for the Romans. BC

- EN 326 Dante's Divine Comedy 5**
A study of *The Divine Comedy: Inferno, Purgatorio, and Paradiso*, with emphasis on both its peculiarly medieval synthesis of thought and on its contemporary appeal as a "classic." MR
- EN 328 Chaucer 5**
A study of Chaucer's *Canterbury Tales* and other works such as his short poems or the *Troilus*. The emphasis is on Chaucer's craft as a storyteller, his creative use of sources, and the range of his wit. MR
- EN 330 Shakespeare 5**
A study of selected plays and sonnets of Shakespeare with special attention to his craft as a playwright and to contemporary approaches of criticism. MR
- EN 331 Shakespeare in Performance 5**
A study of Shakespeare's plays with emphasis on versions available both on film and in the theatre, especially those presented in Seattle and at the Ashland Festival. Emphasis, too, on student performance of the plays. Students will have the option of attending plays at Ashland or of doing an alternative project. MR
- EN 335 17th Century Literature: The Rhetoric and Poetics of Modern Revolutions 5**
The 17th century, a turbulent time in English history, witnessed cultural shifts in politics, religion, economics and education. This course will study both how writers were shaped by their culture and how they shaped it in turn. MR
- EN 338 Restoration and 18th Century Literature 5**
A study of the major British and European poets, satirists, and novelists between 1660 and 1800. Readings will be selected from such authors as Dryden, Swift, Pope, Johnson, Montagu, Fielding, DeFoe, Burney, Voltaire and Moliere. E
- EN 340 British Romanticism 5**
An analysis and discussion of the major works of the Romantic period with emphasis on the poetry of Wordsworth, Coleridge, Byron, Shelley and Keats. E
- EN 343 The 19th Century English Novel 5**
A survey of the novel in a most flourishing period from Austen to Hardy. The works studied may include such authors as Dickens, Thackeray, the Brontes, Eliot and Trollope. E
- EN 346 Literary Realism 5**
Readings in the Realistic movement. Selections will vary but may include such authors as Twain, James, Flaubert, Tolstoy, Balzac, and Zola. E

EN 349 Late 19th Century Literature 5

A study of 19th century literature in the context of its times. The focus is primarily on British writers such as Mill, Huxley, Arnold, Newman, Tennyson and Browning, but, by way of comparison, other American or Continental writers may be introduced. E

EN 353 Modern Drama 5

An introduction to dramatists from 1890 to approximately 1950, whose works expressed and challenged the spirit of their age. The playwrights to be studied might include Ibsen, Shaw, Wilde, Chekhov, O'Neill, Pirandello and Williams.

EN 358 Modernism in Art and Literature 5

A study of the movement of Modernism as expressed in Western art and literature from 1880 to approximately 1950.

EN 360 World Literature 5

An introduction to the important questions, concepts and methods of world literature, including the study of genres, themes, modes and symbols. Transcending the boundaries of national literatures, the course explores the relationship of literature to art, philosophy, history and religion. The problem of literature in translation also receives attention. BC

EN 363 The Mind and Spirit of Asia 5

A study of the philosophies and value systems which influence the literary works of the people of Asia. Attention will be drawn to the parallels between Asian literature and the literature of the West in order to reveal the presence of certain universal values. BC

EN 366 Literature of the Emerging Nations 5

In-depth analyses and interpretations of representative works from developing countries such as India, Pakistan, and countries of Africa and Latin America. Events that generate the literature will be highlighted, as well as the impact of such creativity on world literature. BC

EN 369 Latin American Literature 5

Studies in the poetry and prose of Spanish-speaking Latin American countries as that literature expresses the history and native genius of Latin American culture, especially in the context of the interrelation between colonizers and colonized. Writers to be studied include such authors as Borges, Vargas Llosa, Garcia Marquez, Neruda and Fuentes. BC

EN 370 Myths Americans Live By 5

A study of the formative myths of American culture, such as the Promised Land and the Land of Plenty, as seen in literature from colonial times to the present day. Special emphasis on the role of myth in defining and uniting a people who are culturally diverse. A

- EN 373 American Romanticism 5**
A study of the golden day of American literature, with emphasis on the Transcendentalists Emerson and Thoreau, the "barbaric" Walt Whitman, and the brooding spirits of Hawthorne and Melville. A
- EN 375 American Novelists 5**
A study of the American contribution to the novel up to approximately 1950, with emphasis on the cultural diversity of the writers. Depending on the instructor, novelists may include Melville, Hawthorne, Henry James, Cather, Hemingway, Faulkner, Ellison, Baldwin, Oates and others. A
- EN 377 American Poets 5**
A study of the American spirit as sensed through the words of its poets. Special emphasis on Americans' problematic response to nature and to the nation's history from Colonial times to the present day. A
- EN 379 Narrative Experiments in the Anglo-American Novel 5**
A study of 20th century experimental novels by British and American writers such as Joyce, Wolfe, Faulkner, Stein and others. A
- EN 383 20th Century American Literature 5**
A survey of the principal authors and currents of thought from 1900 to the present. The course will include novels, poetry and essays exemplifying such movements as realism, imagism, existentialism, southern agrarianism and post modern experimentalism. A
- EN 388 Film and Literature 5**
An introductory study of the basic principles and techniques of film art, with emphasis on the complementary contributions of the screenwriter, the director, the cinematographer and the editor.
- EN 390 Tutoring Writing: Theory and Practice 5**
Practical training for tutors. Study of theories of composition and the role of tutors within the writing process. Strategies for diagnosing writing problems, mastering effective conferencing skills to help writers reduce anxiety, generate ideas, solve organizational problems, and develop a fluent, error-free prose style. P
- EN 391 Special Topics 1 to 5**
EN 392 Special Topics 1 to 5
EN 393 Special Topics 1 to 5
- EN 400 History of the English Language 5**
A study of the historical development of English, also serving as an introduction to linguistics: phonology, morphology, syntax and lexicon in their historical and literary contexts. L

- EN 405 Expressive Writing 5**
Strategies and techniques for writing the personal essay: autobiography, reflection, and other kinds of personal narrative. Special attention to development of prose style and authentic voice. Prerequisite: EN 110 and junior standing. Permission of the instructor is required. W
- EN 410 Teaching Composition in the Schools 5**
Theory and practice of teaching composition. Design of writing assignments and mastery of classroom strategies to encourage writing as a process. Practice in the marking and evaluation of essays and conducting one-on-one or small-group conferences. Examination of competing pedagogical theories as related to the development of writing skills. Designed primarily for prospective language arts teachers, K-12. P
- EN 418 Contemporary Literature 5**
A study of contemporary writers and their challenging experiments with prose fiction. Authors such as Hawkes, Lessing, Kundera, Gordimer and Calvino will be studied.
- EN 423 Irish Literature 5**
A study of major figures of the Irish Renaissance and their cultural background in the late 19th century; writers such as Yeats, Joyce, O'Casey and Synge will be studied.
- EN 425 The Russian Novel 5**
Historical influences on the development of the form and content of the Russian novel from the Classical period of Soviet literature. Representatives of the Classical period include Tolstoy and Dostoevsky; representatives of the post-revolutionary period include Gladkov, Bulgakov, Pasternak, Solzhenitsyn and Trifonov. BC
- EN 427 Eastern Literature 5**
An introduction to the literatures of China and Japan with a strong emphasis on the influence of Eastern religions and philosophies on the aesthetic forms. The historical significance of dynastic rule and the influences of Western literature and culture on the literary output of the 19th and 20th centuries is also highlighted. BC
- EN 430 Japanese Drama 5**
A study of the development of the major Japanese theatrical forms, together with a comparative examination of Greek and Elizabethan tragedy. BC
- EN 435 Short Story Literature 5**
A study of the elements and historical development of the short story in its variety of types and emphases.
- EN 440 Women and the Creative Imagination 5**
Through theoretical texts, literature, art and films, this course explores the creative imagination of women as well as the perceptions by which women have been defined and define themselves. Recommended elective for the Women's Studies Minor.

- EN 475 Internship 1 to 5**
 Supervised service in which students apply and develop their skills as English majors working for a business or non-profit institution or agency. Open only to English majors with the permission of the director of interns. Graded CR/E. Prerequisites: junior or senior standing and 20 credits of upper-level English.
- EN 480 Interdisciplinary Course 3 to 5**
 The exploration of contemporary issues and problems by means of several disciplines, including language and literature. Topics will include "language and propaganda", "love and marriage" and "literature and society." Topics for each year are available through the English Department. Co
- EN 490 Literary Theory 5**
 Depending on the instructor, the course examines the texts of historical and contemporary critical theory and their influence on the writing and reading of literature. Other issues, such as the nature of art, beauty and literature or the relationship between a society and its literature may also be discussed. Recommended especially for students preparing for advanced study.
- EN 491 Special Topics 1 to 5**
EN 492 Special Topics 1 to 5
EN 493 Special Topics 1 to 5
- EN 495 Senior Synthesis 5**
 Through the study of a selected theme, the learning of a liberal education, especially through literature, is applied to questions which prepare students for leadership and professional service. Themes such as "points of transition" or "freedom and community" will be offered in different years. Core option, phase three. Open to all qualified seniors. Co
- EN 496 Independent Study**
EN 497 Independent Study
EN 498 Independent Study

Fine, Applied and Performing Arts

William J. Dore, MA, Chairperson

Objectives

Through its degree programs and its service to the university, the Fine, Applied and Performing Arts Department provides a unique "living out" of the central values of a liberal education. Its students, through individual courses and major curricula, receive significant training in both the theory and practice of the arts. Consciously avoiding the one-dimensional formation of either a strictly conservatory or an exclusively academic model of arts education, each major offers students a distinctive opportunity to integrate serious reflections and intense participation, providing a well-rounded experience of each discipline.

Degree Offered

Bachelor of Arts

Majors Offered

Fine Arts/Art

Fine Arts/Drama

Minors Offered

Studio Art

Art History

Drama/Production or Performance

Music

Non-Major Students

As elective choices, courses through the 300 level are open to students in other fields. Many complement the work in other majors (e.g. art history of English, history, philosophy or religious studies) and the department cordially welcomes all members of the school community. Prerequisites, however, should be noted where they exist.

Teacher Education

The teacher preparation program is a graduate level program only. Students planning to become elementary teachers or secondary art or drama teachers must first complete a bachelor's degree and must contact the School of Education for advising. Second endorsements are also available in art and drama.

Bachelor of Arts

Major in Fine Arts/Art

In order to earn the bachelor of arts with a major in fine arts/art, students must complete 180 quarter credits, with a cumulative grade point average of 2.0 and a major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis (satisfied by ART 499)	.....

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty credits in fine arts, including:

FA 101	Arts and Ideas	5
ART 221	Drawing	2
ART 222	Drawing	2
ART 223	Drawing	2
ART 231	Design-Emphasis: Two Dimensions	2
ART 232	Design-Emphasis: Color Theory	2
ART 233	Design-Emphasis: Three Dimensions	2

ART 311	Art History-Prehistoric through Gothic	5
ART 312	Art History-Renaissance through 20th Century	5
ART 321	Advanced Drawing	3
ART 334	Printmaking-Emphasis: Relief	2
ART 346	Painting	2
ART 351	Sculpture	2
ART 499	Senior Thesis/Exhibit	3
ART	Electives	11

Choose one of the following three concentrations:

Printmaking

ART 335	Printmaking-Emphasis: Stencil	2
ART 336	Printmaking-Emphasis: Planographic	2
ART 434	Advanced Printmaking	3
ART 435	Advanced Printmaking	3

Painting

ART 347	Painting	2
ART 348	Painting	2
ART 446	Advanced Painting	3
ART 447	Advanced Painting	3

Sculpture

ART 352	Sculpture	2
ART 353	Sculpture	2
ART 451	Advanced Sculpture	3
ART 452	Advanced Sculpture	3

Bachelor of Art Major in Fine Arts/Drama

In order to earn the bachelor of art degree with a major in fine arts/drama, students must complete 180 quarter credits, with a cumulative grade point average of 2.0 and a major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5

Theology and Religious Studies Phase III (300-399)	5
Interdisciplinary	3 to 5
Senior Synthesis	3
See detailed information on the core curriculum, beginning on page 53.	

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty-five credits in fine arts, including:

FA 102	Introduction to Theatre	5
DR 100	Voice and Diction	3
DR 210	Pantomime	5
DR 222	Acting	3
DR 264	Stage Craft	3
DR 265	Lighting	3
DR 266	Stage Costuming	3
DR 267	Makeup	2
DR 330	Theatre History I	2
DR 331	Theatre History II	2
DR 332	Theatre History III	2
DR 354	Representative Plays I	3
DR 355	Representative Plays II	3
DR 356	Representative Plays III	3
DR 420	Directing	3
DR 470	Theatre Organization and Management	2
DR	Electives	10

Choose one of the following two tracks:

Performance Track

DR 215	Auditioning Techniques	2
DR 221	Improvisation	3
DR 422	Advanced Acting	3

Production Track

DR 280	Stage Management	2
DR 364	Scene Design	3
DR 366	Costume History	3

Please Note: All majors must fulfill a participation requirement each quarter by working in some area on every production.

Minor in Studio Art

In order to earn a minor in studio art, students must complete 30 credits in fine arts, including:

FA 101	Arts and Ideas	5
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Choose one of the following two courses:

ART 311	Art History (Prehistoric through Gothic)	5
ART 312	Art History (Renaissance through 20th Century)	5

Electives in consultation with an art adviser	20
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Minor in Art History

In order to earn a minor in art history, students must complete 30 credits in art history, including:

ART 311	Art History (Prehistoric through Gothic)	5
ART 312	Art History (Renaissance through 20th Century)	5
Independent study/methods		5
Electives in consultation with an art adviser		15

Minor in Drama/Production or Performance

In order to earn a minor in drama/production or performance, students must earn 30 credits in fine arts, including:

FA 102	Introduction to Theatre	5
DR 210	Pantomime	5
Electives in consultation with a drama adviser		20

Minor in Music

In order to earn a minor in music, students must complete 30 credits in music, including:

MU 101	Music Basics I	3
MU 102	Music Basics II	3
MU 103	Music Basics III	3
MU 201	Music History I	3
MU 202	Music History II	3
MU 203	Music History III	3
Music ensemble		6
Music lessons		6

Fine Arts Courses

FA 101	Arts and Ideas	5
A humanistic approach to the creative arts: painting, sculpture, architecture. An examination of the great leaps of imagination.		
FA 102	Introduction to Theatre	5
Introduction to drama as an art form. An historical approach with emphasis on major periods, plays and philosophies.		
FA 103	World Music	5
Introduction to music as an art and as a literature, with emphasis upon historical and cultural correlations.		
FA 120	Experiencing the Arts	5
Aesthetics-based exploration of the arts, focused on enhancing ability to experience and make decisions about aesthetic qualities in man-made and natural objects and events in the environment. Interdisciplinary in art, music and drama. Lectures and practical experience. Core requirement for freshmen.		
FA 191	Special Topics	1 to 5
FA 192	Special Topics	1 to 5
FA 193	Special Topics	1 to 5

Art Courses

ART 221	Drawing	2
ART 222	Drawing	2
ART 223	Drawing	2
ART 231	Design	2
Emphasis: Two Dimensions		
ART 232	Design	2
Emphasis: Color Theory		
ART 233	Design	2
Emphasis: Three Dimensions		
ART 291	Special Topics	1 to 5
ART 292	Special Topics	1 to 5
ART 293	Special Topics	1 to 5
ART 311	Art History	5
Prehistoric through Gothic art		
ART 312	Art History	5
Renaissance through 20th-Century art		
ART 313	Art History	5
World Traditions		

ART 321	Advanced Drawing	3
Study of the human form, special problems in group composition. Prerequisite: ART 221, ART 222, ART 223, or permission of instructor. Maximum nine credits.		
ART 334	Printmaking	2
Emphasis: Relief. Prerequisites: ART 221 and ART 231 or permission of instructor.		
ART 335	Printmaking	2
Emphasis: Stencil. Prerequisite: ART 334 or permission of instructor.		
ART 336	Printmaking	2
Emphasis: Planographic. Prerequisite: ART 335 or permission of instructor.		
ART 346	Painting	2
Prerequisites: ART 221 and ART 231 or permission of instructor.		
ART 347	Painting	2
Prerequisite: ART 346 or permission of instructor.		
ART 348	Painting	2
Prerequisite: ART 347 or permission of instructor.		
ART 351	Sculpture	2
Prerequisites: ART 221 and ART 233, or permission of instructor.		
ART 352	Sculpture	2
Prerequisite: ART 351 or permission of instructor.		
ART 353	Sculpture	2
Prerequisite: ART 352 or permission of instructor.		
ART 391	Special Topics	1 to 5
ART 392	Special Topics	1 to 5
ART 393	Special Topics	1 to 5
ART 434	Advanced Printmaking	3
The principles and practices of rendering in graphic media; complex composition; advanced problems. Prerequisite: ART 336 or permission of instructor.		
ART 435	Advanced Printmaking	3
Prerequisite: ART 434		
ART 436	Advanced Printmaking	3
Prerequisite: ART 435		
ART 446	Advanced Painting	3
Experimental research toward the development of a creative and personalized idiom. Synthesis and research. Prerequisite: ART 348 or permission of instructor.		
ART 447	Advanced Painting	3
Prerequisite: ART 446		
ART 448	Advanced Painting	3
Prerequisite: ART 447		
ART 451	Advanced Sculpture	3
Prerequisite: ART 353 or permission of instructor.		

ART 452	Advanced Sculpture	3
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Prerequisite: ART 451

ART 453	Advanced Sculpture	3
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ART 480 Interdisciplinary Core Course 3 to 5

Title and content change each term.

ART 491 Special Topics 1 to 5

ART 492	Special Topics	1 to 5
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ART 493	Special Topics	1 to 5
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ART 496	Independent Study	1 to 5
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ART 497	Independent Study	1 to 5
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ART 498	Independent Study	1 to 5
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Prerequisite: Advanced standing in art and permission of instructor.

ART 499	Senior Thesis and Exhibit	3
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Designed for graduating art majors, a summation of a body of work accomplished during their studies, evaluation through discussion. Public exhibition of work. Compilation of a professional portfolio and resume.

Drama Courses

DR 100 **Voice and Diction** **3**

Development of the speaking voice as an instrument of communication on or off-stage. Exercises in relaxation, breathing, breath control, voice production, phonetics. Offered every other year.

DR 210 Pantomime 5

Instruction in mime to express inner and outer worlds through the body. Exercises for development of imagination, coordination and body awareness.

DR 215 Auditioning Techniques 2

The theory and practice of auditioning in various situations and how to handle them. Preparing and performing audition pieces. Offered every other year.

DR 221 Improvisation 3

Living in free form under imaginary circumstances. Group exercise and improvisations for development of sensory perception and imagination.

DR 222 Acting 3

Study and practice in modern realistic acting: preparation, presentation and criticism.

DR 230 Video Profiles 5

Theory and practice in the use of video before and behind the camera. Exercises in group discussions, panels, demonstrations, interviews.

A study of fashion, costume and garments and their relationship to the social history of civilization from the ancients to the present. Offered every other year.

DR 391	Special Topics	1 to 5
DR 392	Special Topics	1 to 5
DR 393	Special Topics	1 to 5
DR 400	Ensemble	1 to 5
DR 401	Ensemble	1 to 5
DR 402	Ensemble	1 to 5
DR 404	Playwriting	5
Study and practice in the form and method of script construction.		
DR 420	Directing	3
Theory and practice in principles of directing various styles of drama. Offered every other year.		
DR 422	Advanced Acting	3
Study and practice in classical styles of comedy and tragedy; preparation, presentation and criticism. Prerequisite: DR 100 and DR 222 or permission of the instructor. Offered every other year.		
DR 425	Drama Internship	1 to 12
Apprenticeship in specific area of study in the community. Drama majors only. Permission.		
DR 470	Theatre Organization and Management	2
Establishing and operating a theatre, including planning, budgeting, accounting, staffing, production selection, promotion, ticket sales and fund raising. Offered every other year.		
DR 480	Interdisciplinary Core Course	3 to 5
Title and content change each term.		
DR 491	Special Topics	1 to 5
DR 492	Special topics	1 to 5
DR 493	Special Topics	1 to 5
DR 496	Independent Study	1 to 5
DR 497	Independent Study	1 to 5
DR 498	Independent Study	1 to 5

Music Courses

This program offers to Seattle University students an opportunity to gain insights and skills in four aspects of the field: the experience of ensemble participation, the achievement of performance skills, the knowledge of pathways in music history, and the application of creativity in composition and arranging. There is a private music lesson fee. (See cost page). All courses which may be taken more than once are indicated with an asterisk (*) next to the credits.

MU 101	Music Basics I	3
Examination of the elements of music. The study of melody and creative writing. No prerequisites. Fall quarter only.		
MU 102	Music Basics II	3
Chording and accompaniment. The study of chord types and progressions used in songs. Applicable to both popular and classical music. Winter quarter only.		
MU 103	Music Basics III	3
A practical approach to arranging harmonized melodies for various vocal and instrumental ensembles. Spring quarter only.		
MU 110	Piano Lessons	*1 to 2
Mandatory CR/E; maximum 12 credits.		
MU 111	Voice Lessons	*1 to 2
Mandatory CR/E; maximum 12 credits. Prerequisite: MU 140 or permission of instructor.		
MU 118	String Instrument Lessons	*1 to 2
Violin, viola, cello, contrabass. Mandatory CR/E; maximum 12 credits.		
MU 119	Wind Instrument Lessons	*1 to 2
Flute, clarinet, saxophone, oboe, bassoon. Mandatory CR/E; maximum 12 credits.		
MU 123	Guitar Lessons	*1 to 2
Mandatory CR/E; maximum 12 credits.		
MU 124	Brass Instrument Lessons	*1 to 2
Trumpet, French horn, trombone. Mandatory CR/E; maximum 12 credits.		
MU 125	Organ Lessons	*1 to 2
Mandatory CR/E; maximum 12 credits.		
MU 129	Percussion Lessons	*1 to 2
Mandatory CR/E; maximum 12 credits.		
MU 130	University Chorale	*1
Maximum 12 credits.		
MU 131	Chamber Singers	*1
Maximum 12 credits.		
MU 135	Instrumental Ensemble	*1
Maximum 12 credits.		
MU 140	Beginning Voice Class	*1
MU 141	Beginning Guitar Class	*1
MU 142	Electronic Piano Class	*1
Maximum three credits.		

MU 201	Music History I	3
MU 202	Music History II	3
MU 203	Music History III	3

Topical studies in music history announced on a yearly basis. Quarterly topics will range from history of jazz, Amadeus, Beethoven symphonies, opera, to history of popular music.

MU 291	Special Topics	1 to 5
MU 292	Special Topics	1 to 5
MU 293	Special Topics	1 to 5

MU 310	Piano Lessons	*1 to 2
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Mandatory CR/E, maximum 12 credits.

MU 311	Voice Lessons	*1 to 2
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Mandatory CR/E, maximum 12 credits.

MU 318	String Instrument Lessons	*1 to 2
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Mandatory CR/E, maximum 12 credits.

MU 319	Wind Instrument Lessons	*1 to 2
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Mandatory CR/E, maximum 12 credits.

MU 323	Guitar Lessons	*1 to 2
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Mandatory CR/E, maximum 12 credits.

MU 324	Brass Instrument Lessons	*1 to 2
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Mandatory CR/E, maximum 12 credits.

MU 325	Organ Lessons	*1 to 2
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Mandatory CR/E, maximum 12 credits.

MU 374	World Music Cultures	5
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A socio-cultural survey and analysis of the music of Africa, the Middle East, Asia, Oceania, and Latin America.

MU 391	Special Topics	1 to 5
MU 392	Special Topics	1 to 5
MU 393	Special Topics	1 to 5

MU 480	Interdisciplinary Core Course	3 to 5
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Title and content change each term.

MU 491	Special Topics	1 to 5
MU 492	Special Topics	1 to 5
MU 493	Special Topics	1 to 5

MU 496	Independent Study	1 to 5
MU 497	Independent Study	1 to 5
MU 498	Independent Study	1 to 5

Foreign Languages

James L. Stark, DA, Chairperson

Objectives

The foreign language programs in French, German, Japanese, Spanish, Latin and Greek all recognize academic, cultural and practical purposes:

Academic

Foreign language study aims at broadening the scope of the student's intellectual development by affording both a facility in foreign languages and knowledge of other cultures. This end is achieved through the major programs in foreign languages or double majors which couple a major or minor in a foreign language with a major in another field.

Cultural

Learning about another culture and civilization — its history, geography, literature and art — through the medium of its language leads to a better understanding of one's self and the world in which we live. To achieve this goal, all foreign languages are taught in their cultural context. Courses in French, German, Spanish and Japanese are taught in the vernacular.

Practical

Career opportunities involving foreign languages are expanding. For the university student with a specialization in a particular field and with proficiency in foreign languages, openings exist in the following fields: teaching, social work, transportation, military, foreign service, international law, engineering, librarianship, foreign trade and international business. In addition, many graduate programs require proficiency in foreign language.

Degree Offered

Bachelor of Arts

Majors Offered

Foreign Languages/French
Foreign Languages/German
Foreign Languages/Spanish

Minor Offered

Foreign Languages/French
Foreign Languages/German
Foreign Languages/Spanish

Teacher Education

Those students planning to become elementary or secondary foreign language teachers should major in one of the following languages: French, German, or Spanish. A 24 credit second endorsement is also available in each of these languages. Students planning to become teachers must contact the School of Education for advising.

International Studies

A foreign languages concentration is also offered as an option in the international studies major. Please see International Studies section.

Intensive Programs

Intensive programs offered in some languages during the summer and fall allow the student to complete the first-year basic language course (15 credits) in one quarter.

Credit by Examination and Waiver

The Foreign Languages Department reserves the right to waive specific courses for students who demonstrate, by examination, 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.

Study Abroad

The foreign languages department offers French-in-France in Grenoble, France. In an intensive program, students may complete a full college year of French language on campus fall term, with winter and spring spent abroad studying language, culture and civilization under the direction of Seattle University faculty.

There is also a Latin American Studies program offered spring quarter at the Universidad Catolica Andres Bello in Caracas, Venezuela. Students choose from two levels of Spanish language instruction, with additional course work taught in English. A community service project is part of the program.

The university has established reciprocal exchange programs with international universities. Before attending Karl Franzens Universitat in Graz, Austria, a student must have at least two years of college-level German, because integration into the Austrian university means that all course work will be in German. An exchange program with the comparative culture faculty at Sophia University in Tokyo, Japan, where coursework is in English, allows direct enrollment with one year of previous Japanese language. Students from any major may apply for these programs which allow continued enrollment and financial aid benefits at Seattle University.

Bachelor of Arts

Major in Foreign Languages/French

In order to earn the bachelor of arts degree with a major in foreign languages/French, students must complete 180 quarter credits, with a cumulative grade point average of 2.0 and a major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or higher)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Fifty-five credits in French, including:

FR 115	French Language I	5
FR 125	French Language II	5
FR 135	French Language III	5
FR 215	French Language IV	5
FR 225	French Language V	5
FR 235	French Language VI	5
FR 315	French Culture and Civilization	5
FR 325	Introduction to French Literature	5
FR	Electives (400 level)	15

Please Note: Students who waive elementary language courses may meet the 55 credit requirement by substituting approved courses in other disciplines that relate to their foreign language studies or by taking courses in another language.

Bachelor of Arts

Major in Foreign Languages/German

In order to earn the bachelor of arts degree with a major in foreign languages/German, students must complete 180 quarter credits, with a cumulative grade point average of 2.0 and a major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101,107 or higher)	
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Fifty-five credits in German, including:

GR 115	German Language I	5
GR 125	German Language II	5
GR 135	German Language III	5
GR 215	German Language IV	5
GR 225	German Language V	5
GR 235	German Language VI	5
GR 315	German Culture and Civilization	5
GR 325	Introduction to German Literature	5
GR	Electives (400 level)	15

Please Note: Students who waive elementary language courses may meet the 55 credit requirement by substituting approved courses in other disciplines that relate to their foreign language studies or by taking courses in another language.

Bachelor of Arts

Major in Foreign Languages/Spanish

In order to earn the bachelor of arts degree with a major in foreign languages/Spanish, students must complete 180 quarter credits, with a cumulative grade point average of 2.0 and a major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or higher)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Fifty-five credits in Spanish, including:

SP 115	Spanish Language I	5
SP 125	Spanish Language II	5
SP 135	Spanish Language III	5
SP 215	Spanish Language IV	5
SP 225	Spanish Language V	5
SP 235	Spanish Language VI	5
SP 315	Spanish Culture and Civilization	5
SP 325	Introduction to Spanish Literature	5
SP	Electives (400 level)	15

Please Note: Students who waive elementary language courses may meet the 55 credit requirement by substituting approved courses in other disciplines that relate to their foreign language studies or by taking courses in another language.

Minor in Modern Languages

To earn a minor in modern languages (either French, German or Spanish), students must complete 35 credits in one modern language, including:

115	Language I	5
125	Language II	5
135	Language III	5
215	Language IV	5
225	Language V	5
235	Language VI	5
315	Culture and Civilization	5

Modern Language Courses

French Courses

FR 115	French Language I	5
FR 125	French Language II	5
FR 135	French Language III	5
FR 215	French Language IV	5
FR 225	French Language V	5
FR 235	French Language VI	5

An intuitive approach to understanding, speaking, reading and writing French. These courses constitute a systematic, programmed study of the French language and culture. All of the French language courses are taught in French.

FR 315	French Culture and Civilization	5
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An introduction to French culture and civilization with emphasis on the basic traditions and structures of French society.

FR 325	Introduction to French Literature	5
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A general study of literary French done in the context of a survey of the major texts, authors and movements in French literature with emphasis placed on the theories and techniques of literary analysis.

FR 415	French Literature and Culture, 19th Century	5
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A study of the literary movements in 19th century French literature based on an historical approach to representative authors and works.

FR 425	French Literature and Culture, 17th Century	5
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A study of the development of 17th century French Classicism as it is reflected in the major works of the period.

FR 435	French Literature and Culture, 18th Century	5
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A survey of the major works of the French Enlightenment as it manifests itself in the scientific, philosophic, political and ethical thinking of the 18th century.

FR 445 French Literature and Culture, 5
20th Century

A survey of 20th century French literature and culture which reflects the social and intellectual trends in modern France.

FR 450 Methodology of Teaching French 5

An overview of the various methods and approaches currently being used to teach French.

FR 452 Language Development/Modern French 5

An in-depth study of the various levels of modern French with emphasis on the transformation brought about by current social, political and cultural changes.

FR 463 Contemporary France 5

A study of contemporary French culture involving a survey of texts in French which reflect the issues and changes currently being discussed and debated in modern France.

German Courses

GR 115 German Language I 5

GR 125 German Language II 5

GR 135 German Language III 5

GR 215 German Language IV 5

GR 225 German Language V 5

GR 235 German Language VI 5

An intuitive approach to understanding, speaking, reading, and writing in German. These courses constitute a systematic, programmed study of the German language and culture. All German language courses are taught in German.

GR 315 German Culture and Civilization 5

An introduction to the culture and civilization of German speaking countries with emphasis placed on the importance of geographical, political and historical factors in their development.

GR 325 Introduction to German Literature 5

A general introduction to the major themes of German literature presented from a historical point of view. Reading and analysis of various representative literary genres.

GR 416 German Literature and Culture, 5
Beginnings to the 18th Century

A study of the German tradition from the earliest writings up to the 18th century.

GR 426 German Literature and Culture, 5
18th Century

An analysis of the major works of German literature integrated with the history trends and philosophical currents of 18th century Germany.

GR 431 German Literature and Culture, 5
19th Century

An integrative study of the historical, philosophical and literary diversity of the German-speaking world as it manifests itself in the major literary works of the 19th century.

GR 436 German Literature and Culture, 5
20th Century

A survey of 20th century German literature and culture which reflects the social, political and intellectual trends of modern Germany.

GR 440 German Classicism and Romanticism 5

A study of the origins, characteristics and major literary expressions of these two important German literary movements.

GR 446 Literary Trends of Modern Austria 5
and Germany

A study of the current trends in modern literature in German-speaking countries.

GR 450 Methodology of Teaching German 5

An overview of the various methods and approaches currently being used to teach German.

GR 452 Language Development/Modern German 5

An in-depth study of modern German with emphasis on advanced vocabulary and grammar concepts. Analysis of contemporary works which reflect the changes taking place in modern Germany.

Japanese Courses

JA 115 Japanese Language I 5

JA 125 Japanese Language II 5

JA 135 Japanese Language III 5

JA 215 Japanese Language IV 5

JA 225 Japanese Language V 5

JA 235 Japanese Language VI 5

An intuitive approach to understanding, speaking, reading, and writing in Japanese. These courses include practice in reading and writing, kanji, hiragana, and katakana.

Spanish Courses

SP 115	Spanish Language I	5
SP 125	Spanish Language II	5
SP 135	Spanish Language III	5
SP 215	Spanish Language IV	5
SP 225	Spanish Language V	5
SP 235	Spanish Language VI	5

An intuitive approach to understanding, speaking, reading, and writing Spanish. These courses constitute a systematic, programmed study of the Spanish language and culture. All of the Spanish language courses are taught in Spanish.

SP 315	Spanish Culture and Civilization	5
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An introduction to Spanish culture and civilization with emphasis on the historical evolution of modern Spain.

SP 325	Introduction to Spanish Literature	5
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A general study of literary Spanish done in the context of a survey of representative authors and works.

SP 416	Spanish Literature and Culture, 19th Century	5
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A study of the literary movements in Spanish literature of the 19th century based on an historical approach to major authors and works.

SP 426	Spanish Literature and Culture, 20th Century	5
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A survey of 20th century Spanish literature and culture which reflects the social, political and intellectual trends in modern Spain.

SP 450	Methodology of Teaching Spanish	5
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An overview of the various methods and approaches currently being used to teach Spanish.

SP 452	Language Development/Modern Spanish	5
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An in-depth study of the various levels of modern Spanish with emphasis on advanced vocabulary and grammar concepts.

SP 463	Contemporary Spain	5
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A study of contemporary Spanish culture involving a survey of texts in Spanish which reflect the issues and changes currently being discussed and debated in contemporary Spanish society.

Classical Language Courses

Greek Courses

GK 101	Greek Language I	5
GK 102	Greek Language II	5

GK 103	Greek Language III	5
Intensive study of Attic grammar with elementary reading and composition. Greek 103 includes reading selections from classical Attic and Koine (New Testament) authors.		

Latin Courses

LT 101	Latin Language I	5
LT 102	Latin Language II	5
LT 103	Latin Language III	5
Intensive study of grammar with elementary reading and composition. Latin 103 includes selections from classical authors.		

Special Topic and Independent Language Courses

FL 191	Special Topics	1 to 5
FL 192	Special Topics	1 to 5
FL 193	Special Topics	1 to 5
FL 196	Independent Study	1 to 5
FL 197	Independent Study	1 to 5
FL 198	Independent Study	1 to 5
FL 291	Special Topics	1 to 5
FL 292	Special Topics	1 to 5
FL 293	Special Topics	1 to 5
FL 296	Independent Study	1 to 5
FL 297	Independent Study	1 to 5
FL 298	Independent Study	1 to 5
FL 391	Special Topics	1 to 5
FL 392	Special Topics	1 to 5
FL 393	Special Topics	1 to 5
FL 396	Independent Study	1 to 5
FL 397	Independent Study	1 to 5
FL 398	Independent Study	1 to 5
FL 491	Special Topics	1 to 5
FL 492	Special Topics	1 to 5
FL 493	Special Topics	1 to 5
FL 496	Independent Study	1 to 5
FL 497	Independent Study	1 to 5
FL 498	Independent Study	1 to 5

History

James E. Parry, MA, Chairperson

Objectives

Defying classification as either humanity or social science, history functions as both. It focuses on the values as well as the ideas, personalities and institutions that existed in the past and shaped the present. As concerned with perceptions of reality as with historic reality itself, it attempts to exploit all forms of information concerning the past—myth, folk lore, legend and works of art, as well as conventional manuscript and published sources. And, while the department attempts to assist all students in acquiring that knowledge of the past which is essential to the educated person, it is especially concerned with developing the methods and techniques unique to historical inquiry. By consistently raising questions regarding “how we know” as well as “what we know,” the department aims at the development of fundamental intellectual skills that will be of lifelong utility.

Degree Offered

Bachelor of Arts

Major Offered

History

Minor Offered

History

Teacher Education

The teacher preparation program is a graduate-level program only. Students planning to become elementary teachers or secondary history or social studies teachers must complete a bachelor's degree prior to beginning the teacher preparation program. They should discuss their major with their history adviser to ensure that they are enrolled in the appropriate courses and must contact the School of Education for advising. Second endorsements are available in history (24 credits) and social studies (45 credits).

International Studies

A history concentration is also offered as an option in the international studies major. See International Studies section for details.

Bachelor of Arts Major in History

In order to earn the bachelor of arts degree with a major in history, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
EN 120	Masterpieces of Literature	5
MT	101, 107 or above	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

III. Major Program Requirements

Sixty credits in history, including:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5
HS 300	Methodology	5

Choose one of the following two courses:

HS 339	Recent United States	5
HS 349	Contemporary United States since 1945	5
HS 400	Historiography	5
HS	Electives (including 400-level seminar taken in one of the following three areas: Western Europe, United States or China-Japan-Russia)	25
HS	Electives	10

Minor in History

In order to earn a minor in history, students must complete 35 credits in history, including:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5
HS 300	Methodology	5
HS	Electives (approved by adviser, from one or two areas of concentration)	20

History Courses

HS 120	Origins of Western Civilization	5
Traditional societies of the Western world, their values, institutions and historical development from ancient times to the modern era.		
HS 191	Special Topics	1 to 5
HS 192	Special Topics	1 to 5
HS 193	Special Topics	1 to 5
HS 121	Studies in Modern Civilization	5
The process of modernization in the West and the world.		
HS 231	Survey of the United States	5
A topical survey focusing on the United States as a model of the modern society and an analysis of the conflicts generated by competing traditional and modern value systems in American society		
HS 291	Special Topics	1 to 5
HS 292	Special Topics	1 to 5
HS 293	Special Topics	1 to 5
HS 300	Methodology	5
Techniques of historical research, criticism and writing.		
HS 303	Foundations of European Civilization	5
The emergence of the Carolingian Empire and AngloSaxon England. Western European relations with the Byzantine and Arab-Mohammedan states.		
HS 306	Europe of the High Middle Ages	5
An analysis of the cultural, political and social institutions of Medieval Europe.		
HS 307	Europe in the Renaissance Era	5
A study and interpretation of the many facets of change which brought the Middle Ages to an end and began the distinctive modern developments in the West, 1350-1550.		

- HS 309 Europe in the Reformation Era 5**
Study of the political responses by the "new monarchies" and the religious responses of the Christian churches to the new socio-economic conditions and cultural transformations of Western modernity, 1500-1660.
- HS 311 Europe of the 18th Century 5**
Cultural and political ferment of Western civilization in the century of the Enlightenment and the French Revolution.
- HS 313 Europe of the 19th Century 5**
The era of revolutions in ideas and societies, from the Napoleonic wars to the beginning of World War I.
- HS 315 Europe of the 20th Century 5**
Contemporary movements and institutions.
- HS 317 Peace and War in Western Civilization 5**
Examination of major concepts regarding the nature of peace and war from classical times to the present. A review of efforts to define, achieve and insure peace in the Western tradition, social, political and philosophical-theological opposition to, or support for, war.
- HS 319 World Wars I and II 5**
An examination of the causes, course, and interrelationship of these two wars and their bitter legacy to the 20th century. Social, economic and political factors are examined, as are diplomatic and military leadership.
- HS 321 Modern France 5**
Development of cultural and political France from the 17th century to the present.
- HS 323 Tudor-Stuart England, 1450-1715 5**
A study of a traditional society whose monarchs guided the nation through modernizing and reforming political and religious changes in the 16th century, only to be challenged and defeated by the aristocracy, a capitalist economy and the House of Commons in the 17th century.
- HS 325 Modern England, 1715-Present 5**
The growth of England as a democratic industrial state with the subsequent growth of imperialism and its decline. The crisis of wars and the emergence of socialism in the 20th century.
- HS 327 Modern Germany 5**
Studies in German history and culture.
- HS 331 Colonial America 5**
European discoveries, explorations and settlements from the 16th through the late 18th centuries.
- HS 333 The Beginnings of the United States 5**
The Revolution, Confederation and Constitution. Continental expansion; domestic and international development to the age of Jackson.

- HS 335 Expansion and the Crisis of the Union 5**
The age of Jackson, territorial expansion, slavery and abolition, civil war and reconstruction.
- HS 337 The United States in the Progressive Era 5**
Industrialization, immigration, urbanization and their effects on American society and politics.
- HS 339 Recent United States 5**
The culture of the 1920s, the Great Depression, the Second World War, contemporary American society.
- HS 341 The Pacific Northwest 5**
Past development and present problems of the states comprising the Pacific Northwest with emphasis on Washington state.
- HS 342 American Ethnic Minorities 5**
A study of the reciprocal relationships between the dominant majority in the United States and some of its ethnic minorities; the experiences of those minorities; racist and ethnocentric thought and policies in selected periods of United States history.
- HS 343 American Society and Culture 5**
Social and intellectual history of the United States, with emphasis on the 19th and 20th centuries.
- HS 347 U.S. Diplomatic History 5**
The development of the United States as a world power from the 1890s to the present with emphasis on the history of foreign relations.
- HS 349 Contemporary U.S. Since 1945 5**
An examination of the major changes in the period after the Second World War, with special emphasis on the development of American pluralism.
- HS 371 History of the Soviet Union 5**
A review of the Czarist background and analysis of the rise and fall of the Soviet Union.
- HS 381 Chinese Civilization 5**
The development of Chinese culture, thought and institutions down to the late 19th century.
- HS 383 China-20th Century 5**
The Western impact and the Chinese revolutions from the Opium War to the People's Republic.
- HS 385 Traditional Japan 5**
The development of Japanese culture, thought and institutions to 1867.

- HS 387 Modern Japan 5**
The transformation of Japan from feudalism to imperial power and industrial giant, 1867 to present.
- HS 391 Special Topics 1 to 5**
HS 392 Special Topics 1 to 5
HS 393 Special Topics 1 to 5
Private work by arrangement, with the approval of department chair.
- HS 400 Historiography 5**
Historical study and writing and the philosophy of history from the earliest times to the present.
- HS 412 The French Revolution and Napoleon 5**
Studies in the institutions and events which led to the fall of old France.
- HS 419 Great Historical Figures 5**
An analysis of a major historical figure in the context of his or her times. Considers the impact of an individual upon events as well as that of events upon the individual.
- HS 431 The Westward Movement 5**
American frontier history from colonial times to the end of the 19th century.
- HS 434 American Revolution and Confederation 5**
Events and interpretations in the history of the Atlantic seaboard provinces from the end of the Great War for Europe through independence and Confederated United States.
- HS 435 American Civil War and Reconstruction 5**
Political, social and economic aspects of the American Civil War and reconstruction.
- HS 480 Interdisciplinary Core Course 3 to 5**
Title and content change each term.
- HS 481 Modern Asia Revolutions 5**
Problems and forces in selected Asian nations in the 20th century, especially of circumstances, leaders, tactics, and doctrines of revolutionary groups in China.
- HS 491 Special Topics 1 to 5**
HS 492 Special Topics 1 to 5
HS 493 Special Topics 1 to 5
- HS 497 Independent Study 1 to 5**
HS 498 Independent Study 1 to 5

Honors Program

David J. Leigh, SJ, PhD, Director

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. The courses are historically arranged, beginning with the Ancient Near East and proceeding through the civilizations of the Hindus, 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 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 are given at the end of each quarter.

Scholarships/Applications

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

Program Requirements

When accepted in the program, students complete each of the course sequences numbered HON 101 through HON 251. Completion of the Honors Program satisfies university core curriculum requirements, except those in mathematics, interdisciplinary course and senior synthesis. Students may elect to take HON 398 or HON 499 while completing their major.

Degree Major

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. Degree majors are usually completed in two years.

Honors Program Courses

HON 101	Humanities Seminar - Thought	5
HON 102	Humanities Seminar - Thought	4
HON 103	Humanities Seminar - Thought	5

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

HON 111	Humanities Seminar - Literature	4
HON 112	Humanities Seminar - Literature	4
HON 113	Humanities Seminar - Literature	4

Critical examination of those literary works which have most deeply influenced the development of the Western world, including the Bhagavad Gita, Homer and the Greek playwrights, Virgil, Beowulf, Song of Roland, Dante and Chaucer.

HON 121	Humanities Seminar - History	4
HON 122	Humanities Seminar - History	4
HON 123	Humanities Seminar - History	4

Historical survey which also furnishes a background discipline for humanities-thought and humanities-literature, covering Hebrew, Near Eastern, Greek, Roman and Medieval history.

HON 131	Humanities Seminar - Science	3
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The history and nature of the physical and biological sciences.

HON 142	Humanities Seminar - Art	2
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Synoptic view of art history; period and national styles; principles and implication of design.

HON 191	Interdisciplinary Seminar	1 to 10
HON 192	Interdisciplinary Seminar	1 to 10

HON 201	Humanities Seminar - Thought	4
HON 202	Humanities Seminar - Thought	4
HON 203	Humanities Seminar - Thought	5

Three quarters of critical reading and discussion, including Descartes, Hobbes, Locke, Spinoza, Leibniz, Rousseau, Hume, Wollstonecraft, Kant, Hegel, J.S. Mill, Nietzsche, Marx, Sartre, Heidegger, Merleau-Ponty, Ricoeur.

HON 211	Humanities Seminar - Literature	4
HON 212	Humanities Seminar - Literature	4
HON 213	Humanities Seminar - Literature	4

Shakespeare, Donne, Moliere, Milton, Dryden, Pope, Goethe, the Romantics, Victorians, Russian novelists and modern literature through the Existentialists to the post-moderns.

HON 221	Humanities Seminar - History	4
HON 222	Humanities Seminar - History	4
HON 223	Humanities Seminar - History	4

The Reformation to the present.

HON 231	Humanities Seminar - Science	3
HON 232	Humanities Seminar - Science	4

A study of some contemporary problems in the physical and biological sciences. HON 232 includes three lectures and three laboratory hours per week.

HON 243	Humanities Seminar - Music	2
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Twentieth century music with emphasis upon historical and cultural correlations.

HON 251	Humanities Seminar - Sociology	4
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A study of 19th and 20th century sociological thought and its relevance to current issues: Marx, Durkheim, Weber and others.

HON 291	Special Topics	1 to 5
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HON 292	Special Topics	1 to 5
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HON 293	Special Topics	1 to 5
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HON 398	Independent Study	1 to 5
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Private work by arrangement. Prerequisite: approval of program director.

HON 480	Interdisciplinary Core Courses	3 to 5
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Title and content change each term.

HON 499	Humanities Senior Seminar	5
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Reading and discussion of major synthetic literature in the humanities on selected topics. Prerequisite: approval of instructor.

Interdisciplinary Studies-Social Science

Bradley Scharf, PhD, Interim Coordinator

Objectives

Contemporary society is marked by many changes and controversies about how major institutions can best respond to emergent problems. Public engagement begins with moral awareness, but the path to effective action runs through systematic analysis of aggregate human behavior. Interdisciplinary social science courses take students beyond common sense to the point where value choices meet studies of general causation. Students become involved in the definition of important issues, as well as in the actual practice of using empirical data to sort out alternative modes of action.

Interdisciplinary Social Science Courses

ISS 120 Social Science Inquiry

5

Major issues of contemporary American life are explored with the resources of economics, political science and sociology. Poverty, racism, and sexism are frequent themes. Includes service learning. Correlates with PL 220.

International Studies

Gina Harmon, Coordinator

Objectives

The International Studies Program is an interdisciplinary program which permits a multifaceted focus on Asia, Europe and Latin America. The aim of the program is to provide Seattle University students with the opportunity to study their disciplinary concentration while examining the modern social, political, economic and cultural influences of a foreign country and how these influences affect that discipline. The perspectives acquired through this program will provide students with an awareness and greater understanding of how one reacts not only to one's own cultural experiences, but also to the cultural values of another country. As a result of students' studies and foreign experiences, they will develop those qualities that will allow them to interact in an international setting.

Degree Offered

Bachelor of Arts

Majors Offered

International Studies/Economics

International Studies/History

International Studies/Foreign Language

International Studies/Politics

Minor Offered

International Studies

Study Abroad

The International Studies Program offers university-approved study abroad opportunities, through exchange, consortia, and independent programs. Each program will demonstrate high academic standards within an educational philosophy that insists upon theoretical and practical interaction within each cultural setting. The international studies major requires a learning program in a country other than the U.S. An acceptable study abroad experience encompasses a minimum of 25 quarter credits or 15 semester credits and must be earned in courses taught in the local vernacular. See university-sponsored programs under Foreign Language Department.

Bachelor of Arts

Major in International Studies/Economics

In order to earn the bachelor of arts degree with a major in international studies-economics, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I (not economics or political science)	.....	5
Social Science II (EC 271 required)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

HS 121 Studies in Modern Civilization 5

Please Note: Students educated in schools outside of the United States to the age of 16 may use HS 231 as a substitute for HS 121.

III. Major Program Requirements

Sixty-five credits in international studies, including:

Choose one of the following two courses for five credits:

EC 330	International Economic Events	5
EC 372	Intermediate Macroeconomics	5

EC 374 Intermediate Microeconomics 5

Business/Economics International Electives 15

(Choose from EC 376, 379, 472, 473 or IB 386, FIN 446, MGMT 320, MKTG 456)

Foreign Language above 135 15

HS Elective (non-U.S.) 10

(Choose from HS 313, 315, 317, 319, 321, 325, 327, 347, 371, 381, 383, 387, 481)

PLS 260 Introduction to Global Politics 5

PLS Upper Division Elective (Int'l or Comparative) 5

Approved Elective* 5

IV. Other Program Requirements

EC 272	Microeconomics	5
MT 130 or 134	(prerequisite to upper division business or economics)	5

Please Note: *1. Approved major elective cannot be in the discipline of the chosen concentration. 2. Approval for major electives must be obtained from the adviser for international studies in the department of concentration. 3. See departmental listings for course descriptions. 4. Major requires participation in an approved study abroad program for two quarters or one semester. 5. International students educated to age 16 in a language other than English may request a waiver of the foreign language requirement, substituting additional approved electives in international areas.

Bachelor of Arts

Major in International Studies/History

In order to earn the bachelor of arts degree with a major in international studies/history, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	(not economics or political science)	5
Social Science II	(EC 271 required)	5
Theology and Religious Studies Phase II	(200-299)	5
Ethics	(upper division)	5
Theology and Religious Studies Phase III	(300-399)	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent	0 to 15
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Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence

is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

HS 121 Studies in Modern Civilization 5

Please Note: Students educated in a schools outside of the United States to the age of 16 may use HS 231 as a substitute for HS 121.

III. Major Program Requirements

Sixty-five credits in international studies, including:

Foreign Language above 135	15
HS Elective (non-U.S.)	20
(Choose from HS 313, 315, 317, 319, 321, 325, 327, 347, 371, 381, 383, 387, 481)	
PLS 231 Diversity and Change	5
PLS 260 Introduction to Global Politics	5
PLS Upper Division Elective (Int'l or Comparative)	10
Approved Elective*	5

Choose one of the following five courses:

EC 376 Economic Development	5
EC 379 Comparative Economic Systems	5
EC 472 International Trade	5
EC 473 International Macroeconomics and Finance	5
IB 386 International Business	5

IV. Other Program Requirements

EC 272 Microeconomics	5
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Please Note: *1. Approved major elective cannot be in the discipline of the chosen concentration. 2. Approval for major electives must be obtained from the adviser for international studies in the department of the student's concentration. 3. See departmental listings for course descriptions. 4. Major requires participation in an approved study abroad program for two quarters or one semester. 5. International students educated to age 16 in a language other than English may request a waiver of the foreign language requirement, substituting additional approved electives in international areas.

Bachelor of Arts Major in International Studies- Foreign Language

In order to earn the bachelor of arts degree with a major in international studies-foreign language, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110 Freshman English	5
PL 110 Introduction to Philosophy and Critical Thinking	5

HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I (not economics or political science)	.....	5
Social Science II (EC 271 required)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

HS 121 Studies in Modern Civilization 5

Please Note: Students educated in a schools outside of the United States to the age of 16 may use HS 231 as a substitute for HS 121.

III. Major Program Requirements

Sixty-five credits in international studies, including:

Foreign Language above 135	25
HS Elective (non-U.S.)	10
(Choose from HS 313, 315, 317, 319, 321, 325, 327, 347, 371, 381, 383, 387, 481)	
PLS 231 Diversity and Change	5
PLS 260 Introduction to Global Politics	5
PLS Upper Division Elective (Int'l or Comparative)	10
Approved Elective*	5

Choose one of the following five courses:

EC 376 Economic Development	5
EC 379 Comparative Economic Systems	5
EC 472 International Trade	5
EC 473 International Macroeconomics and Finance	5
IB 386 International Business	5

IV. Other Program Requirements

EC 272	Microeconomics	5
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Please Note: *1. Approved major elective cannot be in the discipline of the chosen concentration. 2. Approval for major electives must be obtained from the adviser for international studies in the department of the student's concentration. 3. See departmental listings for course descriptions. 4. Major requires participation in an approved study abroad program for two quarters or one semester. 5. International students educated to age 16 in a language other than English may request a waiver of the foreign language requirement, substituting additional approved electives in international areas.

Bachelor of Arts

Major in International Studies/Politics

In order to earn the bachelor of arts degree with a major in international studies-politics, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	(not economics or political science)	5
Social Science II	(EC 271 required)	5
Theology and Religious Studies Phase II	(200-299)	5
Ethics	(upper division)	5
Theology and Religious Studies Phase III	(300-399)	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent	0 to 15
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Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

HS 121 Studies in Modern Civilization 5

Please Note: Students educated in a schools outside of the United States to the age of 16 may use HS 231 as a substitute for HS 121.

III. Major Program Requirements

Sixty-five credits in international studies, including:

Foreign Language above 135	15
HS Elective (non-U.S.)	10
(Choose from HS 313, 315, 317, 319, 321, 325, 327, 347, 371, 381, 383, 387, 481)	
PLS 231 Diversity and Change	5
PLS 260 Introduction to Global Politics	5
PLS Upper Division Electives (Int'l or Comparative)	20
Approved Elective*	5

Choose one of the following five courses:

EC 376 Economic Development	5
EC 379 Comparative Economic Systems	5
EC 472 International Trade	5
EC 473 International Macroeconomics and Finance	5
IB 386 International Business	5

IV. Other Program Requirements

EC 272 Microeconomics	5
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Please Note: *1. Approved major elective cannot be in the discipline of the chosen concentration. 2. Approval for major electives must be obtained from the adviser for international studies in the department of the student's concentration. 3. See departmental listings for course descriptions. 4. Major requires participation in an approved study abroad program for two quarters or one semester. 5. International students educated to age 16 in a language other than English may request a waiver of the foreign language requirement, substituting additional approved electives in international areas.

Minor in International Studies

In order to earn a minor in international studies, students must earn 30 credits in courses with an international focus, including:

EC Elective	5
(Choose from EC 376, 379, 472, 473, IB 386)	
HS Elective (non-U.S.)	10
(Choose from HS 313, 315, 317, 319, 321, 325, 327, 347, 371, 381, 383, 387, 481)	
PLS Electives (dealing with international and foreign systems, 300-400 level)	10
Approved International Elective	5

Please Note: EC 271 and 272 are prerequisites to upper division economics courses.

Liberal Studies Program

Betsey Barker Klein, BA, Director

Objectives

The study of the humanities, social sciences and sciences has long been recognized as the finest preparation for the challenges presented in a world requiring critical reflection, creativity, open-mindedness, and the courage of personal conviction. The Liberal Studies Program is designed for students with initiative and curiosity who want to use their skills and knowledge to make a contribution to society through the wide array of opportunities open to persons who are thoughtful, articulate and liberally educated. Professions in the fields of government, law, education, business, communications and a wide range of cultural endeavors consistently require persons with both breadth of vision and breadth of knowledge.

The focus of each student's program is determined by the person's ultimate aspirations. With the guidance of the program director, the student examines the options available in the various disciplines that can be combined into a rich and coherent degree program. The program's interdisciplinary character contributes to the development of both perspective and judgment essential to success in all human endeavors.

The Liberal Studies program is recommended for students who plan to teach at the elementary level. Specific courses are recommended by the School of Education for this major. Students planning to become teachers should inform the School of Education as soon as possible.

Degree Offered

Bachelor of Arts

Major Offered

Liberal Studies

Bachelor of Arts Major in Liberal Studies

In order to earn the bachelor of arts degree with a major in liberal studies, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5

Social Science I	5
Social Science II (different discipline from Social Science I)	5
Theology and Religious Studies Phase II (200-299)	5
Ethics (upper division)	5
Theology and Religious Studies Phase III (300-399)	5
Interdisciplinary	3 to 5
Senior Synthesis (satisfied by LS 490)	

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty credits in liberal studies, including:

Humanities

English, foreign language, history, philosophy, religious studies and fine arts (300-400 level, including five credits in English composition/writing) 20

Social Sciences

Addiction studies, economics, political science, psychology, sociology, communications, public administration and criminal justice (300-400 level) 15

Science Electives 10

Math, Statistics or Computer Science Elective 5

Speech 5

Choose one of the following two courses:

LS 490	Senior Synthesis / Project	5
Approved Seminar		

Please Note: 1. 40 credits must be taken at 300-400 level; 25 of these must be taken at Seattle University.

Liberal Studies Courses

LS 490 Senior Synthesis/Project

5

In the senior year, students either take an approved seminar course offered by one of the other majors in the College of Arts and Sciences, or work on a research project that builds on previous studies. Students' faculty advisers must grant final approval of projects, based on written outlines. The thematic content of projects are determined by students' already approved academic program.

Military Science

Lt. Col. Todd G. Sain, MBA, Chairperson

Objectives

To prepare academically and physically qualified college women and men for the rigor and challenge of serving as officers in the United States Army—active, national guard, or reserve. To that end, the program stresses service to country and community through the development of leadership traits and values necessary for success as an Army commissioned officer.

The Program

The program has been designed to complement the historical mission of Seattle University in teaching and learning, education for values, preparation for service and growth of persons through the program's elective courses, students are exposed to a rigorous curriculum where they learn vital management and leadership skills not available in other college courses. It is multifaceted with distinctive sub-elements to meet individual needs and requirements. For example, ROTC is traditionally a four-year program, but individuals with prior service, members of reserve or National Guard units, participants of JROTC in high school, and summer basic camp attendees may complete the program in only two years. Normally, all students participate in two class days per week (two to three hours), three workshops (leadership labs) per quarter, and one overnight field exercise per quarter. Physical fitness of all cadets is closely monitored.

The program allows for scholarship assistance for selected students, a monthly stipend for all scholarship and third and fourth year students, and attendance at confidence building courses during the summer: Air Assault School, Airborne School, and cadet troop leadership training. For specifics about the program please contact the professor of military science for additional information. High school seniors interested in applying for a four-year scholarship must submit applications by December 1 of their senior year. College freshmen may be eligible to apply for three-year scholarships.

Financial Aid

Cadets receive financial aid in three forms: Two-, three-, and four-year scholarships are awarded annually. Scholarships pay \$8,000 or 80 percent, whichever is greater, of tuition. Scholarships further provide a book allowance, an allowance for lab fees and a monthly allowance of \$100 for up to 10 months. The assistance also provides a \$100 per month allowance to all non-scholarship cadets in the advanced course for up to 10 months. Additionally, four-year scholarship winners and three-year advanced designee scholarship winners who attend Seattle University for the freshman through senior years are entitled to scholarships that cover the remaining 20 percent of their tuition, and free room and board for all four years provided they maintain a 3.0 GPA.

Commissioning Requirements

To be commissioned in the United States Army, students must complete the military science curriculum, including successful completion of the six-week advanced camp the summer prior to the senior year.

Basic Course

Freshman year

MS 111, 112, and 119 or special topics	6
PME: English 110 or equivalent	5
Foreign Language 191, 192 and 193	5
(Scholarship cadets only)	
CSC 113 Introduction to Computers and Application	5
MS 217 Army Conditioning	1

Sophomore year

MS 213, 214, 218 or special topics	6
MS 217 Army Conditioning	1
PME: Course in psychology, sociology, anthropology or ethics	5
MT 111 College Algebra	5

Advanced Course

Junior year

MS 311, 312 and 313	9
MS 314 or 315 (Advanced Camp)	4

Senior year

MS 412, 413 and 419	11
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Please Note: Special topics or independent study courses may be substituted for courses listed above with the approval of the professor of military science.

The Curriculum

The curriculum is designed to prepare students to become future leaders of the U.S. Army by developing the following leadership dimensions: initiative, oral and written communications, judgment, decisiveness, sensitivity, technical competence, planning and organizing, administrative control, delegation and problem analysis. Behavioral development occurs through course work in the areas of professional military education (PME), military knowledge (MK), and military skills (MS).

PME courses are designed to develop students' ability to communicate appropriately in writing, understand the human aspects of command, become familiar with personal computer terminology, hardware and application software, develop the ability to understand and use basic mathematical models for problem solving and decision making and to become acquainted with the evolution of warfare and military theory with a particular emphasis on the place of military institutions in society.

Courses meeting these requirements are taught by other departments in the university but are required to complete the ROTC program.

Military knowledge courses provide a foundation in such areas as

leadership theory, ethics, roles and responsibilities of the officer and military operations. Military skills are developed during the conduct of leadership workshops and quarterly field training exercises.

Leadership development occurs both in and out of the classroom by placing students in a variety of leadership positions. Oral presentations and writing requirements are incorporated in all classes as another means of developing oral and written communication skills.

Military Science Basic Courses

MS 111 Basic Officership I 2

An introduction to the officership environment, military science, key legislation, roles of active and reserve component units, and special programs associated with ROTC. Includes three leadership labs and one field training exercise. (fall)

MS 112 Military Communication Skills 2

Development of written and oral communication skills for the military leader. Practical application through student participation, presentations and writing projects. Includes three leadership labs and one field training exercise. (spring)

MS 119 Introduction to Military Operations 2

An introduction to the air and land warfare. Course will concentrate on the skills of the individual soldier and the squad. Includes weapons and fighting techniques in the offense and defense. Includes three leadership labs and one field training exercise. (winter)

MS 213 Leadership Assessment 2

Through a series of classroom simulations, participants are evaluated on their potential as leaders and managers. Includes organizational behavior, leadership theories, management competencies, communication skills, physical fitness and the leadership assessment program (LAP). Includes three leadership labs and one field training exercise. (spring)

MS 214 Military Ethics and Values 2

Through a series of films, books, essays and discussions the student is introduced to, and explores, military value sets and the ethics practiced within the profession of arms. Provides introduction to lifesaving techniques. Includes three leadership labs and one field training exercise. (winter)

MS 217 Army Conditioning 1

A physical fitness program designed to develop students to the Army standard of physical fitness. Required prior to attendance at camps, air assault, airborne or Ranger schools. (fall, winter, spring)

MS 218	Map Reading	2
An introduction to military map reading. Includes discussion of coordinates, azimuths, conversion, intersection/resection, interpretation of symbols and relief. Includes three leadership labs and one field training exercise. (fall)		
MS 291	Special Topics	1 to 5
MS 292	Special Topics	1 to 5
MS 293	Special Topics	1 to 5
MS 296	Independent Study	1 to 5

Military Science Advanced Courses

MS 311	Advanced Officership III	3
An orientation on the competencies required of the small unit leader, manager. Includes lower-echelon organizations, tactics, deployment and communications. Permission of instructor. Includes three leadership labs and one field training exercise. (winter)		
MS 312	Land Navigation Competencies	3
Principles of land navigation using terrain analysis, map reading, aerial photograph interpretation, and the basics of orienteering. Permission of instructor. Includes three leadership labs and one field training exercise. (fall)		
MS 313	Officership/Leadership/Management	3
A survey course of leadership/management and motivational theories required of the small unit leader. Includes ethics and professionalism, human behavior and the decision-making process. Permission of instructor. Includes three leadership labs and one field training exercise. (spring)		
MS 314	Advanced Camp	4
Successful completion is a prerequisite to commissioning. During six weeks at Ft. Lewis, students are placed in a variety of roles and situations and practice their leadership and management competencies in the broader context of officership. Prerequisite: MS 311, 312, and 313. (summer)		
MS 315	Advanced Camp-Nursing	4
Successful completion is a prerequisite to commissioning. During six weeks at various Army medical centers, nursing students are placed in a variety of roles as an Army nurse to develop their professional competencies—both as a nurse and as an officer. Prerequisites: MS 311, 312, and 313. (summer)		

MS 412 Professionalism and Responsibility 3

A survey course which assists the student to come to grips with the concept of officership. Covers Army values, ethics, professionalism, responsibilities to self, subordinates and country, law of land warfare, and the resolution of ethical/value dilemmas. Permission of instructor. Includes three leadership labs and one field training exercise. (fall)

MS 413 Contemporary Political and Social Issues 3

The capstone course prior to commissioning, discusses the role of the officer and the institution in a rapidly changing world environment. Covers topics from national security, Third World nationalism, to the Soviet Union. Includes three leadership labs and one field training. (spring)

MS 419 Military History 5

A survey course intended to improve the student's understanding of the nature of war and the place of military institutions in society. Develops impact of leaders on the conduct of the battle. Major emphasis on the battles of the Revolutionary War, Civil War, WWI, WWII and Vietnam. Includes three leadership labs and one field training exercise. (winter)

MS 496 Independent Study 1 to 5

Aerospace Studies (Air Force ROTC)

Col. James C. Evans, PAS, Chairman

Objectives

Air Force Reserve Officer Training Corps (AFROTC) is offered to Seattle University students through an agreement with the University of Washington. The Air Force ROTC program is designed to motivate, educate and commission highly qualified students for active duty as officers in the U.S. Air Force. The curriculum develops the professional knowledge, in both theory and application, that an Air Force officer needs to be an effective manager and leader in the aerospace environment.

General Program Requirements

The freshman- and sophomore-level classes (general military course) are open to all students between the ages of 14 and 26 attending any two- or four-year college or university full time. The junior- and senior-level classes (professional officer course) are open to qualified students who have received credit for the general military course and have been competitively selected for entry. For further information contact the recruiting officer at (206) 543-2360 or write Recruiting Officer, AFROTC Det 910, University of Washington/DU-30, Seattle, WA 98195-0001.

Commissioning Requirements

Students who successfully complete the AFROTC program and receive an academic degree from the university are offered commissions as second lieutenants in the U.S. Air Force.

General Military Course (GMC)

The basic division courses consist of one classroom hour and one leadership laboratory hour per week during the freshman and sophomore years. Uniforms and textbooks are provided. Students may enter the freshman class at the start of fall, winter or spring quarters. Sophomore students may enter at the start of fall or winter quarters. A four- or six-week field training course, taken during the summer between the sophomore and junior years, is required for entry into the professional officer course. Students receive pay and travel costs for field training. Except for sophomore cadets on AFROTC scholarships, students incur no active duty service commitment from enrollment in the GMC, and students may drop the courses at any time.

Professional Officer Course (POC)

Cadets selected for enrollment in POC are enlisted in the Air Force Reserve and receive tax-free monthly subsistence pay of \$100. They are furnished text books and uniforms. Junior- and senior-level classes consist of three hours of academic classes and one hour of leadership laboratory per week.

Financial Assistance

The Air Force offers one-, two- and three-year scholarships to qualified college students. Scholarships are available in the areas of engineering, science and technology, nursing, medicine, law, nontechnical and others. A special one-year scholarship is available for nursing and law majors. Nursing students are given special consideration in fulfilling their AFROTC courses to allow time to meet their clinical and core course requirements. AFROTC scholarships pay tuition, certain fees and full textbook reimbursement. In addition, scholarship winners receive a \$100 subsistence allowance per month. Students awarded scholarships from the Air Force ROTC Scholarship Board are eligible for a supplemental room grant. To take advantage of these scholarships, students should apply directly to AFROTC Det 910, University of Washington/DU-30, Seattle, WA 98195-0001 or call (206) 543-2360.

Two-Year Program

To provide for those students who are unable to enroll in the general military courses, a two-year professional officer course is available on a highly competitive basis. The two-year program is open to graduate students and other students who have two years remaining until graduation. Students in this program are required to attend a six-week field training course at an Air Force base during the summer preceding program entry. The student is paid during the six-week period. Upon return to the campus, students pursue the professional officer course. Uniform, text books and \$100 monthly subsistence are provided. Two-year scholarships may be available for qualified students. Students interested in this program should contact the AFROTC department nine to 12 months prior to the fall quarter they desire to enter.

General Military Courses

AS 101	Aerospace Studies 100	1
AS 102	Aerospace Studies 100	1
AS 103	Aerospace Studies 100	1

Focuses on the basic characteristics of air doctrine; U.S. Air Force mission and organization; functions of U.S. strategic offensive and defensive, general-purpose and aerospace support forces; officership/professionalism and an introduction to communicative skills. Additional one-hour leadership laboratory is mandatory.

AS 211	Aerospace Studies 200	1
AS 212	Aerospace Studies 200	1
AS 213	Aerospace Studies 200	1

Factors contributing to the development of air power from its beginnings to the present and the evolution of air power concepts and doctrine. History of air power employment in military and nonmilitary operations in support of national objectives. Assessment of communicative skills. Additional one-hour leadership laboratory is mandatory.

Professional Officer Courses

AS 331	Aerospace Studies 300	3
AS 332	Aerospace Studies 300	3
AS 333	Aerospace Studies 300	3

Emphasis on leadership and management fundamentals, professional knowledge, leadership ethics and communicative skills required of an Air Force junior officer. Case studies are used to examine leadership and management situations. Mandatory leadership laboratory provides advanced leadership experiences in officer-type activities, giving students the opportunity to apply learned principles.

AS 431	Aerospace Studies 400	3
AS 432	Aerospace Studies 400	3
AS 433	Aerospace Studies 400	3

Needs for national security, evolution of American defense strategy and policy, methods for managing conflict, alliances and regional security to preserve American interests. Arms control and terrorism. The military as a profession; officership; the military justice system; current military issues; refinement of communicative skills. A one-hour leadership laboratory is also required.

Naval Science (Navy ROTC)

Capt. J.T. Gilmartin, PNS, Chairperson

Objectives

Naval ROTC is offered to Seattle University students through an agreement with the University of Washington. The objective of Naval ROTC is to educate and train young men and women as officers in the United States Navy or Marine Corps. The single largest source of officers for the Navy and Marine Corps, NROTC provides citizen sailors and marines with a liberal educational background.

General Program Requirements

Generally, classes are taught at the University of Washington, in Clark Hall. All classes are open to all LTW students and all Seattle University students via UW Extension. It is not necessary to be a member of the NROTC unit to take naval science classes.

Commissioning Requirements

Students who successfully complete Naval ROTC, and receive an academic degree from Seattle University will be offered commissions as ensigns in the United States Navy, or as second lieutenants in the Marine Corps.

Scholarships

Four-, three-, and two-year scholarships are available. Special nursing program scholarships are offered as well. Naval ROTC scholarships pay for 100 percent tuition, books and academic fees, as well as a \$100 tax-free subsistence payment each month. To take advantage of these scholarships, students should apply directly to NROTC Unit, University of Washington (DU-40), Seattle, WA 98195, or call (206) 543-0170.

Two-Year Program

The program is open to college students who will complete their sophomore year or third year in a five-year curriculum. The two-year scholarship covers the final two years of college. When accepted, students attend the six-week Naval Science Institute at Newport, Rhode Island, during the summer between their sophomore and junior years to bring them up to date on the NROTC curriculum missed during their freshman and sophomore years.

College Program

Each year, men and women are accepted for four- and two-year non-scholarship college programs. For the four-year program, the professor of naval science accepts applications from qualified students throughout the freshman year. Applications for the two-year program are accepted from current sophomores in community colleges or four-year colleges and must be received prior to the beginning of March.

Those students selected for the two-year program attend a six-week course of instruction at the NSI during the summer prior to their junior year. Successful completion of the NSI instruction qualifies students for enrollment in the advanced course in the NROTC program. Students in the NROTC college program pay their own college expenses but receive monthly subsistence pay of \$100 during their junior and senior years, including the intervening summer. The Navy furnishes all uniforms and textbooks used in naval science courses.

Freshman college program students are eligible for a scholarship after completing one academic term, with scholarship awards based on academic grades and participation within the midshipman battalion. The two-year college program students also may win a scholarship for superior performance at the NSI. Upon graduation, college program students are commissioned in the Navy Reserve or Marine Corps Reserve and serve on active duty for three years. Additional information concerning the NROTC programs may be obtained by writing the University of Washington; Professor of Naval Science; 317 Clark, DU-40; Seattle, Washington 98195; or by visiting the NROTC unit on campus.

Naval Science Courses

N SCI 111 The Naval Service 3
General introduction to the Navy, its organization, missions, roles, tasks and operating methods. The relationship to the other services within the Department of Defense is emphasized.

N SCI 112 Sea Power Practicum I 2
N SCI 113 Sea Power Practicum II 2
A comprehensive study of the role of sea power in the history of the United States, the current status of the various elements of the nation's sea power as they influence the development and implementation of national security policy, and the economic effects of the elements of sea power (the Navy, the merchant marine, port facilities, fisheries and oceanographic capabilities).

N SCI 211 Naval Weapon Systems 3
Concept of naval weapons systems and the systems approach, the techniques of linear analysis of ballistics and weapons, the dynamics of basic components of weapons control systems. The tools are provided for understanding the basic principles that are involved in all modern naval weapon systems, gas turbines and auxiliary power systems.

N SCI 212 Naval Ship Systems I 3
N SCI 213 Naval Ship Systems I 3
Study of the varied ship systems operational in the Navy today, including the principles of characteristic propulsion systems and auxiliary machinery and the elements of ship stability and damage control. An introduction to nuclear propulsion, gas turbines and auxiliary power systems.

N SCI 311 Navigation 3

The science and practice of maritime coastal navigation, including visual fixing, dead reckoning, and piloting methods. Computation of tides and currents and nautical rules of the road.

N SCI 312 Celestial Navigation 3

Theory and practice of celestial navigation. The student performs the complete "day's work" of the ship's navigator.

N SCI 313 Naval Operations 3

Introduction to naval operations, the employment of naval forces, naval tactics, formulation of operations plans and orders, employment of detection equipment and meteorology.

N SCI 411 Psychology of Leadership 3

Introduction of the theory and techniques of naval leadership based on those principles of behavioral science that are pertinent to understanding individual and group behavior of adults. It introduces the student to the management process and the relationship of management functions to leadership. Acceptance of a traditional deep sense of moral responsibility on the part of the aspiring leader is stressed.

N SCI 412 Naval Organization and Management I 3**N SCI 413 Naval Organization and Management II 3**

Study of organization, systems and techniques employed in the Navy for management of its human, financial and material resources. Some of the work relates to the administration of discipline in the Navy under the Uniform Code of Military Justice. Emphasis is placed on the leadership and management role of the junior officer in the fleet.

Marine Corps Option Courses**N SCI 321 Evolution of Warfare I 3****N SCI 322 Evolution of Warfare II 3****N SCI 323 Evolution of Warfare III 3**

Introduction to the art of war, the evolution of warfare from the earliest recorded battles to the present day.

N SCI 421 Amphibious Warfare I 3**N SCI 422 Amphibious Warfare II 3**

Provide basic knowledge of evolution of amphibious warfare from premodern era to present. Strategic and tactical considerations in planning specific operations and amphibious landings.

N SCI 423 USMC Leadership and Administration of Justice 3

Concepts, objectives, characteristic qualities and practical techniques of leadership as exercised by the Marine Corps officer are studied. Emphasis is placed on the leadership and management role of the junior officer in the fleet marine forces.

Philosophy

Kenneth W. Stikkers, PhD, Chairperson

Objectives

The task of philosophy is to study the world and persons in terms of 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 fragmentary approaches to knowledge and truth. It strives to introduce students to the language of universal communication whereby they might translate the complex manifold of human experience into relevant and creative meaning for themselves and for society. It raises such searching questions as: What is the meaning of human existence? What is the scope of human freedom? What is the basis of personal responsibility? Are values relative? How is truth established? How is knowledge distinguished from belief and mere opinion? What is the nature of rational argument? Can God's existence be rationally determined? What is the nature and origin of evil? What is the nature of reality?

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 the person and the world compatible with the Judaeo-Christian vision of the universe. At the same time it realizes that to remain dynamically relevant to the contemporary age it must advance and grow and be ever open to new problems, new ideas, new contributions and new perspectives.

Degree Offered

Bachelor of Arts

Major Offered

Philosophy

Minor Offered

Philosophy

Policy for Honors Students

Honors Program students who have successfully completed the HON courses listed below are exempted from PL 220 and ethics, but need an additional 30 credits to complete the major: PL 260 or 261, 441, 449 and 15 credits of approved electives. They are credited with the following equivalents:

HON 101 = PL 110

HON 102/3 = PL 442

HON 201 = PL 370

HON 202 = PL 371

HON 203 = PL 372

Bachelor of Arts Major in Philosophy

In order to earn the bachelor of arts degree with a major in philosophy, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Fifty-five credits in philosophy, including:

A. Foundations

PL 110	Introduction to Philosophy and Critical Thinking	5
PL 220	Philosophy of the Human Person	5

Choose one of the following two courses:

PL 260	Logic	5
PL 261	Symbolic Logic	5

B. Ethics

PL 345	Ethics	5
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C. History and Traditions

PL 370	Introduction to Modern Philosophy	5
PL 441	The Greek Experience: Plato/Aristotle	5
PL 442	The Medieval Synthesis: Augustine/Aquinas	5
PL 449	Major Figures in the Traditions	5

D. Topics and Controversies

PL	Approved Electives (300-400 level)	15
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Minor in Philosophy

In order to earn a minor in philosophy, students must complete 30 credits in philosophy, including:

PL 110	Introduction to Philosophy and Critical Thinking	5
PL 220	Philosophy of the Human Person	5
PL 345	Ethics	5
PL	Electives	15

Please Note: 1. Students who wish to pursue a special track in the philosophy minor must earn at least 10 of the 15 elective credits from courses designed to complement students' major fields. 2. Students who have completed the Honors Program need an additional 10 elective philosophy credits to complete the minor.

Philosophy Courses

PL 110 Introduction to Philosophy and Critical Thinking 5

A combined historical and problematic approach to the nature of philosophical inquiry. Reflection upon fundamental philosophical problems provides the context for mastering basic tools of critical interpretation, logical reasoning, argumentative writing and responsible cognitive communication. Prerequisite: EN 110.

PL 210 Philosophy of the Human Person (Bridge) 5

This course is a modification of PL 220 for transfer students for whom PL 110 has been waived and who have had no previous introductory philosophy course. It introduces students to the nature of philosophical inquiry and includes the issues contained in PL 220.

PL 220 Philosophy of the Human Person 5

Critical examination of the nature and powers of the human person. Special emphasis on the human knowing process and the problems of human freedom and personal responsibility. Prerequisite: PL 110.

- PL 260 Logic 5**
Systematic treatment of traditional logic. The themes of communication and language, division and definition, propositions, syllogisms and the nature of science will be examined.
- PL 261 Symbolic Logic 5**
Introduction to symbolic or mathematical logic from both an intuitive and formal standpoint. Elementary calculus of classes and relations and introduction to axiomatic set theory and Boolean algebra.
- PL 300 Nature and Cosmos 5**
Philosophical appraisal of contemporary cosmological theory. Possible topics include the Big Bang and before; cosmic expansion and the ultimate fate of the universe; space, time and general relativity; singularities and black holes; the search for a "unified field" theory; the relation of cosmology to theology. Prerequisite: PL 210 or 220.
- PL 303 Philosophy of Science 5**
Philosophical reflections on the historical development of the scientific view of the cosmos. Readings from significant sources. Prerequisite: PL 210 or 220.
- PL 305 Philosophy of Social Sciences 5**
Study of the philosophical implications and presuppositions of the methodology and conceptual framework of the social and behavioral sciences; sociology, economics and/or psychology. Prerequisite: PL 210 or 220.
- PL 306 Philosophy and Psychology 5**
A study of the interrelationships between philosophical methods and contents, and the method and contents of psychology, with special focus on the psychoanalytic and phenomenological-existential developments of psychological theory. Prerequisite: PL 210 or 220.
- PL 308 Philosophy and Literature 5**
An examination of philosophical themes in literature and of the philosophical dimensions of literary interpretation and criticism. Prerequisite: PL 210 or 220.
- PL 309 Environmental Philosophy 5**
An examination of the two key debates: anthropocentrism (human-central view of the world) vs. non-anthropocentrism, and individualism vs. ecological holism. Several specific environmental problems are treated, including animal rights issues. Prerequisite: PL 210 or 220.
- PL 312 Social Ethics 5**
Moral problems raised by the relation between individuals and their societies: the common good, the Justification of authority, rights and responsibilities of individuals and societies. Prerequisite: PL 210 or 220.

- PL 315 Buddhist Philosophy 5**
Study of the path of right living as expressed in the mystical and religious philosophy of Buddha. Prerequisite: PL 210 or 220.
- PL 324 Philosophy of Religion 5**
A philosophical study of religious consciousness in terms of the relationships between religious consciousness and human authenticity, in both its individual and social dimensions. Prerequisite: PL 210 or 220.
- PL 325 Philosophy of Art 5**
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 210 or 220.
- PL 326 Philosophy of Law 5**
An investigation into the nature of law, the relation between law and morality, the limits of law and the nature of justice and rights. Prerequisite: PL 210 or 220.
- PL 335 Philosophy of History 5**
Consideration of the aim and scope of history, the meaning of the historical event, the nature of historical explanation and the criterion for historical truth from the points of view of leading representatives of both the speculative and analytical schools. Prerequisite: PL 210 or 220.
- PL 336 Philosophical Impact of Scientific Revolutions 5**
Critical examination of one or more major scientific revolutions e.g., the Copernican, Galilean-Newtonian, Darwinian, or Einsteinian revolutions - and of philosophical responses to such emergent scientific views. Prerequisite: PL 210 or 220.
- PL 337 Social and Political Philosophy 5**
General overview of major thinkers or focus on particular theme(s) in the history of Western social-political theory, from the ancients to the present-day. Prerequisite: PL 210 or 220.
- PL 341 Issues in Contemporary Philosophy 5**
A selected examination of some of the current debates within philosophy, e.g., modernity vs. post-modernity, relation between theory and practice, the place of reason in contemporary life. Prerequisite: PL 210 or 220.
- PL 345 Ethics 5**
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: PL 210 or 220.
- PL 351 Business Ethics 5**
Application of general ethical theory to those problems directly related to the business world. Prerequisites: PL 210 or 220; EC 271.

- PL 352 Health Care Ethics 5**
Application of general ethical theory to basic problems encountered in the medical profession; fees, professional secrecy, rights of patients, abortion, transplants, drugs. Prerequisite: PL 210 or 220.
- PL 353 Ethical Issues in Science and Technology 5**
An application of ethical theories to morally problematic situations confronted in the sciences and in science-based professions. Possible topics include rights and responsibilities; social experimentation; safety and acceptable risk; privacy, confidentiality and whistle blowing; international and environmental obligations; discrimination and harassment. Prerequisite: PL 210 or 220.
- PL 354 Ethics and Criminal Justice 5**
Critical analysis of the ethical issues facing criminal justice practitioners, such as the use of deadly force, conformity to the rules of one's office, the decision to prosecute, participation in plea bargaining, representation of the guilty, and the imposition of punishment. Prerequisite: PL 210 or 220.
- PL 358 Communication Ethics 5**
Ethical responsibilities of the communicator, in both interpersonal and media settings. Critical examination of ethical codes in establishing relationships and conducting communication in a democratic society. Topics covered include: lying, withholding information, conflicts of interest, objectivity, service to audiences. Prerequisites: PL 210 or 220 and at least one of the following: COMJ 200, COMJ 210, COMC 260 or COMC 290.
- PL 359 Professional Ethics 5**
This course will provide the foundations for dealing with the ethical issues professionals in various fields encounter. In addition to the conceptual foundation of professional ethics, attention is given to such issues as truth-telling, informed decision-making, confidentiality and justice. Prerequisite: PL 210 or 220.
- PL 360 Analytic Philosophy 5**
Readings from source material of 20th century analytic philosophers. Investigation of contemporary schools of logical positivism and linguistic analysis from Russel to Wittgenstein. Prerequisite: PL 210 or 220.
- PL 361 Phenomenology 5**
Focus on the "Pure" phenomenology of Edmund Husserl, the ontological phenomenology of Heidegger, and Merleau-Ponty's phenomenology of the lived-body. Prerequisite: PL 210 or 220.
- PL 362 Existentialism 5**
The themes of anxiety, despair, guilt and freedom in the writings of Kierkegaard, Nietzsche, Sartre, Camus, Jaspers and others. Prerequisite: PL 210 or 220.

- PL 363 Hermeneutics 5**
An examination of the role of interpretation in human understanding, focusing on the work of such thinkers as Gadamer, Heidegger, Schleiermacher, Dilthey, Habermas and Ricoeur. Prerequisite: PL 210 or 220.
- PL 364 American Philosophy 5**
Offers, at the discretion of the instructor, either a general overview of the history of the American philosophical tradition from Puritanism to the present or a focused study of a particular movement (e.g., Pragmatism) or theme (e.g., community) in that tradition. Prerequisite: PL 210 or 220.
- PL 366 Process Philosophy 5**
Critical reflection on the philosophies of such thinkers as Bergson, Pierce, Whitehead and Hartshorne. Prerequisite: PL 210 or 220.
- PL 367 Gender and Social Reality 5**
A study of the influence of feminist thinking on metaphysics, epistemology, ethics and the methodology of philosophy. Prerequisite: PL 210 or 220.
- PL 370 Introduction to Modern Philosophy 5**
A seminar study of major figures of the 17th and 18th centuries, such as Descartes, Hobbes, Locke, Berkeley, Hume and Kant. Prerequisite: PL 210 or 220.
- PL 371 19th-Century Philosophy 5**
Readings from source material of the 19th century philosophers. Investigation of central topics, problems and teachings of selected authors from Hegel to Nietzsche. Prerequisite: PL 210 or 220.
- PL 372 20th-Century Philosophy 5**
Readings from source materials of 20th-century philosophers in the Anglo-American and/or continental traditions such as Bergson, Whitehead, Russell, Wittgenstein, James Dewey, Husserl, Heidegger and Sartre.
- PL 391 Special Topics 1 to 5**
PL 392 Special Topics 1 to 5
PL 393 Special Topics 1 to 5
- PL 402 Knowledge and Reality 5**
Examination of the interrelations between theories of knowledge and metaphysics, with emphasis on: the nature and scope of human knowledge; the relations of perception to understanding; change and causality; the possible and the real. Prerequisite: PL 210 or 220.
- PL 403 God and Philosophy 5**
An examination of the existence, nature and importance of God. Topics to be included: arguments for God's existence, the problem of human suffering, the issue of atheism and nature of faith. Prerequisite: PL 210 or 220.

- PL 439 Seminar on Ethics and Values 5**
Intensive examination of an author or theme in the areas of ethics, aesthetics, social and political values. Prerequisite: PL 210 or 220.
- PL 441 The Greek Experience: Plato/Aristotle 5**
A seminar study of the ancient Greek philosophical experience, with particular focus on the works of Plato and Aristotle. Prerequisite: PL 210 or 220.
- PL 442 The Medieval Synthesis: Augustine/Aquinas 5**
A seminar study of the Christian philosophies of St. Augustine and St. Thomas Aquinas. Prerequisite: PL 210 or 220.
- PL 443 German Idealism 5**
Seminar study of major 18th and 19th century figures as Kant, Fichte, Schelling and Hegel. Prerequisite: PL 210 or 220.
- PL 449 Major Figures in the Traditions 5**
Intensive, seminar examination of the work of a major philosopher. Prerequisite: PL 210 or 220.
- PL 480 Interdisciplinary Core Course 3 to 5**
Title and content may change each term. Prerequisite: PL 210 or 220.
- PL 490 Senior Synthesis 3 to 5**
- PL 491 Special Topics 1 to 5**
PL 492 Special Topics 1 to 5
PL 493 Special Topics 1 to 5
- PL 497 Independent Study 1 to 5**
PL 498 Independent Study 1 to 5
- PL 499 Senior Thesis 1 to 5**
Original philosophical investigation under the direction of a faculty member appointed by the chairman of the department. Prerequisite: senior status.

Political Science/Public Administration

James E. Sawyer, PhD, Chairperson

James B. Hogan, PhD, BPA Coordinator

Objectives

Politics is essential to the human condition. It is expressed in patterns of influence among individuals, in the actions of states in world affairs, and in collective efforts to achieve our most noble goals. The political science curriculum links moral issues to empirical analytic questions of political life and explores the realities of political behavior at local, state, national and international levels. A political science major helps students prepare for careers in government, business and education, and for graduate study or law school.

Degrees Offered

Bachelor of Arts

Bachelor of Public Administration

Majors Offered

Political Science

Public Administration

Minors Offered

Political Science

Public Policy

Public Administration

General Program Requirements

Students in political science and public administration must satisfy the university core curriculum requirements as given in this bulletin, and must complete the general program requirements of the College of Arts and Sciences. Macro-economics is required as partial fulfillment of the social science core. Political science majors are strongly encouraged to take additional courses in history, economics and languages. Advisers may recommend electives in business, sociology, philosophy and writing. Students who plan to attend law school should consult the prelaw section of this bulletin and see a prelaw adviser.

Teacher Education

The teacher preparation program is a graduate-level program only. Students planning to become elementary teachers or secondary political science or social studies teachers must complete a bachelor's degree prior to beginning the teacher preparation program. They should discuss their major with their political science adviser to ensure that they are enrolled in the appropriate courses and must contact the School of Education for advising. Second endorsements are available in political science (24 credits) and social studies (45 studies).

Bachelor of Arts

Major in Political Science

In order to earn the bachelor of arts degree with a major in political science, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	(not economics or political science)	5
Social Science II	(EC 271)	5
Theology and Religious Studies	Phase II (200-299)	5
Ethics	(upper division)	5
Theology and Religious Studies	Phase III (300-399)	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	5

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	

III. Major Program Requirements

Sixty credits in political science, including:

PLS 205	Introduction to American Politics	5
PLS 231	Diversity and Change	5
PLS 253	Introduction to Political Theory	5
PLS 260	Introduction to Global Politics	5
American Government	(PLS 210, 301, 302, 304, 305, 308, 310, 406, 407)	5

Foreign Systems (PLS 230, 330, 331, 338, 432, 448)	5
International Politics (PLS 358, 361, 362, 363, 365, 366, 448)	5
Political Theory (PLS 352, 355, 356, 358, 359)	5
PLS Electives	20

Please Note: Transfer students are required to take at least one course at Seattle University from each of the four fields: American Government, Foreign Systems, International Politics and Political Theory.

Minor in Political Science

In order to earn a minor in political science, students must complete 30 credits in political science, including:

Choose three from the following four courses:

PLS 205	Introduction to American Politics	5
PLS 231	Diversity and Change	5
PLS 253	Introduction to Political Theory	5
PLS 260	Introduction to Global Politics	5
PLS	Electives	15

Public Administration

The bachelor of public administration (BPA) degree provides a broad understanding of how public business is transacted in both government service and private non-profit organizations. The curriculum blends liberal education with preprofessional training in public management and the analysis of public policy. Theory and practice are combined in course work and internship opportunities.

Bachelor of Public Administration Major in Public Administration

In order to earn the bachelor of public administration degree with a major in public administration, students must complete 180 credits with a cumulative grade point average of 2.0 and a major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I (not economics or political science)		5
Social Science II (EC 271)		5

Theology and Religious Studies Phase II (200-299)	5
Ethics (upper division)	5
Theology and Religious Studies Phase III (300-399)	5
Interdisciplinary	3 to 5
Senior Synthesis	5
See detailed information on the core curriculum, beginning on page 53.	

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

II. Major Program Requirements

Sixty-five credits, including:

PLS 205	Introduction to American Politics	5
PLS 210	Introduction to Local and State Politics	5
PUB 280	Introduction to Public Administration	5

Choose one of the following two courses:

MGMT 380	Principles of Management	5
COMC 383	Organizational Communication	5

PLS 305	The Policy Process	5
PUB 379	Public Sector Analysis	5
PUB 382	Research Methods	5
PUB 479	Management Control	5
PUB 485	Leadership in the Public Sector	5
PUB 488	Internship	5

Approved electives from business, communications, computer science and political science 15

Minor in Public Administration

In order to earn a minor in public administration, students must complete 30 credits, including:

PUB 280	Introduction to Public Administration	5
PUB 379	Public Sector Analysis	5
PUB 382	Research Methods	5
PUB 479	Management Control	5
PUB 485	Leadership in the Public Sector	5

Choose one of the following two courses:

MGMT 380	Principles of Management	5
COMC 383	Organizational Communication	5

Minor in Public Policy

In order to earn a minor in public policy, students must earn 30 credits, including the following:

PUB 280	Introduction to Public Administration	5
PLS 305	The Policy Process	5
PLS 310	Urban Politics and Public Policy	5
PUB 382	Research Methods	5
PUB 499	Independent Study	5

Choose one of the following two courses:

PLS 302	Government and the Economy	5
PLS 432	Welfare States	5

Political Science Courses

PLS 120 Politics and Society 5

Politics as human conflict and cooperation. The social, economic, ideological and moral dimensions of politics. Politics as intellectual analysis and social action. Not for major credit.

PLS 205 Introduction to American Politics 5

Constitutional and historical foundations of the federal government. Processes and structures of American politics from conservative, radical, and reformist perspectives. Power, class and culture as elements affecting citizen participation and as shapers of economic and social policy.

PLS 210 Introduction to Local and State Politics 5

Examination of structures and functions of political institutions at local, state, county and special district levels, especially legislative, executive and judicial systems.

PLS 230 Industrial Democracies 5

Social divisions, participation, policy processes in West Europe, North America and Japan. Popular values, power distribution and the future of democracy.

PLS 231 Diversity and Change 5

Political diversity among contemporary nations. Methods of comparison. Testing theories of change in political economy and political sociology. Examples from capitalist, socialist and developing nations.

- PLS 253 Introduction to Political Theory 5**
Tenets and historical development of modern political ideologies, with a focus on liberalism, conservatism and democratic socialism. Theoretical and philosophical questions, such as political obligation and justice.
- PLS 260 Introduction to Global Politics 5**
Analysis of the international system, including the balance of power, imperialism, the global political economy, and international institutions. Major conflict themes in East-West, North-South, and West-West relations.
- PLS 291 Special Topics 1 to 5**
PLS 292 Special Topics 1 to 5
PLS 293 Special Topics 1 to 5
- PLS 301 The American Presidency 5**
The constitutional context and historical development of the president's role in the American political system. Personality and leadership. Relations with the public, Congress, the media, and foreign governments.
- PLS 302 Government and the Economy 5**
Appropriate roles of government in the US economy, including taxation, spending, regulation, and economic and social planning. Contrasts with Japanese and European practices.
- PLS 304 Interests, Parties and Elections 5**
Popular participation, group influence, party organization, and electoral choice in the American political system.
- PLS 305 The Policy Process 5**
How public policies are enacted and implemented in the U.S. Constitutional, political, ideological, and socio-economic constraints on policy makers. The relationship between economic structure and the substance of public policy.
- PLS 308 The Judicial Process 5**
The role of law, courts and other legal institutions in American political life; courts as political actors; the social and political environment of law. The impact of law on public order and citizens' rights.
- PLS 310 Urban Politics and Public Policy 5**
Problems of large American cities with special emphasis on transportation, housing, public safety and planning. Fiscal problems of American cities; public school politics.
- PLS 330 Russian Politics and Society 5**
The rise and fall of the Soviet Union as a special case of political development. The meaning of Lenin, Stalin and Gorbachev. Ethnic conflict, economic dilemmas and social strains. Democracy and authoritarianism in the successor states.

- PLS 331 German Politics and Society 5**
Post-war division and re-unification. Impacts on current political culture, social segments, regional diversity, interest groups and government structures. Germany as the fulcrum of European integration.
- PLS 338 African Politics 5**
Political order, state-building, and economic development in Sub-Saharan Black Africa. Theories of comparative social, economic, and political change. Historical and contemporary causes of famine, civil war, debt, U.S. and Soviet influence, and revolution in South Africa.
- PLS 352 Modern Political Thought 5**
Foundations of modern Western political thought, from the Renaissance to the French Revolution.
- PLS 355 Contemporary Political Thought 5**
Issues in modern and postmodern thought. Marxism and critical theory, Freud and modern identity, hermeneutics, poststructuralism, and feminism.
- PLS 356 American Political Thought 5**
Survey of American political thought, with special focus on the critical debates which marked turning points in our nation's history.
- PLS 358 Global Scarcity 5**
Examination of data on resource depletion and degradation of earth's ecosystems. Economic, political and moral implications of a sustainable society under conditions of scarcity.
- PLS 359 Topics in Political Philosophy 5**
In-depth analysis of an issue, theorist, or debate of contemporary relevance, including theories of justice, the future of liberalism, and the interpretation of political language.
- PLS 361 International Law 5**
Fundamentals of international law, states and international law; the individual in international law; creation, application and enforcement of international law.
- PLS 362 International Organization 5**
How states cooperate to form treaties, institutions and informal agreements. The United Nations and its specialized agencies, GATT, IMF, the World Bank, UNEP, and the Law of the Sea. Theories of institutionalization, integration, regimes and interdependence.
- PLS 363 Human Rights and World Order 5**
Examination of revolutions and ideas on human rights. Study of evolving civil, political, economic, social concepts of human rights in relation to a new world order of justice and peace.

- PLS 365 United States Foreign Policy 5**
The U.S. role in the international system. The sources of American foreign policy commitments in history, culture, social and economic conditions, and the process of government. Focus on U.S. relations with the Soviet Union, the Third World and Europe.
- PLS 366 North-South Conflict 5**
Third World states in conflict and collaboration with Western and Eastern bloc powers. Historical roots and current issues of debt, industrialization, guerilla insurgencies, nuclear weapons and terrorism. Application of international relations theory.
- PLS 391 Special Topics 1 to 5**
PLS 392 Special Topics 1 to 5
PLS 393 Special Topics 1 to 5
- PLS 406 Constitutional Law 5**
Growth, philosophy and development of the United States Constitution as reflected in decisions of the Supreme Court with emphasis on the role of the court in contemporary America. Prerequisite: junior or senior standing.
- PLS 407 The Supreme Court and the Bill of Rights 5**
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 432 Welfare States 5**
Culture and politics of social planning in Sweden, Germany, Britain, US and Canada. Contrasting approaches to income distribution, health care, education and public assistance. Normative and empirical methods in empirical research.
- PLS 448 Hunger and Development 5**
The politics of famine and agricultural development in the poorest Third World countries. International and national actors are examined. Socialist and capitalist strategies of development. Seminar format with individual research projects: Prerequisite: PLS 260 or permission.
- PLS 456 The Human Prospect 5**
An examination of the political implications of the dangers of nuclear war and ecological suicide. Emphasis on discovering political strategies for preventing a world cataclysm.
- PLS 488 Internship 2 to 15**
On-the-job experience with appropriate governmental or non-profit agency. Students may register for no more than 15 total intern credits. Mandatory CR/E.
- PLS 494 Seminars 2 to 5**
PLS 495 Seminars 2 to 5

PLS 496	Independent Study	1 to 5
PLS 497	Independent Study	1 to 5
PLS 498	Independent Study	1 to 5

Public Administration Courses

PUB 280 Introduction to Public Administration 5
Tour of the multi-disciplinary nature of public administration. Role of public organizations in the American polity at the federal, state and local levels. Constitutional definition of administration. Exposure to daily workings of public agencies. Role of independent sector organizations.

PUB 291	Special Topics	1 to 5
PUB 292	Special Topics	1 to 5
PUB 293	Special Topics	1 to 5

PUB 379 Public Sector Analysis 5
Economic theory of public and nonprofit organizations, including demand, production and cost. Introduction to externalities, public goods, collective decision making, taxation, present value and discounting.

PUB 382 Research Methods 5
Social science techniques in defining and executing public policy evaluation. Research design, data acquisition, basic quantitative skills, modes of effective research presentation. Prerequisite: PUB 280.

PUB 479 Management Control 5
Characteristics of the control structure in public and non-profit organizations, including financial reporting, output measurement, programming, budget preparation, performance monitoring and evaluation.

PUB 485 Leadership in the Public Sector 5
Causes and consequences of short-term thinking in major public policies, including the environment, the economy and education. Developing an ethical vision and implementing leadership strategies for the future. Senior synthesis.

PUB 488 Internship 1 to 5
On-the-job experience with appropriate governmental or non-profit agency. Students may register for more than 15 total intern credits. Mandatory CR/E.

PUB 491	Special Topics	1 to 5
PUB 492	Special Topics	1 to 5
PUB 493	Special Topics	1 to 5

PUB 497	Independent Study	1 to 5
PUB 498	Independent Study	1 to 5
PUB 499	Independent Study (Graded tutorial)	1 to 5

Prelaw

David W. Arnesen, JD, Adviser

Eric Olsen, PhD, Adviser

Richard Young, PhD, Adviser

Program

The best preparation and a requirement for entrance to many law schools is the completion of a four-year bachelor's degree.

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 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 liberal studies program. The program of study of each prelaw student must be approved by the departmental adviser, and the prelaw adviser should be consulted quarterly. During their junior year, students must acquaint themselves with the entrance requirements of the law school they plan to attend and make arrangements to take the Law School Aptitude Test (LSAT). The application form and the instruction booklet for this test may be obtained from the prelaw adviser.

Premajor Program

Betsey Barker Klein, BA, Director

Objectives

The college recognizes that many students come to Seattle University wishing to explore academic programs and careers before committing themselves to a major program. The premajor is intended to provide freshmen and sophomores with this opportunity while assuring they are well prepared for whatever direction they choose.

Each student is assigned an adviser who not only assists in arranging the student's program, but will aid in the process of making an academic and career decision.

General Program Requirements

The premajor program is for freshmen and sophomores only. Students must enroll in the core courses of phase I and phase II appropriate to their academic level. The college's entrance requirements in foreign language must be fulfilled immediately if not already satisfied. Remaining electives are chosen based upon the student's interest. Students may apply for admittance into a major or professional school at any time in their freshman or sophomore year, but must do so prior to the attainment of junior status.

Psychology

Jan O. Rowe, Chairperson

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 experience and behavior. The specific and unique role of the Psychology Department is to provide a knowledge of psychology as a human science and as a natural science, both founded on a solid philosophical reflection on values of the human person.

Degrees Offered

Bachelor of Arts

Bachelor of Science

Master of Arts in Psychology (See the *Graduate Bulletin of Information*)

Major Offered

Psychology

Psychology with a Specialty in Addiction Studies

Minor Offered

Psychology

General Program Requirements

Entry into the psychology major requires a 2.75 grade point average for incoming freshmen and a 2.5 grade point average for transfer students.

Psychology majors may choose any minor. 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. Psychology majors may not register for P/E in the courses listed under departmental requirements. They must obtain a minimum grade of C or higher in the required courses, PSY 120, 301, 303, 304, 305, 306 and 499. Psychology majors must complete at least 30 credits in the major at Seattle University.

The psychology major may be combined with a specialty in addiction studies (see addiction studies section of this bulletin.) Students taking this specialty may count ADD 400 and ADD 402 towards their psychology requirements.

A psychology major cannot count more than 10 credits in independent study toward the 50 credits required for the major.

Teacher Education

The teacher preparation program is a graduate-level program only. Students planning to become elementary teachers or secondary psychology

or social studies teachers must complete a bachelor's degree prior to beginning the teacher preparation program. They should discuss their majors with their psychology advisers to ensure that they are enrolled in the appropriate courses, and contact the School of Education for advising. Second endorsements are available in psychology (24 credits) and social studies (45 credits).

Bachelor of Arts Major in Psychology

In order to earn the bachelor of arts degree with a major in psychology, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I (not psychology)	.....	5
Social Science II (not psychology, different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Fifty credits in psychology, including:

PSY 120	Introductory Psychology*	5
PSY 301	History and Schools of Psychology*	5
PSY 303	Statistics and Research Methods*	4
PSY 304	Lab for Statistics and Research Methods*	1
PSY 305	Statistics and Research Methods: Applied*	4
PSY 306	Lab for Statistics and Research Methods: Applied*	1
PSY 499	Senior Seminar*	5
PSY	Electives	25

Please Note: 1. *Must be graded C or better. 2. No more than 10 credits of independent study are permitted.

Bachelor of Arts Major in Psychology Addiction Studies Specialty

In order to earn the bachelor of arts degree with a major in psychology/addiction studies specialty, students must complete 180 quarter credits, with a cumulative grade point average of 2.0 and a major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science		5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I (Not psychology)		5
Social Science II (Not psychology and different discipline from Social Science I)		5
Theology and Religious Studies Phase II (200-299)		5
Ethics (upper division)		5
Theology and Religious Studies Phase III (300-399)		5
Interdisciplinary Course		3 to 5

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence

is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Fifty credits in psychology, including:

PSY 120	Introductory Psychology*	5
PSY 301	History and Schools of Psychology*	5
PSY 303	Statistics and Research Methods*	5
PSY 304	Lab for Statistics and Research Methods*	1
PSY 305	Statistics and Research Methods: Applied*	4
PSY 306	Lab for Statistics and Research Methods: Applied*	1
ADD 402	Counseling-Alcohol and Drugs*	4
PSY 499	Senior Seminar*	5
PSY	Electives	18

Choose one of the following two courses:

PSY 490	Symposium on Alcoholism*	3
ADD 400	Survey of Alcoholism*	3

IV. Other Program Requirements

ADD 401	Pharmacology/Physiology of Alcohol Use	2
ADD 407	Field Experience I	3
ADD 408	Field Experience II	3
ADD 412	Group Dynamics in Treatment	2
ADD 414	Case Management and Assessment	2
ADD 418	Addiction and the Family	2
ADD 424	Drug Abuse 1: Social Aspects	2
ADD 425	Drug Abuse 2: Physiological Aspects	2

Please Note: 1. Must be graded C or better. 2. No more than 10 credits of independent study are permitted.

Bachelor of Science Major in Psychology

In order to earn the bachelor of science degree with a major in psychology, students must complete 180 credits with a cumulative and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5

Lab Science	5
FA 120 Experiencing the Arts	5
PL 220 Philosophy of the Human Person	5
Social Science I (not major discipline)	5
Social Science II (not psychology and different discipline from Social Science I)	5
Theology and Religious Studies Phase II (200-299)	5
Ethics (upper division)	5
Theology and Religious Studies Phase III (300-399)	5
Interdisciplinary	3 to 5

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121 Studies in Modern Civilization	5
HS 231 Survey of the United States	5

III. Major Program Requirements

Fifty credits in psychology, including:

PSY 120 Introductory Psychology*	5
PSY 301 History and Schools of Psychology*	5
PSY 303 Statistics and Research Methods*	4
PSY 304 Lab for Statistics and Research Methods*	1
PSY 305 Statistics and Research Methods: Applied*	4
PSY 306 Lab for Statistics and Research Methods: Applied*	1
PSY 499 Senior Seminar*	5
PSY Electives	10

Choose one of the following two courses:

PSY 330 Physiological Psychology*	5
PSY 316 Health Psychology*	5

Choose one of the following two courses:

PSY 403 Advanced Statistics*	5
PSY 405 Advanced Experimental Design*	5

Choose one of the following two courses:

PSY 404 Psychology of Learning*	5
PSY 440 Cognitive Psychology*	5

IV. Other Program Requirements

Mathematics and physical science electives (may include any course that applies toward a mathematics or science major) 40

Please Note: 1. Must be graded C or better. 2. No more than 10 credits of independent study are permitted.

Minor in Psychology

In order to earn a minor in psychology, students must earn 30 credits of psychology, including:

PSY 120	Introductory Psychology.....	5
PSY	Electives	25

Please Note: Only five credits of independent study are permitted.

Psychology Courses

PSY 120 **Introductory Psychology** **5**

General introduction to the modes of inquiry of scientific psychology, including its nature, scope and method; organic, environmental and personal factors that influence human experience and behavior. Correlates with Philosophy 220. (fall, winter, spring)

PSY 201 **Statistics I** **5**

Basic descriptive and inferential statistics; central tendency, variability, correlation and regression, probability, z and t tests, one way analysis of variance. Prerequisite: At least high school algebra (spring). Non-majors only.

PSY 210 **Personality Adjustment** **5**

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

PSY 220 **Individual and Society** **5**

How the individual shapes society by interacting with the various cultural institutions and how society, in turn, shapes the individual, especially during the growing up years. The psychological nature of individualism and how that nature is expressed in daily life. (winter)

PSY 291 **Special Topics** **1 to 5**

PSY 292 **Special Topics** **1 to 5**

PSY 293 **Special Topics** **1 to 5**

PSY 301 **History and Schools of Psychology** **5**

Survey of the history of psychology, including the classic periods of structuralism, functionalism, behaviorism, psychoanalytic schools and Gestalt. Prerequisite: PSY 120. (fall)

PSY 303 Statistics and Research Methods 4

An introduction to methods of statistical analysis and the use of the natural sciences in the study of human experience and the study of human and animal behavior with an emphasis on the experimental method. Corequisite: PSY 304 (fall, winter)

PSY 304 Lab for Statistics and Research Methods 1

Introduction to the application of computers and computer software in descriptive and inferential statistics. Topics will include the creation of data files, the use of statistical software for data and analysis, and the use of graphics software in reporting the results of statistical analysis. Corequisite: PSY 303 (fall, winter)

PSY 305 Statistics and Research Methods: Applied 4

A continuation of the first course with a greater emphasis on inferential statistics and the application of the experimental method to areas of psychology such as psychophysics, perception, learning and memory. Continued study and application of statistical software to the laboratory project. Prerequisite: PSY 303 and 304. Corequisite: PSY 306 (winter, spring)

PSY 306 Lab for Statistics and Research Methods: Applied 1

The application of the correlational method and the experimental method in conducting psychological research. Topics will include within-subjects designs, between-subjects designs, and factorial designs. Students will design research projects, collect and analyze data and prepare a written report following the format of the publication manual of the American Psychological Association. Prerequisite: PSY 303, PSY 304. Corequisite: PSY 305 (winter, spring).

PSY 315 Abnormal Psychology 5

Survey of abnormal mental and emotional life; symptoms, nature and causes of psychological disorders; abnormalities of specific functions; theories of etiology. Prerequisite: PSY 120. (fall, winter, spring)

PSY 316 Health Psychology 5

An examination of the contributions of the methods of psychology and the application of psychological intervention and treatment of illness. The review of current research with respect to the identification of psychological correlates of health and illness. Prerequisite: PSY 120 (fall, odd-numbered years)

PSY 322 Psychology of Growth and Development 5

Life span development from infancy through childhood, adolescence, young adulthood, middle age, old age and death and dying. Cognitive, personality, social, and emotional development. Optional field work placement in settings related to different age periods. Prerequisite: PSY 120 or equivalent (fall, winter, spring). Credit will not be allowed for both PSY 322 and ED 322.

- PSY 330 Physiological Psychology 5**
Biological basis of behavior, cerebrospinal, autonomic and sensory systems; endocrine glands, relation of the brain to behavior. Prerequisites: PSY 120 (fall, even-numbered years)
- PSY 340 Psychology of Gender 5**
How gender shapes the lives of men and women, including human development, personality, cognition, achievement and social behavior. Emphasis will be on the mechanisms through which gender has its effect, including possible effects of biology, learning, modeling, social roles, etc. Prerequisite: PSY 120 (winter; odd-numbered years)
- PSY 350 Theories of Personality 5**
Study of the assumptions, basic principles and implications for psychotherapy and everyday life of selected personality theorists representing the psychoanalytic, social psychological, social learning, humanistic and existential approaches to psychology. Prerequisite: third-year standing and PSY 120 or equivalent. (fall)
- PSY 375 Psychology of Death and Dying 5**
Topics include the experience of dying, death anxiety, death denial, pain, near-death experiences, bereavement, disasters, rituals cross-culturally, funerals, the death of the child and the child's perception of death, and the relationship of death to life. Prerequisite: PSY 120. (winter)
- PSY 403 Advanced Statistics 5**
Review of probability, correlational methods and inferential statistics followed by factorial designs including repeated measures designs, analysis of covariance designs, multiple regression, factor analysis, multidimensional scaling and other multivariate statistics. Prerequisites: PSY 303, PSY 304, PSY 305 and PSY 306. (spring, even-numbered years)
- PSY 404 Psychology of Learning 5**
Principles of classical conditioning, instrumental conditioning, reinforcement, punishment and avoidance learning, generalization and discrimination, biological aspects of conditioning and learning, review of major learning theories, and application of learning principles in the management of animal and human behavior. Prerequisite: PSY 120. (winter, odd-numbered years)
- PSY 405 Advanced Experimental Design 5**
Students will develop independent skills in designing and conducting studies in psychology and in analyzing and interpreting data. Further development of abilities to read, write and evaluate experimental articles. Training in advanced statistical software for the social sciences. Prerequisites: PSY 303, PSY 304 and PSY 306. (spring, odd-numbered years)
- PSY 427 Introduction to Counseling 5**
Basic theory, principles and dynamics of the counselor-client relationship and the counseling process. Prerequisite: PSY 120.

PSY 440 Cognitive Psychology 5

Considers alternative models of how our mind works to receive, store and process information. The relative strengths of those models in the light of existing data are evaluated. Topics include processes of attention, memory, reasoning and decision making, including the implications of those processes for issues in education, language, social interaction, risk assessment, etc. Prerequisite: PSY 120 (winter; even-numbered years)

PSY 461 Theory and Experience of Group Dynamics 5

Basic theory and principles of group dynamics. Experience of group dynamics in a group focusing on the interpersonal, gives a foundation for understanding theory.

PSY 480 Interdisciplinary Core Course 3 to 5

Title and content change each term.

PSY 490 Symposium on Alcoholism 2 to 5

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. (fall, winter, spring) Also offered as ADD 400.

PSY 491 Special Topics in Psychology 2 to 5**PSY 492 Special Topics in Psychology 2 to 5****PSY 493 Special Topics in Psychology 2 to 5**

By arrangement. Prerequisite: permission.

PSY 496 Independent Study 1 to 5**PSY 497 Independent Study 1 to 5****PSY 498 Independent Study 1 to 5****PSY 499 Senior Seminar 5**

Reading and discussion of current issues with respect to psychology as a mental health profession, and as a discipline with a particular content and diverse methodologies. Prerequisite: permission. (winter and spring)

Sociology

David McCloskey, PhD, Chairperson

Objectives

As the basic social science, sociology raises the question: Why do people do what they do? Sociology offers an in-depth understanding of behavior in human groups ranging from families and small groups to communities and organizations to whole societies, cultures and civilizations.

Sociology studies the ecological foundations of society, major institutions and the social structure, the formation of self and personal identity, and symbolic systems in their cross-cultural and historical dimensions. Theory and research are integrated, enabling students to comprehend the main patterns and trends of past, present and future.

A sociology major or minor helps students prepare for careers in any field in which working with people is paramount, and for graduate study or law school. Particular emphasis is placed on the practical applications of sociological knowledge in the fields of social work, family-life studies and social research. Internships match theory with practice by providing opportunities for on-the-job training in selected sites.

Degree Offered

Bachelor of Arts

Majors Offered

Sociology

Sociology/Applied Social Research Track

Sociology/Family Life Studies Track

Sociology/Social Work Track

Minor Offered

Sociology

Teacher Education

The teacher preparation program is a graduate-level program only. Those students planning to become elementary teachers or secondary sociology or social studies teachers must complete a bachelor's degree prior to beginning the teacher preparation program. They should discuss their major with their sociology adviser to ensure they are enrolled in the appropriate courses and must contact the School of Education for advising. Second endorsements are available in sociology (24 credits) and social studies (45 credits).

Bachelor of Arts Major in Sociology

In order to earn the bachelor of arts degree with a major in sociology, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I (not sociology)	.....	5
Social Science II (not sociology and different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty credits in sociology, including:

SC 120	Introductory Sociology	5
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Choose one from the following five courses in

Area I—Human Ecology:

SC 202	Human Ecology and Geography	5
SC 303	Sociology of Community	5
SC 306	Population Dynamics	5
SC 404	Technology and Society	5
SC 408	The Urban Revolution	5

Choose two from the following five courses in

Area II—Institutions and Social Structure:

SC 210	American Society and Culture	5
SC 215	Family and Kinship	5
SC 316	Inequality and Stratification	5
SC 319	Deviance and Social Control	5
SC 414	Social Movements	5

Choose one from the following four courses in

Area III—Self and Society:

SC 222	Social Psychology	5
SC 321	Socialization through the Life Cycle	5
SC 323	Culture and Personality	5
SC 424	Sociology of Mental Illness	5

Choose one from the following four courses in

Area IV—Cultural Systems:

SC 230	Cultural Anthropology	5
SC 330	Sociology/Anthropology of Religion	5
SC 333	Sociology/Anthropology of Law	5
SC 438	Anthropology of Pacific Northwest Peoples	5

Choose one of the following two courses in

Area V—Theory and Method:

SC 340	Classical Sociological Theory	5
SC 442	Contemporary Sociological Theory	5

Choose one of the following three courses:

SC 346	Social Statistics	5
SC 348	Quantitative Research Methods	5
SC 444	Qualitative Social Research	5

SC	Electives	20
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Please Note: 1. Students should select the remaining elective sociology courses in close consultation with departmental advisers. 2. A minimum of 30 upper division credits will be required for graduation. 3. Transfer students must complete a minimum of 25 credits in sociology at Seattle University.

Bachelor of Arts Major in Sociology Applied Social Research Track

In order to earn the bachelor of arts degree with a major in sociology/applied social research track, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I (not sociology)	.....	5
Social Science II (not sociology and different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty-five credits in sociology, including:

SC 120	Introductory Sociology	5
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Choose one from the following five courses in

Area I—Human Ecology:

SC 202	Human Ecology and Geography	5
SC 303	Sociology of Community	5
SC 306	Population Dynamics	5
SC 404	Technology and Society	5
SC 408	The Urban Revolution	5

Choose one from the following five courses in

Area II—Institutions and Social Structure:

SC 210	American Society and Culture	5
SC 215	Family and Kinship	5
SC 316	Inequality and Stratification	5
SC 319	Deviance and Social Control	5
SC 414	Social Movements	5

Choose one from the following four courses in

Area III—Self and Society:

SC 222	Social Psychology	5
SC 321	Socialization through the Life Cycle	5
SC 323	Culture and Personality	5
SC 424	Sociology of Mental Illness	5

Choose one from the following four courses in

Area IV—Cultural Systems:

SC 230	Cultural Anthropology	5
SC 330	Sociology/Anthropology of Religion	5
SC 333	Sociology/Anthropology of Law	5
SC 438	Anthropology of Pacific Northwest Peoples	5

Choose one of the following two courses in

Area V—Theory and Method:

SC 340	Classical Sociological Theory	5
SC 442	Contemporary Sociological Theory	5

Choose one of the following three courses:

SC 346	Social Statistics	5
SC 348	Quantitative Research Methods	5
SC 444	Qualitative Social Research	5
SC	Electives	5
PSY 385	Comp Research Methods	5
SC 346	Social Statistics	5

SC 348	Quantitative Research Methods	5
SC 482	Evaluation Research	5
SC 488	Internship	5

Please Note: 1. Students should select the remaining elective sociology courses in close consultation with departmental advisers. A minimum of 30 upper division credits will be required for graduation. 2. Transfer students must complete a minimum of 25 credits in sociology at Seattle University.

Bachelor of Arts Major in Sociology Family Life Studies Track

In order to earn the bachelor of arts degree with a major in sociology/family life studies track, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I (not sociology)	.....	5
Social Science II (not sociology and different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty-five sociology credits, including:

SC 120	Introductory Sociology	5
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Choose one from the following five courses in

Area I—Human Ecology:

SC 202	Human Ecology and Geography	5
SC 303	Sociology of Community	5
SC 306	Population Dynamics	5
SC 404	Technology and Society	5
SC 408	The Urban Revolution	5

Choose one from the following five courses in

Area II—Institutions and Social Structure:

SC 210	American Society and Culture	5
SC 215	Family and Kinship	5
SC 316	Inequality and Stratification	5
SC 319	Deviance and Social Control	5
SC 414	Social Movements	5

Choose one from the following four courses in

Area III—Self and Society:

SC 222	Social Psychology	5
SC 321	Socialization through the Life Cycle	5
SC 323	Culture and Personality	5
SC 424	Sociology of Mental Illness	5

Choose one from the following four courses in

Area IV—Cultural Systems:

SC 230	Cultural Anthropology	5
SC 330	Sociology/Anthropology of Religion	5
SC 333	Sociology/Anthropology of Law	5
SC 438	Anthropology of Pacific Northwest Peoples	5

Choose one of the following two courses in

Area V—Theory and Method:

SC 340	Classical Sociological Theory	5
SC 442	Contemporary Sociological Theory	5

Choose one of the following three courses:

SC 346	Social Statistics	5
SC 348	Quantitative Research Methods	5
SC 444	Qualitative Social Research	5

SC 346	Social Statistics	5
SC 348	Quantitative Research Methods	5
SC 482	Evaluation Research	5
SC 488	Internship	5
SC	Electives	10

Please Note: 1. Students should select the remaining elective sociology courses in close consultation with departmental advisers. A minimum of 30 upper division credits will be required for graduation. 2. Transfer students must complete a minimum of 25 credits in sociology at Seattle University.

Bachelor of Arts Major in Sociology Social Work Track

In order to earn the bachelor of arts degree with a major in sociology/social work track, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I (not sociology)	.....	5
Social Science II (not sociology and different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty-five credits in sociology, including:

SC 120	Introductory Sociology	5
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Choose one from the following five courses in

Area I—Human Ecology:

SC 202	Human Ecology and Geography	5
SC 303	Sociology of Community	5
SC 306	Population Dynamics	5
SC 404	Technology and Society	5
SC 408	The Urban Revolution	5

Choose one from the following five courses in

Area II—Institutions and Social Structure:

SC 210	American Society and Culture	5
SC 215	Family and Kinship	5
SC 316	Inequality and Stratification	5
SC 319	Deviance and Social Control	5
SC 414	Social Movements	5

Choose one from the following four courses in

Area III—Self and Society:

SC 222	Social Psychology	5
SC 321	Socialization through the Life Cycle	5
SC 323	Culture and Personality	5
SC 424	Sociology of Mental Illness	5

Choose one from the following four courses in

Area IV—Cultural Systems:

SC 230	Cultural Anthropology	5
SC 330	Sociology/Anthropology of Religion	5
SC 333	Sociology/Anthropology of Law	5
SC 438	Anthropology of Pacific Northwest Peoples	5

Choose one of the following two courses in

Area V—Theory and Method:

SC 340	Classical Sociological Theory	5
SC 442	Contemporary Sociological Theory	5

Choose one of the following three courses:

SC 346	Social Statistics	5
SC 348	Quantitative Research Methods	5
SC 444	Qualitative Social Research	5

SC 346	Social Statistics	5
SC 348	Quantitative Research Methods	5
SC 482	Evaluation Research	5
SC 488	Internship	5
SC	Electives	10

Please Note: 1. Students should select the remaining elective sociology courses in close consultation with departmental advisers. A minimum of 30 upper division credits will be required for graduation. 2. Transfer students must complete a minimum of 25 credits in sociology at Seattle University.

Minor in Sociology

In order to earn a minor in sociology, students must complete 30 credits in sociology, including:

SC 120	Introductory Sociology	5
One course from each of the five main areas of sociology (see major requirements).		25

Please Note: Transfer students must take at least 15 upper division credits at Seattle University for the minor.

Sociology Courses

SC 120 **Introductory Sociology** **5**

A description of the science of sociology; an analysis of interpersonal relations, of associations and social institutions, and of the way these affect one another and are affected by culture. Correlates with PL 220.

SC 202 **Human Ecology and Geography** **5**

Examination of basic human responses to nature. 1. Population dynamics, settlement patterns, resource usage, environmental impacts and the relation of these to ecological processes; 2. geographical location and spatial distribution of human activities in terms of natural and cultural regions. The significance of 'place;' special focus on Pacific Northwest.

SC 210 **American Society and Culture** **5**

Exploration of the basic institutions and social structure of America. Analysis of main patterns and trends since WWII in population, environment, technology, economy, politics, family and class, interpreted as a transformation to a post-industrial society. Reflection on origin and nature of American values and character structure (esp. Weber); problems and future prospects.

SC 215 **Family and Kinship** **5**

Analysis of the nature of family systems. Kinship as the primordial social bond, and the evolution of families in relation to changes in the larger social structure. Contemporary family types, dynamics, development, policy, etc.; changes in contemporary family and kinship relations.

- SC 222 Social Psychology 5**
Inquiry into fundamental relations between the individual and society. Theoretical perspectives on interaction and communication, formation of personal identity through identification with models, internal organization of "self," formation and changes of perceptions, attitudes, beliefs and behaviors; small-group dynamics, collective behavior.
- SC 230 Cultural Anthropology 5**
Study of the nature and dynamics of cultural processes, the evolution of human beings and cultures, and diversity of cultures. Analysis of the ecological, social and symbolic lives of humans in a holistic way. Case studies and selected institutions and peoples. Evolution of major sociocultural systems; impacts of Westernization on native peoples today.
- SC 250 Introduction to Social Work 5**
Historical development of social welfare practices and institutions. Theoretical bases underlying the structure and function of social welfare systems and services. Philosophy and methods used by professional social workers in meeting human needs.
- SC 303 Sociology of Community 5**
Study of community as both an experience and a place; main focus on the life of the local community. Consideration of classical theories of Toennies and others; ecological, anthropological and sociological perspectives on community. Historical changes transforming communities in the modern world and America. Contemporary problems of community and innovative responses; community and regional development.
- SC 306 Population Dynamics 5**
Analysis of basic demographic processes and principles; population in relation to environment and resources. Main demographic patterns and trends in history in relation to changes in social and economic organization. Contemporary dynamics, including the "demographic transition," over-population and "birth dearth."
- SC 316 Inequality and Stratification 5**
Exploration of the nature and development of social inequality and societal stratification. Alternative theories of Marx, Weber, functionalists and others on the dynamics and evolution of stratification systems, especially the emergence of the modern class system, in relation to changes in social structure. Special focus on classes and elites in America, and contemporary changes.
- SC 317 Racial and Ethnic Relations 5**
Investigation of the social construction of "race" and "ethnicity" in comparative perspective, including the political and socio-historical factors affecting individual and group identities. Special attention paid to the economic and social-psychological dimensions of racism and domination.

- SC 319 Deviance and Social Control 5**
 Analysis of the nature and dynamics of norms and values, deviance and sanctions, and modes of social control. Theories of causes of deviant behavior, types of deviance, processes of becoming deviant, stigmatization; deviant groups and subcultures, deviance and race, ethnicity, gender and class differences; deviance, innovation and social change.
- SC 321 Socialization Through the Life-Cycle 5**
 Study of the formation of personal identity throughout the human life-cycle. (1) socialization: emergence of the self through identification with models, agents and modes of socialization, resocialization; (2) life-stages: moral and cognitive development, sociology of childhood, youth, adulthood and old age. Changes in socialization patterns and life-stages in contemporary America.
- SC 323 Culture and Personality 5**
 Exploration of cross-cultural differences in the organization of personality systems. Alternative theories of culture and character, formation of cognitive and moral structures, and changes in "selves" in relation to changes in larger social and historical contexts. Evolution of Western notions of "personhood," the modern "self" and development of American character structure.
- SC 330 Sociology/Anthropology of Religion 5**
 Exploration of the nature and evolution of religion from a cross-cultural perspective. Theories of Durkheim, Marx, Weber and others on the nature and dynamics of religious beliefs, symbols, behaviors, organizations and movements; interrelations of religion, society, culture and self. Evolution of religious systems in relation to changes in social organization; contemporary religion and society.
- SC 333 Sociology/Anthropology of Law 5**
 Exploration of the nature and dynamics of law from a cross-cultural perspective. Theories of custom and law, sources of legal forms and principles; legal institutions, classes and the state; deviance, law and social control; changes in legal systems in relation to changes in politics, economics, religion and society.
- SC 336 Sociology/Anthropology of Health and Medicine 5**
 Exploration of the meanings of health, disease and modes of healing from a cross-cultural perspective. Changes in disease and mortality in relation to changes in social structure. Development of modern scientific medicine, professionalization, and the hospital system; critiques and alternative therapeutics; contemporary dilemmas and future prospects.

- SC 340 Classical Sociological Theory 5**
Examination of the classical theoretical tradition in sociology. Origins of sociology and the social sciences, contexts and changes in social organization, especially the "Twin Revolution" - Industrial and French; founders and schools. Development of sociological theory in the 19th and early 20th centuries: special focus on Marx, Durkheim and Weber; continuing significance of classical models today.
- SC 346 Social Statistics 5**
Exercises in basic descriptive and inferential statistics as used in the social sciences, including measures of central tendency and dispersion, parametric and non-parametric measures of correlation and association in higher-level analysis.
- SC 348 Quantitative Research Methods 5**
Research logic, strategy and design, nature of hypotheses and how to test them; operationalization of variables; instrumentation with tests for reliability and validity; sampling procedures; data gathering techniques; data processing and analysis with statistical techniques.
- SC 353 Ecological Foundations of Social Work 5**
Exploration of systems models, analysis and intervention in living systems as "nested ecologies;" the bases of social work practice from the micro-level of individual ecologies to the macro-level of cultural ecologies. Prerequisite: SC 250.
- SC 354 Social Work in Personal Ecologies 5**
Survey of the philosophy, practice and politics of the past, present and future of social work with the micro-level ecologies of individuals, families and small groups, with a focus on interviewing and intervention skills. Prerequisite: SC 353.
- SC 367 Marriage and Divorce 5**
History of marriage and divorce in American society; explanations of change in various social arenas - economic, political, religious, educational and familial.
- SC 368 Social Work with Families 5**
Behavioral dynamics in family systems, the reciprocal nature of relationships, and conceptual framework for individual and family therapy through study of treatment modalities.
- SC 371 Criminology 5**
Review of the theories of causes of criminal behavior; sociological explanations of criminal interactions, criminal systems and their functions.
- SC 372 Juvenile Delinquency 5**
Analysis of the offenses of juvenile offenders, as distinct from those of adult offenders, and sociological explanations of these behaviors with contemporary conceptual models.

SC 391	Special Topics	1 to 5
SC 392	Special Topics	1 to 5
SC 393	Special Topics	1 to 5

SC 404 Technology and Society 5

The nature of technology as a cultural invention, and theoretical perspectives on the interaction between technology, society and self. Types of technologies and historical development of them in relation to social, economic, political and scientific changes. Special focus on the contemporary revolution in technology and its impact on everyday life. Problems and prospects for the future.

SC 408 The Urban Revolution 5

Nature and dynamics of the city. Theories of the city in history, and development of the Western city (Mumford, Pirenne, Marx, Weber, etc.); urbanization and industrialization; contemporary dynamics of urban regions in relation to social, technological, economic and political changes; the "megapolis." Special focus on the Third World, PNW, and Seattle and environs.

SC 414 Social Movements 5

The nature and dynamics of social movements. Alternative theories of types of movements, preconditions, modes of mobilization and organization, phases of development, the role of charismatic figures and groups, impacts on policy and culture. Case studies of significant historical, protest and contemporary movements.

SC 421 Gender Roles 5

Maleness/femaleness vs. masculinity/femininity; reflection of gender role changes in modern and traditional societies, perceptions and explanations of role changes in educational, economic, political, religious, marital and familial life in American society.

SC 424 Sociology of Mental Illness 5

The nature, dynamics and treatment of madness and insanity from a sociocultural perspective. Theoretical perspectives on the social causes of mental illness; class, gender and cultural differences; therapeutic approaches in cross-cultural and historical perspective. Changes in types and treatments of mental illness in relation to changes in society; contemporary definitions and treatment.

SC 430 Sociology of the Future 5

Examination of the mainline patterns and trends of our time, and scenarios of the future; critiques and alternatives.

- SC 438 Anthropology of Pacific Northwest Peoples 5**
Study of the cultures of native peoples of the north Pacific coast and inter-mountain plateau. Overview of eras, and natural and cultural regions. Analysis of selected peoples in terms of ecology and economics, kinship, politics, status, mythology and ritual. Review of inter-tribal relations, native-white relations, and native-government relations. Contemporary changes, politics and future prospects.
- SC 442 Contemporary Sociological Theory 5**
Examination of major theoretical perspectives in contemporary sociology. Development of sociological theory in the 20th century, especially since WW II; leading thinkers and schools. Exercises in theory construction, and the practical application of theories.
- SC 444 Qualitative Social Research 5**
Hands-on practical exercises in qualitative methods of social research: participant-observation field research, interviewing, ethnographic description, content analysis, document analysis and archival research, logic and methods of comparative and historical research.
- SC 450 Social Work in Public Ecologies 5**
Survey of the philosophy, practice and politics of the past, present and future of social work within mid-level ecologies or organizations, communities and political structures, and macro-ecologies of regions, nations and the planet, with a focus on appropriate intervention strategies at each level. Prerequisite: SC 354.
- SC 452 Social Work with Children and Youth 5**
A practice-oriented course focusing on methods of working with children and youth in social and interpersonal conflict situations at home, school and in the community.
- SC 456 Social Work with Adults and Aged 5**
Examines the history and current status of service to adults and aged. Current concepts about the aging process, and theoretical frameworks which attempt to explain or resolve the social problems of adults and aged are presented.
- SC 462 Ethnic Families of America 5**
Description and theoretical analysis of various ethnic groups in historical development of American society, and the impacts of their cultural perspectives on American family life.
- SC 480 Interdisciplinary Core Course 3 to 5**
Title and content change each term.

SC 482 Evaluation Research 5

Application of basic research design and logic to programs for the purpose of evaluation of performance. Also, the techniques for making social, economic and environmental impact assessment. Prerequisites: SC 346 and either 348 or 444.

SC 488 Internship 5 to 10

Practical work experience in a selected organization or supervised setting. Students are required to meet weekly on campus with other interns in a colloquium guided by a faculty member.

SC 491 Special Topics 1 to 5**SC 492 Special Topics 1 to 5****SC 493 Special Topics 1 to 5****SC 496 Independent Study 1 to 5****SC 497 Independent Study 1 to 5****SC 498 Independent Study 1 to 5**

Theology and Religious Studies

Patricia L. Wismer, PhD, Chairperson

Objectives

Theology and religious studies contribute to the formation of students' personal growth by helping them develop attitudes, skills and knowledge to deal perceptively and critically with the religious dimension of human life, especially with the beliefs, practices and values of the Catholic Christian tradition. The department supplies two levels of courses for the university core curriculum. Phase II religious experience courses (200 numbers on the bulletin course listings) help students recognize and appreciate the presence and function of the sacred in human life and history; Phase III theological reflection courses (300 numbers in the course listings) enable students to learn how to understand religious traditions.

Students must take a Phase II course before they can register for a Phase III course. Transfer students with 90 or more credits and no equivalent 200 or 300 level theology/religious studies course are granted a waiver for Phase III (300-level) and are required to take a Phase II (200-level) course at Seattle University.

The department also offers a program of courses, some from courses designed for the core curriculum, some special for majors and minors (400 numbers in the listings), leading to a bachelor of arts degree in theology and religious studies.

Degrees Offered

Bachelor of Arts

Graduate Degrees in the Institute for Theological Studies. (see Graduate Bulletin of Information.)

Master of Divinity

Master of Theological Studies

Master of Pastoral Ministry

Master of Religious Education

Master of Ministry

Bachelor of Arts Major in Theology and Religious Studies

In order to earn the bachelor of arts degree with a major in theology and religious studies, students must complete 180 credits with a cumulative grade point average of 2.0 and major grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5
HS 120	Introduction to Western Civilization	5
EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Ethics (upper division)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3 to 5

See detailed information on the core curriculum, beginning on page 53.

II. College of Arts and Sciences Requirements

Foreign Languages 115, 125, 135 or equivalent 0 to 15

Please Note: All students with a major in the College of Arts and Sciences must demonstrate competency in a foreign language through the 135 level. This competency is ordinarily achieved by successful completion of the three course sequence: 115, 125 and 135. Because these courses are a college requirement, no courses in the sequence may be taken on a pass/fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the Foreign Language Department for details on the examinations.

Choose one of the following two courses:

HS 121	Studies in Modern Civilization	5
HS 231	Survey of the United States	5

III. Major Program Requirements

Sixty credits in theology and religious studies, including:

Introductory Courses

RS 267	Spiritual Traditions: East and West	5
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Choose one of the following Hebrew Bible courses:

RS 200	The Hebrew Bible	5
RS 201	Torah: The Birth of a People	5
RS 208	Women and the Hebrew Bible	5

Choose one of the following New Testament courses:

RS 211	The Gospel of Jesus Christ	5
RS 217	The Message of Paul	5
RS 221	John: A Different Gospel	5

Intermediate Courses

Choose two of the following systematics courses:

RS 300	Themes of Christian Faith	5
RS 301	Women and Theology	5
RS 303	Theology of the Person	5
RS 310	Jesus the Christ	5
RS 312	Rethinking God	5
RS 317	Church as Community	5
RS 321	Symbol, Ritual and Sacrament	5

Choose one of the following ethics courses:

RS 330	God, Money and Politics	5
RS 334	Jesus and Liberation	5
RS 338	Human Sexuality: The Challenge of Love	5
RS 341	Contemporary Ethical Issues	5
RS 345	Biomedical Ethics: The Giving and Taking of Life	5
RS 347	Christianity and Ecology	5

Advanced Courses

Choose one of the following two courses:

RS 407	Interpreting the Hebrew Bible	5
RS 414	Interpreting the Synoptics	5
RS 401	Theology of Religions	5
RS 419	Historical Theology I	5
RS 420	Historical Theology II	5
RS 461	Theology Seminar	5

Open Elective

RS	*Elective (approved by adviser)	5
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Please Note: *1. Students who transfer with 90 or more credits and no applicable religious studies may waive this requirement. 2. 60 credits in theology and religious studies are required of the major, or 55 credits if 90 credit transfer waiver has been granted.

Minor in Theology and Religious Studies

In order to earn a minor in theology and religious studies, students must complete 30 credits in theology and religious studies, including:

Choose courses in one of the following five specializations for a total of 15 credits:

- Biblical Studies
- Systematic Theology
- Historical Theology
- Theological Ethics
- World Religions

Choose one course from each of the three areas outside the chosen specialization for a total of 15 credits. For purposes of this distribution, the four areas are:

- Biblical Studies
- Systematic/Historical Theology
- Theological Ethics
- World Religions

Please Note: 1. Students considering a minor should contact the department chair as soon as possible to discuss in more detail the options available for a minor. 2. Brochures with sample courses for each area of specialization are also available in the Theology and Religious Studies departmental office. 3. All minors will work closely with a faculty member in their chosen area of specialization who will serve as their adviser for the minor. 4. It is strongly recommended that students take one or more 400-level courses. 5. If students design their programs carefully, courses taken to fulfill the Theology and Religious Studies core requirement will count toward the minor.

Theology and Religious Studies Courses

Courses numbered in the 200s are Core Phase II; those in the 300s are Phase III; those in the 400s are advanced courses for majors and minors as well as interdisciplinary core courses. See core curriculum section of this bulletin.

Core Phase II: Person in Society—Religious Experience (RS 200-293)

RS 200 The Hebrew Bible

5

Study of central traditions and texts of the Hebrew Bible in their historical, cultural, political, and religious contexts. Extensive reading in the narrative and prophetic books and the Psalms, and an intensive study of selected texts, with attention to their role as foundational in the Jewish and Christian religions, both traditionally and recently.

- RS 201 Torah: The Birth of a People 5**
 Study of the Torah or Pentateuch, the core of the Hebrew Bible. Stories of world creation and flood, of Israel's ancestors, of slavery and liberation, of covenant and wandering. Critical reflection on the use of these stories in both Jewish and Christian traditions and in the theologies of contemporary marginalized groups.
- RS 208 Women and the Hebrew Bible 5**
 Investigation of a selection of narrative, legal, prophetic, and wisdom texts dealing with themes relating to women's lives: the frequent absence or trivialization of women; images of women—both individuals and types—as victims, as evil, as strong, and as loyal; and gendered imagery of the divine. Secondary literature will include interpretations by Jewish and Christian women around the world as well as white women and women of color in the United States.
- RS 211 The Gospel of Jesus Christ 5**
 Introductory study of the New Testament with a focus on the Jewishness of Jesus of Nazareth; his unique view of the relationship between God, human persons, communities, and the cosmos as a revolutionary perspective on human identity and freedom. The literary forms in which the Christian community proclaimed him. Appropriations of the Jesus tradition from the diverse perspectives of culture, gender, class, and race.
- RS 217 The Message of Paul 5**
 Paul's letters as the earliest New Testament writings of Christian faith and experience; his evolving understanding of Jesus; influence of the believing community and its culture on Paul's theology; dominant themes and ethical perspectives within the letters, relating especially to modern concerns and issues (e.g., Jewish-Christian dialogue, ministry, sexuality).
- RS 221 John: A Different Gospel 5**
 Investigation of John's distinctive understanding of Jesus as the divinely incarnate Christ; John's cultural and religious background and its shaping of the picture of Jesus as divine light and life; John's theology of indwelling and stress on the commandment of love; the relevance of the Johannine Jesus for contemporary believers.
- RS 224 Metaphor and Gender in the Bible 5**
 Investigation of the metaphorical nature of biblical language with a focus on the dynamics of a faith tradition and on the role of a community's values in determining the character of a text. Study of those stories, themes and images in the biblical world which gave structure and meaning to people's lives, exploring how these aspects reflect and influence the understanding of male and female roles, ancient and modern.

RS 230 God in Human Experience 5

Exploration of religious experience and the understandings of the Sacred, the natural world, person, and society that flow from such experience. Major themes include: revelation and faith; experiences of God and their expression in symbols, stories, and concepts; implications of one's view of God for understanding persons and community; challenges to the contemporary believer.

RS 235 The Catholic Tradition 5

Description of the historical roots and the characteristic set of beliefs, values, structures and practices that give rise to, shape and vitalize the continuing faith-life of Roman Catholics. Scriptural sources and life-effects of the tradition.

RS 243 Faith and Morality 5

Examination of connections between Christian faith expressions and decisions/actions in everyday life. Topics include: development of persons as moral agents in society; the place of Christian scriptures and tradition in the formation of people as agents in history; methods of moral decision-making and tools for evaluating personal decisions and public policies; application to central issues of the day.

RS 252 Living Prayer 5

Introduction to prayer as humans' most direct experience of God; investigation of our experiences of prayer, from prayers our parents taught us to liturgical prayer in various traditions; identification of personal prayer styles; Eastern and Western methods of contemplation as integration of self and world, and as union with God.

RS 255 Psychology and Religion 5

Exploration of experiences of the Sacred as religious and psychological phenomena. Reflection on theories of faith development and development of persons through the lifecycle. Study of the gospel story of Jesus as paradigm of authentic human life.

RS 258 African American Religious Experience 5

Effect of experiences and understandings of God (esp. providence, justice, power, knowledge, goodness) on African American history, struggle and concepts of reality. Contributions of African Americans to biblical interpretation and theological understanding. Impact of African roots, slavery, segregation, and the civil rights movement upon the African American collective psyche.

RS 267 Spiritual Traditions: East and West 5

Study of the revelation-authority religions of the West (Judaism-Christianity-Islam) compared with the wisdom-experience traditions of Asia (Hindu-Buddhist-Tao-Shinto). Focus on historical data and scriptural texts of each tradition to understand different views of person, community, sacred world, and meditation as experienced relationship to the divine.

RS 275 Jewish Faith and Life 5
 Examination of monotheism, covenant, morality and ethics as law, halacha (an intricate system of law governing the daily life of the individual), the lifecycle from birth to death, Sabbath and holidays, kosher dietary laws, messiah and messianism, theological Zionism, political Zionism and the modern Jewish state of Israel. Analysis of antisemitism as a major factor in the development of Judaism and the Jewish psyche.

RS 291 Special Topics 2 to 5
RS 292 Special Topics 2 to 5
RS 293 Special Topics 2 to 5

Core Phase III: Responsibility and Service— Theological Reflection (RS 300-398)

RS 300 Themes of Christian Faith 5
 Origins, continuing relevance, and integrating connections of some of the principal beliefs that shape and sustain Christian living over time: faith, revelation, creation, incarnation, redemption, life in the Spirit. Relation of beliefs to continuing life-evaluations and decisions.

RS 301 Women and Theology 5
 Exploration of central topics in feminist theology, e.g., naming the Sacred, the self in relation, transformation of the world. Discussion of what is involved in "doing theology" and what women bring to this discipline by attending to their own experience, interpretation and the power of their heritage.

RS 303 Theology of the Person 5
 Theological reflection on the nature of human persons understood in relation to self, community, natural world and God. Major themes include e.g.: origins and destiny; sin and grace; embodiment; creativity, play and work; gender and sexuality; suffering and oppression; human dignity and responsibility.

RS 310 Jesus the Christ 5
 Exploration of Jesus Christ's continuing redemptive significance for today's world. Sources and methods for addressing questions about who Jesus is and what he does. Investigation of the Christian community's deepening understanding of and response to the mystery of Jesus' person, presence, and power.

RS 312 Rethinking God 5
 Exploration of some major themes in the doctrine of God (e.g., power, love, transcendence, involvement in the world, trinitarian life, etc.) in light of questions raised by contemporary understandings of basic issues like suffering, gender and cultural diversity, humanity's place in the ecosystem, etc. Reflection on images and understandings of God in the Bible, Christian tradition, contemporary theology. Influence of one's view of God upon one's sense of responsibility for the world.

- RS 317 Church as Community 5**
An examination of the Christian community's attempt to represent Jesus' expression of the love of the triune God for all creation. Study of the Church's beliefs, values, structures, and activities in the past and in today's pluralistic world. Role of the Christian community in the lives of its members and in society.
- RS 321 Symbol, Ritual and Sacrament 5**
Investigation of the relevance of symbol, ritual and sacrament for human life. Introductory exploration of these topics in selected world religions. Study of sacraments in the Catholic Christian tradition, including Christ and the church as primary sacraments, biblical roots, and historical development; contemporary challenges to sacramental practice; relation between sacraments and Christian living.
- RS 330 God, Money and Politics 5**
A critical examination of the relationship between wealth and power and the Christian tradition; relationship between faith and the social, political and economic orders; faith and justice; Christian social teachings; Christian responses to issues of poverty, hunger and injustice.
- RS 334 Jesus and Liberation 5**
Examination of the subject and methods of liberation theologies, such as Latin American, feminist, Black, Asian; reflection on the life, mission, death and resurrection of Jesus Christ in light of oppressive situations; role of church; nonviolence, revolution and the drive for freedom.
- RS 338 Human Sexuality: The Challenge of Love 5**
Study of ethical standards for human sexuality in relation to Scripture, Christian tradition, and human experience; dialogue between the natural/social sciences and theological perspectives on sexuality; role of gender in sexuality; examination of ethical norms on marriage, same-sex relationships, being single, and dysfunctional and abusive relationships; sacramental character of marriage; sexuality and the sacred.
- RS 341 Contemporary Ethical Issues 5**
Exploration of selected contemporary moral problems in the light of the challenge they present to Christian ethics; emphasis upon components of an adequate Christian ethical framework; dialogical character of Christian ethics between the natural/social sciences and theological/philosophical perspectives; issues such as nonviolence, war and peace, capital punishment, racism, sexism, etc.
- RS 345 Biomedical Ethics: The Giving and Taking of Life 5**
Reflection on the ethical challenges which modern scientific and medical advances present to the Christian tradition in the areas of human reproduction and death; the proper relationship between science and Christian faith; the personal and relational character of human persons and their ways of moral knowing vs. the technological, scientific ways of determining knowledge.

RS 347 Christianity and Ecology 5
 Exploration of the role and responsibility of humans in the natural world; place of nature in Christian teachings and practices; examination of Biblical themes such as domination, co-creation, Promised Land, and Exodus; Christianity in the face of the environmental crisis and its dialogue with nature religions; myth and symbols of the sacred in nature.

RS 371 Dialogue, East and West 5
 Comparative study of Western and Eastern religious traditions; common categories for understanding what people seek in any religion-knowledge of the holy, harmony with the real world, significant moral value, and what differentiates one tradition from another; principles for interfaith dialogue that avoid obstacles to development within traditions, and obstacles to dialogue between traditions.

RS 373 Creation Spirituality 5
 Reading, analysis, and discussion of the current Christian search for a holistic awareness of a God whose presence continues in an ongoing Creation, and of human dynamic connectedness with and dependence on the natural world. Reflection on Chinese Taoist and Zen Buddhist views which contribute to environmental courtesy and personal harmony with the universe.

RS 380 Core Ethics: Christian Perspective 5
 Core ethics requirement as offered from Christian theological perspectives. Examines the theological contributions which Christian faith brings to bear upon normative ethics by exploring the constitutive elements of an adequate ethical framework within the Christian tradition; theological method, requisite sources of knowledge informing an ethical framework, the prioritization of sources in normative ethics, modes of ethical reasoning.

RS 391	Special Topics	2 to 5
RS 392	Special Topics	2 to 5
RS 393	Special Topics	2 to 5

RS 396	Independent Study	2 to 5
RS 397	Independent Study	2 to 5
RS 398	Independent Study	2 to 5

Major Courses (RS 401-498)

RS 401 Theology of Religions 5
 The study of theologizing the world's religious history; in Jewish, Christian, Buddhist, Hindu, Taoist-Confucian and Japanese traditions. An in-depth exploration of inter-religious dialogue. Topics considered include the persistence of religion, science and religious experience, revelation and transcendence, invisible harmony, cosmic confidence in reality and anthropomorphic categories. Christocentrism and Buddhacentrism, Brahmanic transcendence and Muslim mysticism. Prerequisite: RS 267.

Women's Studies Minor

Karen Barta, PhD, Marylou Sena, PhD, and Harriet Shaklee, PhD, Coordinators

Objectives

The program of courses which comprises the women's studies minor will enable students to examine women's roles in society from multiple perspectives and disciplines; to understand and evaluate feminist critical scholarship and to apply it across disciplines and in all areas of life; to analyze the connections between gender inequalities and other forms of discrimination (race, class ethnicity, etc.); and to develop abilities and skills to deal positively and effectively with gender issues for individuals and society.

The minor is designed for women and men to complement a major field of study with an increased understanding of the role gender plays in social construction of reality.

Minor in Women's Studies

In order to earn a minor in women's studies, students must complete 30 credits in women's studies, including:

WS 101	Introduction to Women's Studies	5
WS 401	Women's Studies Seminar	5
Electives from approved list, below		20

Please Note: As soon as a student decides to pursue a minor in women's studies, she or he should contact one of the coordinators of the minor. In consultation with the coordinator, students will choose an adviser and begin to design programs that fit their specific interests and best complement their majors. The adviser helps decide on particular courses, assures that all requirements of the minor are fulfilled, that the minor is noted on the transcript, provides information on further study and/or career opportunities, and works closely with students' advisers in their majors. Students are expected to meet regularly with their women's studies adviser to plan the minor as part of their overall academic program.

Courses selected for the minor may include those which fulfill university core or elective requirements, but may not include those taken to fulfill a major. Not more than 10 credits may be taken in any one discipline. At least 15 credits must be from upper division courses. At least 15 credits must be taken at Seattle University, five credits of which must be WS 401.

- RS 407 Interpreting the Hebrew Bible 5**
 Intensive study of selected texts in the Hebrew Bible focusing on a specific theme; emphasis on inductive study followed by reading a variety of interpretations; attention to the use made of these texts in various strands of Jewish and Christian traditions. Prerequisite: 200-level course in Hebrew Bible.
- RS 414 Interpreting the Synoptics 5**
 Discussion of the "synoptic problem"; use of historical (source, form, redaction criticisms) and literary methods to uncover the unique portraits of Jesus in the gospels of Matthew, Mark, and Luke; the gospels as narrative theologies embodying images of self, God, community, and world; critical reflection on interpretative uses of gospel traditions from diverse perspectives. Prerequisite: 200-level course in New Testament.
- RS 419 Historical Theology I 5**
 Development of the Christian community's understanding in faith through the first twelve centuries, highlighting its theologians' thinking through the tradition in light of the intellectual, social and cultural milieux of their day. Growth of trinitarian and christological developments of the fourth and fifth centuries as well as the effect of the rise of monasticism and the universities on theological thought. Close readings of several major figures (e.g., Irenaeus, Origen, the Cappadocians, Augustine).
- RS 420 Historical Theology II 5**
 Development of the Christian community's understanding in faith from the thirteenth to the twentieth century, highlighting its theologians' thinking through the tradition in light of the intellectual, social and cultural milieux of their day. Close readings of several major figures (e.g., Thomas Aquinas, Martin Luther or John Calvin, Friedrich Schleiermacher, Karl Rahner). Church councils, theological movements, and other figures surrounding and connecting these major thinkers.
- RS 461 Theology Seminar 5**
 In-depth investigation of one selected theme that engages students in the full range of advanced theological reflection-biblical roots, historical development, contemporary reinterpretations, implications for life and includes attention to the trinitarian dynamic of Christian theology. Examples include Trinity, grace and life in the Spirit; Christian anthropology; Christology; justice and the common good; etc. Capstone course for the major. Prerequisite: major, minor or permission
- RS 480 Interdisciplinary Core Course 5**
 Title and content may change each term
- RS 491 Special Topics 2 to 5**
RS 492 Special Topics 2 to 5
RS 493 Special Topics 2 to 5
- RS 496 Independent Study 2 to 5**
RS 497 Independent Study 2 to 5
RS 498 Independent Study 2 to 5

Courses Approved for the Women's Studies Minor

Courses Specific to the Minor

WS 101 Introduction to Women's Studies 5

A survey of women in society and the methods and concepts used in women's studies. Exploration of how gender, race, class and sexuality create similarities, differences and connections between women. Topics include women's histories, work, violence against women, creativity, empowerment and social change.

WS 401 Women's Studies Seminar 5

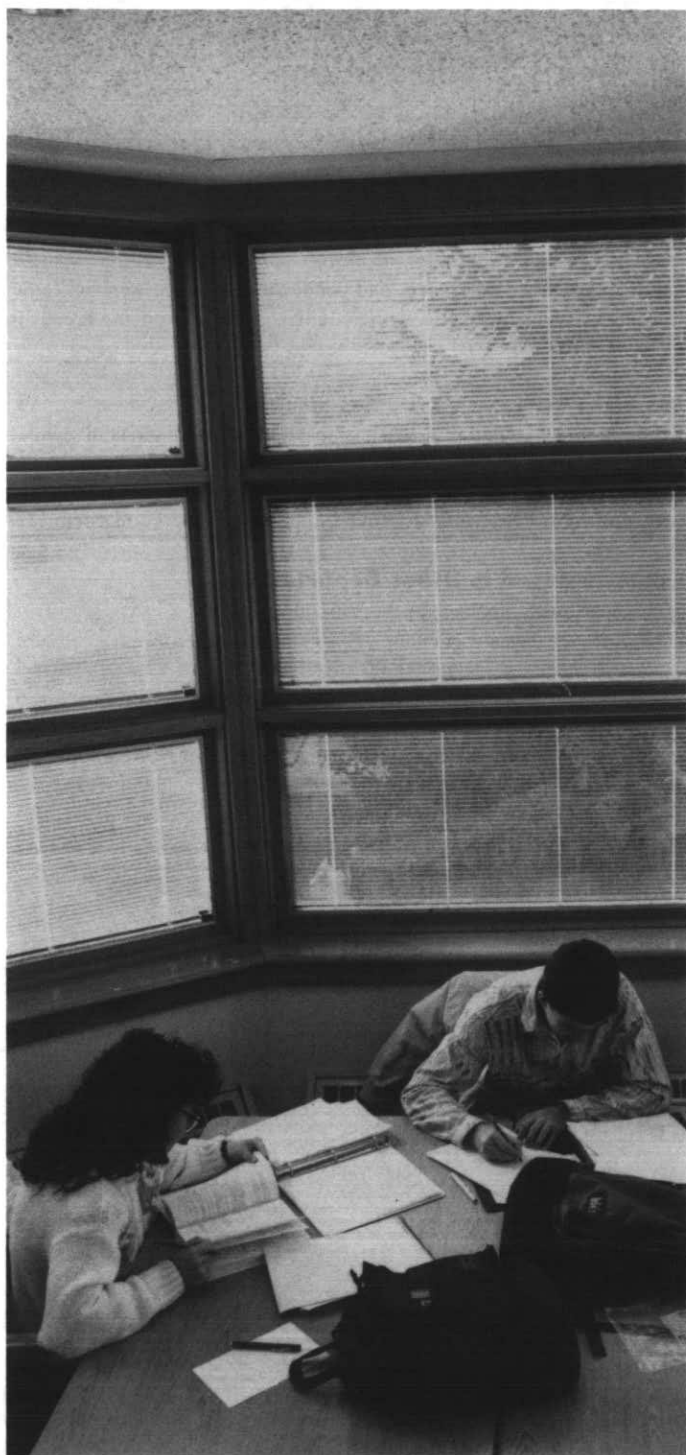
Exploration of methods of various disciplines to understand gender, providing a truly interdisciplinary perspective on women's issues. Synthesis of preceding work in the minor. Required for women's studies minor. Prerequisite: women's studies minors only, permission of instructor.

Courses Based in Other Departments

(See departmental listings for descriptions.)

CJ 406	Female Offenders	5
EN 440	Women and the Creative Imagination	5
N 372	Issues in Women's Health: A Wellness Perspective	5
PL 220	Philosophy of the Human Person	5
	(with gender-inclusive emphasis, as indicated in the remarks column of the quarterly schedule of classes)	
PSY 340	Psychology of Gender	5
RS 208	Women and the Hebrew Bible	5
RS 224	Metaphor and Gender in the Bible	5
SC 421	Gender Roles	5

Special topics courses may be added as departments propose new offerings. Advisers will have current listings of additional courses approved for the minor.



Albers School of Business and Economics

Jerry A. Viscione, PhD, Dean

C. Frederick DeKay, PhD, Associate Dean

Mary Conrad, MBA, Director of Graduate Programs

Kathryn Lewis, MBA, Assistant Director of Graduate Programs

Wendie Phillips, MA, Assistant Director of Undergraduate Programs

Ann Roesener, MA, Director of Placement

Department Chairpersons

Accounting: David E. Tinius, PhD

Administration: C. Patrick Fleenor, PhD

Economics and Finance: Barbara M. Yates, PhD

Individualized Major: Wendie Phillips, MA

Program Chairpersons

Accelerated Programs: Hildegard Hendrickson, PhD

International Business: David Arnesen, JD

Operations: Karen Brown, PhD

Professorships and Endowed Chairs

Thomas Glead Chair in Business: David A. Dubofsky, PhD

Robert D. O'Brien Chair in Business: Harriet Stephenson, PhD

Centers

The Entrepreneurship Center: Harriet Stephenson, PhD, Director

Objectives

Collegiate education for business should prepare students for business careers and service to the community, not simply for job-finding. A broad, liberal education, comparable to university studies in other professional fields, provides a sound base for development of managerial talents.

The programs of the Albers School of Business and Economics 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 Albers 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

The undergraduate and graduate programs are accredited by: American Assembly of Collegiate Schools of Business—graduate and undergraduate levels.

Organization

The Albers School has two principal divisions, undergraduate and graduate studies. Undergraduate majors are offered in eight business fields. In addition, the school offers a bachelor of arts in economics degree program.

Minors are offered in business administration and economics. Certificates of Post-Baccalaureate Studies are also available.

Degrees and Programs Offered

Bachelor of Arts in Economics

Bachelor of Arts in Business Administration with majors in:

Accounting

Business Economics

Finance

Individualized Major in Business Administration

International Business

Management

Marketing

Operations

Minors Offered

Economics

Business Administration

Accelerated Programs

BA-MBA

BAE-BA Minor-MBA

Certificate of Post-Baccalaureate Studies

Business Administration

Accounting

Business Economics

Finance

International Business

Manufacturing Management

Purchasing

Quality

Graduate Programs

See *Graduate Bulletin of Information* for:

Master of Business Administration

Master of Science in Finance

Master of Arts in Applied Economics

Certificates of Post-MBA Studies

Curriculum

The program of required study for the bachelor's degree in business has four principal components: the university core, the business foundation requirements, the major requirements, and electives. All students in the baccalaureate degree program fulfill requirements in English, mathematics, philosophy, a lab science, social sciences and theology and religious studies. The business foundation requirements include courses in accounting, economics, finance, legal environment, international, management, marketing, operations, and statistics. Specialization in one of the eight major fields is required. Students may earn a double major in two areas of business by completing a total of 190 credits and the degree requirements for both majors. Students must complete at least twenty credits in each major. Individualized major may not be one of the areas of a double major. No course in the major may be taken through independent study. Business courses appear under the prefixes ACC, BUSA, EC, FIN, IB, MGMT, MKTG, OP.

General Program Requirements

A minimum of 180 credits is required for bachelor degrees in business or economics, including 80 hours of university core curriculum courses. The pass/fail option may not be applied to courses in the Business core, university core and business major. Internship and Independent Study must be graded CR/E.

Students transferring from another institution normally must earn at least 40 hours (55 hours for accounting majors) of upper division credits in business and/or economics at Seattle University. Special rules may apply to transfer students with more than 90 credits. See an academic adviser or the registrar for specific course requirements.

Admission Requirements

Native Students

Native students, that is students entering Seattle University with no prior college, are accepted according to university undergraduate admission policy.

Transfer Students

Transfer students, including transfers from other schools within Seattle University, must have a 2.25 cumulative grade point average and 2.25 minimum in business and mathematics courses to be admitted into the Albers School of Business and Economics.

A transfer applicant whose records do not meet the grade point average requirement may request special consideration by writing the associate dean of the Albers School of Business and Economics specifying reasons for the exception. A transfer student with 90 or more credits whose academic record is good but who has not completed required lower division courses may be granted provisional admission with a specific number of terms to complete lower division requirements.

To be accepted as transfer credit in fulfillment of a program requirement, business, mathematics, economics and computer science courses must be graded at C (2.0 on the decimal system).

Progression

1. No student is permitted to take business courses number 300 or above prior to admission to junior status in a business major. Exceptions may be requested by majors in other departments from the associate dean of the Albers School of Business and Economics.
2. To be admitted to junior standing in a BABA major, at least 90 credits and a cumulative grade point average of 2.25 is required. Also, BABA students must have completed MT 118 and 130 or the equivalent and at least four of these eight other required lower division courses: ACC 230, 231, COMC 240, CSC 103, and EC 260, 271, 272. The grade point average in these courses must be no less than 2.25.
3. Both BABA and BAE students must maintain a 2.25 cumulative grade point average.
4. Effective fall 1990, newly admitted students to the Albers School of Business and Economics must earn a grade of C- or better in each course required by the major and supporting courses such as MT 118, 130, CSC 103, EC 271, and COMC 240.
5. Students applying for readmission after an absence of less than one full calendar year will be considered on the basis of academic performance requirements in effect at the time of withdrawal and will be held to those standards for completion of degree requirements. After an absence of one calendar year or more, students will be required to meet program and performance requirements in force at the time of readmission.
6. Students changing to business and economics majors from other majors will be required to meet program and academic performance requirements in force at the time the major is changed.

Dismissal

1. BABA majors who have 90 credits and who have not met the stated cumulative grade point average and basic course requirements for junior status are subject to dismissal from the Albers School of Business and Economics.
2. If the cumulative grade point average or the grade point average in business and economic courses (including computer science and mathematics) falls below 2.25 for three or more successive terms (including summer if registered) the student is subject to dismissal.
3. Anyone who has completed more than 120 credits of degree requirements and has been dismissed ordinarily will not be considered for readmission.

Graduation

To be granted either the BABA degree or the BAE degree, students must achieve a 2.25 cumulative grade point average overall as well as a 2.25 cumulative grade point average in all course work required by the school.

Accounting

David E. Tinius, PhD, Chairperson

Objectives

Professionally trained accountants serve in diverse roles in private business, government, non-profit organizations, and other entities. After meeting the state requirements, many accounting graduates pursue careers as certified public accountants.

Degree Offered

Bachelor of Arts in Business Administration

Major Offered

Accounting

Bachelor of Arts in Business Administration Major in Accounting

In order to earn the bachelor of arts in business administration degree with a major in accounting, students must complete 180 quarter credits with a cumulative and major grade point average of 2.25, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses for five credits:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT 130	Elements of Calculus for Business (or MT 134)*	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Lab Science	.....	5
Social Science I (not economics)	.....	5
Social Science II (EC 271 required)*	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Senior Synthesis (satisfied by MGMT 482)	.....	5

*Major requirement and must be graded C- or better.

See detailed information on the core curriculum beginning on page 53.

II. ASBE Arts and Sciences Requirements

Arts and Sciences Elective (or MT 118*)	5
CSC 103 Introduction to Computers and Applications*	5
COMC 240 Communication for Business*	5

* Major requirement and must be graded C- or better.

III. ASBE Business Foundation Requirements

Sixty credits from the following:

ACC 230 Principles of Accounting I	5
ACC 231 Principles of Accounting II	5
EC 260 Business Statistics	5
EC 272 Principles of Economics—Micro	5
EC 310 Quantitative Methods and Applications	5

Choose one of the following two courses for five credits:

MGMT 320 Global Environment of Business	5
EC 330 Int'l Economic Events and Business Decisions	5

FIN 340 Business Finance	5
MKTG 350 Introduction to Marketing	5
OP 360 Manufacturing and Service Operations	5
BUSA 370 Business and International Law	5
MGMT 380 Principles of Management	5
MGMT 482 Business Policy and Strategy	5

IV. Major Program Requirements

Forty credits from the following:

ACC 330 Cost Accounting	5
ACC 331 Intermediate Accounting I	5
ACC 332 Intermediate Accounting II	5
ACC 333 Intermediate Accounting III	5
ACC 336 Federal Income Tax I	5
ACC 435 Auditing	5
ACC 437 Accounting Information Systems	5
ACC Elective	5

(Choose from ACC 431, 432, 433, 436, 439, or other approved upper division accounting courses.)

Business Economics

Barbara M. Yates, PhD, Chairperson

Objectives

A concentration in business economics enables students to deepen their understanding of the national and world economies as well as to develop economic analysis skills for careers in business, banking, investments, law and government.

Degree Offered

Bachelor of Arts in Business Administration

Major Offered

Business Economics

Bachelor of Arts in Business Administration Major in Business Economics

In order to earn the bachelor of arts in business administration degree with a major in business economics, students must complete 180 quarter credits with a cumulative and major grade point average of 2.25, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses for five credits:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT 130	Elements of Calculus for Business (or MT 134)*	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Lab Science	.....	5
Social Science I (not economics)	.....	5
Social Science II (EC 271 required)*	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Senior Synthesis (satisfied by MGMT 482)	.....	5

*Major requirement and must be graded C- or better.

See detailed information on the core curriculum beginning on page 53.

II. ASBE Arts and Sciences Requirements

Arts and Sciences Elective (or MT 118*)	5
CSC 103 Introduction to Computers and Applications*	5
COMC 240 Communication for Business*	5

* Major requirement and must be graded C- or better.

III. ASBE Business Foundation Requirements

Sixty credits from the following:

ACC 230 Principles of Accounting I	5
ACC 231 Principles of Accounting II	5
EC 260 Business Statistics	5
EC 272 Principles of Economics—Micro	5
EC 310 Quantitative Methods and Applications	5

Choose one of the following two courses for five credits:

MGMT 320 Global Environment of Business	5
EC 330 Int'l Economic Events and Business Decisions	5
FIN 340 Business Finance	5
MKTG 350 Introduction to Marketing	5
OP 360 Manufacturing and Service Operations	5
BUSA 370 Business and International Law	5
MGMT 380 Principles of Management	5
MGMT 482 Business Policy and Strategy	5

IV. Major Program Requirements

EC 372 Intermediate Macroeconomics (or EC 330)	5
EC 374 Intermediate Microeconomics	5
EC Elective (400 level)	10

(EC 373 Applied Econometrics may be substituted for one of the 400 level courses.)

Economics

Barbara M. Yates, PhD, Chairperson

Objectives

The courses in economics are designed to acquaint students with the economy in which they live and to relate these courses to all other social sciences. The analytical approach in the economics courses provides the students with the tools of analysis necessary to solve problems and make decisions in the government and private sector. The major courses cover topics such as economic fluctuations, income distribution, domestic and international finance, urban problems, labor relations, and economic systems. Students who perform especially well are encouraged to pursue graduate work in preparation for professional status as economists in government, industry or the academic world. A major in economics, in combination with selected courses in political science, communications, and business provides excellent preparation for law school and MBA or MPA programs.

Degree Offered

Bachelor of Arts in Economics

Major Offered

Economics

Bachelor of Arts in Economics

In order to earn the bachelor of arts in business administration degree with a major in business economics, students must complete 180 quarter credits with a cumulative and major grade point average of 2.25, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses for five credits:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT 130	Elements of Calculus for Business (or MT 134)*	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Lab Science	.....	5
Social Science I (not economics)	.....	5
Social Science II (different from Soc Science I; not economics)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5

Theology and Religious Studies Phase III (300-399)	5
Interdisciplinary**	3 to 5

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Sixty-five to seventy** credits including:

EC 260	Business Statistics	5
EC 271	Principles of Economics-Macro	5
EC 272	Principles of Economics-Micro	5
EC 372	Intermediate Macroeconomics (or EC 330)	5
EC 374	Intermediate Microeconomics	5

Choose one of the following two courses for five credits:

EC 470	History of Economic Thought	5
EC 479	Senior Synthesis and Research	5

EC	Electives (300 or 400 level, interdisciplinary economics course allowed)**	15
EC	Electives 400-level and/or FIN 443, interdisciplinary economics course not allowed	20
CSC 103	Introduction to Computers and Applications	5

Please Note: 1. For the bachelor of arts in economics, 20 credits upper division economics courses are required. *2. C- is the minimum grade in courses required by the major. **3. If EC 377 fills the interdisciplinary requirement, only 10 credits are required. 4. ACC 230 Principles of Accounting-Financial is a highly recommended elective.

Finance

Barbara M. Yates, PhD, Chairperson

Objectives

The courses in the finance curriculum are designed to provide the students with the theoretical and technical knowledge students need to become effective financial decision makers. The curriculum emphasizes the importance of the finance function in a business setting as well as the role it has in the efficient allocation of resources in the economy.

Degree Offered

Bachelor of Arts in Business Administration

Major

Finance

Bachelor of Arts in Business Administration Major in Finance

In order to earn the bachelor of arts in business administration degree with a major in finance, students must complete 180 quarter credits with a cumulative and major grade point average of 2.25, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses for five credits:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT 130	Elements of Calculus for Business (or MT 134)*	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Lab Science	.....	5
Social Science I (not economics)	.....	5
Social Science II (EC 271 required)*	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Senior Synthesis (satisfied by MGMT 482)	.....	5

*Major requirement and must be graded C- or better.

See detailed information on the core curriculum beginning on page 53.

II. ASBE Arts and Sciences Requirements

Arts and Sciences Elective (or MT 118*)	5
CSC 103 Introduction to Computers and Application*	5
COMC 240 Communication for Business*	5

* Major requirement and must be graded C- or better.

III. ASBE Business Foundation Requirements

ACC 230 Principles of Accounting I	5
ACC 231 Principles of Accounting II	5
EC 260 Business Statistics	5
EC 272 Principles of Economics—Micro	5
EC 310 Quantitative Methods and Applications	5
FIN 340 Business Finance	5
MKTG 350 Introduction to Marketing	5
OP 360 Manufacturing and Service Operations	5
BUSA 370 Business and International Law	5
MGMT 380 Principles of Management	5
MGMT 482 Business Policy and Strategy	5

Choose one of the following two courses for five credits:

MGMT 320 Global Environment of Business	5
EC 330 Int'l Economic Events and Business Decisions	5

IV. Major Program Requirements

FIN 342 Intermediate Corporate Finance	5
FIN 344 Investments and Portfolio Theory	5
EC 372 Intermediate Macroeconomics (or EC 330)	5
Elective	5
(Choose from ACC 432, FIN 441, 443, 444, 445, 446, 449 or other approved upper division finance courses.)	

Please Note: 1. Students are encouraged to take additional courses in finance and/or minor in economics or take a second concentration in business economics. EC 471, 473, and 474 are especially recommended.

Individualized Major in Business Administration

Wendie Phillips, MA, Chairperson

Objectives

The individualized major in business administration 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.

Degree Offered

Bachelor of Arts in Business Administration

Major Offered

Individualized Major in Business Administration

Bachelor of Arts in Business Administration Individualized Major in Business Administration

In order to earn the bachelor of arts in business administration degree with an individualized major in business administration, students must complete 180 quarter credits with a cumulative and major grade point average of 2.25, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses for five credits:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT 130	Elements of Calculus for Business (or MT 134)*	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Lab Science	.....	5
Social Science I (not economics)	.....	5
Social Science II (EC 271 required)*	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5

Theology and Religious Studies Phase III (300-399) 5

Senior Synthesis (satisfied by MGMT 482) 5

*Major requirement and must be graded C- or better.

See detailed information on the core curriculum beginning on page 53.

II. ASBE Arts and Sciences Requirements

Arts and Sciences Elective (or MT 118*) 5

CSC 103 Introduction to Computers and Application* 5

COMC 240 Communication for Business* 5

*Major Requirement and must be graded C- or better.

III. ASBE Business Foundation Requirements

ACC 230 Principles of Accounting I 5

ACC 231 Principles of Accounting II 5

EC 260 Business Statistics 5

EC 272 Principles of Economics—Micro 5

EC 310 Quantitative Methods and Applications 5

Choose one of the following two courses for five credits:

MGMT 320 Global Environment of Business 5

EC 330 Int'l Economic Events and Business Decisions 5

FIN 340 Business Finance 5

MKTG 350 Introduction to Marketing 5

OP 360 Manufacturing and Service Operations 5

BUSA 370 Business and International Law 5

MGMT 380 Principles of Management 5

MGMT 482 Business Policy and Strategy 5

IV. Major Program Requirements

Upper division business/economics 25

Individualized business majors must complete at least 25 credits of upper division work in business and/or economics from at least three different disciplines, selected with an adviser's approval. At least ten of the credits must be 400-level courses.

International Business

David Arnesen, JD, Chairperson

Objectives

The international business major prepares students for careers with firms engaged in international business. Emphasis is placed on perceiving the problems and opportunities of operating in an international environment.

Degree Offered

Bachelor of Arts in Business Administration

Major Offered

International Business

Bachelor of Arts in Business Administration Major in International Business

In order to earn the bachelor of arts in business administration degree with a major in international business, students must complete 180 quarter credits with a cumulative and major grade point average of 2.25, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses for five credits:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT 130	Elements of Calculus for Business (or MT 134)*	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Lab Science	.....	5
Social Science I (not economics)	.....	5
Social Science II (EC 271 required)*	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Senior Synthesis (satisfied by MGMT 482)	.....	5

*Major requirement and must be graded C- or better.

See detailed information on the core curriculum beginning on page 53.

II. ASBE Arts and Sciences Requirements

Arts and Sciences Elective (or MT 118*)	5
CSC 103 Introduction to Computers and Application*	5
COMC 240 Communication for Business*	5

*Major Requirement and must be graded C- or better.

III. ASBE Business Foundation Requirements

ACC 230 Principles of Accounting I	5
ACC 231 Principles of Accounting II	5
EC 260 Business Statistics	5
EC 272 Principles of Economics—Micro	5
EC 310 Quantitative Methods and Applications	5

Choose one of the following two courses for five credits:

MGMT 320 Global Environment of Business	5
EC 330 Int'l Economic Events and Business Decisions	5
FIN 340 Business Finance	5
MKTG 350 Introduction to Marketing	5
OP 360 Manufacturing and Service Operations	5
BUSA 370 Business and International Law	5
MGMT 380 Principles of Management	5
MGMT 482 Business Policy and Strategy	5

IV. Major Program Requirements

Twenty-five credits plus supplemental activities

IB 386 International Business	5
MGMT 486 International Management	5
Electives (Choose from BUSA 476, FIN 446, MGMT 456)	10
Electives with an international emphasis	5

V. Supplemental Activities

Choose two activities from the following four:

1. Demonstrate competency in a foreign language through the 135 level.
This competency is ordinarily achieved by successful completion of the three-course sequence: 115, 125 and 135. No courses in the sequence may be taken on a pass-fail basis. Placement into other than the beginning course of the sequence is achieved by acceptable performance on the Foreign Language Competency Examination. See the foreign language department for details on the examinations. Latin and other languages not in use, will not be accepted.
2. A two quarter internship with a company involved in international business in the Seattle area.
3. A minimum of one quarter (15 quarter credits) of related studies abroad in an acceptable program. The course work must be approved prior to study abroad by the Albers School and Seattle University.
4. International studies minor.

Management

C. Patrick Fleenor, PhD, Chairperson

Objectives

The general area of management is concerned with the administration of private business or public enterprise. It includes relating the goals of an enterprise with the goals of those individuals and groups of individuals who make the enterprise a continuing process. The management major is designed for students seeking careers in administration, personnel or industrial relations in business or government.

Degree Offered

Bachelor of Arts in Business Administration

Major Offered

Management

Bachelor of Arts in Business Administration Major in Management

To earn the bachelor of arts in business administration degree with a major in management, students must complete 180 quarter credits with a cumulative and major grade point average of 2.25 including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses for five credits:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT 130	Elements of Calculus for Business (or MT 134)*	5
FA 120	Exploration of the Arts	5
PL 220	Philosophy of the Human Person	5
Lab Science	.....	5
Social Science I (not economics)	.....	5
Social Science II (EC 271 required)*	5	
Theology and Religious Studies Phase II (200-299)	5	
Ethics (upper division)	5	
Theology and Religious Studies Phase III (300-399)	5	

*Major requirement and must be graded C- or better.

See detailed information on the core curriculum beginning on page 53.

II. ASBE Arts and Sciences Requirements

Arts and Sciences Elective (or MT 118*)	5
CSC 103 Introduction to Computers and Applications*	5
COMC 240 Communication for Business*	5

*Major requirement and must be graded C- or better.

III. ASBE Business Foundation Requirements

ACC 230 Principles of Accounting I	5
ACC 231 Principles of Accounting II	5
EC 260 Business Statistics	5
EC 272 Principles of Economics-Micro	5
EC 310 Quantitative Methods and Applications	5

Choose one of the following two courses for five credits:

MGMT 320 Global Environment of Business	5
EC 330 Int'l Economic Events and Business Decisions	5
FIN 340 Business Finance	5
MKTG 350 Introduction to Marketing	5
OP 360 Manufacturing and Service Operations	5
BUSA 370 Business and International Law	5
MGMT 380 Principles of Management	5
MGMT 482 Business Policy and Strategy	5

IV. Major Program Requirements

MGMT 382 Organizational Behavior	5
MGMT 383 Human Resource Management	5
Electives	10
(Choose from MGMT 387, 481, 483, 485, 486 or other approved 300 or 400 level management course.)	

Marketing

C. Patrick Fleenor, PhD, Chairperson

Objectives

Marketing is the study of the flow of goods and services to ultimate consumers and users. Career opportunities in marketing are found in manufacturing, wholesaling and retailing, marketing research and in the promotional areas of advertising and personal selling.

Degree Offered

Bachelor of Arts in Business Administration

Major Offered

Marketing

Bachelor of Arts in Business Administration Major in Marketing

In order to earn the bachelor of arts in business administration degree with a major in marketing, students must complete 180 quarter credits with a cumulative and major grade point average of 2.25, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses for five credits:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT 130	Elements of Calculus for Business (or MT 134)*	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Lab Science	.....	5
Social Science I (not economics)	.....	5
Social Science II (EC 271 required)*	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Senior Synthesis (satisfied by MGMT 482)	.....	5

*Major requirement and must be graded C- or better.

See detailed information on the core curriculum beginning on page 53.

II. ASBE Arts and Sciences Requirements

Arts and Sciences Elective (or MT 118*)	5
CSC 103 Introduction to Computers and Applications*	5
COMC 240 Communication for Business*	5

*Major requirement and must be graded C- or better.

III. ASBE Business Foundation Requirements

ACC 230 Principles of Accounting I	5
ACC 231 Principles of Accounting II	5
EC 260 Business Statistics	5
EC 272 Principles of Economics—Micro	5
EC 310 Quantitative Methods and Applications	5

Choose one of the following two courses for five credits:

MGMT 320 Global Environment of Business	5
EC 330 Int'l Economic Events and Business Decisions	5
FIN 340 Business Finance	5
MKTG 350 Introduction to Marketing	5
OP 360 Manufacturing and Service Operations	5
BUSA 370 Business and International Law	5
MGMT 380 Principles of Management	5
MGMT 482 Business Policy and Strategy	5

IV. Major Program Requirements

MKTG 451 Marketing Research	5
MKTG 452 Marketing Management	5
Electives	10
(Choose from MKTG 351, 352, 353, 456 or other approved 300 or 400 level marketing course.)	

Please Note: EC 374, 472, and 473 are strongly recommended.

Operations

Karen Brown, PhD, Chairperson

Objectives

The operations concentration has been developed in response to the growing demand for professionals who have the ability to support and lead efforts aimed at improving quality, service delivery and productivity. The field of operations focuses on the effectiveness of processes that transform resources into goods and services. This topic has gained increased attention in recent years because of the need for American industry to improve its global competitiveness. Four professional tracks are offered within this concentration: Quality, Purchasing, Planning, and General Operations. Course work provides students with technical skills, theoretical background, and hands-on exposure to industry practices. An emphasis is placed on the development of written and oral communication skills.

Degree Offered

Bachelor of Arts in Business Administration

Major Offered

Operations

Bachelor of Arts in Business Administration Major in Operations

In order to earn the bachelor of arts in business administration degree with a major in operations, students must complete 180 quarter credits with a cumulative and major grade point average of 2.25, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses five credits:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5
EN 120	Masterpieces of Literature	5
MT 130	Elements of Calculus for Business (or MT 134)*	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Lab Science	.....	5
Social Science I (not economics)	.....	5
Social Science II (EC 271 required)*	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5

Theology and Religious Studies Phase III(300-399)	5
Senior Synthesis (satisfied by MGMT 482)	5
See detailed information on the core curriculum beginning on page 53.	

II. ASBE Arts and Sciences Requirements

Arts and Sciences Elective (or MT 118*)	5
CSC 103 Introduction to Computers and Applications*	5
COMC 240 Communication for Business*	5
*Major requirement and must be graded C- or better.	

III. ASBE Business Foundation Requirements

ACC 230 Principles of Accounting I	5
ACC 231 Principles of Accounting II	5
EC 260 Business Statistics	5
EC 272 Principles of Economics—Micro	5
EC 310 Quantitative Methods and Applications	5

Choose one of the following two courses for five credits:

MGMT 320 Global Environment of Business	5
EC 330 Int'l Economic Events and Business Decisions	5
FIN 340 Business Finance	5
MKTG 350 Introduction to Marketing	5
OP 360 Manufacturing and Service Operations	5
BUSA 370 Business and International Law	5
MGMT 380 Principles of Management	5
MGMT 482 Business Policy and Strategy	5

IV. Major Program Requirements

Twenty-five credits:

OP 361 Operations Strategy	5
OP 362 Principles of Quality	5
OP 363 Operations Planning and Control Systems	5

Plus one of the following tracks:

Purchasing: OP 364 and 464	10
Quality: OP 462 and 466	10
Planning: OP 467 and ACC 330	10
General Operations: OP 364, 462, 464, 466, 467, ACC 330, MGMT 385, or other approved 300 or 400 level operations course. At least one of these two classes must be a 400 level course and at least one must have an OP prefix.	10

Please Note: The internship is highly recommended for students with limited work experience.

Minor in Business Administration

To earn a minor in business administration, students must complete a set of seven business courses beyond the non-business prerequisite courses in mathematics, computer science, and economics. One of the mathematics courses and one of the economics courses could fulfill university core requirements.

Prerequisite courses:

MT 118	College Algebra
MT 130	Elements of Calculus for Business (or MT 134)
COMC 240	Communication for Business
EC 271	Principles of Economics-Macro
EC 272	Principles of Economics-Micro
CSC 103	Introduction to Computers and Applications

Business courses:

EC 260	Business Statistics
ACC 230	Principles of Accounting-Financial
ACC 231	Principles of Accounting-Managerial
FIN 340	Business Finance
MKTG 350	Introduction to Marketing
MGMT 380	Principles of Management

Plus one of the following: Any 300 or 400 level business course for which prerequisites have been met. Students pursuing the minor are strongly advised to select a course dealing with international aspects of business. Students working toward a minor in business are subject to the same grade requirements as students pursuing a major in business administration. Students applying for the minor are required to take at least 20 credits in business from Seattle University.

Minor in Economics

To earn a minor in economics, students must complete thirty credits of economics including the following:

EC 271	Principles of Economics-Macro	5
EC 272	Principles of Economics-Micro	5
EC 372	Intermediate Macroeconomics (or EC 330)	5
EC 374	Intermediate Microeconomics	5
EC	Electives 300-400 level (see adviser)	10

Accelerated Programs

Five-Year BA-MBA Program

The Albers School of Business and Economics offers an opportunity for academically superior undergraduates to accelerate their undergraduate work and be granted early admission to the MBA program. The program allows students to complete a bachelor of arts in business administration and a master's in business administration in a five-year time span. This program is open to full-time undergraduates with a 3.4 grade point average or greater. Part-time undergraduates and transfer students can participate

in the program on a modified schedule. Interested students should contact the office of the associate dean.

Five-Year Program: BAE-BA Minor-MBA

The Albers School of Business and Economics offers an opportunity for academically superior undergraduates to accelerate their undergraduate work and be granted early admission to the MBA program. The program allows students to complete a bachelor of arts in economics, a minor in business administration and a master's in business administration in a five-year span. This program is open to full-time undergraduates with a 3.4 grade point average or greater. Part-time undergraduates and transfer students can participate in the program on a modified schedule. Interested students should contact the office of the associate dean.

Certificate of Post-Baccalaureate Studies

The Albers School of Business and Economics offers 1) an undergraduate certificate in business for students with a bachelor's degree in a non-business area and 2) certificates in specific disciplines for students with a bachelor's degree in business. The certificates of post-baccalaureate studies in business provides an opportunity for graduates of non-business undergraduate programs to develop expertise and acquire a credential in the business area while earning college credits. The curriculum requires between six and 13 courses, depending on prior course work. It largely replicates the required courses for a minor in business and fulfills many of the foundation level course requirements for the MBA degree. The academic credit may be applicable to other degree program requirements. The certificate of post-baccalaureate studies in accounting, business economics, finance, international business, purchasing, quality, manufacturing management, and other fields provide opportunities for qualified business graduates to develop expertise and acquire a credential in an area of specialization beyond the bachelor's in business degree while earning college credits. The curriculum consists of a selection of six or seven undergraduate courses, at least four of which must be in the discipline named in the certificate. To avoid duplication of previous course work, courses in related disciplines may be substituted for classes in the named discipline.

The program is open to graduates of regionally accredited bachelor's programs only. The application process will require preparation of an application form, payment of fees and submission of transcripts. For admission, a student's academic performance must be equal to or better than the standards for admission to and for graduation from the Seattle University BABA program. Seattle University graduates generally will be considered automatically eligible for the program. Students will register as regular certificate-seeking undergraduate students at Seattle University. Students must earn a 2.50 cumulative grade point average in the courses applied to the certificate. In addition students must earn a grade of C- or better in each course required for the certificate. For more information about these certificate programs, contact the office of the associate dean.

Certificate in Business Education and/or Marketing

The School of Education, in cooperation with the Albers School of Business and Economics, offers teacher certification in business education and/or marketing. Before applying for this certificate program, interested students should speak with the chairperson of teacher education in the School of Education concerning course requirements that cannot be met at Seattle University.

Business Administration Courses

ACC 230 Principles of Accounting I (Financial) 5

Introduction to financial accounting concepts with emphasis on the development of the student's ability to understand and interpret financial statements of business entities. Prerequisite: Sophomore standing. (fall, winter, spring).

ACC 231 Principles of Accounting II (Managerial) 5

Introduction to the use of accounting information for decision-making in planning and controlling the operation of business organizations. Prerequisites: ACC 230 and sophomore standing. (fall, winter, spring).

ACC 330 Cost Accounting 5

Determination of manufacturing costs in job order and process cost systems, including standard cost measurement; introduction to methods of cost control. An emphasis on effective written communication in the cost accounting function. Prerequisites: ACC 231 and junior standing.

ACC 331 Intermediate Accounting I 5

Theory and development of accounting principles; evolution of theory as it relates to the current state of accounting for the assets of the entity and the measurement and reporting of periodic income. Introduction to international accounting issues. One-third of the class time will be devoted to written and oral communications skill development. Prerequisites: ACC 231 and junior standing.

ACC 332 Intermediate Accounting II 5

Theory and development of accounting principles; evolution of theory as it relates to the current state of accounting liabilities and owner's equities, including issues in international accounting. Prerequisite: ACC 331.

ACC 333 Intermediate Accounting III 5

Study of advanced topics in accounting theory and practice with emphasis upon financial reporting. Selected areas include: accounting for income taxes, pensions, leases, accounting changes, interim and segment reporting, statement of cash flows, and disclosure requirements, including international accounting issues. Special emphasis on accounting for governmental and not-for-profit organizations. Prerequisite: ACC 332.

- ACC 336 Federal Income Tax I** **5**
Taxation of individuals; gross income and deductions; property transactions; use of tax service and research in tax problems. Prerequisites: ACC 231 and junior standing.
- ACC 430 Advanced Cost Accounting** **5**
An extension of ACC 330, this course focuses upon the structure of management control systems, as contrasted with product costing systems. Both the technical processes (quantitative models such as flexible budgets, forecasting methods variance analysis, and decision models) and the behavioral processes (organizational structures, employee participation, and compensation) are stressed. Emphasis given to oral and written communications skill development. Prerequisites: ACC 231, 330, EC 260.
- ACC 431 Advanced Financial Accounting** **5**
Special accounting problems associated with partnerships, international transactions and business combinations. Particular emphasis on consolidated financial statements. Emphasis given to the development of oral and written communications skills. Prerequisite: ACC 332.
- ACC 432 Financial Statement Analysis** **5**
Develops an understanding of the tools and techniques used in the analysis of financial statements. Develops an understanding of the use and application of financial statements in decision-making, both internally and by investors and creditors. Both liquidity and profitability analysis will be examined. Emphasis given to the development of oral and written communications skills. Prerequisites: ACC 230, 231 and FIN 340.
- ACC 433 Seminar in Accounting Theory** **5**
Critical examination of accounting theories; concepts, postulates and principles related to income measurement, assets, liabilities and equities. Emphasis given to the development of oral and written communications skills. Prerequisite: ACC 332.
- ACC 435 Auditing** **5**
Purpose, scope, concepts, and methods used in examining and attesting to financial statements. Current issues concerning professionalism, the role of the public accountant, and auditing matters in international accounting. An emphasis on effective written communication in the audit function. Prerequisite: ACC 332.
- ACC 436 Federal Income Tax II** **5**
Study of advanced topics in federal taxation including tax research and administrative procedure; with emphasis on the taxation and partnerships and corporations. Course includes assisting taxpayers with preparation of their individual income tax returns with the supervision of tax professionals. Emphasis given to the development of communications skills in a professional-to-client environment. The taxpayer assistance component of the course is spread over parts of winter and spring quarters. Students receive an "N" grade for winter quarter and the course grade spring quarter. Prerequisite: ACC 336

ACC 437 Accounting Systems and Communications 5

Study of accounting information systems and their managerial aspects, with a significant, approximately one-third, emphasis on oral and written business communications skill development. Topics include computer technology, systems controls, systems analysis and design, as well as specific applications in accounts payable, inventory, payroll, billing, cash and property. Prerequisites: ACC 330, 332, BUSA 310.

ACC 439 Advanced Auditing/Internal Auditing 5

Analysis of current issues in auditing, including audit experience through an audit simulation. The course is designed to extend knowledge of audit decision-making and improve written and oral communication abilities. Topics included will be closely tied to current issues facing the accounting and audit professional. Prerequisites: ACC 331, 332, 333 and 435.

ACC 491 Special Topics 2 to 5

ACC 496 Independent Study 1 to 5

ACC 497 Independent Study 1 to 5

ACC 498 Independent Study 1 to 5

Supervised individual research and internships. Open to senior business majors with the approval of the student's adviser. Must be taken CR/E.

BUSA 270 Law and Business 5

Nature and development of law, structure and functions of the court, civil and criminal procedure; role of attorneys and an introduction to the law of contracts. Prerequisite: Sophomore standing. (fall, winter, spring).

BUSA 291 Special Topics 1 to 5

BUSA 292 Special Topics 1 to 5

BUSA 293 Special Topics 1 to 5

BUSA 310 Information Systems Mgmt in Business 5

Introduction to computer-based information system concepts for end user business managers. Topics include an overview of functional business systems, information system planning, systems analysis and design, systems selection, acquisition, contracting, current technology, (e.g. data communications, decision support and expert systems, networking, database modeling), data security and control, and computer ethics. Course methods may include lecture, case analysis, and group or individual projects. Prerequisites: Junior standing and CSC 103.

BUSA 370 Business and International Law 5

The course will include traditional legal issues, including nature and development of law, structure and functions of the courts, civil and criminal procedure, and contracts. The course will focus on the legal environment that exists for U.S. businesses because of the increased international business activities. Prerequisites: Junior standing.

BUSA 476 International Law 5

The course includes substantial focus on international contracts, specifically laws relating to international sales, commercial transactions, shipping, letters of credit, methods of payment and resolution of international disputes. In addition, lectures including discussion of the General Agreement on Tariffs and Trade, import duties, export restrictions and use of foreign representatives. Prerequisites: BUSA 270 and junior standing.

BUSA 491 Special Topics 2 to 5**BUSA 496 Independent Study 1 to 5****BUSA 497 Independent Study 1 to 5****BUSA 498 Independent Study 1 to 5**

Supervised individual research and internships. Open to senior business majors with the approval of the student's adviser. Must be taken CR/E.

EC 120 Introduction to Economic Society 5

Development of the conventional economic model, including its philosophical assumptions. Implications for contemporary economic performance. Applications to issue of social justice. Correlates with Philosophy 220.

EC 260 Business Statistics 5

Business statistics introduces the business and economics student to basic statistical procedures, concepts and computer applications used in the business world. The course includes instruction in descriptive statistics, probability, decision theory, probability distributions, sampling distributions, statistical inference, chi-square analysis and correlation. Prerequisites: MT 130, CSC 103.

EC 271 Principles of Economics—Macro 5

Organization, operation and control of the American economy in its financial and socio-political settings; problems of inflation, unemployment, taxation, the public debt, money and banking, growth. Prerequisite: Sophomore standing. (fall, winter, spring).

EC 272 Principles of Economics—Micro 5

Operation of the American economy with emphasis on prices, wages, production and distribution of income and wealth; problems of the world economy. Prerequisite: Sophomore standing. (fall, winter, spring).

EC 310 Quantitative Methods and Applications 5

This course is a continuation of EC 260 with particular emphasis on the following topics: regression analysis, analysis of variance, reliability and validity, and linear programming. Major emphasis will be placed on computer applications of the quantitative methods applicable to business functional areas and on the enhancement of the student's communication, analytical, and computer skills. Prerequisite: CSC 103 and EC 260.

EC 330 International Economic Events 5
and Business Decisions

This course will develop the economic theory necessary to understand how the international macro economy works and influences the behavior and success of business. Emphasis will be placed upon the impact of international macroeconomic events and how those events affect a firm's ability to compete. Prerequisites: EC 271. No credit granted for students who have taken EC 372.

EC 370 American Economic History 5

A study of the key developments in American economic history; application of economic analysis to historical data and events; development of economic institutions. Prerequisites: EC 271, EC 272.

EC 372 Intermediate Macroeconomics 5

Determination of levels of national income, employment and prices. Problems of unemployment and inflation. Policies for stabilization and growth. Prerequisite: EC 271. No credit granted for students who have taken EC 330.

EC 373 Applied Econometrics 5

Study of the theory and application of econometrics for students who need to understand and use regression, generalized least squares, and simultaneous equations. Prerequisites: MT 134 or 135; EC 260.

EC 374 Intermediate Microeconomics 5

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 376 Economic Development 5

Developing nations and agriculture, industry, population, education, technology, exports, imports, capital and savings, unemployment. Commodity agreements. Special preferences. Foreign aid. U.N.C.T.A.D. Prospects and limits. Prerequisite: EC 271, 272.

EC 377 Government and Business 5

Development in the United States of public policy. Government regulation of industry and commerce and application to mergers, business concentration and restrictive business practices, regulation of public utilities and international competitiveness. Prerequisite: EC 272.

EC 378 Urban/Regional Economics 5

The causes and consequences of the interdependencies of firms, individuals, households and governmental units within the constrained space of urban areas. Problems of land, housing, transportation, labor and public services. Prerequisite: EC 272.

- EC 379 Comparative Economic Systems 5**
Economic systems in theory and practice. Classical, Marxian, Neoclassical, Keynesian, post-Keynesian theories. Soviet agricultural and industrial organization and operation. Market socialism. Future trends. Prerequisites: EC 271, 272.
- EC 386 International Business Enterprise 5**
This course examines changes in the international competitive environment and how business should respond to remain competitive in the global marketplace. Prerequisites: EC 271 and 272.
- EC 391 Special Topics 1 to 5**
EC 392 Special Topics 1 to 5
EC 393 Special Topics 1 to 5
- EC 468 Natural Resource and Environmental Economics 5**
The course covers the economic analysis related to natural resource use, including depletable and renewable resources. Environmental topics include pollution, preservation, conservation and development. Prerequisites: EC 271, EC 272.
- EC 470 History of Economic Thought 5**
Major historical developments in economic thought, ancient to contemporary, Christian influence, mercantilism, laissez faire; German and Austrian schools, Marx and socialists; Keynes and neo-Keynesian analysis. Prerequisites: EC 271, 272.
- EC 471 Government Finance 5**
Revenues, expenditures and debts of federal, state and local governments; public sector pricing and investment; government finance as means for social reform; shifting and incidence of taxes. Prerequisites: EC 271, 272.
- EC 472 International Trade 5**
Pattern, organization and promotion of U.S. and world trade. Trade theories. Exchange rates. Foreign prices and payments. Protection and free trade. G.A.T.T. European Community. Multinationals in foreign trade. Prerequisites: EC 271, 272.
- EC 473 International Macroeconomics and Finance 5**
Impact of international trade and finance on the macroeconomy and government policy. Topics include exchange rate determination, the balance of payments, operations of the international monetary system. Prerequisites: EC 271, 272; EC 372 recommended.
- EC 474 Forecasting Business Conditions 5**
Introduction to casual and ad hoc time series methods of forecasting utilized by business firms. Regression, exponential smoothing, decomposition and Box Jenkins methods are included. Prerequisites: EC 260, 271 and 272.

EC 475 Industrial Organization 5
Analysis of the market structure of American business and effects of different market structures on pricing, marketing, innovation and profit seeking. Prerequisites: EC 271, 272.

EC 476 Labor Economics 5
Survey of the economics of the industrial relations; effects of industrial changes on labor, hours and wages; employment and unemployment; trade unionism and labor legislation. Prerequisites: EC 271, 272.

EC 479 Senior Synthesis and Research 5
An advanced course providing the opportunity for students to pursue topics in breadth and depth, and apply the tools of economic analysis to current issues in national and international economic policy. Prerequisite: Permission.

EC 491 Special Topics 2 to 5

EC 496 Independent Study 1 to 5

EC 497 Independent Study 1 to 5

EC 498 Independent Study 1 to 5

EC 499 Independent Study 1 to 5

Supervised individual research and internships. Open to senior economics majors with approval of adviser. Must be taken CR/E.

FIN 340 Business Finance 5

Study of the financial policies and practices of business firms; planning, control and acquisition of short-term and long-term funds; management of assets; evaluation of alternative uses of funds; capital structure of the firm; cost of capital; financing growth and expansion of business firms. Prerequisites: EC 271, ACC 231 and junior standing. (fall, winter, spring).

FIN 342 Intermediate Corporate Finance 5

Thorough coverage of the topics: working capital management, capital budgeting, lease analysis, dividend policy, long-term sources of financing and contingent claims as they apply to corporate finance. Prerequisite: FIN 340.

FIN 344 Investments and Portfolio Theory 5

An introduction to the theory of investments and a review of empirical research in the area. Emphasis is on risk/return relationship. Topics to be covered include: modern portfolio theory, asset pricing, the pricing of contingent claims, taxes, inflation and investments, and market efficiency. Prerequisite: FIN 340.

FIN 441 Case Problems in Finance 5

Through the use of cases, develop skills in identifying problems, conducting analysis, and using financial theory for making decisions in simulated business settings. Prerequisite: FIN 342.

FIN 443 Financial Institutions and Marketing 5
 Nature, function, and role of financial institutions and markets in the economy. Transmission of monetary and fiscal policies through interest rates and funds flows. Prerequisite: EC 271.

FIN 444 Security Analysis 5
 Analysis of the securities of public entities and private firms from both individual and institutional viewpoints. Prerequisite: FIN 340.

FIN 445 Risk Analysis 5
 Analysis of how risk and uncertainty affect the financial decision making processes of individuals and financial institutions. Topics covered include hedging and insurance theory, and the operations of futures and options markets. Prerequisite: FIN 340.

FIN 446 International Corporate and Trade Finance 5
 Investigates techniques used to manage the financial activities of a corporation operating in an international environment. Addresses economic exposure of a firm to exchange rate changes, hedging techniques, capital budgeting, international financial markets, techniques of accessing blocked funds, foreign currency options, and other topics. Offered every other year. Prerequisites: FIN 340 and junior standing.

FIN 449 Senior Seminar 5
 Advanced topics course. Purpose of course is to expose students to recent research in finance in a seminar setting. Topics covered will depend on instructor. Prerequisites: FIN 340, 342, 344.

FIN 491 Special Topics 2 to 5

FIN 496 Independent Study 1 to 5

FIN 497 Independent Study 1 to 5

FIN 498 Independent Study 1 to 5

Supervised individual research and internships. Open to senior business majors with the approval of the student's adviser. Must be taken CR/E.

IB 386 International Business 5
 Addresses the differences in finance, accounting, marketing, and management in an international environment. Specific attention is given to the cultural dimensions of these differences and the changes occurring in the international environment. Analyzes forms of business organization, roles of multinational corporations, methods of serving foreign markets, political risk assessment and other topics. Prerequisites: MGMT 380 and junior standing. For other international business courses, see Finance, Marketing, Management, Operations, and Economics course listings.

IB 491 Special Topics 2 to 5

IB 496	Independent Study	1 to 5
IB 497	Independent Study	1 to 5
IB 498	Independent Study	1 to 5

Supervised individual research and internships. Open to senior business majors with the approval of the student's adviser. Must be taken CR/E.

MGMT 320 Global Environment of Business 5

This course will introduce the major factors (legal/political, economic, competitive, socio-cultural, technological and natural) in the global environment and examine their individual and interrelated effects on organizational and managerial practices. This course will provide a framework for understanding organizational action within an increasingly global environment.

MGMT 380 Principles of Management 5

Introductory survey of field of management including organizational theory, behavior, development, strategy, and human resource management. Basic concepts and tools to solving organizational problems. Prerequisite: Junior standing.

MGMT 382 Organizational Behavior 5

Models of organizational behavior, alternative managerial behaviors, developing skills in dealing with people in areas of leadership, motivation, communication skills, conflict, and group processes. Prerequisite: MGMT 380.

MGMT 383 Human Resource Management 5

The role of the human resource department, social and legal environment, human resource planning, recruiting, selection, training, evaluation, compensation, career planning, employee relations, discipline and organizational exit. Prerequisite: MGMT 380.

MGMT 387 Business Communications 5

Elements of the communication process, formal and informal networks, verbal and non-verbal messages, listening, conflict styles, effective meetings, small group communication, oral presentations, written communications, and intercultural considerations. Prerequisite: MGMT 380.

MGMT 481 Small Business Management 5

Procedures and problems in starting and operating a successful small business enterprise. Prerequisite: Senior standing.

MGMT 482 Business Policy and Strategy 5

The senior capstone business course. Students integrate and apply knowledge, skills, and experience gained in the university and business course curricula. Critical thinking and analysis are engaged as students make decisions, set goals, and act on information from real business situations. The business situations reflect today's multicultural and international environment. Course methods may include lecture, discussion, case analyses, and individual or group projects. Prerequisites: All business foundation requirements. Senior standing. (fall, winter, spring).

- MGMT 483 Management Seminar** 5
Development of a specific area of management. Various approaches to study of organizations, conceptual and analytical methods, research methodologies and trends in management. Prerequisite: MGMT 380. Senior standing.
- MGMT 485 Management of Change** 5
Review of forces and factors acting to create change in organizations, relationship between changes in organizations and human reactions, systemic change efforts, resistance to change, planned change models. Prerequisite: MGMT 380.
- MGMT 486 International Management** 5
Exploration of topics of particular relevance to the international/global manager. Initial focus on international and global strategy, followed by theories of organizational roles in society, and the role culture plays in shaping organizational and individual behaviors. Prerequisite: MGMT 380.
- MGMT 491 Special Topics** 2 to 5
- MGMT 496 Independent Study** 1 to 5
MGMT 497 Independent Study 1 to 5
MGMT 498 Independent Study 1 to 5
Supervised individual research and internships. Open to senior business majors with the approval of the student's adviser. Must be taken C/E.
- MKTG 350 Introduction to Marketing** 5
Survey of institutions and essential functions in the marketing system. Analysis of the marketing mix; product, place, promotion and price strategies. Prerequisites: Junior standing or permission. (fall, winter, spring)
- MKTG 351 Consumer Behavior** 5
Application of behavioral sciences to explore consumer decision-making processes. Characteristics of goods, shopper behavior, opinion leadership, market segmentation, concepts, relevant personal selling. Prerequisite: MKTG 350.
- MKTG 352 Marketing Communications** 5
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: MKTG 350.
- MKTG 353 Sales Management** 5
Sales management deals with the personal selling function and its related administration and managerial activities. The course covers the development of the selling function, sales management planning, recruiting, training, sales force organization, supervision and motivation, compensation and evaluation. Prerequisite: MKTG 350.

MKTG 451 Marketing Research**5**

Purpose, methods, and techniques of marketing research. Prerequisites: MKTG 350 and EC 260.

MKTG 452 Marketing Management**5**

Case studies of corporate problems, decision-making. Student participation in various roles of marketing. Organization planning, execution, and control of marketing problems. Prerequisites: Seniors only. MKTG 350 and ACC 231.

MKTG 456 International Marketing**5**

Analyzes issues important in marketing in multiple foreign environments. Addresses market segmentation, product design, promotional strategies, pricing strategies in the face of changing exchange rates, media choice, and the importance of cultural differences. Offered every other year. Prerequisites: Junior standing. MKTG 350.

MKTG 491 Special Topics**2 to 5****MKTG 496 Independent Study****1 to 5****MKTG 497 Independent Study****1 to 5****MKTG 498 Independent Study****1 to 5**

Supervised individual research and internships. Open to senior business majors with the approval of the student's adviser. Must be taken CR/E.

**OP 360 Manufacturing and Service Operations
(formerly BUSA 360)****5**

An introduction to the operations function, including operations strategy, operations analysis, quality improvement, facility layout, work design, materials management, scheduling, aggregate planning, forecasting and international operations. Students work in teams to visit a local factory, and prepare reports relating their observations to course topics. Prerequisites: MT 130, CSC 103, EC 260, and MGMT 380 (MGMT 380 may be taken concurrently with OP 360).

OP 361 Operations Strategy**5**

An indepth examination of operation strategies for manufacturing and services and their essential linkages with other organizational functions, including marketing, finance, and engineering. Development, content, and implementation of operations strategies are discussed in the context of domestic and international cases. Student teams apply a theoretical framework to analyze operations strategies in local firms. Prerequisites: OP 360, MKTG 350 (MKTG 350 may be taken concurrently with OP 361).

OP 362 Principles of Quality 5

This course focuses on customer requirements and introduces tools and concepts available for improving manufacturing and service quality. Course topics include customer needs assessment, societal and ethical issues, customer interaction, quality function deployment, benchmarking, quality costs, statistical concepts in quality analysis and control, organization for quality, process analysis tools, quality information systems, and motivational issues. Prerequisites: OP 360, EC 310, MKTG 350 (MKTG 350 may be taken concurrently with OP 362).

OP 363 Operations Planning and Control Systems 5

This course covers planning and control systems applied to the transformation processes in manufacturing and service settings. Course topics include master planning, forecasting, inventory management, material requirements planning (MRP), capacity planning, production activity control, activity-based costing, just-in-time (JIT) systems, theory of constraints, demand management, distribution requirements planning, automation, and implementation issues. Students are introduced to computer applications in most topic areas and cases are used to illustrate course concepts. The course will provide students with some of the background necessary for professional certification with the American Production and Inventory Control Society (APICS). Prerequisite: OP 360, EC 310.

OP 364 Purchasing and Materials Management 5

This course provides an overview of the purchasing and materials management functions, including policies and procedures, planning, ethical issues, contracts, and the role of computers. Also covered are inventory decisions, quality assessment, material specifications and properties, make/buy analysis, new product development issues, value analysis, pricing decisions, sources of supply, logistics, services and systems procurement, and hazardous material issues. Prerequisites: OP 360, OP 362.

OP 462 Advanced Quality 5

An interdisciplinary approach allows for the integration of technical and behavioral methods for improving quality. Topics include implementation strategies, design for quality, concurrent design, quality circles, quality function deployment, loss-function, Taguchi method, design of experiments, process capability, reliability prediction and modeling, special issues for service operations, and further application of tools introduced in OP 362. Students work in teams to apply quality improvement principles in a local organization. Prerequisite: OP 362 and senior standing.

OP 464 Purchasing Strategy and Negotiation 5

This is the second course in purchasing and serves as an extension of the material covered in OP 364. Taking a strategic posture, OP 464 includes the topics of supplier evaluation, selection and partnerships, supplier development and certification, procurement, planning, researching and conducting supplier negotiations, just-in-time applications, international issues, counter-trade, and legal concerns. Students participate in simulated negotiations. Prerequisites: OP 362, OP 364.

OP 465 International Study Tour in Operations 5

Students will spend two weeks touring factories and meeting in faculty-led seminar groups in Mexico, Europe or Asia. Seminar sessions during a two week period prior to the tours will provide students with relevant backgrounds regarding politics, customs, culture, language, and manufacturing practices. At the end of the tour, each student will write a paper summarizing observations and relating them to previous course work in operations. Grading is credit/no credit. Prerequisites: OP 360, at least one other elective in the operations area, MGMT 320, and faculty permission.

OP 466 Project Management 5

This course addresses the managerial concepts and technical tools required for evaluating, planning, managing and controlling projects. Topics include strategic issues, project selection, risk analysis, work breakdown structures, PERT/CPM, resource management, conflict issues, time-cost tradeoffs, project scheduling software, cost/schedule control systems, team-building, and matrix organization. Guest speakers from industry highlight implementation issues. Students apply course concepts to real and simulated projects. Prerequisite: OP 360.

OP 467 Work and Process Design 5

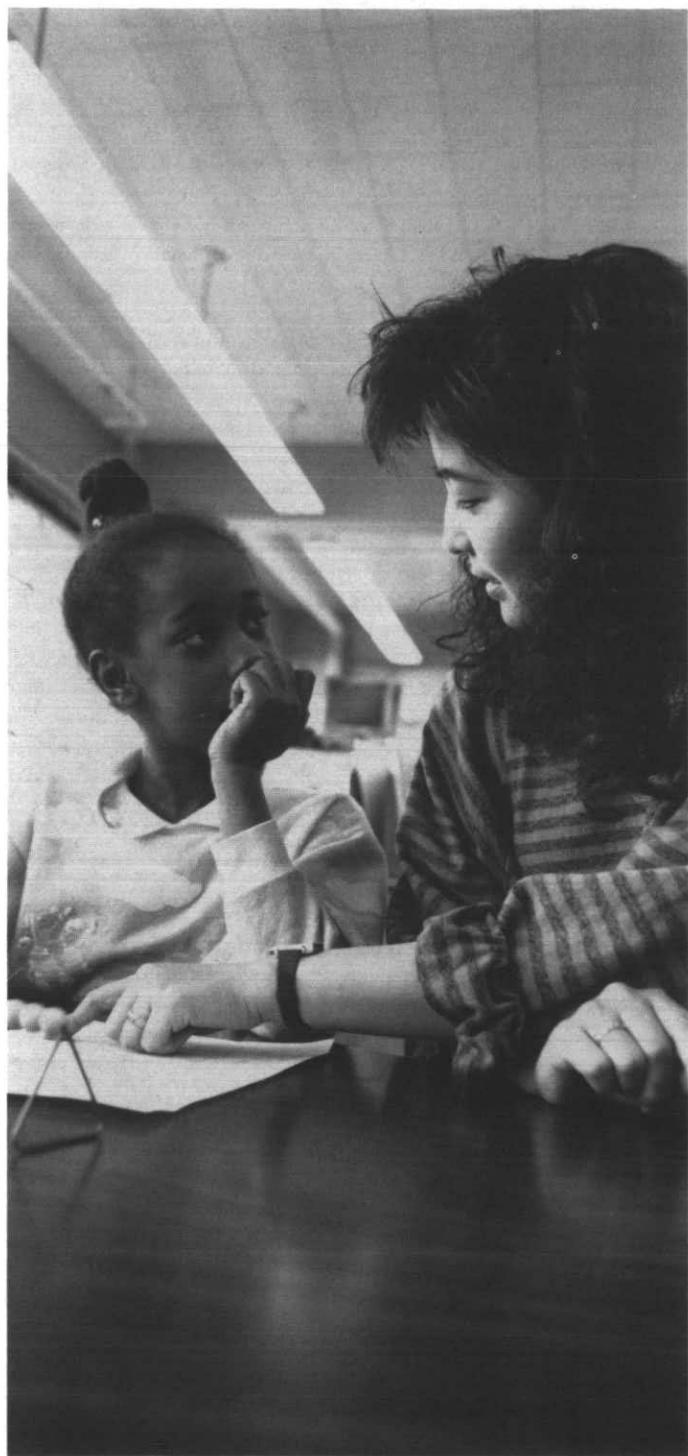
Course topics are built around socio-technical systems theories and include work space layout, time and motion studies, job analysis, methods engineering, performance standards, assembly line balancing, group technology, cellular manufacturing, learning curves, ergonomics, safety, hazardous work environments, compensation, cost analysis of work design improvement strategies, quality of work life, and implementation issues. Students analyze design problems in local organizations. Prerequisite: OP 360.

OP 491 Special Topics in Operations 1 to 5**OP 496 Operations Internship 1 to 5**

Students exercise operations skills learned in the classroom by participating in the operations internship program. Internships are arranged with local businesses to match the interests and backgrounds of individual students. Functional areas may include purchasing, industrial engineering, operations analysis, space planning, quality management, materials, forecasting, production scheduling and others. Prerequisites: OP 360 and at least one elective in the operations area.

OP 497 Independent Study 1 to 5**OP 498 Independent Study 1 to 5**

Supervised individual research and internships. Open to senior business majors with the approval of the student's adviser. Must be taken CR/E.



School of Education

Margaret M. Haggerty, PhD, Dean
Andrea C. Sledge, PhD, Assistant Dean

Department Chairpersons

Counselor Preparation: R. Michael O'Connor, PhD
Curriculum and Instruction: Stephanie L. Bravmann, PhD
Administration and Adult Education: Sandra Barker, PhD
Educational Leadership: John J. Gardiner, EdD
Teacher Education: Margit McGuire, PhD

Objectives

Within the framework of the Jesuit tradition of a liberal education and guided by Seattle University's tripartite mission emphasizing teaching, growth of persons and preparation for service, the School of Education has as its objectives the preparation of men and women who:

- are dedicated to their profession and knowledgeable of its underlying theory and research;
- understand the importance of continuing their personal and professional growth throughout their lives;
- have the competency and commitment to contribute to the welfare of others through their work;
- reflect actively upon and develop their personal value system;
- reflect the humanistic philosophy of Jesuit educational tradition.

The teacher preparation program is a graduate-level program leading to Washington teaching certificates in elementary education and in a variety of secondary school subjects. Also available are programs to prepare teachers in the areas of early developmentally disabled, learning disabled, early childhood, reading and gifted education. See the *Graduate Bulletin of Information* or call the Education Office for details.

Through reciprocal agreements, School of Education graduates also qualify for certification in many other states.

Accreditation

The School of Education is accredited by the National Council for Accreditation of Teacher Education and approved by the Washington State Board of Education.

Organization

The School of Education is organized into five departments: Teacher Education, Curriculum and Instruction, Counselor Preparation, Administration and Adult Education, and Educational Leadership. Close cooperation exists among all departments, schools and colleges of the university in working out programs of preparation for students.

Graduate Degrees Offered

See *Graduate Bulletin of Information*

Master of Arts in Education

Master of Education

Master of Counseling

Master in Teaching

Master in Adult Education and Training

Educational Specialist

Doctor of Education

Teacher Education-Master in Teaching

Students planning to enter the teaching profession should complete a bachelor's degree in an academic area that is a certifiable subject area for the state of Washington. Students planning to be elementary teachers may major in liberal studies instead of majoring in a certifiable subject area.

Undergraduate students who have determined that they desire to become teachers are responsible for contacting the School of Education for assignment of an adviser. They should meet at least once a year with that adviser as an undergraduate.

The master in teaching program is designed to meet state standards for teacher certification for beginning teachers. After completing this program, students can be recommended for initial certification.

Certification

In order to receive certification, candidates must have full-time student teaching experience in their subject area.

Elementary Certification

Candidates will qualify for the certificate to teach kindergarten through eighth grade by successfully completing the master in teaching program.

Secondary Certification

Candidates must have an academic major or the equivalent in a subject in which full-time placement is available. They also must have their bachelor's or master's degree in their area of desired certification (e.g., someone wanting to teach biology must have a bachelor's or master's degree in biology.) Candidates with a degree in a closely associated area (e.g., engineering or environmental studies) must call the master in teaching program secretary at (206) 296-5759 to arrange an appointment with the master in teaching administrative coordinator to evaluate their transcripts.

Secondary Certification: Subject Majors

The following majors are suitable for secondary certification:

Art	K-12
Bilingual Education	K-12
Biology	4-12
Chemistry	4-12

English	4-12
English as a Second Language	K-12
English/Language Arts	4-12
Foreign Language (designated)	K-12
History	4-12
Mathematics	4-12
Music	K-12
Physical Education	K-12
Physics	4-12
Science	4-12
Social Studies	4-12
Special Education	K-12

The following majors are suitable for additional teaching; however, these must be accompanied by one of the majors listed above:

Agriculture	4-12
Anthropology	4-12
Business Education	4-12
Choral Music	K-12
Computer Science	4-12
Drama	4-12
Math Science	4-12
Economics	4-12
Geography	4-12
Health	4-12
Home/Family Life Education	4-12
Industrial Arts/Technology	4-12
Instrumental Music	K-12
Journalism	4-12
Learning Resources	K-12
Marketing Education	4-12
Political Science	4-12
Psychology	4-12
Reading	K-12
Sociology	4-12
Speech	4-12
Traffic Safety	K-12

Admission Requirements

A bachelor's degree from a regionally accredited institution is required. For applicants interested in becoming elementary teachers, any degree is accepted; a strong liberal arts background is desired. For applicants interested in becoming secondary teachers, a bachelor's degree in an area certifiable in Washington state is desired. Applicants whose degrees differ from their teaching interest or are in a non-certifiable subject area should call the master in teaching program secretary at (206) 296-5759 to arrange an appointment with the administrative coordinator to evaluate their transcripts.

A grade point average of 3.0 is required. Strong applicants who are below a 3.0 GPA may be considered. Applicants must submit scores from

the Graduate Record Examination (GRE) or the National Teacher Examination (NTE) communication skills test. Scores must be within the last five years and submitted by the application deadline. In addition, a spontaneous writing sample must be provided. (This is arranged through the Learning Center of Seattle.)

Two recommendations from immediate supervisors and/or professors are required. (Recommendation forms and envelopes are provided.)

Applicants must complete a one-page autobiographical statement outlining their motivation and commitment to teaching, prior applicable course work, experience with school-age children and understanding of cultural differences. This statement should clearly describe the applicant's experience with young people or exceptional individuals (demonstrated by paid or volunteer work in classrooms, social service agencies, or other activities associated with youth).

Applicants must show competency in mathematics for elementary teachers, and demonstrated competency in basic skills. Competency in technology is also required. The MIT program is designed to develop competency in instructional technology. MIT students are required to operate a computer and load and use software, including a word processing program. Students who are unfamiliar with computers can take course work at the university, a college or a retail computer store to prepare for the MIT program. Further, familiarity with the operation of audio visual equipment commonly used in schools is desirable.

Applicants must complete a successful interview with faculty of the Department of Teacher Education.

Prerequisites

Students planning to be elementary teachers must demonstrate competency in mathematics. MT 200 is highly recommended.

Writing and spelling skills are important for admission to the program. If the student desires to have these skills assessed as an undergraduate, this should be discussed with an adviser. Students must demonstrate competency in this area to be admitted to the program. English 410 is highly recommended for elementary and secondary teachers.

Additional Endorsements

For continuing certification, teachers must obtain a second endorsement in one of the following subject areas. Students are encouraged as undergraduates to complete this state requirement. The following additional endorsements are available at Seattle University. Unless otherwise noted, 24 credits are required.

Art	K-12
Bilingual Education	K-12
Biology	4-12
Chemistry	4-12
Computer Science	4-12
Foreign Language	K-12
French	
German	
Spanish	

Drama	4-12
Early Childhood Education	P-3
*Early Childhood Special Education	P-3
Earth Science	4-12
Economics	4-12
English	4-12
English as a Second Language	K-12
**English/Language Arts	4-12
History	4-12
Journalism	4-12
Mathematics	4-12
Physics	4-12
Political Science	4-12
Psychology	4-12
Reading	K-12
**Science	4-12
**Social Studies	4-12
Sociology	4-12
Special Education	K-12
Speech	4-12

*48 credits required

**45 credits required

Special Education

Students interested in teaching special education may enroll in special education courses during their junior and senior years. A program meeting Seattle University's special education endorsement requirements consists of between 33 and 36 credit hours. Such a program should be designed in cooperation with an education adviser.

Education Courses

These courses can be used as electives in a student's program with a School of Education adviser's approval.

ED 413 Programs in Early Childhood Education 3

Models of observation; curriculum and teaching methods for preschool, kindergarten and primary-grades children. (summer, odd years)

ED 414 Issues in Early Childhood Education 3

Stresses child development theory, research on the effectiveness of ECE programs, and current issues and trends for preschool, kindergarten and primary grades. Prerequisite: ED 413. (summer, odd years)

ED 415 Early Education Practicum 3

Field based curriculum development or action research project in a preschool, kindergarten or primary grades setting. Prerequisites: permission of ECE coordinator, ED 413 and ED 414.

ED 422 Working with Parents and Professionals 3

This course will focus on skills necessary for teachers to work with parents and professionals. Included are techniques for involving parents in the educational process, counseling approaches and conferencing practices. Emphasis is placed on working with the parents of exceptional students.

ED 423 Introduction to Classroom Management 3

Provides theory and strategies for managing the K-12 classroom. While a variety of theories will be studied, the systematic use of applied behavior analysis techniques will be a major emphasis of the course.

ED 424 Introduction to Mild Handicaps 3

History and current practices in diagnosis and remediation of students who are learning disabled and mildly handicapped.

ED 425 Introduction to Special Education 3

Survey of characteristics of exceptional students served by special educators. A review of special education practices and federal and state laws guiding special education. Writing individual education programs which lead to effective instruction is also included.

ED 426 Introduction to Moderate and Severe Handicaps 3

Examination of characteristics of students with developmental disabilities; emphasis on current trends and practices in their education.

ED 427 Methods in Special Education 3

An examination of methods of teaching exceptional students in varied settings. Prerequisite: ED 425 or permission of the instructor.

ED 428 Language Development 3

An introduction to critical features of the developmental processes of receptive and expressive language with consideration of diagnosis, curriculum and method.

ED 432 Mainstreaming the Exceptional Student 3

Issues surrounding mainstreaming; methods for working with exceptional students in the regular classroom. (fall, winter).

ED 438 Laboratory Experience - Elementary 1 to 6

Mandatory CR/E. (fall, winter, spring)

ED 439 Laboratory Experience -Secondary 1 to 6

Mandatory CR/E. (fall, winter, spring)

ED 450 Nature and Needs of the Gifted 3

An introductory course to gifted education, including a history of the field, theoretical foundations, administrative arrangements for program organization, definitions, assessment (identification tools, new strategies), developmental issues, special populations (gender, ethnicity, SES, urban/rural, handicapped, extremely gifted, etc.), awareness of attitudes toward the gifted, etc. Will include work on intellectually (academically) gifted as well as creatively gifted individuals. (spring, even years; summer, odd years)

ED 451 Gifted Education: Mathematics and Science 3

Current research exploring the relationship of brain development to types of giftedness will be examined, as will implications of this research and Piaget's work as they relate to curriculum design. Applications to the rationale and methods for mathematics and science instruction for gifted students will be identified and explored. Prerequisite: ED 450. (summer, even years)

**ED 460 Computers and Instructional Technology 3
in the Classroom**

An examination of the uses of computers and other forms of media in the classroom.

ED 470 Manual Language 3

The use of manual English for the handicapped. Includes the deaf finger spelling alphabet and a 600 to 800 word vocabulary. Emphasis is on understanding of alternative methods of communication.

ED 472 Literature for Early Education 3

Examination of distinguished books for young children. Includes discussion of the literary and artistic merit as well as the human values represented in early childhood literature.

ED 477 Multicultural Literature 3

Analysis of multicultural literature written for children for use by the teacher in assisting children to appreciate cultural diversity. Discussion of racism, sexism and other dehumanizing influences expressed in literature and ways educators can bring about positive change.

ED 491 Special Topics 1 to 5**ED 492 Special Topics 1 to 5****ED 493 Special Topics 1 to 5****ED 496 Independent Study 1 to 5****ED 497 Independent Study 1 to 5****ED 498 Independent Study 1 to 5**

Matteo Ricci College

Bernard M. Steckler, PhD, Dean

Jodi Kelly, MRE, Assistant Dean

About Matteo Ricci College

Matteo Ricci College at Seattle University is the three-year university phase of an innovative program that coordinates and integrates high school and university level studies, and enables students to complete their high school and university education in six or seven years, rather than the traditional eight.

The Matteo Ricci College (MRC) program was developed jointly by Seattle Preparatory School and Seattle University. That collaboration led, in 1975, to Seattle Prep's initial offering of the three-year high school phase (the curriculum of MRC/SP) and in 1977, to Seattle University's initial offering of the three-year university phase (the curriculum of MRC/SU). Access to MRC at Seattle University was restricted from the inception of the program through the 1988-89 academic year to students who had completed the three-year curriculum at Seattle Prep.

Over the past five years, collaboration between MRC/SU and certain local Catholic high schools has led to academic partnerships that open the college to graduates of those schools. The focus of these partnerships is a bridge curriculum that is designed jointly by high school and MRC/SU faculty and taught by high school faculty on the high school campus. That curriculum can generate 10 Seattle University credits, which may be applied toward MRC degree program requirements or other Seattle University program requirements, or be transferred to other universities.

Objectives

Matteo Ricci College seeks to develop students who shape their personal and social futures through responsible choices. The objectives of the program are to continue the harmonious development of the student's cognitive, affective and valuative potential; bring the student to a reflective consciousness of how he or she learns; and foster an inquiring, caring community of learners and teachers. Focusing on the student's intellectual, aesthetic, emotional, ethical and religious life, the curriculum is designed to sharpen and test generalizable learning skills. Students exercise and develop verbal and non-verbal communication skills; develop specific skills, both in a broad range of traditional disciplines and in an area of specialization; confront, through interdisciplinary investigation, problems, clarifying themes and a variety of values. Students will be aided in undergoing prescriptive self-assessment.

Admission Requirements

Beginning with the fall term of the 1989-90 academic year, access to MRC/SU became available to the following students:

- Seattle Prep students who have successfully completed the three-year MRC/SP curriculum and are recommended for advancement to MRC/SU.

- Graduates of Seattle Prep who follow the three-year MRC/SP curriculum with successful completion of a fourth year of study on the Prep campus.
- Graduates of John F. Kennedy Memorial High School, O'Dea High School and Eastside Catholic High School who: 1. meet the university's entrance requirements; 2. earn 10 Seattle University credits, with a grade of C or higher, through the bridge curriculum; and 3. receive recommendations from teachers involved in the bridge curriculum and from the high school administration.

Degree Offered

Bachelor of Arts in Humanities

A second baccalaureate degree in a variety of liberal arts and professional areas can usually be earned in an additional three quarters of study.

General Program Requirements

MRC students are expected to make normal progress toward completing the required courses in sequence. They must maintain a cumulative academic grade point average of 2.0 during the first year of the program and 2.25 or above during the remainder of the program. Students failing to meet these expectations will be placed on probation for two quarters, and thereafter are subject to dismissal from the MRC program.

The MRC peer advisers serve as the principal advisers to all MRC students on academic and academically related matters. Consequently, a student in the college may not register for any Seattle University course, either in the summer session or during the regular academic year, without first consulting and receiving the written permission of a peer adviser.

Bachelor of Arts Major in Humanities

In order to earn the bachelor of arts with a major in humanities through Matteo Ricci College, students must complete 135 quarter credits including the following:

HUM courses	60
Fine Arts electives	4 to 5
Science and Technology.....	5
Social Science Inquiry.....	5

Choose one of the following areas of concentration:

Concentration in a Single Discipline.....	40
Concentration in a Pre-professional Discipline	50
Liberal Studies Approved Courses.....	45 to 50
General Science	45 to 50
Electives (approved by MRC adviser)	remainder

Typical Schedule

Year 4

HUM 100, 200 series courses	30
Fine Arts course	4-5
Area of concentration and approved courses	10-11

Year 5

HUM 280 and 300 series courses	15
Science and Technology course	5
Social Science Inquiry	5
Area of concentration and approved courses	20

Year 6

HUM 400 series	15
Area of concentration and approved courses	30

Please Note: 1. Only courses graded C- (1.7) or higher will fulfill the HUM requirements scheduled for the Year 4 course of study. Only those graded C (2.0) or higher will be accepted in fulfillment of the HUM courses scheduled for the Year 5 and Year 6 courses of study. 2. MRC students who have successfully completed an area of concentration may apply the credits earned toward a second baccalaureate degree in certain major fields of study, subject to the approval of the appropriate school, and the university regulation of 45 minimum additional credits for a second baccalaureate degree. 3. The curriculum for students entering MRC/SU from schools other than Seattle Prep will vary only slightly from the requirements listed above, depending on the content of the respective school's bridge curriculum. While such students can bring 10 Seattle University credits earned through a bridge curriculum, the number of credits that must be taken on the Seattle University campus for completion of the MRC degree program remains at 135.

Matteo Ricci College Humanities Courses

HUM 150 Composition: Language and Thought 5

Study and practice in informal logic and argumentation, with emphasis upon the composition of clear, persuasive writing.

HUM 151 Composition: Language and the Arts 5

Interdisciplinary study of artistic composition in a variety of art forms, with emphasis upon, and practice in, literary composition.

HUM 180	Socio-Cultural Transformations I	5
HUM 181	Socio-Cultural Transformations II	5
HUM 182	Socio-Cultural Transformations III	5

A three-quarter, interdisciplinary study of the evolution of major systems of meaning and value in Western civilization and the social expressions of these systems; emphasis on analysis of social and cultural phenomena and on interpretation of the personal and communal significance of cultural change in the past, present and future.

HUM 260	Modes of Inquiry	5
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Inquiry into the dynamic of human knowing through three general modes of inquiry: first person (focusing on the "I, myself"); second person (respecting you); and third person (observing the "it's, he's, she's and they's"); attention to the dependence of knowing on interpretive frameworks, to the dependence of these frameworks on social and cultural forces shaping human existence and to rigorous interrogation of these frameworks.

HUM 280	Cultural Interface	5
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Interdisciplinary study of the elements of human behavior which define culture, and the processes of interaction between European culture and cultures of Asia, Africa and Latin America.

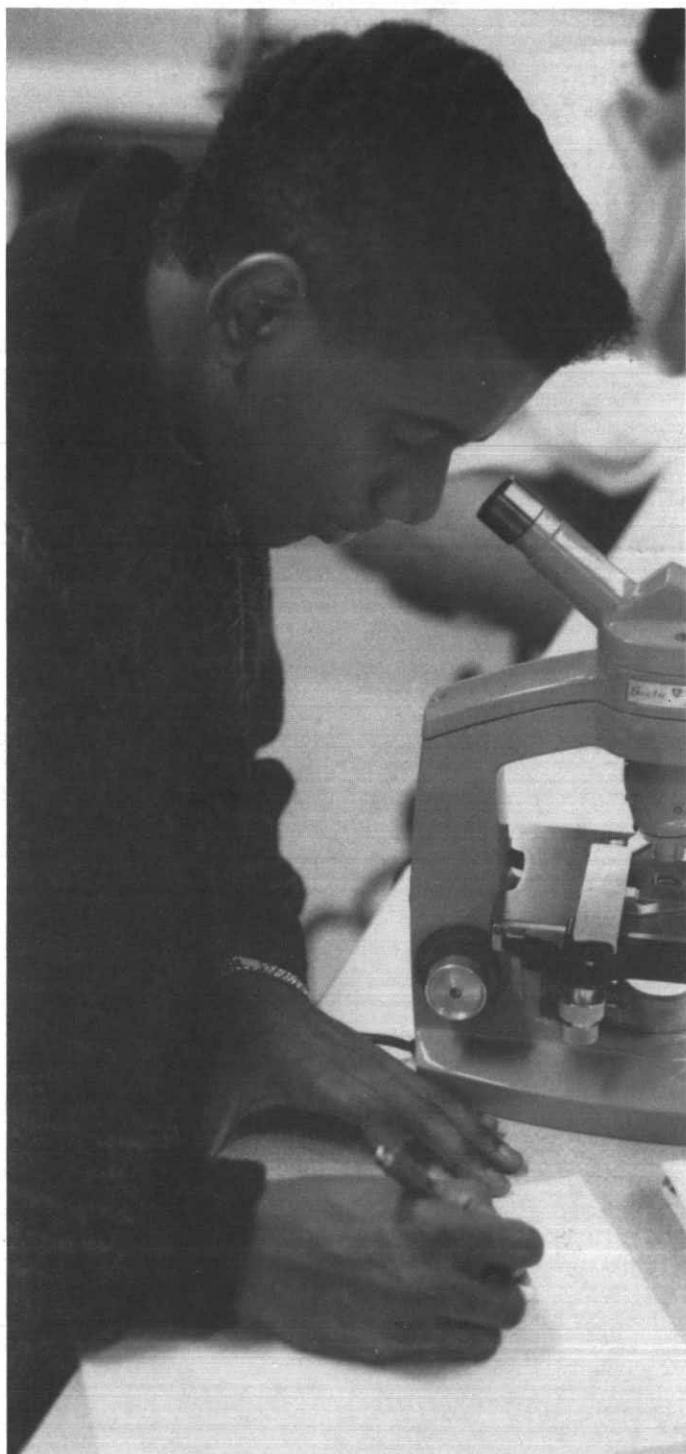
HUM 291	Special Topics	1 to 5
HUM 292	Special Topics	1 to 5
HUM 293	Special Topics	1 to 5

HUM 301	Perspectives on the Person I	5
HUM 302	Perspectives on the Person II	5

Reflective and critical examination of the structures of experience which define and shape human reality from philosophical, theological, psychological and literary perspectives; emphasis on understanding of self and on appropriation of a religiously grounded sense of care and responsibility at both individual and social levels.

HUM 400	MRC Seminar	5
HUM 401	MRC Seminar	5
HUM 402	MRC Seminar	5

Several seminars each quarter which challenge students to apply knowledge and skills already acquired to complex social and cultural issues of the contemporary world; emphasis on searching for the normative and the ideal in economic, political, scientific, technological, religious and aesthetic contexts and on integrating the academic and the "real" world.



School of Nursing

Luth M. Tenorio, PhD, RN, Dean

Objectives

The aim of the School of Nursing is to provide educational preparation for professional practice. There are four major goals for the nursing program:

- Provide educational experiences to develop knowledge, skills and values essential to the profession of nursing.
- Provide opportunities for students to realize their potentials as persons and as professionals.
- Prepare students in the Jesuit tradition of service to others for meeting health needs in society.
- Provide the foundation for graduate study in nursing.

Degree Offered

Bachelor of Science in Nursing

Accreditation

National League for Nursing

Washington State Board for Nursing

Programs of Study

The School of Nursing offers an undergraduate program in nursing for basic students with no previous education in nursing and for the registered nurse student seeking the BSN degree.

Admission Requirements

All entering students from high schools or accredited institutions of higher learning 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. A cumulative grade point average of 2.75 or above from another college or university is required for transfer students seeking admission into the School of Nursing. Additional requirements for registered nurses are:

- Graduation from an NLN-accredited school of nursing
- Current nursing licensure in the state of Washington
- Recommendation from the director of the nursing program and from employer

General Program Requirements

The academic and clinical performances of each nursing student are evaluated at the end of each quarter to determine progression in the program. Specific requirements for progression are detailed in Policy 75-3, which is included in the School of Nursing Student Handbook.

Students must meet the School of Nursing/Clinical Agency requirements for annual health screening, current C.P.R. certification, immunization

protection, medical insurance coverage and other state and federal requirements. Students are responsible for these expenses as well as uniforms, equipment and transportation costs to, from, and while in cooperating teaching units. Students are referred to the School of Nursing Student Handbook for a more detailed overview of requirements and expectations.

Beyond the usual university costs, students must assume responsibility for and provide their own transportation between campus and clinical agencies. Professional liability insurance is recommended for basic students and is required for registered nurse students through the duration of all clinical experiences. Fees are assessed for all laboratory and clinical courses (see costs section of this bulletin). Specific fees are required for standardized testing in preparation for practice. Fees are also required to apply for RN licensure. Details regarding these costs are found in the School of Nursing Student Handbook.

Clinical Experiences

Clinical experience is provided through cooperating agencies, which include the Bessie Burton Sullivan Skilled Nursing Residence, Children's Hospital and Medical Center, Evergreen Hospital Medical Center, Group Health Cooperative Hospital and Clinics, Harborview Medical Center, Northwest Hospital, Overlake Medical Center, Pike Market Medical Clinic, Providence Medical Center, Seattle King County Health Department, Swedish Hospital Medical Center, Valley Medical Center, Veterans Administration Medical Center, Virginia Mason Hospital, Yesler Terrace and other selected health care agencies.

Bachelor of Science in Nursing

In order to earn the bachelor of science in nursing, students must complete 180 quarter credits with a cumulative grade point average of 2.5 and with courses applicable to the major graded 2.0 or better, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies of Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
Lab Science	(CH 101 required)	5
PL 220	Philosophy of the Human Person	5
PSY 120	Introductory Psychology	5

Choose one of the following two courses:

Social Science II (not psychology)	5
FA 120 Experiencing the Arts	5

Theology and Religious Studies Phase II (200-299)	5
PL 352 Health Care Ethics	5
Theology and Religious Studies Phase III (300-399)	5
N 422 Senior Synthesis	3
N 480 Interdisciplinary Core: The Changing Family	3
See detailed information on the core curriculum beginning on page 55.	

II. Major Program Requirements

Prerequisites:

CH 102 Introductory Organic and Biochemistry	5
BL 200 Anatomy and Physiology I	5
BL 210 Anatomy and Physiology II	5
BL 220 Microbiology	5
PSY 322 Psychology of Growth and Development	5

Nursing sequence:

N 200 Concepts in Professional Nursing	5
N 301 Health Promotion Across the Lifespan	5
N 302 Health Assessment	5
N 303 Basic Nursing Interventions	3
N 318 Nursing Care of Ill Adults I	3
N 319 Nursing Care of Ill Adults I-Practice	4
N 320 Pharmacological Principles Basic to Nursing Practice	2
N 321 Pathophysiology I	3
N 322 Pathophysiology II	3
N 323 Concepts in Gerontological Nursing	2
N 328 Nursing Care of Ill Adults II	4
N 329 Nursing Care of Ill Adults II-Practice	6
N 338 Nursing Care of Ill Children	3
N 339 Nursing Care of Ill Children-Practice	4
N 348 Psychiatric Mental Health Nursing	3
N 349 Psychiatric Mental Health Nursing-Practice	4
N 404 Research in Nursing Practice	3
N 410 Nursing Care of the Childbearing Family	3
N 411 Nursing Care of the Childbearing Family-Practice	4
N 412 Community Health Nursing	3
N 413 Community Health Nursing-Practice	4
N 423 Transition to Professional Nursing Practice	8

Bachelor of Science in Nursing for Registered Nurse Students

In order to earn the bachelor of science in nursing for registered nurse students, students must complete, either at Seattle University or in transfer, 180 quarter credits with a cumulative grade point average of 2.5 and with courses applicable to the major graded 2.0 or better, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
MT	(101, 107 or above)	5
CH 101	Introductory General Chemistry	5
PL 220	Philosophy of the Human Person	5
PSY 120	Introductory Psychology	5

Choose one of the following two courses:

Social Science II (not Psychology)	5
FA 120 Experiencing the Arts	5

Theology and Religious Studies Phase II (200-299)	5
PL 352 Health Care Ethics	5
Theology and Religious Studies Phase III (300-399)	5
N 422 Senior Synthesis	3
N 480 Interdisciplinary Core: The Changing Family	3

II. Major Program Requirements

Prerequisites:

CH 102	Introductory Organic and Biochemistry	5
BL 200	Anatomy and Physiology I	5
BL 210	Anatomy and Physiology II	5
BL 220	Microbiology	5
PSY 322	Psychology of Growth and Development	5

Nursing sequence:

N 310	Current Perspectives in Professional Nursing	5
N 321	Pathophysiology I	3
N 322	Pathophysiology II	3
N 385	Clinical Decision Making	5
N 404	Research in Nursing Practice	3
N 412	Community Health Nursing	3
N 413	Community Health Nursing-Practice	4
N 423	Transition to Professional Nursing Practice	8

Required courses with the option for advanced placement:

N 302	Health Assessment	5
N 303	Basic Nursing Interventions	3
N 318	Nursing Care of Ill Adults I	3
N 319	Nursing Care of Ill Adults I-Practice	4
N 320	Pharmacological Principles Basic to Nursing Practice	2
N 323	Concepts in Gerontological Nursing	2
N 328	Nursing Care of Ill Adults II	4
N 329	Nursing Care of Ill Adults II-Practice	6
N 338	Nursing Care of Ill Children	3
N 339	Nursing Care of Ill Children-Practice	4
N 348	Psychiatric Mental Health Nursing	3
N 349	Psychiatric Mental Health Nursing-Practice	4
N 410	Nursing Care of the Childbearing Family	3
N 411	Nursing Care of the Childbearing Family-Practice	4

Please Note: Prospective students are encouraged to work with the coordinator of the RN-B program early in the program to design a plan of study that meets both individual needs and program requirements. All RNs must complete prerequisite requirements as well as transfer core requirements.

Nursing Courses

N 200 Concepts in Professional Nursing 5

An exploration of concepts and values for socialization to professional nursing. Introduction to nursing process and communication skills and the development of nursing and nursing theory in a historical context. (Theory, four credits; lab, one credit). Prerequisite: Phase I core courses. Corequisites: N 301, N 302. (spring)

N 301 Health Promotion Across the Lifespan 5

Concepts of health, protection and promotion, and teaching-learning principles. Exploration of factors influencing health status of individuals across the lifespan; strategies to develop and modify health behavior. Prerequisites: PSY 322. Corequisites: N 200, N 302 (spring)

N 302 Health Assessment 5

History-taking, physical examination, and documentation skills. Assessment of healthy individuals includes physical, psychosocial, developmental, cultural, and spiritual aspects. Theory (2 credits), laboratory/clinical (3 credits). Prerequisites: BL 200, BL 210. Corequisite: N 200, N 301. (spring)

N 303 Basic Nursing Interventions 3

Skills related to basic needs, aseptic technique, and medication administration. Simulated lab practice and validation of performance. Prerequisites: Nursing Level 1, BL 220. Corequisites: N 318, N 319, N 320. (fall) Must be taken CR/E.

- N 310 Current Perspectives in 5**
Professional Nursing
Transition course for RNs only. Professional nursing in a social context; characteristics of professional practice; teaching-learning principles; communication skills; health promotion. Field assignments arranged. (fall)
- N 318 Nursing Care of Ill Adults I 3**
A nursing process approach to care of the ill adult. Risk factors and common, uncomplicated physiological alterations in health states. Prerequisites: Nursing Level I; BL 220. Prerequisites or corequisite: N 303, N 320, N 321. (fall)
- N 319 Nursing Care of Ill Adults I - Practice 4**
Clinical practice to promote application of concepts, principles and processes from previous courses and the corequisite N 318; experiences with ill clients in a variety of clinical settings. Prerequisites: Same as for N 318. Corequisite N 318.
- N 320 Pharmacological Principles Basic To 2**
Nursing Practice
Professional nursing responsibilities in assessing, planning and evaluating pharmacological interventions. Prerequisites: Nursing Level I, CH 102. (fall)
- N 321 Pathophysiology I 3**
Alterations in structure and function resulting from stressors on the human body. A conceptual approach to pathophysiological mechanisms: physical, laboratory, diagnostic findings. Areas of study include stress, adaptation and alterations in defense mechanisms: fluid, electrolyte and acid-base imbalances; responses to cell and tissue injury; altered immune response, nutrition, elimination and neuro-muscular-sensory response. Open to non-majors. Prerequisites: BL 200, BL 210. (fall)
- N 322 Pathophysiology II 3**
This course builds on the concepts and areas of study from Pathophysiology I. Body responses addressed include alteration in tissue perfusion-oxygenation, hormonal regulatory and reproductive function, genetic mechanisms, complex alterations in cellular and immune responses, resulting in multi-system and general body dysfunction. Open to non-majors. Prerequisite: N 321. (winter, spring)
- N 323 Concepts in Gerontological Nursing 2**
Health-derived and health-related concerns of older persons with emphasis on attitudes, adjustments in aging, environmental considerations, chronic illness, and ethical/legal aspects of nursing care. Prerequisite: Nursing Level I or permission. (winter, spring)

- N 328 Nursing Care of Ill Adults II 4**
A nursing process approach to care of the ill adult with common, complex, physiological alterations in health. Application of values, nursing and other theories as a basis for holistic care. Prerequisites: N 303, N 318, N 319, N 320, N 321. Prerequisite or corequisite N 322. Corequisite: N 329. (fall, winter, spring)
- N 329 Nursing Care of Ill Adults II - Practice 6**
Clinical practice to promote application of concepts, principles and processes from N 328; experiences with individual clients in a variety of acute care settings. Prerequisites: same as for N 328; corequisite: N 328.
- N 338 Nursing Care of Ill Children 3**
The nursing process for the care of hospitalized infants, children, and adolescents with acute and/or chronic health problems. The focus is the child within a family. Prerequisites: N 303, N 318, N 319, N 320, N 321. Prerequisite or corequisite: N 322, N 339. (fall, winter, spring)
- N 339 Nursing Care of Ill Children - Practice 4**
Clinical practice to promote application of concepts, principles and processes from N 338; experiences with individual clients in a variety of clinical settings. Prerequisites: Same as for N 338; Corequisite: N 338.
- N 348 Psychiatric Mental Health Nursing 3**
A nursing process approach to nursing care of adults with biopsychosocial responses to mental distress and dysfunction. Application of values, nursing and other theories, as a basis for holistic care and promotion of growth and mental wellness. Prerequisites: N 303, N 318, N 319, N 320, N 321. Corequisite: N 349. (fall, winter, spring)
- N 349 Psychiatric Mental Health Nursing - Practice 4**
Clinical practice to promote application of concepts, principles and processes from N 348; experiences with individuals and groups in a variety of clinical settings. Prerequisites: Same as for N 348; Corequisite: N 348.
- N 372 Issues in Women's Health:
A Wellness Perspective 5**
Elective course (not a major requirement). Life style and influences on health behaviors. Health promotion and protection practices. Special emphasis on nutrition as it relates to wellness. Examination of health issues and choices for women and families. Junior standing or permission of instructor. Open to non-majors and applicable to a women's studies minor.
- N 385 Clinical Decision Making 5**
Seminar for RNs only. Analysis of clinical decision making and examination of selected professional issues with clients of different ages. Application of the nursing process in a variety of practice settings. Prerequisite: PSY 322, N 310, and NLN Mobility II Examinations. (winter)

N 391	Special Topics	1 to 5
N 392	Special Topics	1 to 5
N 393	Special Topics	1 to 5

N 396	Independent Study	2 to 5
N 397	Independent Study	2 to 5
N 398	Independent Study	2 to 5

N 404 Research in Nursing Practice 3

The research process as an integral part of nursing practice. Evaluation and application of research findings. Instructional methods emphasize use of group process to foster team work. Level 2 nursing course. (spring)

N 410 Nursing Care of the Childbearing Family 3

Application of the nursing process to the childbearing family. Health promotion in a variety of community settings. Analysis of contemporary issues relating to the childbearing family. Prerequisites: Nursing Level 2. Corequisite: N 411. (winter, spring)

N 411 Nursing Care of the Childbearing Family - Practice 4

Clinical practice to promote application of concepts, principles and processes from N 410; experiences with individuals and families in a variety of clinical settings. Prerequisites: Same as for N 410; Corequisite: N 410.

N 412 Community Health Nursing 3

A systems framework for nursing interventions with clients, families, groups, and the community. Application of the nursing process focusing on complex, chronic health problems of clients from diverse cultural groups in community settings. Prerequisites: Nursing Level 2, N 480. Prerequisite or corequisite N 410, 411; Corequisite: N 413. (winter, spring)

N 413 Community Health Nursing - Practice 4

Clinical practice to promote application of concepts, principles and processes from N 412; experiences with clients, families and groups in community settings. Prerequisites: Same as for N 412; Corequisite: N 412.

N 414 Nursing Care of Critically Ill Clients 3

Elective course in nursing (not a requirement for the major). Nursing process approach to the care of critically ill clients. Analysis of selected illness situations as base for understanding care of critically ill clients. Prerequisites: All nursing Level 2 or RN with current license. (winter or spring)

N 422 Senior Synthesis in Nursing 3

Integration of the liberal arts with nursing; incorporation of leadership, management and organizational theories into professional nursing practice. Critically examines ethical, economic, legal, political and technological forces influencing nursing and health care delivery. Meets core requirement. Prerequisites: Nursing Level 2. (winter, spring)

N 423 Transition to Professional 8
Nursing Practice

Integration of clinical and management skills. Management of care for groups of clients and families with complex health care needs. Students select a setting according to interests and availability. Prerequisites: Nursing Level 2. Corequisite: N 422 (winter, spring)

N 480 Interdisciplinary Core Course 3
The Changing Family

Kinship is used as the primary model for studying families and as a symbolic model for analyzing social relationships. Family responses to change and conflict are explored. The health and well being of contemporary families will be examined from a multicultural perspective. Required level 2 nursing course. Open to non-majors. Meets core interdisciplinary course requirement. Prerequisites: Phase I and II of the core. (fall, winter)

N 480 Interdisciplinary Core Course Stress, 3
Survival and Adaptation

Elective course in nursing (not a requirement for the major). Assess stress responses from multifactor systems-oriented models through current research and literature. Examine complex cognitive, behavioral, affective, sociocultural and environmental variables. Practice self-management interventions. Open to non-majors. Meets core interdisciplinary course requirement. Prerequisites: Phase I and II of the core. (fall and winter)

N 491 Special Topics 1 to 5

N 492 Special Topics 1 to 5

N 493 Special Topics 1 to 5

N 496 Independent Study 2 to 5

N 497 Independent Study 2 to 5

N 498 Independent Study 2 to 5

School of Science and Engineering

Kathleen Mailer, PhD, Dean

Robert J. Smith, Assistant Dean

Objectives

Rooted in the Jesuit tradition of liberal education, the School of Science and Engineering at Seattle University seeks to provide dynamic, integrated and challenging academic programs in science, engineering and health. The school is dedicated to preparing students for responsible roles in their chosen professions and to advancing the educational qualifications of practicing professionals. The school seeks to foster among all students an understanding of scientific inquiry and a critical appreciation of technological change, and to inspire them to lifelong intellectual, professional and human growth.

Degrees Offered

Bachelor of Arts

with a major in chemistry, computer science, mathematics or physics.

Bachelor of Science

with a major in mathematics.

Bachelor of Science in Biochemistry

Bachelor of Science in Biology

Bachelor of Science in Chemistry

Bachelor of Science in Civil Engineering

Bachelor of Science in Civil Engineering with a

specialty in environmental engineering

Bachelor of Science in Diagnostic Ultrasound

Bachelor of Science in Electrical Engineering

Bachelor of Science in General Science

Bachelor of Science in Mathematics

Bachelor of Science in Mechanical Engineering

Bachelor of Science in Medical Technology

Bachelor of Science in Physics

Master of Software Engineering -See *Graduate Bulletin of Information*

Students interested in other scientific, technical and health-related careers, such as medicine or dentistry, may either pursue a disciplinary degree and use elective courses to suit their needs or tailor their complete curriculum within the general science degree.

Accreditation

Individual programs within the school are accredited by the following professional bodies:

- American Chemical Society (chemistry)
- Accreditation Board for Engineering and Technology (civil engineering, electrical engineering and mechanical engineering)
- Council on Allied Health Education and Accreditation (diagnostic ultrasound)

Admission Requirements

In addition to the requirements for admission to Seattle University, freshmen applicants for admission to the School of Science and Engineering must have completed at least three years of high school mathematics, preferably including trigonometry, and at least two years of laboratory science for all majors except mathematics and computer science.

Transfer applicants will be considered when their overall college grade point average is at least 2.50 on a 4.00 scale and when their cumulative grade point average in all engineering, mathematics or science courses is also at least 2.50. Transfer admission is on the basis of space available, with academic performance being the prime consideration. A history of withdrawals, incompletes and repeated courses lessens the chances for admission. To be accepted for transfer credit, required engineering, mathematics or science courses must be graded C (2.00) or above. No technology courses will be accepted as transfer credit.

School of Science and Engineering Requirements

Students seeking the bachelor's degree in the School of Science and Engineering must complete 180 credits, including the university core curriculum requirements. The three engineering degrees require 192 credits. For all of the engineering programs and for the bachelor of science in computer science the student's cumulative grade point average and the School of Science and Engineering grade point average must be at least 2.50. The core requirements have been modified for several of the degree programs, as described in the individual departmental sections of this bulletin, but in no case may a student have fewer than 45 credits in the combination of history, humanities and social sciences. Students also must complete the specific departmental requirements for their particular degree.

No course may be taken without the indicated prerequisites. Only the dean may waive this policy.

Biology

Daniel B. Matlock, PhD, Chairperson

Objectives

Biology is the study of life at all levels, from the molecular to the global. A vital part of liberal education, knowledge of biology contributes directly to an understanding of contemporary life and appreciation of human values. It provides insights into the nature of the human body, human social structure and behavior, as well as the ecological interrelationships, genetics and evolution, physiological functions, cellular and subcellular processes of all living things.

Emphasizing laboratory and field work, the bachelor of science in biology degree offers students experiences across the entire field of biology, along with solid training in the supporting sciences. It is designed to prepare students for graduate work in basic and applied fields of biology and for professional careers in fields such as medicine, dentistry, veterinary medicine, teaching and technical areas with biological applications. Students interested in premedical, predental or preveterinary medicine should consult the premed section of this bulletin.

Degree Offered

Bachelor of Science in Biology

Major Offered

Biology

Bachelor of Science Major in Biology

In order to earn the bachelor of science degree with a major in biology, students must complete 180 quarter credits with a cumulative and major grade point average of 2.0, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies I (200-299)	.....	5

Ethics (upper division)	5
Theology and Religious Studies II (300-399)	5
Interdisciplinary	3 to 5
Senior Synthesis (satisfied by BL 494 and 495)	

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Fifty-six credits in biology, including:

BL 165	General Biology I	5
BL 166	General Biology II	5
BL 167	General Biology III	5

Choose one of the following two courses:

BL 235	Invertebrate Zoology	5
BL 252	Taxonomy of Flowering Plants	5

Choose one of the following three courses:

BL 325	Comparative Anatomy of the Vertebrates	5
BL 330	Comparative Vertebrate Histology	5
BL 361	Ultrastructure	4
BL 240	Genetics	4
BL 470	General Ecology	5

Choose one of the following two courses:

BL 385	Plant Physiology	5
BL 388	Animal Physiology	5
BL 485	Cell Physiology	5
BL	Electives	10

Senior Synthesis:

BL 494	Independent Experience	2 to 4
BL 495	Seminar	1

Please note: One course of plant science beyond the 165-167 series is required.

III. Other Program Requirements

CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CH 122	General Chemistry II	4
CH 132	General Chemistry Lab II	1
CH 123	General Chemistry III	4
CH 133	General Chemistry Lab III	1

Choose organic chemistry sequence a. or b.

a. CH 335	Organic Chemistry I	3
CH 345	Organic Chemistry Lab I	2
CH 336	Organic Chemistry II	3

CH 346	Organic Chemistry Lab II	2
CH 337	Organic Chemistry III	4
CH 347	Organic Chemistry Lab III	2
b. CH 219	Quantitative Analysis	5
CH 231	Fundamental Organic Chemistry I	4
CH 233	Fundamental Organic Chemistry Lab I	1
CH 232	Fundamental Organic Chemistry II	4
CH 234	Fundamental Organic Chemistry I Lab II	1
Choose option a. or b. for ten credits:		
a. MT 131	Calculus for Life Sciences	5
PSY 303	Statistics and Research Methods	4
PSY 304	Lab for Statistics and Research Methods	1
b. MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
Choose physics series a. or b. for fifteen credits:		
a. PH 105	Mechanics and Sound	5
PH 106	Electricity, Magnetism and Thermodynamics	5
PH 107	Survey of Modern Physics	5
b. PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5

Minor in Biology

In order to earn a minor in biology, students must complete 30 credits in biology, which must include:

BL 165	General Biology I	5
BL 166	General Biology II	5
BL 167	General Biology III	5

and 15 credits of biology electives, of which 10 credits must be in courses numbered 200 or above.

Teacher Education

The teacher preparation program is a graduate-level program only. Students planning to teach in elementary or secondary schools must complete a bachelor's degree prior to beginning the teacher preparation program. They should discuss their major with their biology adviser to ensure that they are enrolled in the appropriate courses and must contact the School of Education for advising. Second endorsements are available in biology (24 credits) and general science (45 credits).

Biology Courses

BL 101 Principles of Biology 5

Important areas of biology, beginning at the cellular level and culminating with a consideration of interactions and changes in natural populations. Four lecture and three laboratory hours per week. (fall, spring)

BL 165 General Biology I 5

BL 166 General Biology II 5

BL 167 General Biology III 5

Survey of the biological world, concepts and principles. I) cell biology, metabolism, respiration, photosynthesis, genetics. II) evolution, diversity and comparisons of groups of living organisms. III) development and differentiation; comparative functions of tissues and organ systems; animal behavior; ecology. Four lecture and three laboratory hours per week. Prerequisite: high school algebra and chemistry. BL 165 prerequisite to BL 166 and 167. (I-fall, winter; II-winter; III-spring.)

BL 200 Anatomy and Physiology I 5

Major structural and functional systems of the human body. Cells, tissue, bone, muscle and nervous system. Laboratory emphasis on microscopic and gross anatomy. Credits not applicable for biology major. Four lecture and three laboratory hours per week.

BL 210 Anatomy and Physiology II 5

Major structural and functional systems of the human body. Digestive, circulatory, respiratory, endocrine, urinary and reproductive systems. Physiological interactions among systems. Laboratory emphasis on physiology. Credits not applicable for biology major. Four lecture and three laboratory hours per week. Prerequisite: BL 200. (winter)

BL 220 Microbiology 5

Introduction to microbiology, emphasizing health-related aspects. Four lecture and three laboratory hours per week. Credits not applicable for biology major. Prerequisite: BL 210. (winter)

BL 235 Invertebrate Zoology 5

Survey of invertebrate phyla including their anatomy, morphology, taxonomy and ecology. Four lecture and three hours laboratory per week. One weekend field trip. Prerequisites: BL 165, 166, 167. (spring, even years)

BL 240 Genetics 4

Introduction to the principles of inheritance with an emphasis on the transmission of genetic information from one generation to the next. Topics include Mendelian and non-Mendelian inheritance, dominance, linkage, gene interactions, sex discrimination and sex linkage, polygenic inheritance, human medical genetics and maternal effects. Three lectures and one discussion section per week. Prerequisites: BL 165, 166 and 167 or permission of instructor. (winter)

- BL 252 Taxonomy of Flowering Plants 5**
Native flora as an introduction to taxonomy, involving the principal orders and families of flowering plants. Three lecture and four laboratory hours per week. Prerequisites: BL 165, 166. (spring, odd years) (formerly BL 375)
- BL 275 Marine Biology 5**
Study of the marine environment and the animals and plants inhabiting it. Four lecture and three laboratory hours per week and one weekend field trip. Prerequisites: BL 165, BL 166, BL 167, BL 235. (spring, odd years) (formerly BL 375)
- BL 291 Special Topics 1 to 5**
BL 292 Special Topics 1 to 5
BL 293 Special Topics 1 to 5
- BL 296 Independent Study 1 to 5**
BL 297 Independent Study 1 to 5
BL 298 Independent Study 1 to 5
- BL 300 Microbiology 5**
Basic biology of micro-organisms, including morphology, physiology, genetics and ecology, with some aspects of applied and medical microbiology. Four lecture and three laboratory hours per week. Prerequisite: BL 210 or 388 or 485. (fall)
- BL 310 Comparative Vertebrate Embryology 5**
Early development of selected vertebrates with consideration of gametogenesis, fertilization, gastrulation, cell differentiation and organogenesis. Four lecture and three laboratory hours per week. Prerequisites: BL 165, 166, 167. (spring)
- BL 325 Comparative Anatomy of the Vertebrates 5**
Comparative study of the structures of the integumentary, muscular, skeletal, digestive, respiratory, excretory, reproductive, circulatory and nervous systems of selected vertebrates with emphasis on evolutionary relationships between organisms and development of structures within individuals. Prerequisites: BL 165, 166, 167. (winter)
- BL 330 Comparative Vertebrate Histology 5**
Study of the fundamental body tissues. Three lecture and four laboratory hours per week. Recommended BL 310 or 325. (winter)
- BL 361 Ultrastructure 4**
The examination of cellular structure as seen through the electron microscope. Introduction to theory of operation of the electron microscope, interpretation of electron micrographs, comparisons of fine structure of different cell types, correlations of structures with cellular functions, examples of research applications. Lecture/demonstration format; three lectures and one demonstration period per week. Prerequisite: BL 165 and permission of instructor. (winter)

- BL 385 Plant Physiology 5**
Study of the function of plants, with emphasis on the wide range of physiological process that may contribute to success and survival of plants in their environment. Transport mechanisms; water and mineral management; responses to light, including photosynthesis, photoperiodism, and photomorphogenesis; functions of plant hormones; responses to environmental stresses; events in development. Four lecture and three laboratory hours per week. Individual project. Prerequisites: BL 165, 166, 167; CH 335/345. (spring, even years)
- BL 388 Animal Physiology 5**
Study of the function of animals, with emphasis on processes that contribute to the success and survival of animals in their respective environments, including nerve and muscle function, hormonal regulation, osmoregulation, digestion and thermoregulation. Four lecture and three laboratory hours per week. Prerequisites: BL 165, 166, 167, CH 335, 336, 337. (fall)
- BL 415 Fundamentals of Immunology 3**
Humoral and cellular immune systems; clonal selection theory; antigen and antibody properties and interactions, immunological diversity; autoimmune diseases; AIDS; cancer immunology; monoclonal antibodies and immunotherapy. Prerequisites: BL 165 or 200/210; CH 102 or organic chemistry. (spring, even years)
- BL 422 Medical Microbiology 3**
Study of clinically significant bacterial and viral pathogens. Characteristics of pathogenic microorganisms and their mechanisms of pathogenesis at the cellular and molecular level will be emphasized. Epidemiological and immunological aspects of microbial diseases will also be considered. Three lecture hours per week. Prerequisites: BL 220 or 300; CH 102 or organic chemistry (spring, odd years)
- BL 440 Molecular Genetics 4**
Study of heredity at the molecular level, including gene structure, transcription, mutation, DNA replication, recombinant DNA methodologies and their applications. Three lectures and one laboratory per week. Prerequisites: BL 165, CH 347 and BL 240 or CH 450. (winter)
- BL 470 General Ecology 5**
Study of the interactions between organisms in biological communities, and the relationship of biological communities to the environment. Topics include: population growth and regulation, competition and predation, community energetics and nutrient cycling, comparative ecosystem analysis, and the evolution of ecosystems. Laboratory exercises include: field sampling techniques, experimental population manipulations, and ecosystem modeling. Four lecture and three laboratory hours per week. One weekend field trip. Prerequisites: MT 111. Recommended: BL 235, BL 252, PSY 201. (fall) (formerly BL 370)

BL 485 Cell Physiology 5

Cellular structure and function from a molecular approach. Topics include: membrane transport, bioenergetics, cell division, protein synthesis and secretion, gene regulation, and cell motility. Emphasis on biochemical laboratory techniques. Four lecture and three laboratory hours per week. Prerequisites: BL 165, 166, 167; CH 337/347. Recommended: MT 111. (spring)

BL 491 Special Topics 1 to 5**BL 492 Special Topics 1 to 5****BL 493 Special Topics 1 to 5****BL 494 Biology Senior Synthesis: Independent Experience 2 to 4**

Gives students the opportunity to integrate their liberal arts background from the core with studies in their major. Varying with individual students' needs, it may involve independent laboratory or field research, library research or practical work experience. A written project proposal and final report are required. Prerequisites: senior standing in biology major or permission of department chair. (fall or winter)

BL 495 Biology Senior Synthesis: Seminar 1

Follows BL 494. Each student orally presents the results of his/her independent experience to students and faculty in the Biology Department. Prerequisites: senior standing, BL 494. (spring)

BL 496 Independent Study 1 to 5**BL 497 Independent Study 1 to 5****BL 498 Independent Study 1 to 5****BL 499 Undergraduate Research 1 to 5**

Literature and laboratory investigation of a basic research problem. Preparation of a written report. Prerequisite: permission of chair (fall, winter, spring)

Chemistry

Thomas W. Griffith, PhD, Chairperson

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 degree program of bachelor of science in chemistry or bachelor of science in biochemistry is recommended to students who wish to prepare themselves for graduate studies in chemistry, biochemistry, or for medical/dental school. By completion of CH 415, CH 425 and seven additional approved credits in chemistry beyond the minimum requirements for the chemistry degree, the student is eligible for certification of the degree by the Committee on Professional Training of the American Chemical Society.

The bachelor of arts degree is recommended for those desiring a solid foundation in chemistry along with greater freedom of choice for elective courses from programs such as education, business, engineering or other fields within the university.

The medical technology program is designed to prepare students for professional careers as technologists in medical or biological research laboratories.

Degrees Offered

- Bachelor of Arts
- Bachelor of Science in Chemistry
- Bachelor of Science in Biochemistry
- Bachelor of Science in Medical Technology

Majors Offered

- Chemistry
- Biochemistry
- Medical Technology

Minor Offered

- Chemistry

Bachelor of Arts Major in Chemistry

In order to earn the bachelor of arts degree with a major in chemistry, students must complete 180 quarter credits with a cumulative grade point average of 2.0, including the following:

I. Core Curriculum Requirements

- | | | |
|--------|--|---|
| EN 110 | Freshman English | 5 |
| PL 110 | Introduction to Philosophy and Critical Thinking | 5 |

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Forty-five credits in chemistry, including:

CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CH 122	General Chemistry II	4
CH 132	General Chemistry Lab II	1
CH 123	General Chemistry III	4
CH 133	General Chemistry Lab III	1
CH 219	Quantitative Analysis	5
CH 231	Fundamental Organic Chemistry I	4
CH 233	Fundamental Organic Chemistry Lab I	1
CH 232	Fundamental Organic Chemistry II	4
CH 234	Fundamental Organic Chemistry Lab II	1
CH 361	Physical Chemistry II	3
CH 363	Physical Chemistry Lab I	2

Choose 10 credits from the following electives:

CH 260	Laboratory Safety	1
CH 326	Instrumental Analysis	5
CH 360	Physical Chemistry I	3
CH 362	Physical Chemistry III	3
CH 364	Physical Chemistry Lab II	2
CH 415	Advanced Inorganic Chemistry	3
CH 425	Synthetic Inorganic Chemistry Lab	2
CH 436	Advanced Organic Chemistry	3
CH 450	Biochemistry I	4
CH 452	Biochemistry II	4
CH 456	Biochemistry III	3
CH 499	Undergraduate Research	1 to 6

and special topics or independent study courses.

III. Other Program Requirements

MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT	Elective	5

Choose physics series a. or b.

a. PH 105	Mechanics and Sound	5
PH 106	Electricity, Magnetism and Thermodynamics	5
PH 107	Survey of Modern Physics	5

b. PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5

Bachelor of Science in Chemistry

In order to earn the bachelor of science degree with a major in chemistry, students must complete 180 quarter credits with a cumulative grade point average of 2.0, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Sixty credits in chemistry, including:

CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CH 122	General Chemistry II	4
CH 132	General Chemistry Lab II	1
CH 123	General Chemistry III	4
CH 133	General Chemistry Lab III	1
CH 219	Quantitative Analysis	5

CH 326	Instrumental Analysis	5
CH 335	Organic Chemistry I	3
CH 345	Organic Chemistry Lab I	2
CH 336	Organic Chemistry II	3
CH 346	Organic Chemistry Lab II	2
CH 337	Organic Chemistry III	4
CH 347	Organic Chemistry Lab III	2
CH 360	Physical Chemistry I	3
CH 363	Physical Chemistry Lab I	2
CH 361	Physical Chemistry II	3
CH 364	Physical Chemistry Lab II	2
CH 362	Physical Chemistry III	3
CH	Electives	6

III. Other Program Requirements

MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5

Choose one of the following four courses:

CSC 103	Introduction to Computers and Applications	5
CSC 113	Introductory Programming: BASIC	5
CSC 114	Introductory Programming: FORTRAN	5
MT 232	Multivariable Calculus	5

Please Note: 1. A student is eligible for certification of the degree by the American Chemical Society if CH 415, CH 425 and seven additional credits of approved advanced work in chemistry are taken. 2. For students planning graduate work, MT 232, MT 233, MT 234 and PH 204, PH 205 are strongly recommended as electives.

Bachelor of Science in Biochemistry

In order to earn the bachelor of science degree with a major in biochemistry, students must complete 180 quarter credits with a cumulative grade point average of 2.0, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5
EN 120	Masterpieces of Literature	5
FA 120	Experiencing the Arts	5

PL 220	Philosophy of the Human Person	5
Social Science I		5
Social Science II (different discipline from Social Science I)		5
Theology and Religious Studies Phase II (200-299)		5
Ethics (upper division)		5
Theology and Religious Studies Phase III (300-399)		5
Interdisciplinary		3 to 5
Senior Synthesis		3

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Sixty credits of chemistry, including:

CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CH 122	General Chemistry II	4
CH 132	General Chemistry Lab II	1
CH 123	General Chemistry III	4
CH 133	General Chemistry Lab III	1
CH 219	Quantitative Analysis	5

Choose option a. or b. for five credits:

a. CH 326	Instrumental Analysis	5
b. CH 362	Physical Chemistry III	3
CH 364	Physical Chemistry Lab II	2
CH 335	Organic Chemistry I	3
CH 345	Organic Chemistry Lab I	2
CH 336	Organic Chemistry II	3
CH 346	Organic Chemistry Lab II	2
CH 337	Organic Chemistry III	4
CH 347	Organic Chemistry Lab III	2
CH 361	Physical Chemistry II	3
CH 363	Physical Chemistry Lab I	2
CH 436	Advanced Organic Chemistry	3
CH 450	Biochemistry I	4
CH 452	Biochemistry II	4
CH 456	Biochemistry III	3

III. Other Program Requirements

BL 165	General Biology I	5
BL	Approved Electives (courses numbered 300-400)	10
MT 134	Calculus I	5
MT 135	Calculus II	5
MT 136	Calculus III	5
PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5

Bachelor of Science in Medical Technology

In order to earn the bachelor of science degree with a major in medical technology, students must complete 180 quarter credits with a cumulative grade point average of 2.0, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Forty-one credits, including:

CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CH 122	General Chemistry II	4
CH 132	General Chemistry Lab II	1
CH 123	General Chemistry III	4
CH 133	General Chemistry Lab III	1
CH 219	Quantitative Analysis	5
CH 450	Biochemistry I	4
CH 452	Biochemistry II	4
CH	Electives	13

III. Other Program Requirements

Choose two of the following three courses for 10 credits:

BL 165	General Biology I	5
BL 166	General Biology II	5
BL 167	General Biology III	5
BL 200	Anatomy and Physiology I	5
BL 210	Anatomy and Physiology II	5

Choose one of the following two courses:

BL 220	Microbiology	5
BL 300	Microbiology	5

BL 240	Genetics	4
BL 415	Fundamentals of Immunology	3
BL 485	Cell Physiology	5
BL	Electives	6
MT 131	Calculus for Life Sciences	5
PH 105	Mechanics and Sound	5
PH 106	Electricity, Magnetism and Thermodynamics	5

Choose one of the following three courses:

CSC 113	Introductory Programming: BASIC	5
CSC 114	Introductory Programming: FORTRAN	5
CSC 103	Introduction to Computers and Applications	5

Please Note: Professional certification requires one year of internship in an accredited laboratory training program after completion of the degree.

Minor in Chemistry

In order to earn a minor in chemistry, students must complete 35 credits in chemistry, including:

CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CH 122	General Chemistry II	4
CH 132	General Chemistry Lab II	1
CH 123	General Chemistry III	4
CH 133	General Chemistry Lab III	1
CH 219	Quantitative Analysis	5
	Organic chemistry (200 level or above)	10

Teacher Education

The teacher preparation program is a graduate-level program only. Students planning to become elementary, secondary chemistry or general science teachers must complete a bachelor's degree prior to beginning the teacher preparation program. They should discuss their major with their chemistry adviser to ensure enrollment in appropriate courses and must contact the School of Education for advising. Second endorsements are available in chemistry (24 credits) and general science (45 credits).

Chemistry Courses

Credit may be received for only one of each of the following pairs of courses: CH 231/335; 232/336; 233/345; 234/346. A student who completes CH 231 with a grade of B or better may enroll in CH 336 with the permission of the instructor.

CH 101 Introductory General Chemistry 5

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, winter)

CH 102 Introductory Organic and Biochemistry 5
Organic chemistry and introduction to biochemistry with application to the health sciences. Four lecture and three laboratory hours per week. Prerequisite: CH 101 or equivalent. (winter, spring, summer)

CH 110 Fundamentals of Chemistry 5
An introduction to chemistry designed for students with little or no preparation in science. Also for students desiring a review of high school chemistry prior to enrolling in CH 101 or CH 121. Four lecture hours and one three-hour lab per week. (fall, spring)

CH 121 General Chemistry I 4

CH 122 General Chemistry II 4

CH 123 General Chemistry III 4

1. Atomic and molecular structure, oxidation-reduction reactions, mass relationships, nuclear chemistry, periodic properties, acids, bases, ionic reactions. 2. Thermochemistry, gases, solutions, equilibria, kinetics. 3. Thermodynamics, electrochemistry, chemistry of metals and nonmetals. Four lecture hours per week. Prerequisites: CH 101, 110 or high school chemistry for CH 121; 121 for 122; 122 for 123; Corequisites: 131 for 121; 132 for 122; 133 for 123. (121, fall, winter; 122, winter, spring; 123, spring, summer)

CH 131 General Chemistry Lab I 1

CH 132 General Chemistry Lab II 1

Introduction to basic laboratory procedures and safety, practice in modes of scientific inquiry, including observation, measurement, data collection, interpretation and evaluation of results and reporting. Three hours per week. Prerequisite: CH 131 for 132. Corequisites: CH 121 for 131; 122 for 132. (131, fall, winter; 132, winter, spring)

CH 133 General Chemistry Lab III 1

Introduction to qualitative chemical analysis on a semimicro scale. Experimentation in the chemistry of ionic systems and basic quantitative analytical methods. Four hours per week. Corequisite: CH 123; Prerequisite: CH 132. (spring, summer)

CH 219 Quantitative Analysis 5

Theory, methods and techniques of gravimetric, volumetric, electro-analytical and chromatographic procedures in quantitative analysis; introductory statistics. Two lecture and eight laboratory hours per week. Prerequisites: CH 123 and 133. (fall)

CH 231	Fundamental Organic Chemistry I	4
CH 232	Fundamental Organic Chemistry II	4

Structure, bonding, nomenclature, reactions and synthesis of organic compounds: 1) alkanes, alkenes, alkynes, alkyl halides, aromatic and heteroaromatic compounds; 2) alcohols, ethers, phenol, thiols, aldehydes, ketones, carboxylic acids and derivatives, amines, carbohydrates, amino acids and proteins. Spectroscopic applications. Each is four lecture hours per week. Prerequisites: CH 123, 133 for 231; 231 for 232. (231 winter; 232 spring) (Not recommended for premed students).

CH 233	Fundamental Organic Chemistry Lab I	1
CH 234	Fundamental Organic Chemistry Lab II	1

Techniques used in synthesis, isolation and identification of organic compounds. Each is three laboratory hours per week. CH 231 corequisite for 233; CH 232 corequisite for 234; CH 233 prerequisite for 234. (233 winter; 234 spring)

CH 260	Laboratory Safety	1
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Important aspects of hazardous chemicals and laboratory safety, including pertinent laws and regulations. Establishing and maintaining a safe working environment in the laboratory. Prerequisite: One quarter of organic chemistry.

CH 291	Special Topics	1 to 5
CH 292	Special Topics	1 to 5
CH 293	Special Topics	1 to 5

CH 326	Instrumental Analysis	5
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Theory and techniques of instrumental methods representative of spectrophotometric electroanalytical and chromatographic techniques. Two lecture and two four-hour laboratory periods per week including discussion of principles. Prerequisites: CH 219, 361, 363. (spring)

CH 335	Organic Chemistry I	3
CH 336	Organic Chemistry II	3
CH 337	Organic Chemistry III	4

Structural theory; functional groups; nomenclature; properties, applications, reactions and syntheses of organic compounds; stereochemistry; reaction mechanisms; kinetic and thermodynamic properties of reactions. 1. Hydrocarbon compounds; 2. Oxygen-containing compounds; 3. Nitrogen containing compounds and biomolecules. Three lecture hours per week for CH 335 and CH 336, four hours per week for CH 337. Prerequisites: CH 123 for CH 335, CH 335 (with C or better) for CH 336, CH 336 (with C or better) for CH 337. (CH 335 fall, CH 336 winter, CH 337 spring)

CH 345	Organic Chemistry Lab I	2
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Theory and practice of laboratory techniques; experimental study of properties of organic compounds; introduction to organic synthesis. Five hours per week. Corequisite: CH 335 (fall)

CH 346 Organic Chemistry Lab II 2
 Application of laboratory techniques in simple and multistep syntheses; qualitative and quantitative measurements of properties of organic compounds; determination of kinetic and thermodynamic parameters. Five hours per week. Prerequisite: CH 345; Corequisite: CH 336. (winter)

CH 347 Organic Chemistry Lab III 2
 Instrumental and classical qualitative techniques applied to the identification of organic compounds. Six hours per week. Prerequisite: CH 346 (or 234) Corequisite: CH 337 (or prerequisite 232)

CH 360 Physical Chemistry I 3
CH 361 Physical Chemistry II 3
CH 362 Physical Chemistry III 3

1. Quantum chemistry, spectroscopy, photochemistry. 2. States of matter, thermodynamics, equilibrium, kinetics. 3. Theory of reaction rates, thermodynamics of solutions, phase equilibrium, electrochemistry, statistical thermodynamics. Three lectures per week. 1 may be taken either before or after 2 and 3. Prerequisites: CH 123, CH 133, MT 136 and one year of physics for CH 360 and CH 361; CH 361 for CH 362. (I-fall, II-winter, III-spring)

CH 363 Physical Chemistry Laboratory I 2
CH 364 Physical Chemistry Laboratory II 2

Quantitative measurements of physical chemical phenomena, detailed data analysis, evaluation. Four laboratory hours per week. Prerequisites: CH 219 for CH 363; CH 363 for CH 364. CH 361 is pre-or co-requisite for CH 363; CH 362 is a pre- or co-requisite for CH 364. I-winter, II-spring)

CH 391 Special Topics 1 to 5
CH 392 Special Topics 1 to 5
CH 393 Special Topics 1 to 5

CH 396 Independent Study 1 to 5
CH 397 Independent Study 1 to 5
CH 398 Independent Study 1 to 5

CH 415 Advanced Inorganic Chemistry 3
 Advanced topics in inorganic chemistry with particular attention to the transition metals and their compounds. Prerequisites: CH 360 and CH 361. (Alternate years with CH 436)

CH 425 Synthetic Inorganic Chemistry Laboratory 2
 Synthesis and characterization of inorganic compounds involving a variety of laboratory techniques and instrumentation including: high temperature, vacuum line or inert atmosphere and nonaqueous solvent syntheses and characterization by FTNMR, FTIR, conductivity, GC, magnetic susceptibility and UV-Vis spectroscopy. Five laboratory hours per week. Prerequisite: CH 360. Corequisite: CH 415. (Alternate years)

CH 436 Advanced Organic Chemistry 3
Advanced topics in organic chemistry. Directed reading and/or lectures.
Prerequisite: One year of physical and one year organic chemistry. (Alternate years with Ch 415)

CH 450 Biochemistry I 4
Structure and function of amino acids, proteins, lipids, nucleic acids. Mechanism of action of enzymes, bioenergetics, oxidative phosphorylation and introduction to metabolism. Three lecture and four laboratory hours per week. Prerequisites: CH 232, CH 234 or CH 337, CH 347. Recommended: CH 219 (fall) (formerly CH 455)

CH 452 Biochemistry II 4
Biosynthesis of nucleic acids and proteins, biotechnology. Laboratory methods include: isolation and characterization of proteins, lipids and nucleic acids; genetic analysis including preparation of genomic libraries, Southern blotting, restriction fragment length polymorphisms and polymerase chain reactions. Six laboratory hours per week and two lecture hours per week. Prerequisites: BL 165 (or permission of chair), CH 450 (winter).

CH 456 Biochemistry III 3
Intermediary metabolism: A study of the metabolism of carbohydrates, lipids, amino acids and nucleic acids with emphasis on enzymology, thermodynamics, metabolic control mechanisms and integration of control between metabolic pathways. Prerequisite: CH 450 (spring, alternate years)

CH 460 Advanced Physical Chemistry 3
Quantum chemistry, vibrational and rotational energies, absorption and emission of radiation, molecular symmetry, group theory, electronic spectra. Prerequisite: one year of physical chemistry.

CH 480 Interdisciplinary Core Course 3 to 5
Title and content change each term.

CH 491 Special Topics 1 to 5

CH 492 Special Topics 1 to 5

CH 493 Special Topics 1 to 5

Directed reading and/or lecture at an advanced level.

CH 496 Independent Study 1 to 5

CH 497 Independent Study 1 to 5

CH 498 Independent Study 1 to 5

CH 499 Undergraduate Research 1 to 6

Literature and laboratory investigation of a basic research problem.
Four laboratory hours per week per credit.

Civil and Environmental Engineering

Percy H. Chien, PhD, Chairperson

Objectives

Civil engineering is the knowledge of mathematical and physical sciences that serves to develop ways to economically use the materials and forces of nature. It is used in creating, improving and protecting the environment, in providing facilities for community living, industry and transportation, and in providing structures for the use of mankind.

The Civil and Environmental Engineering Department is dedicated to the education of professional civil and environmental engineers. This implies the application of the highest standards of excellence in education, performance of services and ethical conduct. It also implies that specialization in engineering subjects is integrative with courses that speak to the arts and culture of civilization and to the study of natural systems.

To accomplish these ends, analysis and design courses in the fields of environmental, geotechnical, hydraulic, structural, transportation and water resources 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 Science in Civil Engineering

Majors Offered

Civil Engineering

Civil Engineering with a specialty in environmental engineering

Departmental Requirements

Departmental candidacy must be achieved prior to being granted entry into CE 323. Candidacy is achieved by successfully completing all required 100- and 200-level civil engineering, chemistry, computer science, mechanical engineering, mathematics and physics courses with a combined grade point average of at least 2.50, as well as EN 110. Only courses graded C (2.0) or better may be transferred into the department to offset degree requirements. In addition to the prerequisites, departmental candidacy in one of the engineering departments is required for entry into 300- and 400-level courses. Both cumulative and science and engineering grade point averages must be at least 2.5 for graduation.

Taking the Washington state Fundamentals of Engineering (FE) examination is required for the degree. This degree is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Bachelor of Science in Civil Engineering

In order to earn the bachelor of science degree with a major in civil engineering, students must complete 192 credits with a cumulative and major grade point average of 2.5 including the following:

I. Core Curriculum Requirements

Students majoring in Civil Engineering must earn a minimum of 45 credits in the core curriculum.

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
PL 220	Philosophy of the Human Person	5
Social Science I (not economics)		5
Theology and Religious Studies Phase II (200-299)		5
Ethics (upper division)		5
Theology and Religious Studies Phase III (300-399)		5

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Seventy-five credits required, including:

CEE 221	Strength of Materials I	4
CEE 222	Strength of Materials Lab I	2
CEE 311	Engineering Measurements	5
CEE 323	Strength of Materials II	4
CEE 324	Strength of Materials Lab II	2
CEE 331	Fluid Mechanics	4
CEE 335	Applied Hydraulics	4
CEE 337	Fluids Lab	2
CEE 351	Engineering Geology	3
CEE 353	Soil Mechanics and Foundations	3
CEE 371	Water Resources I-Surface Water Hydrology	3
CEE 402	Engineering Economy	3
CEE 445	Structural Mechanics	5
CEE 473	Environmental Engineering I- Physical and Chemical Unit Operations	5
CEE 487	Engineering Design I	4
CEE 488	Engineering Design II	4
CEE 489	Engineering Design III	4
Engineering electives (400 level)		14

III. Other Program Requirements

CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CSC 230	FORTAN for Engineers	3

ME 105	Engineering Graphics and Design	3
ME 107	Introduction to Microcomputer Applications	2
ME 210	Statics	5
ME 230	Dynamics	5
ME 321	Thermodynamics	4
MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
MT 232	Multivariable Calculus	3
MT 233	Linear Algebra	3
MT 234	Differential Equations	4
PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5
	Science elective	5

Please Note: 1. Fundamentals of Engineering (FE) examination is required for graduation. 2. There is no room in the civil engineering program for free electives.

Bachelor of Science in Civil Engineering Specialty in Environmental Engineering

In order to earn the bachelor of science degree with a major in civil engineering/environmental engineering, students must complete 192 quarter credits with a cumulative and science and engineering grade point average of 2.5, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
PL 220	Philosophy of the Human Person	5
	Social Science I (not economics)	5
	Theology and Religious Studies Phase II (200-299)	5
	Ethics (upper division)	5
	Theology and Religious Studies Phase III (300-399)	5

Students majoring in civil engineering with an environmental engineering specialty must earn a minimum of 45 credits in the core curriculum. See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Seventy credits from the following:

CEE 331	Fluid Mechanics	4
CEE 335	Applied Hydraulics	4
CEE 337	Fluids Lab	2
CEE 341	Biological Principles for Environmental Engineering	4
CEE 342	Environmental Engineering Chemistry	4
CEE 343	Air Pollution Engineering	4
CEE 351	Engineering Geology	3
CEE 371	Water Resources I-Surface Water Hydrology	3
CEE 402	Engineering Economy	3
CEE 472	Water Resources II-Ground Water System	4
CEE 473	Environmental Engineering I- Physical and Chemical Unit Operations	5
CEE 474	Environmental Engineering II- Biological Unit Operations	5
CEE 475	Industrial and Hazardous Waste Treatment	5
CEE 476	Environmental Law and Impact Studies	3
CEE 477	Selected Topics in Environmental Engineering	5
CEE 487	Engineering Design I	4
CEE 488	Engineering Design II	4
CEE 489	Engineering Design III	4

III. Other Program Requirements

CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CH 122	General Chemistry II	4
CH 132	General Chemistry Lab II	1
CSC 230	FORTRAN for Engineers	3
ME 105	Engineering Graphics and Design	3
ME 107	Introduction to Microcomputer Applications	2
ME 210	Statics	5
ME 230	Dynamics	5
ME 321	Thermodynamics	4
MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
MT 232	Multivariable Calculus	3
MT 233	Linear Algebra	3
MT 234	Differential Equations	4
PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5

Choose one of the following two courses:

BL 101	Principles of Biology	5
BL 165	General Biology I	5

Please Note: 1. Fundamentals of Engineering (FE) examination is required for graduation. 2. There is no room in the civil engineering program for free electives.

Civil and Environmental Engineering Courses

- CEE 221 Strength of Materials I 4**
 Mechanics of solid deformable bodies; relationships between the external forces acting on elastic bodies and the stresses and deformations produced. Members subjected to tension, compression, flexure and torsion. Four lecture hours per week. Prerequisites: ME 230, MT 232, MT 233. (fall, spring)
- CEE 222 Strength of Materials Laboratory I 2**
 Laboratory experiments on the mechanics of solid deformable bodies and the relationships between tension, compression, flexure and torsion. Practice in preparing technical reports. Four hours per week. Pre- or corequisite: CEE 221. (fall, spring)
- CEE 291 Special Topics 1 to 5**
CEE 292 Special Topics 1 to 5
CEE 293 Special Topics 1 to 5
- CEE 311 Engineering Measurements 5**
 Engineering measurements as applied to civil engineering. Planning for surveys, introduction to photogrammetry. Public Land and State Plane Coordinate Systems. Four lecture and one laboratory period per week. Prerequisites: MT 111, MT 115, ME 105. (spring)
- CEE 323 Strength of Materials II 4**
 Continuation of the mechanics of solid deformable bodies. Beam topics, stability of columns, combined stresses and strains, fatigue and energy relationships. Prerequisites: CEE 221, MT 234. (winter)
- CEE 324 Strength of Materials Laboratory II 2**
 Laboratory experiments on the mechanics of solid deformable bodies and the stresses and deformations produced. Members under tension, compression, torsion, flexure and buckling. Composite structures. Fatigue. One lecture and four laboratory hours per week. Pre- or co-requisite: CEE 323. (winter)
- CEE 331 Fluid Mechanics 4**
 Fluid statics and dynamics. Topics include fluid properties, continuity equation, energy equation; laminar and turbulent flow regimes. Prerequisites: ME 230, MT 234. (fall, winter)

CEE 335 Applied Hydraulics**4**

Analysis and design of pipe systems. Applications and selections of pumps and turbines. Dynamic similitude and hydraulic modeling. Analysis of open channel flow and unsteady flow. Prerequisite: CEE 331. (winter)

CEE 337 Fluids Laboratory**2**

Experimental calibration of various flow meters, loss coefficients and pipe friction factors. Experimental verification of various principles of fluid mechanics. One lecture and one four-hour laboratory per week. Prerequisite: CEE 331. (winter, spring)

**CEE 341 Biological Principles for
Environmental Engineering****4**

Basic principles of microbiology and biochemistry as applied to environmental control and wastewater treatment. Kinetic and energetic aspects are emphasized. Effects of domestic and industrial water pollution on the biological characteristics of natural waters and the aquatic life are studied. Prerequisite: BL 101 or BL 165 or equivalent. (fall)

CEE 342 Environmental Engineering Chemistry**4**

Principles of chemical kinetics and thermodynamics applied to fundamental understanding of aqueous environmental samples including natural waters, wastewaters and treated waters; factors controlling inorganic and organic chemical concentrations, acid-base equilibria, absorption phenomena. Theory and applications of instrumental methods of analysis as applied to measurements for environmental control. Prerequisites: CH 121, CH 131, CH 122, CH 132, or equivalent. (winter)

CEE 343 Air Pollution Engineering**4**

Introductory course in air pollution and its control. Topics include air pollutants and its effects, sources, dispersion models, engineering control and quality legislation. Prerequisite: junior standing in engineering or permission of instructor. (spring)

CEE 351 Engineering Geology**3**

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. (fall)

CEE 353 Soil Mechanics and Foundations**3**

Engineering properties of soils; consolidation, shear strength, permeability. Fundamentals of slope stability and earth pressure theories. Fundamentals of foundation design. Two lecture and one laboratory session per week. Prerequisites: CEE 221, CEE 222, CEE 351. (winter)

CEE 371 Water Resources I - 3
Surface Water Hydrology

Hydrologic data sources, collection and analysis including frequency analysis. Precipitation, runoff, evaporation and transpiration. Analysis of stream flow, hydrographs, flood mitigation and drainage basins. Special attention to factors affecting water supply and quality including stream pollution and self-purification. Prerequisite: CEE 331. (spring)

CEE 391 Special Topics 1 to 5

CEE 392 Special Topics 1 to 5

CEE 393 Special Topics 1 to 5

CEE 402 Engineering Economy 3

Elements of immediate and long-term economy of facility design, construction and maintenance; interest rates, present worth and prospective return on investment; depreciation and replacement studies. Prerequisite: senior standing. (fall, winter)

CEE 403 Project and Systems Management 5

Introduction to project and construction management. How to plan and organize these services. Network scheduling, contracting procedures, risk, analysis and estimating. Prerequisite: senior standing.

CEE 445 Structural Mechanics 5

Classical and matrix methods in structural mechanics. Basic structural theory in both classical and matrix notation. Introduction to structural computer programs. Prerequisites: CEE 323. (fall)

CEE 447 Structural Design I 5

CEE 449 Structural Design II 5

Design of basic structural members and connections. Specific structural design building codes. I. Steel design. II. Reinforced and prestressed concrete design. Prerequisites: CEE 445 for I, CEE 447 for II. (I. winter, II. spring)

CEE 455 Foundation Design 4

Design considerations for foundations. Introduction to bearing capacity theory and lateral earth pressures. Subsurface investigation for determining soil properties. Design of shallow and deep foundations, rigid and flexible retaining walls, temporary earth retention systems and engineered soils. Prerequisites: CEE 351, CEE 353.

CEE 461 Introduction to Urban 4
Transportation Engineering

Presentation of urban modes. Introduction to planning. Environmental issues and citizen participation. Three lectures and three engineering design laboratory hours per week. Prerequisite: senior standing.

- CEE 463 Transportation Planning 4**
Historical background. The planning process. Goals and objectives. Models. Impact of transportation decisions. Benefit/cost. Legal and political issues. Three lectures and three engineering design laboratory hours per week. Prerequisite: CEE 461.
- CEE 465 Fundamentals of Traffic Engineering 3**
Terminology. Traffic control studies. Traffic control concepts on urban street systems. Surveillance. Detectors. Local controllers. Design plans and specifications. Three lectures per week. Prerequisite: CEE 463.
- CEE 466 Traffic Engineering Laboratory 2**
Experiments with the 15 Eagle Signal Traffic Controllers mounted on a frame to control the traffic flow in street system. The present street system is Waycross, Georgia. One four-hour lab per week. Corequisite: CEE 465.
- CEE 472 Water Resources II -
Ground Water System 4**
Geologic and hydrologic occurrence of ground water. Analytical solutions for ground water flow. Hydraulics of radial flow and pumping systems. Quantity and quality of ground water. Recharge and pollution problems. Prerequisites: CEE 351, CEE 371. (fall)
- CEE 473 Environmental Engineering I -
Physical and Chemical Unit Operations 5**
Theoretical and experimental studies of unit operations including sedimentation, filtration, coagulation, precipitation, absorption, oxidation-reduction, ion exchange, disinfection and membrane processes. Four lectures and one laboratory or field trip per week. Prerequisites: CH 121, CH 131. (fall)
- CEE 474 Environmental Engineering II -
Biological Unit Operations 5**
Theoretical and experimental studies of the microbiological and biochemical mechanisms associated with the treatment of aqueous and solid wastes, including aerobic and anaerobic processes, composting, chemical thermodynamics and sludge disposal. Four lectures and one laboratory or field trip per week. Prerequisite: CEE 473. (winter)
- CEE 475 Industrial and Hazardous
Waste Treatment 5**
Design of waste treatment systems for industrial processes, especially as related to the Northwest industries. Four lectures and one laboratory or field trip per week. Prerequisite: senior standing or permission of instructor. (spring)

CEE 476 Environmental Law and Impact Studies 3

Social, economic and engineering factors involved in environmental regulations. National and regional water policies, programs and administration. Emphasis on national environmental policy act and its implementation. Terminology of environmental inventory, assessment and impact statement. Prerequisite: senior standing or permission of instructor. (winter)

CEE 477 Selected Topics in Environmental Engineering 5

A comprehensive study of a topic in environmental engineering not covered in another course. Topics will vary to keep pace with current environmental risk assessment, technical advances, research developments and the EPA's innovative technology program. Prerequisite: senior standing in engineering or science, or permission of instructor. (spring)

CEE 481 Cold Regions Engineering 4

Engineering considerations in design of structures, utilities and other facilities under cold climate conditions. Prerequisite: Senior civil engineering standing.

CEE 487 Engineering Design I 4

Design process, problem solving and decision making, modeling and simulation, optimization, economics, forecasting, reliability. Four lecture hours per week. Prerequisite: Senior standing. Corequisite: CEE 402. (fall)

CEE 488 Engineering Design II 4**CEE 489 Engineering Design III 4**

Group design project focusing on the integrative aspects of engineering subject matter. The project should focus on: (1) philosophy of design, a creative approach, and a comprehensive design project; planning, organizing and leading an engineering project, exercising judgment and considering economic factors; and (2) integrated aspects of creative design and analysis; case studies; design of a novel device or system. Two lecture and four design hours per week. Prerequisite: CEE 487 for CEE 488; CEE 488 for CEE 489. (CEE 488, winter; CEE 489, (spring))

CEE 491 Special Topics 1 to 5**CEE 492 Special Topics 1 to 5****CEE 493 Special Topics 1 to 5****CEE 496 Independent Study 1 to 5****CEE 497 Independent Study 1 to 5****CEE 498 Independent Study 1 to 5**

Computer Science

Mitchell Spector, PhD, Chairperson

Objectives

The computer science program provides four major functions. A rigorous bachelor of science in computer science degree prepares students for graduate study or professional careers involving computers and their applications in scientific and technical areas. A more flexible bachelor of arts degree prepares students for professional careers involving computer applications in less technical areas such as business or education. A minor in computer science provides students pursuing degrees in other areas with a solid background in the fundamental concepts and elementary applications of computer science. Finally, a suite of computer science courses caters to computer literacy for the general student population.

Degrees Offered

Bachelor of Arts

Bachelor of Science in Computer Science

Master of Software Engineering - See *Graduate Bulletin of Information*

Bachelor of Arts Major in Computer Science

In order to earn the bachelor of arts degree with a major in computer science, students must complete 180 quarter credits with a cumulative and major grade point average of 2.0, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3 to 5

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Forty-five credits in computer science, including:

CSC 151	Fundamentals of Computer Science I	5
CSC 152	Fundamentals of Computer Science II	5
CSC 250	File Processing and Database Concepts	5
CSC 251	Introduction to Computer Organization	5
CSC 310	Data Structures and Analysis of Algorithms	5
CSC 380	Organization of Programming Languages	5
CSC 450	Automata, Computability and Formal Languages	5
CSC	Electives (300-level or above)	10

III. Other Program Requirements

MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 222	Discrete Structures	5
MT 244	Fundamentals of Probability and Statistics	5
*Area of Application	.....	30

* Bachelor of arts degree students must complete a coordinated group of application area courses. These courses must include at least 30 credits of courses in an area of proposed application of computer science. These 30 credits may be those prescribed for a minor in another department, but may not include any credits already required by the Computer Science Department for the bachelor of arts degree. In areas of application where a minor is not prescribed, the Computer Science Department will define the acceptable application area courses, with the assistance of the appropriate departments.

Please Note: 1. A minimum C (2.0) grade is required in prerequisites to 300- through 400-level courses.

Bachelor of Science in Computer Science

In order to earn the bachelor of science degree with a major in computer science, students must complete 180 quarter credits with a cumulative and major grade point average of 2.50, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
FA 120	Experiencing the Arts	5

PL 220	Philosophy of the Human Person	5
Social Science I		5
Social Science II (different discipline from Social Science I)		5
Theology and Religious Studies Phase II (200-299)		5
Ethics (upper division)		5
Theology and Religious Studies Phase III (300-399)		5
Interdisciplinary	3 to 5	
Senior Synthesis	3 to 5	

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Sixty-five credits in computer science, including:

CSC 151	Fundamentals of Computer Science I	5
CSC 152	Fundamentals of Computer Science II	5
CSC 250	File Processing and Database Concepts	5
CSC 251	Introduction to Computer Organization	5
CSC 252	Computer Systems and Assembler Language	5
CSC 310	Data Structures and Analysis of Algorithms	5
CSC 340	Operating Systems	5
CSC 360	Introduction to Software Engineering	5
CSC 380	Organization of Programming Languages	5
CSC 450	Automata, Computability and Formal Languages	5
CSC	Electives (400 or above)	15

III. Other Program Requirements

MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
MT 222	Discrete Structures	5
MT 233	Linear Algebra	3
MT 244	Fundamentals of Probability and Statistics	5
PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5
EE 304	Microprocessor Design	4
EE 461	Data Communications	4

Please Note: A minimum C (2.0) grade is required in prerequisites to 300- through 400-level courses.

Minor in Computer Science

In order to earn a minor in computer science, students must complete 30 quarter credits in computer science, including:

CSC 151	Fundamentals of Computer Science I	5
CSC 152	Fundamentals of Computer Science II	5
CSC	Electives 200 level or above with no more than five credits in courses numbered 240 or below.	20

Advanced Placement Credit

Students who have taken the College Board advanced placement test in computer science may petition the department for advanced placement credit on the basis of test results scored three or higher.

Teacher Education

As of fall 1990, the teacher preparation program is a graduate-level program only. Students planning to teach in elementary or secondary schools must complete a bachelor's degree prior to beginning the teacher preparation program. They should discuss their major with their computer science adviser to ensure that they are enrolled in the appropriate courses. A second endorsement is available in computer science (24 credits). Students planning to become teachers must contact the School of Education for advising.

Computer Science Courses

Please Note: CSC 103, 113, 114, 151, 152, 170, 180, 232, 233, 250, 251, 252, 310, 420 and 465 have four lectures and one laboratory per week.

CSC 103 Introduction to Computers and Applications 5

An introduction to computers. No prior experience with computers is assumed or required. The course includes an overview of computers and their applications to information processing. Students are introduced to the use of computers in word processing, spreadsheets and data base systems, and to elementary concepts of computer programming. (fall, winter, spring)

CSC 113 Introductory Programming with BASIC 5

An introductory course in computer programming using the BASIC language. Emphasis on developing programming style to solve representative problems on the computer.

CSC 114 Introductory Programming with FORTRAN 5

An introductory course in computer programming using the FORTRAN language. Emphasis on developing programming style to solve example problems of various types. Programs will be developed and run on the computer as laboratory projects. Prerequisite: MT 101.

CSC 151 Fundamentals of Computer Science I 5

Introduction to the fundamentals of computer science, including programming in a structured, modular language, with emphasis on programming design and style. Algorithm development, stepwise refinement, elementary searching and sorting algorithms. Brief history of computer hardware and software; discussion of the social implications of computers. Pre- or co-requisite: MT 134, MT 131, or MT 130. (fall, winter)

CSC 152 Fundamentals of Computer Science II 5

Continuation of the introduction to the fundamentals of computer science, including string processing, recursion, internal searching and sorting, simple data structures such as stacks, queues and linked lists, and binary trees. Prerequisite: CSC 151. (winter, spring)

CSC 170 Intermediate Programming with PASCAL 5

Continued development of programming skills through the writing, debugging and testing of a number of intermediate level programs in PASCAL. Basic aspects of string processing, recursion, search sort methods and elementary data structures. Prerequisites: CSC 151, or MT 134/MT 131/MT 130 plus previous programming experience.

CSC 180 Intermediate Programming with COBOL 5

Continued development of programming skills through the writing, debugging and testing of a number of intermediate level programs in COBOL. COBOL programming and data processing. Prerequisites: CSC 151 or previous programming experience.

CSC 191 Special Topics 1 to 5**CSC 192 Special Topics 1 to 5****CSC 193 Special Topics 1 to 5****CSC 230 FORTRAN for Engineers 3**

FORTRAN language including flowcharting, debugging, input/output, loops, arrays and sub-programs. Introduction to numerical techniques. Laboratory programming assignments will be drawn primarily from the fields of engineering. Prerequisites: ME 215 or 230; MT 232 and MT 233.

CSC 232 Business Applications Programming 5

Programming business applications, utilizing the COBOL language, including data and file structures, report generation and the use of structured programming concepts. Other topics may include fourth generation languages (4 GL), business applications software packages, database systems, query languages and communication facilities. Prerequisite: CSC 152.

CSC 233 Scientific/Systems Applications Programming 5

Programming in the C language, with emphasis on the use of structures, functions, pointers and the UNIX C library. Laboratory assignments will be drawn from applications in computer systems programming and the natural sciences. Prerequisite: CSC 152.

CSC 250 File Processing and Database Concepts 5

File processing environments, sequential and random accessing techniques, tree, list and ring structured file organizations, related data structure concepts and file control systems. Additional topics may include database systems, query processing and concepts of normalization. Prerequisite: CSC 152. (fall)

CSC 251 Introduction to Computer Organization 5

Basic concepts of computer architecture and digital logic design. Coding of information, number representations, and computer arithmetic. Computer architecture concepts, including CPU, memory and I/O organization. Control unit implementation and microprogramming. Laboratory projects include the design and construction of a simple computer using integrated circuit chips. Prerequisites: CSC 152, MT 222. (winter)

CSC 252 Computer Systems and Assembler Language 5

Elementary computer structure, machine languages, assembly language programming. Programming will be done in assembly language. Addressing techniques, macros, linkers, loaders and assemblers. Prerequisite: CSC 251. (spring)

CSC 291 Special Topics 1 to 5

CSC 292 Special Topics 1 to 5

CSC 293 Special Topics 1 to 5

CSC 296 Independent Study 1 to 5

CSC 297 Independent Study 1 to 5

CSC 298 Independent Study 1 to 5

CSC 310 Data Structures and Analysis of Algorithms 5

Concepts of data structures and analysis of their utilization in algorithm design. Graphs and applications of graphs, memory management, algorithm and system design and analysis. Prerequisites: CSC 250, MT 222. (fall)

CSC 340 Operating Systems 5

Basic concepts of operating systems, including machine structures, dynamic processes, system structures, memory management, I/O control, process management, file systems, security issues and recovery techniques. Prerequisites: CSC 310, MT 244.

CSC 360 Introduction to Software Engineering 5

Technical and managerial aspects of software development and maintenance. The software life cycle. Selected methodologies, techniques and tools for software requirement specification, design, coding and testing. Prerequisite: CSC 250.

CSC 380 Organization of Programming Languages 5

Introduction to the structure and organization of programming languages; syntax and semantics; data and control structures; implementation and translation considerations. The course will include programming assignments in different languages. Prerequisite: CSC 310.

CSC 391 Special Topics 1 to 5

CSC 392 Special Topics 1 to 5

CSC 393 Special Topics 1 to 5

CSC 396 Independent Study 1 to 5

CSC 397 Independent Study 1 to 5

CSC 398 Independent Study 1 to 5

CSC 420 Introduction to Database Systems 5

Introduction to database concepts, the need for database management systems, survey of DBMS systems and their use. Elementary concepts of DBMS architecture and design. Prerequisite: CSC 310.

CSC 444 Concurrent Systems 5

Concurrency in software and hardware. From sequential to concurrent programming. Correctness of concurrent programs. Semaphores. Mutual exclusion. The producer-consumer problem. Monitors. Rendezvous and distributed processing. Object-oriented approaches to concurrency. Hardware support for parallel processing, including pipeline computers, array processors and dataflow computers. Prerequisites: CSC 252, 340.

CSC 450 Automata, Computability and Formal Languages 5

Formal mathematical basis of computer science. Topics include set theory, recursive functions, automata, regular sets, formal languages. Turing machines, concepts of computability and computational complexity. Prerequisites: CSC 310, MT 244.

CSC 465 Computer Graphics and Image Processing 5

Fundamentals of computer graphics. Drawing two-dimensional shapes. Processing of gray scale images, segmentation, contour filling, thinning algorithms, algorithms for curve-fitting and display. Creating three-dimensional graphic displays, shading and shadowing algorithms. Prerequisite: CSC 310, MT 233.

CSC 470 Artificial Intelligence 5

Topics include representations of data, knowledge and algorithms, search strategies, processing considerations, classical problems in artificial intelligence, and applications. Prerequisite: CSC 310.

CSC 485 Translation of Programming Languages 5

Formal language definitions and descriptions. Syntax, semantics, parsing and translating techniques. Prerequisites: CSC 380.

CSC 490 Senior Project 5

This course is to be an integrative project for the CSC major. It should involve application of many of the concepts taught in previous courses to some significant current problem in computer science or its applications. As such, it may also involve significant interdisciplinary considerations. Prerequisites: two of the courses CSC 340, 360, 380.

CSC 491	Special Topics	1 to 5
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CSC 492	Special Topics	1 to 5
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CSC 493	Special Topics	1 to 5
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CSC 496	Independent Study	1 to 5
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CSC 497	Independent Study	1 to 5
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CSC 498	Independent Study	1 to 5
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Diagnostic Ultrasound

Andrea C. Skelly, BS, RDCS, RDMS, Chairperson

Objectives

The diagnostic ultrasound program prepares students for the profession of diagnostic medical sonography. Founded on a concentration in basic sciences, the program affords simultaneous opportunities for receiving a liberal arts education, as well as didactic and practical exposure to a range of ultrasound specialties. This approach leads not only to competence in the practice of sonography, but also to the development of future leaders in the field.

Degree Offered

Bachelor of Science in Diagnostic Ultrasound

Accreditation

The diagnostic ultrasound program is accredited by the Committee on Allied Health Education and Accreditation (CAHEA).

Bachelor of Science in Diagnostic Ultrasound

In order to earn the bachelor of science degree with a major in diagnostic ultrasound, students must complete 180 quarter credits with a cumulative and major grade point average of 2.3, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division) (prefer Health Care Ethics)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Seventy-eight credits in diagnostic ultrasound, including:

US 330	Diagnostic Ultrasound I	5
US 331	Diagnostic Ultrasound II	5

US 332	Echocardiography	5
US 333	Methods of Cardiac Evaluation	2
US 334	Vascular Evaluation and Doppler	2
US 335	Introduction to Instrumentation	1
US 355	Human Cross Section Anatomy	5
US 370	Health Care Management and Professional Issues (core interdisciplinary)	3
US 375	Ultrasound Instrumentation	4
	Senior Synthesis: Ultrasound Internship*	
US 473	Clinical Orientation to Ultrasound	10
US 474	Clinical Experience in Ultrasound I (must be taken three times, 8 credits each)	24
US 483	Ultrasound Seminar I (must be taken four times, 2 credits each)	8
US 484	Basic Science of Ultrasound (must be taken twice, 2 credits each)	4

*A calendar year internship is necessary for entry into professional employment and certification. This internship is a part of the degree and follows after the academic course requirements are met. Because of the professional nature of the program, qualities other than a good grade point average are required of internship candidates. Students must provide verification from a physician of good health prior to ultrasound specific courses.

III. Other Program Requirements

BL 165	General Biology	5
BL 200	Anatomy and Physiology I	5
BL 210	Anatomy and Physiology II	5
BL	Elective (cannot be BL 101)	5
N 321	Pathophysiology I	3
N 322	Pathophysiology II	3
PH 350	Physics of Diagnostic Ultrasound	3

Choose one of the following three courses:

CSC 103	Introduction to Computers and Applications	5
CSC 113	Introductory Programming with BASIC	5
CSC 114	Introductory Programming with FORTRAN	5

Choose one of the following three options:

MT 131	Calculus for Life Sciences (preferred)	5
MT 130	Elements of Calculus for Business	5
MT 134 and 135	Calculus and Analytic Geometry I and II	10

Choose physics series a. or b.

a. PH 105	Mechanics and Sound	5
PH 106	Electricity, Magnetism and Thermodynamics	5

b. PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5

Please Note: 1. MT 111 and MT 115 are prerequisites to PH 105 and MT 131. 2. Contact department regarding preferred course sequence.

Diagnostic Ultrasound Courses

US 330	Diagnostic Ultrasound I	5
US 331	Diagnostic Ultrasound II	5

Brief review of acoustical physics, modes of display, uses and limitations of ultrasound. Pathophysiology of organ systems evaluated by ultrasound and their ultrasonic appearance. Prerequisites: US 355, PH 350. (330 spring, 331 winter)

US 332	Echocardiography	5
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Anatomy, physiology and pathological conditions of the adult and pediatric heart, their visualization and evaluation with real-time 2-D imaging, Doppler and M-mode echocardiography. Prerequisites: BL 200, 210; US 355; PH 350. (spring)

US 333	Methods of Cardiac Evaluation	2
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Integration of various modes of cardiac evaluation with echocardiography. Cardiac catheterization, ECG, auscultation and phonocardiography are covered in addition to other pertinent topics. The course serves to expand the student's knowledge of cardiac physiology and pathophysiology. Corequisite or prerequisite: US 332. (spring)

US 334	Vascular Evaluation and Doppler	2
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Introduction to applications of Doppler ultrasound for the detection and evaluation of vascular disease. Vascular anatomy, physiology, and pathology. Additional methods of evaluating vascular disease which complement Doppler data. Prerequisite: US 355, PH 350. (winter)

US 335	Introduction to Instrumentation	1
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Integration of ultrasound physics, instrumentation and principles with hands-on experience. Practice in modes of equipment operation and safety. Includes observation, data collection, interpretation and evaluation of results and reporting. Course complements material presented in PH 350 and ultrasound courses. Pre- or corequisite; PH 350.

US 355	Human Cross Section Anatomy	5
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Survey of cross section anatomy with emphasis on organs of body amenable to ultrasound diagnostic techniques. Prerequisites: BL 200 and 210. (fall)

US 370	Health Care Management and Professionalism Issues	3
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Examination of ethical, legal and psycho-social aspects of health care. Methods of budgeting, hiring and firing, and departmental administration. The sonographer's role in relation to the patient, physician and staff. Fulfills interdisciplinary core requirement and is open to all qualified students. (fall)

US 375 Ultrasound Instrumentation 4

Understanding the operation of diagnostic ultrasound equipment, including A and B-mode, M mode 2-D/real-time and Doppler systems. Prerequisite: PH 350. (winter)

US 391 Special Topics 1 to 5**US 392 Special Topics 1 to 5****US 393 Special Topics 1 to 5****US 396 Independent Study 1 to 5****US 397 Independent Study 1 to 5****US 398 Independent Study 1 to 5****US 473 Clinical Orientation to Ultrasound 10**

Five days per week spent in a hospital environment, learning patient care, practical medical ethics, observing and performing ultrasound procedures and other diagnostic modalities. Prerequisite: permission. Corequisite: US 483.

US 474 Clinical Experience in Ultrasound I 8

Five eight-hour days per week in an approved ultrasound department of a hospital. Prerequisite: permission. Program requires this course be taken three times for a maximum of 24 credits. Corequisite: US 483.

US 483 Ultrasound Seminar I 2

Seminar to review and discuss cases performed by students and issues of professional interest. Seattle-based students meet one day every other week. Students based outside Seattle area have projects assigned by correspondence, by the faculty and staff. Prerequisite: permission. Program requires this course be taken four times for a maximum of eight credits. Corequisite: 473 or 474. Fulfills senior synthesis core requirement, together with US 484.

US 484 Basic Science of Ultrasound 2

Project of professional interest assigned by faculty involving critical examination of current literature and research techniques. Prerequisite: permission. Program requires this course be taken for a maximum of four credits. Corequisite with second and third quarter internship, US 474. Fulfills senior synthesis requirement together with US 483.

Electrical Engineering

Patricia D. Daniels, PhD, PE, Chairperson

Objectives

Electrical engineering is concerned with the use of electrical energy for the benefit of society. The profession of electrical engineering is scientifically based and design oriented. As such, its practice draws heavily from the areas of mathematics, physics and the other natural sciences, as well as other branches of engineering.

The electrical engineering program strives to provide a broad foundation based upon mathematical and scientific principles that will prepare the graduate for a productive lifelong career in any of the various sub-fields of the electrical engineering profession. The Electrical Engineering Department is teaching oriented and offers an undergraduate program that focuses on an integrated, traditional perspective of the electrical engineering profession.

The curriculum spans the subspecialties of electrical engineering with courses in communications and control theory, digital systems and signal processing, microprocessors, electrical and electronic circuits, electromagnetic fields and waves, engineering design, networks and power generation and distribution. The student interested in a career in any specialty within the broad confines of electrical engineering is given sufficient preparation in a well-balanced program of study. The hallmark of the senior year is the capstone engineering design experience, in which student design teams work on multi-disciplinary engineering design projects.

The electrical engineering program provides an integrated base for those graduates who choose to enter professional practice in electrical engineering directly upon graduation and a rigorous preparation for those who choose graduate study in electrical engineering.

Degree Offered

Bachelor of Science in Electrical Engineering

Departmental Requirements

In addition to the prerequisites, departmental candidacy in one of the engineering departments is required for entry into 300 and 400 level courses. Candidacy is achieved by successfully completing all required 100 and 200 level CH, CSC, EE, ME, MT, and PH courses and EN 110 with a combined grade point average of at least 2.50. Only courses graded 2.0 (C) or better may be transferred into the department to offset degree requirements; only 100- and 200-level courses will be transferred.

Both the cumulative grade point average and the School of Science and Engineering grade point average must be at least 2.5 for graduation.

Taking the Washington state Fundamentals of Engineering (FE) examination is required for the degree. This degree is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Electrical Engineering Curricular Blocks

Courses taken to fulfill requirements toward the bachelor's in electrical engineering degree are grouped together into four interrelated curriculum blocks. The engineering common studies program is essentially standard across the Departments of Civil and Environmental, Electrical and Mechanical Engineering; the capstone design sequence is multi-disciplinary in character and thus cuts across departmental lines. These courses are EE 201, 210, 311, 312, 320, 321, 327, 328; PH 205 and 330. The electrical engineering core curriculum forms the scientific foundation upon which all advanced electrical engineering courses are built. The electrical engineering advanced requirements extend the electrical engineering core in specific technical directions. The electrical engineering advanced electives are offered on a variety of topics. The specific elective offerings are governed by student interest and availability of faculty resources; topics not listed by course number may be offered as special topics.

Bachelor of Science in Electrical Engineering

In order to earn the bachelor of science degree with a major in electrical engineering, students must complete 192 quarter credits with a cumulative and engineering grade point average of 2.5, including the following:

I. Core Curriculum Requirements

Students majoring in electrical engineering must complete a minimum of 45 credits in the core curriculum.

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
PL 220	Philosophy of the Human Person	5
Social Science I	(not economics)	5
Theology and Religious Studies Phase II	(200-299)	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III	(300-399)	5

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Seventy-eight credits in electrical engineering, including:

EE 201	Digital Operations and Computation	4
EE 210	Electrical Circuits I	5
EE 304	Microprocessor Design	4
EE 311	Electrical Circuits II	4
EE 312	Linear System Analysis	4

EE 320	Electronics I	5
EE 321	Electronics II	5
EE 327	Electrical Circuits Laboratory	2
EE 328	Electronic Circuits Laboratory	2
EE 331	Distributed Systems	4
EE 360	Communication Systems	3
EE 403	Digital Signal Processing	4
EE 450	Electromechanical Energy Conversion	4
EE 457	Electromechanical Energy Conversion Lab	2
EE 467	Communications Lab	2
EE 487	Engineering Design I	4
EE 488	Engineering Design II	4
EE 489	Engineering Design III	4
EE	Electives	12

III. Other Program Requirements

CEE 402	Engineering Economy	3
CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CSC 230	FORTRAN for Engineers	3
ME 105	Engineering Graphics and Design	3
ME 107	Introduction to Microcomputer Applications	2

Choose option a., b., or c.

a. ME 215	Statics/Dynamics	5
b. ME 210	Statics	5
ME 230	Dynamics	5
c. ME 210	Statics	5
PH 310	Intermediate Mechanics I	5
MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
MT 232	Multivariable Calculus	3
MT 233	Linear Algebra	3
MT 234	Differential Equations	4
PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5
PH 205	Introduction to Quantum Physics	3
PH 330	Electromagnetic Field Theory	5

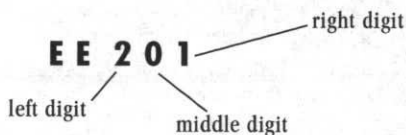
Please Note: 1. No transfer credit is allowed for EE 300- or 400-level courses. 2. The Fundamentals of Engineering Examination is required for graduation. 3. There is no room in electrical engineering for free electives.

Electrical Engineering Courses

Please Note: All courses are numbered under a system which relates the technical content of lecture and laboratory courses to subfields of the electrical engineering profession. The hundreds digit indicates the nominal year in which the course is scheduled. The tens digit denotes the technical topic area according to the following listing. The ones digit specifies the course uniquely and identifies lecture and laboratory courses as well.

Left Digit	Middle Digit	Right Digit
1 Freshman	0 Digital/Computer	0-6 Lecture and lecture/ laboratory
2 Sophomore	1 Circuits	7-9 Laboratory
3 Junior	2 Electronics	
4 Senior	3 E/M Fields	
	4 Controls	
	5 Power/Energy	
	6 Communications	
	7 Measurements	
	8 Design	
	9 Independent Study/Special Topics	

sample:



EE 201 means:

sophomore class; digital/computer; lecture and lecture/laboratory

EE 201 Digital Operations and Computation 4

Digital processing of information and data, number systems, Boolean algebra; design of hardware for registers, counting and arithmetic operations; organization of computers, storage and input/output. Introduction to simple logic circuits. Elementary concepts of programming and assembly language. No prerequisites. (fall, spring)

EE 210 Electrical Circuits I 5

Fundamental concepts and units, Kirchhoffs laws, mesh and node analysis, equivalent circuits, linearity and superposition; first and second order circuits; natural and forced responses, initial conditions; sinusoidal analysis. Prerequisites: MT 233, PH 201. Corequisite: MT 234. (fall, spring)

EE 296	Independent Study	1 to 5
EE 297	Independent Study	1 to 5
EE 298	Independent Study	1 to 5

- EE 304 Microprocessor Design 4**
Design of electrical digital components and systems that employ microprocessors. Assembly language programming, peripheral access, memory, interfacing the microprocessor to the external system. Three lectures and one four-hour laboratory. Prerequisites: EE core curriculum; or CSC 251. (fall, winter, spring)
- EE 311 Electrical Circuits II 4**
Phasors and impedance; Laplace transforms; system functions and the s-plane; analytical and graphical techniques of frequency response description, Bode diagrams; two-port analysis; AC power; introduction of the digital computer in circuit analysis and design. Prerequisite: EE 210 and departmental candidacy. (fall, winter)
- EE 312 Linear System Analysis 4**
Linear systems and response type classifications. System functions. Impulse response. Convolution. Fourier series and transforms. Signal spectra. Prerequisite: EE 311. (winter, spring)
- EE 315 Elements of Electrical Engineering 5**
An introductory course to subjects of electrical engineering. Basic circuit theory; linear systems; steady-state solutions; Laplace transform and transient analysis; Boolean algebra, logic gates, combinational and sequential logic; magnetic fields, transformers and energy conversion. An introductory course for engineering and natural science students not majoring in electrical engineering. Prerequisites: MT 234 and PH 201. (fall, winter)
- EE 320 Electronics I 5**
Analysis and design of elementary electronic circuits including linear circuits, operational amplifiers, non-linear circuits and digital circuits. Introduction to bipolar and field effect devices and characteristics. Corequisite: EE 311. (fall, winter)
- EE 321 Electronics II 5**
Continuation of EE 320. Transistor amplifiers, frequency response, feedback, analog integrated circuits, introduction to oscillators, introduction to logic families. Prerequisite: EE 320. (winter, spring)
- EE 327 Electrical Circuits Laboratory 2**
A laboratory covering the principles of electrical and electronic circuits. Electronic instrumentation and general practice. Principles of technical communication. One-hour lecture and one four-hour laboratory per week. Corequisites: EE 311 and EE 320. (fall, winter)
- EE 328 Electronic Circuits Laboratory 2**
Continuation of EE 327. Emphasis on solid-state circuits, both analog and digital. Prerequisite: EE 327. Corequisite: EE 321. (winter, spring)
- EE 331 Distributed Systems 4**
Analysis of distributed systems; steady-state and transient analysis of lossless lines, lossy lines; waveguides. Prerequisite: EE core curriculum. (fall, spring)

EE 360 Communication Systems**3**

Analysis and design of signal transmission systems that include amplitude, phase, frequency and pulse modulation. Subsystem synthesis and design with comparative analysis. Communication in the presence of noise. Prerequisite: EE core curriculum. (fall, spring)

EE 403 Digital Signal Processing**4**

Linear, time invariant, discrete systems; finite moving average and recursive digital filters; Z-transform; discrete Fourier transform; fast Fourier transform. Prerequisite: EE core curriculum. (fall, winter)

EE 404 Introduction to VLSI Circuit Design**4**

An introduction to the design of very large scale integrated circuits using engineering workstations and silicon compiling software. Aspects of the design, manufacture and test will be covered in lecture. The laboratory will be used for the design of circuits, using the workstations and software. Three lectures and one three-hour laboratory per week. Prerequisite: EE core curriculum.

EE 414 Active Networks and Filters**4**

Design of active filters. Operational amplifier circuits. Approximation of frequency response characteristics. Sensitivity. Frequency transformations. Active two-port networks. Simulation of passive elements. Switched capacitor filters. Prerequisite: EE core curriculum.

EE 432 Microwave Systems**4**

Propagation of electromagnetic waves and interaction with materials, guided waves, and passive and active devices, microstrip and integrated circuits. Prerequisite: EE core curriculum. Corequisite: EE 331.

EE 440 Control Systems**4**

Fundamentals of classical and modern system theory; analysis and design of closed-loop systems with emphasis on stability and transient response using Nyquist, Bode, root-locus, and state-space techniques. Prerequisite: EE core curriculum.

EE 450 Electromechanical Energy Conversion**4**

Electromechanical energy conversion principles and design. Application and details of electromechanical devices, such as relays, transformers, rotating machinery and special devices. Prerequisites: EE core curriculum. (fall, winter)

EE 451 Power Systems**4**

Analysis of power systems: symmetrical components, power system parameters, steady-state operation, faults, economic operation. Prerequisites: EE core curriculum, EE 450. Corequisite: EE 331.

**EE 457 Electromechanical Energy
Conversion Laboratory****2**

A laboratory covering the principles and practice of electromechanical energy conversion devices. Prerequisites: EE core curriculum, EE 450. (winter, spring)

EE 461 Data Communications 4

An introduction to the concepts and methods of data communication. Systems, protocols and controls used in data transfer. Media employed for data transmission and multiplexing techniques. Long-range and local networks used in data and computer communications. For computer science majors and as an EE elective for electrical engineering majors. Prerequisite: EE 201 or CSC 251. (spring)

EE 462 Modern Optics 4

An introduction to modern optics consisting of Huygens principle, diffraction, Fourier optics and image processing, optical cavities, interferometry, planar waveguides, integrated optics and fibers. Prerequisites: EE core curriculum; or PH 330. Corequisite: EE 331 or PH 331.

EE 467 Communications Laboratory 2

A laboratory covering basic principles of encoding, modulation and transmission of electronic signals. One-hour lecture and one four-hour laboratory per week. Prerequisites: EE core curriculum, EE 331. Corequisite: EE 360. (fall, winter)

EE 470 Automated Testing 4

Theory and application of testing techniques for analog and digital systems. The IEEE-488/1980 standard general purpose interface bus is described and used. IEEE 1149.1 is also covered. Two lectures and one four-hour laboratory per week. Prerequisites: EE core curriculum, or EE 315.

EE 487 Engineering Design I 4**EE 488 Engineering Design II 4****EE 489 Engineering Design III 4**

Team design project focusing on project organization and management, principles of engineering design, oral and written communication, and professionalism. In EE 487 student teams are formed and industrially sponsored projects assigned. Project proposals are written and presented. In EE 488 and 489 problem solutions are developed and implemented, culminating in a formal presentation of results. Two one-hour lectures per week in addition to individual team design time. The three courses must be taken as a continuous sequence. Prerequisite: advanced junior or senior standing in engineering. (487, fall; 488, winter; 489, spring)

EE 491 Special Topics 1 to 5**EE 492 Special Topics 1 to 5****EE 493 Special Topics 1 to 5****EE 496 Independent Study 1 to 5****EE 497 Independent Study 1 to 5****EE 498 Independent Study 1 to 5**

Independent study by student on topic of mutual interest to student and an instructor. Enrollment is limited and open only to students who have agreed upon a proposed topic or course of study with the instructor. May be used as an advanced elective with departmental permission.

General Science

Robert J. Smith, Chairperson

Objectives

The general science program provides special opportunities to students interested in interdisciplinary fields, such as ecology, environmental science, earth science, and premedical, pre dental, or preveterinary studies. The program provides a broad background in the basic sciences. Judicious use of electives permits the student to specialize in other technical areas, such as computer science or business. Each student's curriculum is tailor-made in consultation with the director of the program.

A prime objective is to provide students with a better understanding of the human ramifications of science and technology and to help them think realistically and creatively about intellectual, moral and social issues related to science and technology.

Degree Offered

Bachelor of Science in General Science

Bachelor of Science in General Science

In order to earn the bachelor of science in general science degree with a major in general science, students must complete 180 credits with a cumulative and major grade point average of 2.0, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Ninety credits in mathematics, science and computer science including:

*Major Field	30
*Minor Field	20
(May not include introductory mathematics and science courses)	
Science Electives (see department)	0 to 20

Courses used to satisfy the following requirements may, in some cases, be applied toward the major or minor fields.

CSC	Elective	5
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Choose two courses from the following five:

BL 165	General Biology I	5
BL 166	General Biology II	5
BL 167	General Biology III	5
BL 200	Anatomy and Physiology I	5
BL 210	Anatomy and Physiology II	5

Choose option a. or b.

a. CH 101	Introductory General Chemistry	5
CH 102	Introductory Organic and Biochemistry	5
b. CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CH 122	General Chemistry II	4
CH 132	General Chemistry Lab II	1

Choose one set of two courses from option a., b. or c.

a. MT 111	College Algebra	5
MT 131	Calculus for Life Sciences	5
b. MT 118	College Algebra for Business	5
MT 130	Elements of Calculus for Business	5
c. MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5

Choose one set of two courses from option a. or b.

a. PH 105	Mechanics and Sound	5
PH106	Electricity, Magnetism and Thermodynamics	5
b. PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5

Please Note: At least 10 credits of the 90 general science required credits must be from 300- or 400-level classes. A further 15 hours must be from 300-level, 400-level or approved 200-level courses. This may require prerequisites beyond the minimal degree requirements. The approved 200-level courses are CH 219, MT 232, MT 233, MT 234, PH 202, PH 204 and PH 205.

*Fields allowed: biology, chemistry, engineering (all engineering courses are one field), mathematics, physics, computer science, interdisciplinary science, and psychology. Only PSY 201, PSY 330 and PSY 401 can be counted toward an interdisciplinary science degree. See department for approved electives.

Teacher Education

The teacher preparation program is a graduate-level program only. Those students planning to become elementary teachers or secondary earth science or general science teachers must complete a bachelor's degree prior to beginning the teacher preparation program. They should discuss their major with their general science adviser to ensure enrollment in appropriate courses and must contact the School of Education for advising. Second endorsements are available in earth science (24 credits) and general science (45 credits).

Interdisciplinary Science Courses

ISC 110 **Science, Technology and Society** **5**

The study of the nature and structure of science and technology, the interactions of science and technology and the impact of science and technology on society. Four hours lecture/discussion and two laboratory hours per week. Prerequisite: MT 101, 107 or above. (winter, spring).

ISC 120 **Introduction to Geology** **5**

Study of the principles of modern geology with consideration of both the physical and historical aspects. Topics will include: modern plate theory, tectonics, uniform processes and the fossil record. Four hours lecture and three hours of laboratory per week. Arranged weekend field trips. Prerequisite: MT 101, 107 or above.

ISC 191 **Special Topics** **1 to 5**

ISC 192 **Special Topics** **1 to 5**

ISC 193 **Special Topics** **1 to 5**

ISC 202 **To See the Light** **5**

A hands-on approach to the nature and uses of light: the many faces of light as seen by philosophers, artists and scientists; theories of color; physiology and psychology of perception, light and color in art; laser optics; camera systems; current optical technology; student light projects. Three hours lecture/discussion and one four-hour laboratory/field trip per week. Prerequisite: MT 101, 107 or above.

ISC 205 **Biophysical Principles** **5**

Interrelationships 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. Prerequisite: MT 101, 107 or above.

- ISC 207 Air and Water 5**
Dynamics of air and water systems. Consideration of the causes and control of air and water pollution. Monitoring and standards for clean air and water. The role of technology in the deterioration of air and water quality. Four hours of lecture and three hours of laboratory per week. One weekend field trip. Prerequisite: MT 101, 107 or above. (fall)
- ISC 208 Sun, Food and People 5**
Introduction to ecology. The flow of solar energy through the ecosystem and the effect of this on food production. The food chain. The supply and demand of food. Pesticides and fertilizers. Past, present and future trends in human population. Prerequisite: MT 101, 107 or above. (winter)
- ISC 209 Energy and Mineral Resources 5**
The supply, demand and resources of energy and minerals. Patterns of energy use. Fossil fuels, water power, atomic energy, their use and abuse. Renewable forms of energy. Conservation. Program for the future. Mineral resource depletion, an embryonic crisis. Solid waste and recycling. Prerequisite: MT 101, 107 or above. (spring)
- ISC 296 Independent Study 1 to 5**
ISC 297 Independent Study 1 to 5
ISC 298 Independent Study 1 to 5
- ISC 301 To Feed the World 5**
An interdisciplinary approach to the history, production and distribution of food from the perspectives of paleontology, anthropology, biology, chemistry and the social sciences; modes of scientific examination and interpretation are explored; interrelationships of science, technology and human needs are emphasized. Active participation by students: lectures, movies and small group discussions. Community service project required. Prerequisite: Phase II of core. (spring)
- ISC 310 Evolution: Development of a Theory 5**
Basic statements and ideas of evolutionary theories from an interdisciplinary perspective. This will include both an historical perspective and a consideration of modern debates. Prerequisites: ISC 110 and one laboratory science course; or two science courses, one with laboratory experience.
- ISC 315 Mineralogy 5**
Examination of the many and varied forms that minerals take in the earth's crust, their formation, chemical composition and environmental considerations. Four hours of lecture and three hours of laboratory per week. Prerequisites: ISC 120, MT 111, CH 121, 131, 122, 132.
- ISC 320 Geology and Mineralogy of the Pacific Northwest 2**
The general geologic setting and basic mineralogy of the Northwest. Weekend field trips are in conjunction with the field biology course. Prerequisites: two laboratory science courses.

ISC 330 Field Biology of Washington 2
Life zones, habitats, and plants and animals of special interest in the state. Weekend field trips are in conjunction with the geology and mineralogy course. Prerequisites: two laboratory science courses.

ISC 401 The Human Response to Science and Technology 5

A comparative-historical approach to the scientization of culture and its contemporary and projected consequences; critical evaluation of competing claims about science and technology as enlightening allies of human progress; a personal search for appropriate intellectual and ethical perspectives on science as a way of knowing and on technology as a way of living. Seminar format; guest lectures; small group paper conferences; student-led seminars. Prerequisites: junior standing or higher, PL 220; HS 104 or 105.

ISC 480 Interdisciplinary Core Course 3 to 5
Title and content change each term.

ISC 496 Independent Study 1 to 5
ISC 497 Independent Study 1 to 5
ISC 498 Independent Study 1 to 5

Mathematics

Janet E. Mills, PhD, Chairperson

Objectives

The Mathematics Department offers three distinct programs. The first, leading to the bachelor of science in mathematics, prepares the student for advanced study and professional work in mathematics. The others are more flexible programs which provide for work in a secondary field and lead to either the bachelor of arts or the bachelor of science degree.

Degrees Offered

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Science in Mathematics

Bachelor of Arts Major in Mathematics

In order to earn the bachelor of arts degree with a major in mathematics, students must complete 180 credits with a cumulative and major grade point average of 2.0, including the following:

I. Core Curriculum Requirements

- | | | |
|--------|--|---|
| EN 110 | Freshman English | 5 |
| PL 110 | Introduction to Philosophy and Critical Thinking | 5 |

Choose one of the following two courses:

- | | | |
|--------|--|---|
| HS 120 | Introduction to Western Civilization | 5 |
| HS 121 | Studies in Modern Civilization | 5 |

- | | | |
|--|--------------------------------------|--------|
| EN 120 | Masterpieces of Literature | 5 |
| Lab Science | ..... | 5 |
| FA 120 | Experiencing the Arts | 5 |
| PL 220 | Philosophy of the Human Person | 5 |
| Social Science I | ..... | 5 |
| Social Science II (different discipline from Social Science I) | ..... | 5 |
| Theology and Religious Studies Phase II (200-299) | ..... | 5 |
| Ethics (upper division) | ..... | 5 |
| Theology and Religious Studies Phase III (300-399) | ..... | 5 |
| Interdisciplinary | ..... | 3 to 5 |

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Forty-eight credits of mathematics, including:

- | | | |
|--------|--|---|
| MT 134 | Calculus and Analytic Geometry I | 5 |
| MT 135 | Calculus and Analytic Geometry II | 5 |
| MT 136 | Calculus and Analytic Geometry III | 5 |
| MT 232 | Multivariable Calculus | 3 |

MT 233	Linear Algebra	3
MT 234	Differential Equations	4

Choose one of the following two courses:

MT 222	Discrete Structures	5
MT 310	Introduction to Advanced Mathematics	5

Choose one of the following two courses:

MT 411	Introduction to Abstract Algebra I	5
MT 431	Introduction to Real Analysis I	5

MT 481	Senior Synthesis	3
MT	Electives (two courses numbered 300 or above)	10

III. Other Program Requirements

Twenty credits of approved natural science, computer science, psychology or economics, including at least one five credit computer science course. (See academic adviser for approved courses.)

Please Note: All prerequisites for 300- and 400-level courses must be graded 2.0 or better.

Bachelor of Science Major in Mathematics

In order to earn the bachelor of science degree with a major in mathematics, students must complete 180 credits with a cumulative and major grade point average of 2.0, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Fifty-eight credits of mathematics, including:

MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
MT 232	Multivariable Calculus	3
MT 233	Linear Algebra	3
MT 234	Differential Equations	4

Choose one of the following two courses:

MT 222	Discrete Structures	5
MT 310	Introduction to Advanced Mathematics	5

Choose one of the following three courses:

MT 244	Fundamentals of Probability and Statistics	5
MT 351	Probability	5
MT 371	Introduction to Numerical Methods	5

Choose two of the following four courses:

MT 411	Introduction to Abstract Algebra I	5
MT 412	Introduction to Abstract Algebra II	5
MT 431	Introduction to Real Analysis I	5
MT 432	Introduction to Real Analysis II	5

MT 481	Senior Synthesis	3
MT	Electives (two courses numbered 300 or above)	10

III. Other Program Requirements

CSC Elective	5
Electives (approved natural science, computer science, engineering or social science)	25
(See your academic adviser for approved courses.)	

Please Note: All prerequisites for 300-400 level courses must be graded 2.0 (C) or better.

Bachelor of Science in Mathematics

In order to earn the bachelor of science in mathematics degree with a major in mathematics, students must complete 180 credits with a cumulative and major grade point average of 2.50, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
Lab Science	.....	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Sixty-eight credits in mathematics, including:

MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
MT 232	Multivariable Calculus	3
MT 233	Linear Algebra	3
MT 234	Differential Equations	4

Choose one of the following two courses:

MT 222	Discrete Structures	5
MT 310	Introduction to Advanced Mathematics	5

Choose one of the following three courses:

MT 244	Fundamentals of Probability and Statistics	5
MT 351	Probability	5
MT 371	Introduction to Numerical Methods	5
MT 411	Introduction to Abstract Algebra I	5
MT 412	Introduction to Abstract Algebra II	5
MT 431	Introduction to Real Analysis I	5
MT 432	Introduction to Real Analysis II	5
MT 481	Senior Synthesis	3
MT	Electives (courses numbered 222 or above)	10

III. Other Program Requirements

20 credits of approved natural science, computer science or economics, including at least one five credit computer science course.

Please Note: 1. In certain circumstances, with approval of the chair, 10 credits of upper division work in computer science or a physical science may be substituted for 10 credits in mathematics. 2. All prerequisites for 300- and 400-level courses must be graded 2.0 or better.

Minor in Mathematics

In order to earn a minor in mathematics, students must complete 30 credits in mathematics, including:

MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
Approved mathematics courses (222 or higher)		15

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.

Teacher Education

The teacher preparation program is a graduate-level program only. Students planning to teach in elementary or secondary schools must complete a bachelor's degree prior to beginning the teacher preparation program. Students seeking teacher certification in mathematics may complete the bachelor of arts degree using MT 321 as an upper division elective and substituting MT 244 for five credits of upper division course work. A second endorsement is available in mathematics (24 credits). Students planning to become teachers must contact the School of Education for advising.

Proper Sequence for Taking Courses

The normal sequence of elementary mathematics courses is MT 101; MT 111 or MT 118; MT 130, MT 131 or MT 134; MT 135; and MT 136. A student who has received a 2.0 or better in any course of this sequence or its equivalent cannot subsequently receive credit for a course which appears before it in the sequence. A student may not receive credit for more than two courses among MT 101, MT 107, and MT 200. A student may not receive credit for more than one course from each of the following groups: MT 111 and 118; MT 130, MT 131 and MT 134; MT 244 and MT 351. A student who has taken MT 130 or MT 131 and, due to a change of major, is required to take MT 134 as preparation for MT 135 will receive credit for both MT 130 (or MT 131) and MT 134. Credit for MT 134 will be contingent on completing MT 135 with a 2.0 or better.

Mathematics Courses

- MT 101 Intermediate Algebra 5**
Sets and numbers, polynomials, fractions, linear equations and inequalities, exponents, quadratic equations and inequalities; systems of equations; functions and graphing. Prerequisite: One year each of high school algebra and geometry. (fall, winter, spring)
- MT 107 Mathematics: A Practical Art 5**
General introduction to logic, sets, probability, statistics, algorithmic processes and other selected topics. Hands-on experience with microcomputers. Emphasis on development of quantitative skills. Prerequisite: One year each of high school algebra and geometry. (fall, winter)
- MT 111 College Algebra 5**
Inequalities, algebra of functions, graphs, exponential and logarithmic functions, theory of equations, mathematical induction, complex numbers. Prerequisite: a grade of C- or better in MT 101, or qualifying examination. Credit not granted for both MT 111 and MT 118. (fall, winter)
- MT 115 Trigonometry 2**
Radian measure, trigonometric functions and their graphs, identities, trigonometric equations, inverse trigonometric functions. Prerequisite: a grade of C- or better in MT 111 or 118, or qualifying examination. (fall, winter, spring)
- MT 118 College Algebra for Business 5**
Sets; relations and functions, graphing; linear, quadratic, exponential, logarithmic functions; systems of linear equations; inequalities; linear programming; applications to business. Prerequisite: a grade of C- or better in MT 101, or qualifying examination. Credit not granted for both MT 111 and MT 118. (fall, winter, spring)
- MT 130 Elements of Calculus for Business 5**
Limits; continuity; rate of change; derivative, basic differentiation formulas, extrema; area under a curve; the definite integral and applications. Prerequisite: a grade of C- or better in MT 111 or MT 118, or qualifying examination. (fall, winter, spring)
- MT 131 Calculus for Life Sciences 5**
Limits; rate of change; derivatives, basic differentiation formulas, extrema; the definite integral. Applications to the life and social sciences. Prerequisite: a grade of C- or better in MT 111 and MT 115, or qualifying examination. (spring)
- MT 134 Calculus and Analytic Geometry I 5**
Limits and derivatives of rational and trigonometric functions; applications of limits and derivatives. Computer laboratory component. Prerequisite: a grade of C- or better in MT 111, or qualifying examination. Corequisite: MT 115, unless exempted by qualifying examination. (fall, winter, spring)

MT 135	Calculus and Analytic Geometry II	5
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Theory, techniques and applications of integration; differentiation and integration of trigonometric, exponential and logarithmic functions. Prerequisite: a grade of C- or better in MT 134. (fall, winter, spring)

MT 136 **Calculus and Analytic Geometry III** **5**

Indeterminate forms; improper integrals; infinite series; Taylor's theorem; vectors; polar coordinates; solid analytic geometry. Prerequisite: a grade of C- or better in MT 135. (fall, winter, spring)

MT 200 Mathematics for K-8 Teachers 5

Systems of numeration; algorithms; elementary logic; sets; introduction to probability and statistics. Emphasis on logic and problem solving. Prerequisite: MT 101 or 107 or equivalent. (winter)

MT 222	Discrete Structures	5
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Logic; set theory; equivalence relations and partitions; algebraic structures, including Boolean algebras; combinatorics; graph theory; applications to computer science. Prerequisites: a grade of C- or better in MT 135 or permission of instructor; a computer programming course. (fall)

MT 232	Multivariable Calculus	3
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Partial derivatives, multiple integration, and applications. Prerequisite: a grade of C- or better in MT 136. (fall, winter, spring)

MT 233 Linear Algebra 3

Matrices, determinants, vector spaces, linear transformations, eigenvalues.
Prerequisite: a grade of C- or better in MT 136. (fall, winter, spring)

MT 234 Differential Equations 4

First and second order differential equations; linear differential equations; systems of differential equations; power series solutions. Prerequisites: a grade of C- or better in MT 232 and MT 233. (fall, winter, spring)

MT 244 Fundamentals of Probability and Statistics 5

Probability models. Discrete and continuous random variables, basic concepts of descriptive and statistical inference. Queueing theory. Applications. The course will include use of computer software. Prerequisite: a grade of C- or better in MT 135, or permission of instructor. (Spring) Cannot apply both MT 244 and MT 351 toward a mathematics major.

MT 291 Special Topics 1 to 5

MT 292	Special Topics	1 to 5
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MT 293	Special Topics	1 to 5
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MT 296 **Independent Study** **1 to 5**

MT 297	Independent Study	1 to 5
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MT 298	Independent Study	1 to 5
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MT 310 Introduction to Advanced Mathematics 5

Logic and proofs; quantifiers; basic notions of set theory; induction, cartesian products and relations; equivalence relations; functions; cardinality. Prerequisite: MT 136. (spring of alternate years)

MT 321 Euclidean and Modern Geometries 5

An axiomatic approach to finite geometries and basic Euclidean geometry; straight-edge and compass constructions; problems of antiquity; special topics in Euclidean geometry. Geometric transformations, The Fifth postulate and non-Euclidean geometries. Prerequisite: MT 135.

MT 351 Probability 5

Basic concepts and theorems in probability theory; the binomial, Poisson, normal and other fundamental probability distributions; moments; limit theorems. Prerequisite: MT 232. Cannot apply both MT 244 and MT 351 toward a mathematics major.

MT 361 Introduction to Applied Mathematics 5

Introduction to partial differential equations and boundary value problems of mathematical physics; separation of variables, applications of Fourier series, Fourier transforms and characteristic methods. Computer laboratory component. Prerequisite: MT 234.

MT 371 Introduction to Numerical Methods 5

Approximation and errors; solution of equations and systems of linear equations; numerical integration. Four lecture hours and one computer laboratory hour per week. Prerequisites: MT 233. Proficiency in a programming language.

MT 381 Elementary Topology 5

Set theory; topology of the real line; topological spaces; compactness; connectedness; product spaces; metric spaces. Prerequisite: MT 233.

MT 391 Special Topics 2 to 5**MT 392 Special Topics 2 to 5****MT 393 Special Topics 2 to 5****MT 411 Introduction to Abstract Algebra I 5****MT 412 Introduction to Abstract Algebra II 5**

Theory of groups, rings, fields and field extensions; vector spaces and linear transformations; special topics. Prerequisites: permission of instructor for 411; 411 for 412. (offered in sequence: fall, winter of alternate years)

MT 431 Introduction to Real Analysis I 5

MT 432 Introduction to Real Analysis II 5

The real number system; continuity; point set theory; partial differentiation; vector fields; linear transformations; Riemann-Stieltjes integrals; implicit function theorem; infinite series; power series; uniform convergence. Prerequisites: permission of instructor for 431; 431 for 432. (offered in sequence: fall, winter of alternate years)

MT 437 Introduction to Complex Variables 5

The complex number system, analytic functions, integration, series, residues, conformal mapping. Prerequisite: MT 234.

MT 480 Interdisciplinary Core Course 3 to 5

Title and content change each term.

MT 481 Senior Synthesis 3

Problems in modern mathematics and applications. Individual projects will include a written report and a classroom presentation. Prerequisite: permission. (spring)

MT 491 Special Topics 2 to 5

MT 492 Special Topics 2 to 5

MT 493 Special Topics 2 to 5

MT 497 Independent Study 1 to 5

MT 498 Independent Study 1 to 5

MT 499 Independent Study 1 to 5

Mechanical Engineering

Dennis Wiedemeier, PhD, Chairperson

Objectives

The goal of the mechanical engineering program is to prepare students for a career in the mechanical engineering profession in design, development, research or other areas, such as engineering sales and management.

The program offers a coherent series of courses in each of three broad categories: energy conversion, machine design and dynamic systems. Creative engineering design, based on a firm theoretical and experimental foundation, is emphasized throughout the program.

Degree Offered

Bachelor of Science in Mechanical Engineering

Departmental Requirements

In addition to the prerequisites, departmental candidacy in one of the engineering departments is required for entry into 300 and 400 level courses. Candidacy is achieved by successfully completing all required 100 and 200 level CEE, CH, CSC, ME, MT, and PH courses with a combined grade point average of at least 2.50, as well as EN 110. Only courses graded C (2.0) or better may be transferred into the department to offset degree requirements. Both the cumulative grade point average and the School of Science and Engineering grade point average must be at least 2.5 for graduation. Taking the Fundamentals of Engineering (FE) examination is required for the degree. This degree is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Bachelor of Science in Mechanical Engineering

Students majoring in mechanical engineering must earn a minimum of 45 credits in the core curriculum. In order to earn the bachelor of science in mechanical engineering degree with a major in mechanical engineering, students must complete 192 credits with a cumulative and science and engineering grade point average of 2.50, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
PL 220	Philosophy of the Human Person	5
Social Science I (not economics)		5
Theology and Religious Studies Phase II (200-299)		5
Ethics (upper division)		5
Theology and Religious Studies Phase III (300-399)		5

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Seventy-four credits of mechanical engineering, including:

ME 105	Engineering Graphics and Design	3
ME 107	Introduction to Microcomputer Applications	2
ME 210	Statics	5
ME 230	Dynamics	5
ME 304	Basics of Computer Aided Engineering	4
ME 321	Thermodynamics	4
ME 323	Heat Transfer	5
ME 350	Materials Science	5
ME 370	Machine Elements I	4
ME 372	Machine Elements II	4
ME 425	Applied Thermodynamics	5
ME 434	Dynamic Systems	4
ME 436	Dynamic Systems Lab	2
ME 487	Engineering Design I	4
ME 488	Engineering Design II	4
ME 489	Engineering Design III	4
Engineering Electives (approved by department)		10

III. Other Program Requirements

CEE 221	Strength of Materials I	4
CEE 222	Strength of Materials Lab I	2
CEE 331	Fluid Mechanics	4
CEE 337	Fluids Lab	2
CEE 402	Engineering Economy	3
CH 121	General Chemistry I	4
CH 131	General Chemistry Lab I	1
CSC 230	FORTTRAN for Engineers	3
EE 315	Elements of Electrical Engineering	5
MT 134	Calculus and Analytical Geometry I	5
MT 135	Calculus and Analytical Geometry II	5
MT 136	Calculus and Analytical Geometry III	5
MT 232	Multivariable Calculus	3
MT 233	Linear Algebra	3
MT 234	Differential Equations	4
PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5
Science or Math Elective		5

Please Note: 1. A minimum of 45 credits in core curriculum courses is required for graduation. 2. The Fundamentals of Engineering (FE) exami-

nation is required for graduation. 3. There is no room in mechanical engineering for free electives.

Mechanical Engineering Courses

ME 105 Engineering Graphics and Design 3

Technical sketching. Isometric, orthographic, auxiliary and sectional views. Dimensioning. Descriptive geometry. Introduction to computer-aided drafting (CAD). Introduction to engineering design. Includes design project using CAD. Laboratory. Corequisite: ME 107. (fall, winter, spring)

ME 107 Introduction to Microcomputer Applications 2

Introduction to the use of microcomputers for engineering. Integrated processing of graphics and text. Spreadsheet applications for engineers. BASIC programming for engineers. Laboratory. (fall, winter, spring)

ME 210 Statics 5

Vector algebra. Equilibrium of forces and moments, distributed forces, hydrostatics, friction, virtual work; all applied to simple bodies. Five lectures per week. Prerequisites: MT 135, PH 200. (fall, winter)

ME 215 Statics/Dynamics 5

Vector algebra. Forces, resultants. Equilibrium. Free body diagrams. Equilibrium of rigid bodies. Centroids. Forces in cables. Method of virtual work. Rectilinear and curvilinear motions. Newton's second law. Energy and momentum methods. Systems of particles. Rigid bodies. Plane motion. Vibrations. Five lecture hours per week. Students must pass a qualifying examination before proceeding to dynamics. Not open to ME and CEE students. Prerequisites: PH 200, MT 136. (fall)

ME 230 Dynamics 5

Vectors applied to kinematics and kinetics. Particle, system of particles, and rigid bodies related to translation, rotation, plane motion, relative motion, forces, impulse-momentum, work-energy. Five lectures per week. Prerequisites: ME 210, MT 136. (winter, spring)

ME 291 Special Topics 1 to 5

ME 292 Special Topics 1 to 5

ME 293 Special Topics 1 to 5

ME 296 Independent Study 1 to 5

ME 297 Independent Study 1 to 5

ME 298 Independent Study 1 to 5

ME 304 Basics of Computer Aided Engineering 4

Introduction to microcomputer structure. Basics of interfacing microprocessors with the real world. Applications; graphics, control, robotics. Two lectures and one four-hour laboratory per week. Prerequisite: CSC 230. Corequisite: EE 315. (fall, spring)

- ME 321 Thermodynamics 4**
Thermal properties of ideal and real gases, liquids, vapors and mixtures. Conservation of energy. Conversion of thermal energy to work. Power, efficiency, cycles, compressible gas flow. (winter, spring)
- ME 323 Heat Transfer 5**
Heat transfer - conduction, convection and radiation. Conduction in one and two dimensions, steady state and transient. Forced and natural convection with phase change. Applications. Four lecture hours, one three-hour laboratory per week. Prerequisite: ME 321. Corequisite: CEE 331 or ME 215. (fall, spring)
- ME 350 Materials Science 5**
Atomic structure. Metallic bond. Structure of metals and non-metals. Equilibrium diagrams. Time-dependent transformations. Relation of structure to properties. Elastic and plastic deformation. Four lectures, one three-hour laboratory per week. (fall, winter)
- ME 370 Machine Elements I 4**
Study of beams and columns. Failure theories. Introduction to fracture mechanics. Impact, fatigue, corrosion, and wear. Introduction to statistical considerations and reliability. Four lecture hours per week. Prerequisite: CEE 221, Corequisite: ME 350. (winter, spring)
- ME 372 Machine Elements II 4**
Continuation of ME 370. Fasteners, welds, springs, bearings, gears, clutches and brakes. Four lecture hours per week. Prerequisite: ME 370. (fall, spring)
- ME 391 Special Topics 1 to 5**
ME 392 Special Topics 1 to 5
ME 393 Special Topics 1 to 5
- ME 396 Independent Study 1 to 5**
ME 397 Independent Study 1 to 5
ME 398 Independent Study 1 to 5
- ME 401 Principles of Instrumentation 2**
Review of the elements of instrumentation systems: sensors; cables; pendtimers; filters; and display devices. Further study of each system element to find sources of unwanted signals and/or noise. Study of methods to eliminate or minimize unwanted signals and noise. One lecture and one three-hour laboratory per week. Corequisite: ME 304.
- ME 425 Applied Thermodynamics 5**
Thermodynamics applied to ideal and real cycles, internal and external combustion engines, fans, blowers, compressors, nozzles, refrigeration, air conditioning, liquefaction of gases. Four lectures, one three-hour laboratory per week. Prerequisite: ME 321. (fall, winter)

- ME 427 Steam Power Plants 4**
Thermodynamics, heat transfer, fluid mechanics applied to design of modern thermal power stations and auxiliaries with economic and ecologic integration into regional power systems. Four lectures per week. Prerequisites: ME 323, 425.
- ME 429 Internal Combustion Engines 4**
Thermodynamic cycle review. Actual otto and diesel engines. Fuels and combustion, carburetion, efficiency, alternate engines. Four lectures per week. Prerequisite: ME 425.
- ME 434 Dynamic Systems 4**
System modeling. System analysis based on transform calculus methods. Introduction to digital computer methods of analysis for non-linear systems. Topics include: Laplace transform, transfer functions, block diagram manipulation. Bode diagrams, root locus, system stability analysis, algorithms for computer system analysis. Four lectures per week. Prerequisite: EE 315; Corequisite: ME 323. (winter, spring)
- ME 436 Dynamic Systems Laboratory 2**
Laboratory experiments which augment the lecture material in ME 434. Characteristics and relevant constraints for a variety of system elements and assemblies. Design, construction and testing of a servo-system. One lecture and one three-hour laboratory per week. Prerequisite: ME 434. (fall, spring)
- ME 438 Control Systems 4**
Feedback control system analysis. Proportional, integral and derivative control. Control system design, compensation. Root locus, Nyquist and Bode plots. Analog and digital simulation. Four lectures per week. Prerequisite: ME 434.
- ME 441 Heat/Ventilation/Refrigeration 4**
Psychrometry; space heating and cooling loads; air conditioning; fans and ducts; heat exchangers; solar systems; refrigeration. Four lectures per week. Prerequisites: ME 323, 425.
- ME 452 Heat Treatment of Ferrous and Non-Ferrous Materials 2**
Heat treatment of various metallic alloys, particularly steel. Two lectures per week. Prerequisite: ME 350.
- ME 454 Fracture Mechanics 2**
Modern fracture theory - stress intensity functions, crack driving forces. Fast fracture. Impact fracture. Two lectures per week. Prerequisite: ME 370.
- ME 461 Compressible Flow 4**
One-dimensional gas dynamics. Flow in nozzles and diffusers, normal shocks, frictional flows and flows with heat transfer and energy release. Four lectures per week. Prerequisites: ME 321, CEE 331.

ME 463	Gas Turbines	4
Basic gas dynamics, Brayton cycle, design principles of compressors, turbines and compressors. Four lectures per week. Prerequisite: ME 321.		
ME 465	Turbomachinery	4
Design operation of turbines and compressors, principles of turbine/compressor types, off-design operation, pumps, cavitation, two-phase flow. Four lectures per week. Prerequisite: ME 321.		
ME 487	Engineering Design I	4
Design process, problem solving and decision making, modeling and simulation, optimization, economics, costing, reliability. Four lecture hours per week. Prerequisite: department permission. (fall)		
ME 488	Engineering Design II	4
ME 489	Engineering Design III	4
Group design project focusing on the integrative aspects of engineering subject matter. The project should focus on: (1) philosophy of design, a creative approach, and a comprehensive design project; planning, organizing and leading an engineering project; exercising judgment and considering economic factors; and (2) integrated aspects of creative design and analysis; case studies; design of a novel device or system. Two lecture and four design hours per week. Prerequisite: ME 487 for 488; 488 for 489. (488, winter; 489, spring)		
ME 491	Special Topics	2 to 5
ME 492	Special Topics	2 to 5
ME 493	Special Topics	2 to 5
ME 496	Independent Study	1 to 5
ME 497	Independent Study	1 to 5
ME 498	Independent Study	1 to 5

Physics

Mary A. Alberg, PhD, Chairperson

Objectives

The Physics Department offers two degree programs. For those who wish a career in physics, the bachelor of science in physics program takes the student from classical mechanics through quantum mechanics, including advanced laboratory courses emphasizing nuclear and nuclear reactor physics. The curriculum is designed to prepare students for advanced work in pure and applied physics or for graduate study. The bachelor of arts program is ideal for those who desire a solid background in physics, but also want the flexibility to specialize in another area, such as computer science.

Degrees Offered

Bachelor of Arts

Bachelor of Science in Physics

Bachelor of Arts Major in Physics

In order to earn the bachelor of arts degree with a major in physics, students must complete 180 credits with a cumulative and major grade point average of 2.0, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
Social Science I	.....	5
Social Science II (different discipline from Social Science I)	.....	5
Theology and Religious Studies Phase II (200-299)	.....	5
Ethics (upper division)	.....	5
Theology and Religious Studies Phase III (300-399)	.....	5
Interdisciplinary	.....	3 to 5
Senior Synthesis	.....	3

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Forty-five credits in physics, including:

PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5
PH 204	Relativity	2
PH 205	Introduction to Quantum Physics	3
PH 310	Intermediate Mechanics I	5
PH 330	Electromagnetic Field Theory	5
PH 375	Nuclear Instrumentation	5
PH	Electives	10

III. Other Program Requirements

MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
MT 232	Multivariable Calculus	3
MT 233	Linear Algebra	3
MT 234	Differential Equations	4
	Related science electives (approved by department)	15

Please Note: No 100-level courses may be counted toward the major.

Bachelor of Science in Physics

In order to earn the bachelor of science in physics degree with a major in physics, students must complete 180 credits with a cumulative grade point average of 2.0, including the following:

I. Core Curriculum Requirements

EN 110	Freshman English	5
PL 110	Introduction to Philosophy and Critical Thinking	5

Choose one of the following two courses:

HS 120	Introduction to Western Civilization	5
HS 121	Studies in Modern Civilization	5

EN 120	Masterpieces of Literature	5
FA 120	Experiencing the Arts	5
PL 220	Philosophy of the Human Person	5
	Social Science I	5
	Social Science II (different discipline from Social Science I)	5
	Theology and Religious Studies Phase II (200-299)	5
	Ethics (upper division)	5
	Theology and Religious Studies Phase III (300-399)	5
	Interdisciplinary	3 to 5
	Senior Synthesis	3

See detailed information on the core curriculum beginning on page 53.

II. Major Program Requirements

Sixty credits in physics, including:

PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5
PH 204	Relativity	2
PH 205	Introduction to Quantum Physics	3
PH 310	Intermediate Mechanics I	5
PH 311	Intermediate Mechanics II	3
PH 330	Electromagnetic Field Theory	5
PH 331	Electromagnetic Waves	3
PH 481	Theoretical Physics	5
PH 485	Quantum Mechanics	5
PH	Electives (cannot be PH 101 or PH 111)	14

III. Other Program Requirements

MT 134	Calculus and Analytic Geometry I	5
MT 135	Calculus and Analytic Geometry II	5
MT 136	Calculus and Analytic Geometry III	5
MT 232	Multivariable Calculus	3
MT 233	Linear Algebra	3
MT 234	Differential Equations	4
	Related Science Electives (approved by department)	12

Please Note: No 100-level courses may be counted toward the major.

Minor in Physics

In order to earn a minor in physics, students must complete 30 credits in physics, including:

PH 200	Mechanics	5
PH 201	Electricity and Magnetism	5
PH 202	Waves, Optics and Thermodynamics	5
PH 205	Introduction to Quantum Physics	3
	Physics Electives (200-level and above)	10

Please Note: No 100-level courses may be counted toward the minor.

Teacher Education

The teacher preparation program is a graduate level program only. Students planning to teach at the elementary or secondary school level must complete a bachelor's degree prior to beginning the teacher preparation program. Those students should discuss their major with their physics adviser to ensure enrollment in appropriate courses and must contact the School of Education for advising. Second endorsements are available in physics (24 credits) and general science (45 credits).

Physics Courses

Please Note: PH 101, PH 105, PH 106, PH 107, PH 200, PH 201, PH 202, PH 375, and PH 475 have four lectures and one laboratory per week.

- PH 101 Astronomy: The Solar System 5**
Description of the motions of celestial objects as seen from earth. Explanation of the motions from the early Greeks through the moderns. Survey of the physical properties and origins of the solar system, including the latest findings of space probes. Prerequisite: core mathematics requirement. (fall and spring)
- PH 105 Mechanics and Sound 5**
Non-calculus survey of classical mechanics. Statics, kinematics and dynamics of particles and systems; fluids; harmonic motion, waves, and sound. Prerequisites: MT 111, MT 115 or equivalent. (fall)
- PH 106 Electricity, Magnetism and Thermodynamics 5**
Survey of electromagnetism. Electrostatics, magneto-statics, electromagnetic fields, dc and ac circuits, introduction to thermodynamics. Prerequisite: PH 105. (winter)
- PH 107 Survey of Modern Physics 5**
Optics, including reflection refraction, interference, diffraction and polarization. Introduction to atomic and nuclear physics. Prerequisite: PH 106. (spring)
- PH 200 Mechanics 5**
Vector mathematics; kinematics; conservation of momentum and collisions; relative motion and reference frames; force and Newton's laws; work, energy, and power; rotational dynamics; rigid body Motion, gravitation. Prerequisites: MT 115, MT 134. (winter, spring)
- PH 201 Electricity and Magnetism 5**
Electric charge, forces, field, flux; Gauss' law; electric potential; conductors, dielectrics, capacitance; current and resistance; DC circuits; magnetic forces, fields; inductance. Prerequisites: PH 200, MT 135. (fall, spring)
- PH 202 Waves, Optics and Thermodynamics 5**
Harmonic motion; mechanical and electromagnetic waves; reflection, refraction, dispersion, interference, diffraction and polarization. Temperature, ideal gases, kinetic theory, second law of thermodynamics. Prerequisites: PH 201, MT 136. (fall, winter)
- PH 204 Relativity 2**
An introduction to special relativity. The Lorentz transformation; relativistic kinematics and dynamics. Prerequisite: PH 202. (spring)

PH 205 Introduction to Quantum Physics 3

Evidence for the quantization of light, matter and energy; the nuclear atom; wave-particle duality; the uncertainty principle; the Schrodinger equation and its applications. Prerequisites: PH 202; MT 232. (winter, spring)

PH 291 Special Topics 1 to 5**PH 292 Special Topics 1 to 5****PH 293 Special Topics 1 to 5****PH 296 Independent Study 1 to 5****PH 297 Independent Study 1 to 5****PH 298 Independent Study 1 to 5****PH 310 Intermediate Mechanics I 5**

Vector calculus; kinematics of a particle; one-dimensional motion of a particle; two and three dimensional dynamics of a particle; moving reference systems; central forces and celestial mechanics. Prerequisites: PH 200, MT 232. (winter)

PH 311 Intermediate Mechanics II 3

General motion of a rigid body; Lagrange's equations; small vibrations. Prerequisites: PH 310, MT 234. (spring)

PH 330 Electromagnetic Field Theory 5

Static electric fields in vacuum and material media; solutions of Laplace's and Poisson's equations in curvilinear coordinates; static magnetic fields; time-varying fields and Maxwell's equations. Prerequisites: PH 201, MT 234. (fall, winter)

PH 331 Electromagnetic Waves 3

Derivations and solutions of wave equations; plane waves in vacuum and material media; reflection, refraction, polarization; radiation of electromagnetic waves. Prerequisite: PH 330. (spring)

PH 350 Physics of Diagnostic Ultrasound 3

The physics of pulsed ultrasound, including its production and detection by transducers, characteristics of pulses and sound beams, interaction of ultrasound with tissue including attenuation, impedance, reflection, refraction, scattering, ranging and Doppler effect; introduction to ultrasonic instrumentation. Prerequisites: PH 106 or equivalent; MT 131 or 134; enrollment in diagnostic ultrasound or permission. (fall)

PH 361 Solid State Physics and Devices 5

Crystal structure and defects; interatomic binding; thermal and electrical properties; energy bands, carrier statistics and carrier transport phenomena. Semiconductor devices. Prerequisite: PH 205.

PH 375	Nuclear Instrumentation	5
Ionizing radiation. Nuclear decay processes, interaction of radiation with matter, instrumentation for the detection of photons, charged particles and neutrons. Prerequisite: PH 205.		
PH 391	Special Topics	1 to 5
PH 392	Special Topics	1 to 5
PH 393	Special Topics	1 to 5
PH 396	Independent Study	1 to 5
PH 397	Independent Study	1 to 5
PH 398	Independent Study	1 to 5
PH 470	Nuclear Physics	5
Structure and properties of nuclei and elementary particles; symmetries and conservation laws; electromagnetic, weak, and hadronic interactions; nuclear models. Prerequisites: PH 205, MT 234.		
PH 475	Basic Physics of Nuclear Fission Reactors	5
Brief historical sketch, discussion of pertinent nuclear reactions, cross-sections, moderation, equation of continuity, diffusion area, Fermi age, criticality and Fermi criticality equation, simple spherical reactor. Kinetic aspects are considered, such as the role of delayed neutrons and reactor period. The laboratory experiments deal with diffusion area, Fermi age, multiplication factor, buckling and control rod action. Prerequisites: PH 205; MT 234.		
PH 480	Interdisciplinary Core Courses	3 to 5
Title and content change each term.		
PH 481	Theoretical Physics	5
Topics in theoretical physics selected from statistical thermal and modern physics. Prerequisites: PH 205, MT 234. (fall)		
PH 485	Quantum Mechanics	5
Wave-particle duality, the state function, the Schrodinger equation, one-dimensional problems, the operator formalism, matrices, central forces, angular momentum, spin, identical particles. Prerequisites: PH 205, MT 234. (fall)		
PH 491	Special Topics	1 to 5
PH 492	Special Topics	1 to 5
PH 493	Special Topics	1 to 5
PH 496	Independent Study	1 to 5
PH 497	Independent Study	1 to 5
PH 498	Independent Study	1 to 5

Premedical and Predental

Thomas W. Cunningham, PhD, Adviser

Students wishing to enter professional schools of medicine, dentistry or veterinary medicine, or graduate schools in biomedical studies, should matriculate in a program of studies leading to a bachelor's degree in any academic field that will give a broad training in the liberal arts and fulfill the proper requirements in the physical and biological sciences. Students may choose any academic major; most elect biology, chemistry, physics, general science or psychology. With the framework of any one of the degree programs, students obtain strong backgrounds in the liberal arts through the core curriculum.

Because of the necessity for required science courses to be completed by the end of the junior year, students in these programs will complete the core curriculum in a different sequence than that shown elsewhere in this bulletin. The courses to be taken and the sequence for taking them will be developed by the student's academic adviser.

For further clarification of degree requirements and the university core curriculum, see the section of this bulletin regarding the core curriculum.

Most medical, dental and veterinary schools require the following undergraduate science sequences: Chemistry 121, 122, 123, 131, 132, 133, 335, 336, 337, 345, 346, 347; Biology 165, 166, 167, and Physics 105, 106, 107. Professional schools also recommend calculus, cell physiology and biochemistry. 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, at which time they should take the MCAT, DAT, VAT tests. Application for admittance to professional schools should be made during the summer or fall of the senior year.

Evening Programs

David F. Carrithers, MBA, Director

Stephen Bangs, MA, Assistant Director

The Office of Evening Programs was established in fall 1990 to assist schools in providing programs and services to non-traditional students at times that are convenient to them in the evening.

Objectives

The Office of Evening Programs, with the four academic schools and two colleges of Seattle University, plans, coordinates, and promotes undergraduate degree programs at night. A bachelor's degree from Seattle University at night is no different from a degree earned in the daytime. Entrance requirements and graduation requirements are the same for each. In fact, students who consider themselves primarily evening students may enroll in courses offered in the daytime, just as day students may enroll in the evening courses.

In addition to planning appropriate curricula at night, the Evening Programs Office coordinates events and activities for evening students. Many administrative offices maintain evening hours for the convenience of those on campus after 5 p.m. Also, student development offices such as Career Planning and Placement, the Counseling Center, Learning Center, Campus Ministry, Campus Assistance Center, Campus Security and many others include events and activities focusing on the evening student population on their calendars. The objective of Evening Programs is to provide a comprehensive, well-rounded college experience for evening students, many of whom are part-time and of non-traditional age.

Organization

The Office of Evening Programs is independent of the academic schools or colleges of the university. The deans of the schools or colleges providing the bachelor's degree in the evening and Academic Council establish and maintain requirements for degrees. An evening bachelor's degree is conferred by the college or school that offers the same degree in the daytime. Admission to an evening program is granted by the dean of the degree-granting college or school.

Academic transactions involving registration and awarding of degrees are supervised by the university's registrar.

Evening Degrees Offered

For admission and program requirements, consult the degree descriptions that appear as part of each school or college program offerings.

Arts and Sciences

Bachelor of Arts - with major in Liberal Studies

Bachelor of Criminal Justice

Bachelor of Public Administration

Business

Bachelor of Arts in Business Administration

Concentrations in:

Accounting

Business Economics

Finance

General Business

International Business

Management

Marketing

Operations

Nursing

Bachelor of Science in Nursing - for registered nurses

Graduate School

Edward J. Jennerich, PhD, Dean

Graduate studies directed toward the master's degree were first offered at Seattle University in 1910 in a division of its College of Arts and Sciences. In 1935, graduate courses became an integral part of the university's teacher education program. As the demand for specialization increased, additional graduate programs were developed. Graduate opportunities were expanded with the first doctoral program in 1976, the educational specialist degree in 1980 and the Institute for Theological Studies in 1985.

Objectives

Graduate School programs endeavor to offer advanced in-depth education to individuals seeking specialized knowledge and skills in a particular field. Graduate students are encouraged to further develop speaking and writing competencies, and to enhance high-level thinking abilities, including application and synthesis. Expertise in the examination of the ethical and value-laden issues in various fields is an important component of graduate education at Seattle University.

Efforts are made to stimulate students' curiosity while at the same time providing the investigative skills needed to seek answers to challenging questions. It is hoped that individuals who complete graduate programs will have developed personal and professional competencies that will contribute to the improvement of their field and to the betterment of those whom they serve.

Organization

The dean of the Graduate School and the Graduate Council are responsible for administration of the Graduate School and supervision of all programs leading to the master's, educational specialist and doctoral degrees. The dean of the Graduate School and the Graduate 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. Admission to graduate study is granted through the dean of the Graduate School in consultation with the appropriate graduate program director.

Academic transactions involving registration and awarding of degrees are supervised by the university's registrar.

Most courses are offered in the late afternoon, evenings and on weekends to accommodate working professionals. Some education classes are held off campus in Auburn and Bellevue. Selected business classes are held in Bellevue and Everett. Daytime classes are held for students in the master in teaching program and in the Institute for Theological Studies.

Degrees Offered

For admission, program requirements and information on specialized tracks, see the Seattle University Graduate Bulletin or contact the Graduate Admissions Office, Seattle University, Broadway and Madison, Seattle, WA 98122-4460, (206) 296-5900.

Graduate Degrees Offered

Arts and Sciences

Master of Arts in Psychology

Business

Master of Business Administration

Master of Arts in Applied Economics

Master of Science in Finance

Education

Master of Arts in Education

Master of Education

These degrees may be earned with a specialization in adult education and training, counseling, curriculum and instruction, educational administration and student development administration.

Master In Teaching

Master of Counseling

Educational Specialist

This degree may be earned in educational administration or educational diagnostics/school psychology.

Doctor of Education

Science and Engineering

Master of Software Engineering

Institute for Public Service

Master of Public Administration

Institute for Theological Studies

Master of Ministry (summer only)

Master of Religious Education (summer only)

Master of Pastoral Ministry

Master of Theological Studies

Master of Divinity

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Microsoft Corporation

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Attorney, Boeing Computer Services

Michael McHugh

Proprietor, Mick McHugh's Restaurants

Dorene McTigue

Bellevue, Washington

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Office Managing Partner, Arthur Andersen

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Chairman, First Bank, Ketchikan, Alaska

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President

Central Pre-Mix Concrete Company

Spokane, Washington

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Edmonds, Washington

Daniel C. Regis

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Price Waterhouse

Seattle, Washington

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Bellevue, Washington

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President, Seattle University

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Tarlson & Associates

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Seattle, Washington

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President

John D. Eshelman, PhD

Provost

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Associate Provost for Academic Administration and

Dean of the Graduate School

Tullisse (Toni) Murdock, PhD

Associate Provost for Programs and Planning

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Director, Summer School, Evening Programs and Continuing Education

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Provost

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Dean, College of Arts and Sciences

Margaret M. Haggerty, PhD

Dean, School of Education

Loretta Jancoski, PhD

Director, Institute for Theological Studies

Edward J. Jennerich, PhD

Associate Provost for Academic Administration and
Dean of the Graduate School

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Director, Liberal Studies

Kathleen Mailer, PhD

Dean, School of Science and Engineering

Bernard M. Steckler, PhD

Dean, Matteo Ricci Seattle University

Dannette Sullivan, MED

Registrar

Luth M. Tenorio, PhD

Dean, School of Nursing

Lawrence E. Thomas, MALS

University Librarian

Jerry A. Viscione, PhD

Dean, Albers School of Business and Economics

James White, BA

Director, Financial Aid

Finance and Administration

James I. Adolphson, BA

Assistant Vice President for Finance

Joe Conner, MBA

Director of Construction and Facilities Planning

Anna E. Dillon

Assistant Vice President for Human Resources
and Affirmative Action Officer

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Director, Plant Services and Public Safety

Barbara Horgan, MPA

Assistant Vice President for Information Services

Steve K. Oh, MBA

Controller

Jerome C. Pederson, MBA

Director, Administrative Services

Denis S. Ransmeier, MBA

Vice President for Finance and Administration

Stephen F. Roise Jr., BS

Internal Auditor

Student Development

Rick Bird, MBA,

Associate Director of Residential Life and
Director of Auxiliary Services

Mary Romer Cline, MDiv

Director, Campus Ministry

Kathryn Courtney, MS

Director, Center for Leadership and Service

Henry F. Durand, PhD

Vice President for Student Development

Carla Erickson

Director of Pathways

Helen A. LaBouy, MBA

Director, Student and Career Development

Nancy Gerou, PhD,

Director, University Sports

Faizi Ghodsi, MBA

Director, International Student Center

Thomas Krueger, MS

Director, Minority Student Affairs

Dale Nienow, PhD

Assistant Vice President for Student Development

Judith Lee Sharpe, MA

Director, Residential Life

Howard H. Morishige, PhD

Director, Health Center

Zakiya Stewart, MEd

Director, Learning Center/Disabled Student Resources

University Relations

J. Paul Blake, BA

Assistant Vice President for University Relations and
Director, Public Relations

Mark Burnett, MPA

Assistant Vice President for University Relations and
Director, Alumni Relations

Richard K. Francois

Assistant Vice President for University Relations and
Director of Development

Cecelia Gramblin

Director, Information Services

Linda N. Hanson, BA

Vice President for University Relations

William F. LeRoux, SJ, MA, STD

Assistant to the Vice President for University Relations

Joseph A. Maguire, SJ, MA

Alumni Chaplain

Faculty

The year following faculty names indicates initial full-time appointment to the university faculty.

Josef C. Afanador, EdD (1975)

Associate Professor of Counseling Education

BA, 1963, Butler University; MS, 1967, Purdue University; EdD, 1971, University of Arizona

Richard H. Ahler, SJ, STD (1977)

Associate Professor of Theology and Religious Studies

AB, 1954, PhL, 1956, St. Louis University; MA, 1957, Marquette University; STL, 1963, St. Louis University; STD, 1975, Gregorian University

Mary A. Alberg, PhD (1979)

Chair, Physics Department

Associate Professor of Physics

BA, 1963, Wellesley College; MS, 1970, PhD, 1974, University of Washington

Jeffrey Anderson, PhD (1991)

Assistant Professor of Education

BA, 1972, University of Minnesota; MA, 1981, College of St. Thomas; PhD, 1990, University of Denver

Kathryn Anderson, MN, RN (1992)

Instructor of Nursing

BSN, 1976, University of Virginia;

MN, 1981, University of Washington

Abdolhossein Ansari, PhD (1985)

Associate Professor of Business, Management Information Systems

BS, 1976, Tehran College of Insurance; MBA, 1979, University of Detroit; MA, 1981, PhD, 1984, University of Nebraska, Lincoln

Constance G. Anthony, PhD (1988)

Associate Professor of Political Science

BA, 1971, University of California, Santa Cruz; MA, 1973, PhD, 1982, University of California, Berkeley

David Arnesen, JD (1989)

Chair, International Business Program

Assistant Professor of Business/Business Law

BA, 1975, University of Washington; JD, 1977, University of Puget Sound School of Law

Gary L. Atkins, MA (1978)

Chair, Communication Department

Associate Professor of Journalism

AB, 1971, Loyola University; MA, 1972, Stanford University

Gregg Y. Ayakawa, PhD (1991)

Assistant Professor of Biology

BA, 1977, University of Hawaii; MS, 1979, PhD, 1983

Sandra L. Barker, PhD (1985)

Chair, Administration and Adult Education

Associate Professor of Education

BA, 1963, University of Oregon; MAT, 1968, University of Portland; PhD, 1983, University of Oregon

Karen A. Barta, PhD (1983)

Associate Professor of Theology and Religious Studies

BS, 1964, Marian College of Fond du Lac; MA, 1972, PhD, 1979, Marquette University

Mary C. Bartholet, MS (1958)

Associate Professor of Nursing

BS, 1949, College of St. Teresa; MS, 1958, St. Louis University

John C. Bean, PhD (1986)

Professor of English, Director of the Writing Center

BA, 1965, Stanford University; PhD, 1972, University of Washington

Arthur H. Benedict, PhD (1992)

Assistant Professor of Civil and Environmental Engineering

BS, 1963, Tufts University; MS, 1965, PhD, 1968, Tufts University

Shawn D. Bird, MS (1992)

Instructor of Management Information Systems

BGS, 1986, University of Iowa; MS, 1991, Texas Tech University

Andrew G. Bjelland, PhD (1982)

Associate Professor of Philosophy

AB, 1961, Immaculate Conception Seminary; PhD, 1970, St. Louis University

David A. Boness, PhD (1990)

Assistant Professor of Physics

BA, 1980, Yale University; MS, 1985, PhD, 1991, University of Washington

Philip L. Boroughs, PhD (1992)

BA, 1973, Gonzaga University; MDiv, 1978, Jesuit School of Theology, Berkeley

Hamida H. Bosmajian, PhD (1966)

Professor of English

BA, 1961, University of Idaho; MA, 1962, PhD, 1968, University of Connecticut

Peter A. Brous, PhD (1992)

Assistant Professor of Finance

BS, 1981, University of Connecticut; PhD, 1989, University of Oregon

Stephanie Bravmann, PhD (1992)

Chair, Curriculum and Instruction

Assistant Professor of Education

AB, 1975, Indiana University; PhD, 1986, University of Washington

Karen A. Brown, PhD (1983)

Associate Professor of Business/Production Operations Management

BS, 1971, MBA, 1979, PhD, 1983, University of Washington

David Brubaker, PhD (1980)

Associate Professor of Biology

BS, 1966, University of Redlands; MS and PhD, 1972, University of Michigan

Rebecca Ginnings Bruckner, PhD (1990)

Assistant Professor of Fine Arts

BA, 1963, Southern Methodist University; MA, 1965, University of California; PhD, 1970, University of Delaware

Hilda Bryant, MA (1988)

Assistant Professor of Communication

BA, 1965; MA, 1968, University of Washington

Chauncey A. Burke, PhD (1978)

Assistant Professor of Business/Marketing

BSBA, 1970, Mt. St. Mary's College; MBA, 1978, PhD, 1987, University of Washington

J. Patrick Burke, PhD (1967)

Associate Professor of Philosophy

BA, 1965, Gonzaga University; MA, 1967, St. Louis University; PhD, 1978, University of Louvain

Norma Jean Bushman, MN (1960)

Associate Professor of Nursing

BSN, 1959, MN, 1960, University of Washington

Robert E. Callahan, PhD (1977)

Associate Professor of Business/Management

BS, 1967, MBA, 1969, Drexel University; PhD, 1977, Case Western Reserve University

Emmett H. Carroll, SJ, DA (1973)

Associate Professor of English

BA, 1955, Gonzaga University; STL, 1963, Gregorian University; MA 1966, Rutgers University; DA, 1980, Carnegie-Mellon University

Gary L. Chamberlain, PhD (1979)

Gaffney Endowed Chair

Professor of Theology and Religious Studies

BA, 1962, PhL, 1963, St Louis University; MA, 1967, University of Chicago; PhD, 1973, Graduate Theological Union

John P. Chattin-McNichols, PhD (1979)

Associate Professor of Education

AB, 1973, University of California at Los Angeles; PhD, 1979, Stanford University

Xusheng Chen, PhD (1988)

Associate Professor of Electrical Engineering

BSEE, 1967, Institute of Power Engineering, Shanghai; MSEE, 1982, Jiao Tong University; MSEE, 1984, Louisiana State University; PhD, 1987, Washington State University

Percy H. Chien, PhD, (1976)

Chair, Civil and Environmental Engineering Department
Associate Professor of Civil Engineering
BSCE, 1962, National Taiwan University; MSCE, 1967, University of Houston;
PhD, 1972, Clemson University

Louis K. Christensen, PhD (1965)

Professor of Music
BA, 1954, MA (Mus) 1956, PhD, 1961, University of Washington

Carol Wolfe Clay, MFA (1987)

Assistant Professor of Drama
BA, 1977, California State University; MFA, 1985, University of California,
Davis

Janet M. Claypool, MN (1966)

Professor of Nursing
BSN, 1959, MN, 1960, University of Washington

Gerald L. Cobb, SJ, PhD (1988)

Assistant Professor of English
BA, 1974, Gonzaga University; MA, 1975, University of Washington; STM,
MDiv, 1981, Jesuit School of Theology at Berkeley; PhD, 1988, University
of Washington

John N. Collins, PhD (1992)

Director and Professor, Institute of Public Service
BA, 1960, University of Washington; MA, 1963, PhD 1967, Northwestern
University

Ananda K. Cousins (1993)

Assistant Professor of Mechanical Engineering
BA, 1980, Wesleyan University; MS, 1982, PhD, 1986, Columbia University

Thomas W. Cunningham, PhD (1959)

Professor of Psychology
BA, 1956, Seattle University; MS, 1959, PhD, 1966, University of Portland

Patricia D. Daniels, PhD (1986)

Chair, Electrical Engineering
Professor of Electrical Engineering
BS, 1968, PhD, 1974, University of California, Berkeley. Registered
Professional Engineer

Verelle M. Davis, MS (1972)

Assistant Professor of Nursing
BS, 1959, University of Washington; MS, 1970, Catholic University

Don T. DeCoster, PhD (1986)

Professor of Accounting
BBA, 1954, West Texas State University; MBA, 1958, PhD, 1961, University
of Texas; PhD, 1970, University of Oregon

Rosario T. DeGracia, MS (1963)

Associate Professor of Nursing

BSN, 1954, University of the Philippines; MS, 1959, Western Reserve University

C. Frederick DeKay, PhD (1980)

Associate Dean, Albers School of Business and Economics

Associate Professor of Economics

BA, 1972, University of Washington; PhD, 1979, Johns Hopkins University

Robert J. Deltete, PhD (1978)

Associate Professor of Philosophy

BA, 1969, Seattle University; MA, 1976, PhD, 1983, Yale University

Bonnie Jean Denoon, PhD (1975)

Associate Professor of Education

BA, 1961, MEd, 1966, Wichita State University; PhD, 1975, Peabody College

Khalil (Charles) Dibee, PhD (1964)

Professor of Finance

BS, 1956, University of Detroit; MBA, 1958, PhD, 1962, University of Texas

Daniel A. Dombrowski, PhD (1988)

Professor of Philosophy

BA, 1974, University of Maine; PhD, 1978, St. Louis University

William J. Dore Jr, MA (1963)

Chair, Fine Arts Department

Professor of Drama

BA, 1954, MA, 1957, University of Washington

David A. Dubofsky (1993)

Thomas F. Gleed Professor

BE, 1973, City College of New York; MBA, 1978, University of Houston; PhD, 1982, University of Washington

Diane Duca, MA (1992)

Instructor, Institute of Public Service

BA, 1966, Colorado Women's College; MA, 1976, University of Colorado

Diane M. Durnam, PhD (1985)

Research Assistant Professor of Chemistry

BS, 1976, University of California; PhD, 1981, University of Washington

Mary B. Ehlers, PhD (1974)

Associate Professor of Mathematics

BA, BA in Ed, 1964, Western Washington State College; MA, 1966, PhD, 1969, Washington State University

Gary J. Erickson, PhD (1985)

Associate Professor of Electrical Engineering

BS, 1964, Portland State University; MS, 1967, PhD, 1977, University of Wyoming. Registered Professional Engineer

Suzanne M. Erickson, PhD (1986)

Associate Professor of Finance

BABA, 1975, University of Washington; MBA, 1981, Seattle University; PhD, 1987, University of Washington

Mary Ersek, PhD (1991)

Assistant Professor of Nursing

BSN, 1980, Georgetown University; MN, 1987, PhD, 1991, University of Washington

John D. Eshelman, PhD (1969)

Provost

Professor of Economics

BS, 1963, Harding College; MA, 1967, PhD, 1971, University of Washington

Sharon Filipcic, MN (1992)

Instructor of Nursing

BSN, 1984, University of Washington; MN, 1990, University of Washington

Carol K. Fillenberg, PhD (1992)

Associate Professor of Education

BS, 1969; MEd, 1974; PhD, 1977, Colorado State University

C. Patrick Fleenor, PhD (1973)

Chair, Administration Department

Professor of Business/Management

BA, 1969, Boise State College; MBA, 1970, PhD, 1975, University of Washington

Sharon Galbraith, PhD (1986)

Assistant Professor of Business/Marketing

BComm 1980, University of Calgary; MBA, 1982, PhD, 1987, University of Washington

John J. Gardiner, PhD (1991)

Professor of Education

BA, 1967, PhD, 1973, University of Florida

Pierre C. Gehlen, PhD (1982)

Associate Professor of Mechanical Engineering

BS, 1961, Universite de l'Etat a Liege; PhD, 1966, Northwestern University

Lane A. Gerber, PhD (1980)

Professor of Psychology

BS, 1960, Franklin and Marshall College; PhD, 1968, University of Chicago

Karen A. Gilles, MLS (1981)

Assistant Librarian

BA, 1968, University of Illinois; MLS, 1978, University of Washington

Roger Gillis, SJ, MFA (1987)

Assistant Professor of Drama

BA, 1969; MA, 1973, Gonzaga University; MFA, 1986, Catholic University

John J. Gilroy, PhD (1982)

Associate Professor of Education

BA, 1957, MA, 1958, LaSalle College; MA, 1967, Middlebury College; PhD, 1972, University of Pittsburgh

Joseph F. Gower, PhD (1991)

Dean, College of Arts and Sciences

Associate Professor of Theology and Religious Studies

BA, 1968, University of Scranton; PhD, 1977, University of Notre Dame

Thomas W. Griffith, PhD (1988)

Chair, Chemistry Department

Professor of Chemistry

BS, 1965, Iowa State University; MS, 1968, Idaho State University; PhD, 1971, Oklahoma State University

Robert B. Grimm, SJ, PhD (1986)

Associate Professor of Business/Management; Rector

AB, 1971, Gonzaga University; MDiv, 1976, Weston School of Theology;

MBA, 1978, New York University; PhD, 1986, University of Colorado

Kathye Jean Grisham, MN (1976)

Assistant Professor of Nursing

BA, 1965, University of Wisconsin; MN, 1967, University of Washington

Kristin E. Guest, PhD (1981)

Associate Professor of Education

BA, BS, 1965, University of Minnesota; MA, 1967, PhD, 1970, University of Wisconsin

Reed A. Guy, PhD (1975)

Professor of Physics

BS, 1966, University of Alabama; PhD, 1970, University of Virginia

Wynne A. Guy, MA (1979)

Assistant Professor of Mathematics

BA, 1966, University of Alabama; MA, 1969, University of Virginia

Margaret M. Haggerty, PhD (1971)

Dean, School of Education

Professor of Education

BS, 1957, College of St. Teresa; MA, 1964, PhD, 1967, Catholic University

Steen Halling, PhD (1976)

Professor of Psychology

BA, 1967, York University; MA, 1970, PhD, 1976, Duquesne University

J. Hutchinson Haney, MS (1974)

Assistant Professor of Counseling Education

BA, 1966, University of Denver; MS, 1968, University of Arizona

John M. Harding, JD (1975)

Associate Professor of Accounting

BA, 1942, Yale University; JD, 1948, Yale Law School

Rebecca Hartley, PhD (1990)

Assistant Professor of Biology

BS, 1984, University of Washington; PhD, 1989, Indiana University

Robert G. Heeren, PhD (1983)

Professor of Electrical Engineering

BS, 1960, Purdue University; MS, 1962, PhD, 1968, University of Illinois

Jacqueline B. Helfgott, PhD (1993)

Assistant Professor of Criminal Justice

BA, 1988, University of Washington; MA, 1991, PhD, 1992, Pennsylvania State University

Hildegard R. Hendrickson, PhD (1967)

Professor of Finance

BA, 1958, MBA, 1959, PhD, 1966, University of Washington

Jean Henrikson, M Libr (1987)

Assistant Librarian

M Libr, 1976, University of Washington

Marvin T. Herard, MFA (1960)

Professor of Fine Arts

BA, 1954, University of Washington; MFA 1960, Cranbrook Academy of Art

Robert Higgs, PhD (1989)

Visiting Professor of Economics

BA, 1965, San Francisco State College; PhD, 1968, Johns Hopkins University

Alan L. Hilton, EdD (1985)

Associate Professor of Education

BA, 1966, California State University, Sacramento; MS, 1974, Santa Clara University; EdD, 1980, University of Southern California

Max H. Hines, PhD (1993)

Associate Professor of Counselor Preparation

BS, 1967, University of Wisconsin, River Falls; MS, 1974, University of Wisconsin, Oshkosh; PhD, 1983, University of Minnesota

Constance Hirnle, MN (1992)

Assistant Professor of Nursing

BS, 1971, State University of New York, Buffalo; MN, 1990, University of Washington

James B. Hogan, PhD (1976)

Professor of Political Science

Coordinator, Public Administration

AB, 1957, Long Beach State; MA, 1958, University of California at Los Angeles; PhD, 1970, Cornell University

Burt C. Hopkins, PhD (1990)

Assistant Professor of Philosophy

BA, 1977, Allegheny College; MA, 1983, Ohio University; PhD, 1988, DePaul University

Patrick Howell, SJ, D Min (1986)

Associate Professor of Theological Studies and Theology/Religious Studies
BS, 1961, Gonzaga University; MA, 1966, Boston College; DMin, 1985,
Catholic University of America

Margaret L. Hudson, PhD (1974)

Associate Professor of Biology
BS, 1968, PhD, 1974, University of Washington

Jeanette A. Hulburt, ML (1964)

Associate Librarian
BA, 1950, Seattle University; ML, 1964, University of Washington

Nalini Iyer, MA (1993)

Instructor of English
BA, 1986, University of Madras, Stella Maris College, India; MA, 1988,
Purdue University

Sharon James, PhD (1982)

Associate Professor of Communication
BS, 1970; MA, 1973; PhD, 1981, University of Kansas

Loretta Jancoski, PhD (1988)

Director, Institute for Theological Studies
Assistant Professor of Theology
BA, 1960, College of St. Mary; MA, 1967, University of Notre Dame; MA,
1971, PhD, 1976, University of Chicago Divinity School

Edward J. Jennerich, PhD (1987)

Associate Provost for Academic Administration and
Dean of the Graduate School
Professor of Education
BA, 1967, Trenton State College; BS, 1970, Drexel University; PhD, 1974,
University of Pittsburgh

Dolores M. Johnson, PhD (1964)

Associate Professor of English
BA, 1960, MA, 1964, PhD, 1971, University of Washington

Garry R. Kampen, PhD (1985)

Associate Professor of Software Engineering
BA, 1963, Carleton College; MA, 1964, University of Michigan; PhD, 1973,
University of Washington

Michael M. Kelliher, SJ, D Crim (1972)

Chair, Criminal Justice Department
Associate Professor of Sociology
AB, 1960, Gonzaga University; STB, 1968, University of Santa Clara; M Crim,
1969, D Crim, 1972, University of California at Berkeley

Paul Kidder, PhD (1989)

Assistant Professor of Philosophy
BA, 1979, University of Washington; MA, 1982, PhD, 1987, Boston College

Paulette Kidder, PhD (1989)

Assistant Professor of Philosophy

BA, 1982, University of Washington; MA, 1985, PhD, 1989, Boston College

David R. Knowles, PhD (1978)

Associate Professor of Economics

BA, 1969, MA, 1973, PhD, 1978, Washington State University

Harry H. Kohls, SJ, PhD (1966)

Associate Professor of Philosophy (Ret)

AB, 1935, MA, 1936, Gonzaga University; PhD, 1952, Georgetown University

Ursel S. Krumme, MA (1977)

Associate Professor of Nursing

BS, 1961, MA, 1962, New York University

Kevin Krycka, PhD (1989)

Assistant Professor of Psychology

BA, 1981, Aquinas College; PsyD, Illinois School of Professional Psychology

Georg D. Kunz, PhD (1971)

Associate Professor of Psychology

AB, 1960, PhL, 1961, Gonzaga University; MA, 1964, Marquette University; PhD, 1975, Duquesne University

Marianne LaBarre, MA (1987)

Co-Director Masters of Divinity/Masters of Theological Studies

Program Assistant; Assistant Professor of Theology

BA, 1969, Marylhurst College; MA, 1981, St. Mary's College of California

James Robert Larson, PhD (1952)

Associate Dean of Arts and Sciences

Professor of Sociology

AB, 1949, Seattle University; MA, 1952, Fordham University; PhD, 1958, University of Washington

S. Kathleen LaVoy, PhD (1988)

Assistant Professor of Psychology

BA, 1978, MA, 1982, California State University; MS, 1987, PhD, 1988, University of California, Santa Cruz

Charles Lawrence, PhD (1989)

Assistant Professor of Sociology

BA, 1968, Whitman College; MA, 1972, PhD, 1981, New School for Social Research

Sarah P. Leadley, ML (1993)

Junior Librarian

BS, 1986, Portland State University; ML, 1992, University of Washington

Eunkyu Lee, MBA (1992)

Assistant Professor of Marketing

BBA, 1985, Seoul National University, Seoul Korea; MBA, 1987, Duke University

Jacqueline Leibsohn, PhD (1991)

Assistant Professor of Education

BA, 1982, University of California, San Diego; MS, 1986, PhD, 1989, Colorado State University

David J. Leigh, SJ, PhD (1983)

Director, Honors Program

Associate Professor of English

BA, 1961, MA, 1963, Gonzaga University; MA, 1969, Regis College, Toronto; PhD, 1972, Yale University

William F. LeRoux, SJ, MA, STD (1958)

Assistant to the Vice President for University Relations

Professor of Theology and Religious Studies

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Associate Professor of Business/Administration

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Professor of Physics

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Index of Discipline Codes

ACC	Accounting
ADD	Addiction Studies
ART	Art
BL	Biology
BUSA	Business Administration
CEE	Civil and Environmental Engineering
CH	Chemistry
CJ	Criminal Justice
COMC	Communication
CSC	Computer Science
DR	Drama
EC	Economics
ED	Education
EE	Electrical Engineering
EN	English
SE	Software Engineering
FA	Fine Arts
FIN	Finance
FL	Foreign Language
FR	French
GK	Greek
GR	German
HS	History
HON	Humanities (Honors)
HUM	Humanities (Matteo Ricci College)
IB	International Business
ISC	Interdisciplinary Science (See General Science)
ISS	Interdisciplinary Social Science
JA	Japanese
COMJ	Journalism and Mass Communication
LS	Liberal Studies
LT	Latin
ME	Mechanical Engineering
MGMT	Management
MKTG	Marketing
MS	Military Science
MT	Mathematics
MU	Music
N	Nursing
OP	Operations
PH	Physics
PL	Philosophy
PLS	Political Science
PSY	Psychology
PUB	Public Administration
RS	Theology and Religious Studies
SA	Study Abroad
SC	Sociology
SP	Spanish
US	Diagnostic Ultrasound
WS	Women's Studies



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