

PACIFIC
LUTHERAN
UNIVERSITY

Tacoma,
Washington



Catalog
1978-79
1979-80



The information contained herein reflects an accurate picture of Pacific Lutheran University at the time of publication. However, the university reserves the right to make necessary changes in procedures, policies, calendar, curriculum, and costs.

Pacific Lutheran University does not discriminate on the basis of sex, race, creed, color, national origin, age, or handicapped condition in the education programs or activities which it operates, and is required by Title IX of the Education Amendments of 1972 and the regulations adopted pursuant thereto, by Title VII of the Civil Rights Act of 1974, and by Section 504 of the Rehabilitation Act of 1973 not to discriminate in such manner. The requirement not to discriminate in education programs and activities extends to employment therein and to admission thereto.

Inquiries concerning the application of said Title IX and published regulations to this university may be referred to:

1. The Director of Personnel, Room G-28 Harstad Hall, Pacific Lutheran University, telephone 531-6900 extension 397, for matters relating to employment policies and practices, promotion, fringe benefits, training, and grievance procedures for personnel employed by the university.
2. The Executive Assistant to the Provost, Room A-100 Administration Building, Pacific Lutheran University, telephone 531-6900 extension 432, for matters relating to student admissions, curriculum, and financial aid.
3. The Director of Minority Affairs, Room A-113 Administration Building, Pacific Lutheran University, telephone 531-6900 extension 441, for matters regarding administrative policies relating to students, student services, and the student grievance procedure.
4. Or the Director of the Office of Civil Rights, Department of Health, Education and Welfare, Washington, D.C.

Inquiries concerning the application of said Section 504 of the Rehabilitation Act may be referred to:

The Registrar, Room A-102 Administration Building, Pacific Lutheran University, telephone 531-6900 extension 213.

Pacific Lutheran University complies with the Family Education Rights and Privacy Act of 1974.

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PACIFIC LUTHERAN UNIVERSITY
Tacoma, Washington 98447
(206) 531-6900

Directory

The university is located at South 121st Street and Park Avenue in suburban Parkland. Office hours are from 8:00 a.m. to 5:00 p.m. Monday through Friday. Most offices are closed for chapel on Monday, Wednesday, and Friday from 10:00 to 10:30 a.m. during the school year, and on Fridays during June, July, and August all offices close at 12 noon. The university also observes all legal holidays.

The University Center maintains an information desk which is open daily until 10 p.m. (11 p.m. on Friday and Saturday).

Visitors are welcome at any time. Special arrangements for tours and appointments may be made through the admissions office (extension 227) or the university relations office (extension 457).

FOR INFORMATION ABOUT:

General interests of the university, church relations, and community relations

Academic policies and programs, faculty appointments, curriculum development, academic advising and assistance, and foreign study

General information, admission of students, publications for prospective students, freshmen class registration, and advanced placement

Transcripts of records, schedules, registration, and transfer students

Financial assistance, scholarships, and loans

Fees, payment plans, campus parking and security

Residence halls, counseling and testing, health services, minority affairs, foreign students, and extracurricular activities

Gifts, bequests, grants, and the annual fund

Work-study opportunities, student employment, and career options

Graduate programs and summer sessions

Continuing education opportunities

Alumni activities

Worship services and religious life at the university

CONTACT THE OFFICE OF:

THE PRESIDENT

THE PROVOST

College of Arts and Sciences

Division of Humanities

Division of Natural Sciences

Division of Social Sciences

School of Business Administration

School of Education

School of Fine Arts

School of Nursing

School of Physical Education

THE DIRECTOR OF ADMISSIONS

THE REGISTRAR OR THE
TRANSFER COORDINATOR

THE DIRECTOR OF FINANCIAL AID

THE VICE PRESIDENT — FINANCE AND
OPERATIONS

THE VICE PRESIDENT FOR STUDENT LIFE

THE VICE PRESIDENT FOR DEVELOPMENT

THE DIRECTOR OF CAREER PLANNING AND
PLACEMENT

THE DEAN OF GRADUATE AND SUMMER
STUDIES

THE DIRECTOR OF CONTINUING EDUCATION

THE DIRECTOR OF THE ALUMNI
ASSOCIATION

THE UNIVERSITY PASTORS

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Academic Calendar

1978-79

SUMMER SESSION 1978

Monday, June 19	Classes begin, 8:00 a.m.
Tuesday, July 4	Independence Day holiday
Wednesday, July 19	First term ends
Thursday, July 20	Classes begin — second term
Friday, August 18	Summer Session closes
Friday, August 18	Commencement

FALL SEMESTER 1978

Sunday, September 3 to	
Tuesday, September 5	Orientation and registration
Wednesday, September 6	Classes begin, 8:00 a.m.
Friday, October 20	Mid-semester break
Wednesday, November 22	Thanksgiving recess begins, 12:50 p.m.
Monday, November 27	Thanksgiving recess ends, 8:00 a.m.
Friday, December 8	Classes end, 6:00 p.m.
Monday, December 10 to	
Friday, December 15	Final examinations
Friday, December 15	Semester ends after last exam

INTERIM 1979

Wednesday, January 3	Begins
Wednesday, January 31	Ends

SPRING SEMESTER 1979

Monday, February 5	Registration
Tuesday, February 6	Classes begin, 8:00 a.m.
Monday, February 19	Washington's Birthday holiday
Friday, April 6	Easter recess begins, 6:00 p.m.
Monday, April 16	Easter recess ends, 4:00 p.m.
Friday, May 18	Classes end, 6:00 p.m.
Monday, May 21 to	
Friday, May 25	Final examinations
Friday, May 25	Semester ends after last exam
Sunday, May 27	Worship service and commencement

Academic Calendar

1979-80

SUMMER SESSION 1979

Monday, June 18	Classes begin, 8:00 a.m.
Wednesday, July 4	Independence Day holiday
Wednesday, July 18	First term ends
Thursday, July 19	Classes begin — second term
Friday, August 17	Summer Session closes
Friday, August 17	Commencement

FALL SEMESTER 1979

Friday, September 7 to	
Monday, September 10	Orientation and registration
Tuesday, September 11	Classes begin, 8:00 a.m.
Friday, October 26	Mid-semester break
Wednesday, November 21	Thanksgiving recess begins, 12:50 p.m.
Monday, November 26	Thanksgiving recess ends, 8:00 a.m.
Friday, December 14	Classes end, 6:00 p.m.
Monday, December 17 to	
Friday, December 21	Final examinations
Friday, December 21	Semester ends after last exam

INTERIM 1980

Monday, January 7	Begins
Friday, February 1	Ends

SPRING SEMESTER 1980

Tuesday, February 5	Registration
Wednesday, February 6	Classes begin, 8:00 a.m.
Monday, February 18	Washington's Birthday holiday
Friday, March 28	Easter recess begins, 6:00 p.m.
Monday, April 7	Easter recess ends, 4:00 p.m.
Friday, May 16	Classes end, 6:00 p.m.
Monday, May 19 to	
Friday, May 23	Final examinations
Friday, May 23	Semester ends after last exam
Sunday, May 25	Worship service and commencement

Academic Calendar



Objectives of the University

Pacific Lutheran University, born of the Reformation spirit, maintains the privilege of exploration and learning in all areas of the arts, sciences, and religion. The basic concern of Martin Luther was religious, but his rejection of church tradition as primary authority, and his own free search for religious truth, served in effect to liberate the modern mind in its quest for all truth. The total impact of Luther's stand has permanently shaped the modern world and helped provide the modern university with its basic methodology.

Pacific Lutheran University is a community of professing Christian scholars dedicated to a philosophy of liberal education. The major goals of the institution are to inculcate a respect for learning and truth, to free the mind from the confinements of ignorance and prejudice, to organize the powers of clear thought and expression, to preserve and extend knowledge, to help men and women achieve professional competence, and to establish lifelong habits of study, reflection, and learning. Through an emphasis on the liberating arts, the University seeks to develop creative, reflective, and responsible persons. At the same time, the acquisition of specialized information and technical skill is recognized as a condition of successful involvement in the modern world. The University seeks to develop the evaluative and spiritual capacities of the students and to acquaint them honestly with rival claims to the true and the good. It encourages the pursuit of rich and ennobling experiences and the development of significant personhood through an appreciation of humanity's intellectual, artistic, cultural, and natural surroundings. The University affirms its fundamental obligation to confront liberally educated men and women with the challenges of Christian faith and to instill in them a true sense of vocation.

By providing a rich variety of social experiences, Pacific Lutheran University seeks to develop in the student a joy in abundant living, a feeling for the welfare and personal integrity of others, good taste, and a sense of social propriety and adequacy. Distinguishingly between personal Christian ethics and normal social controls, the University adopts only such rules as seem necessary for the welfare of the educational community.

The physical development of students is regarded as an integral part of their liberal education. Hence the University encourages participation in physical activities and respect for health and fitness.

Professing a concern for human nature in its entirety, the faculty of the University encourages wholesome development of Christian faith and life by providing opportunities for worship and meditation, offering systematic studies of religion and encouraging free investigation and discussion of basic religious questions. The University believes the essence of Christianity to be personal faith in God as Creator and Redeemer, and it believes that such faith born of the Holy Spirit generates integrative power capable of guiding human beings to illuminating perspectives and worthy purposes. The University community confesses the faith that the ultimate meaning and purposes of human life are to be discovered in the person and work of Jesus Christ.

As an educational arm of the Church, Pacific Lutheran University provides a locus for the fruitful interplay of Christian faith and all of human learning and culture, and as such holds it a responsibility to discover, explore, and develop new frontiers. Believing that all truth is God's truth, the University, in achieving its educational and spiritual goals, maintains the right and indeed the obligation of faculty and students to engage in an unbiased search for truth in all realms.

HISTORY

Pacific Lutheran University was founded in 1890 by men and women of the Lutheran Church in the Northwest, and by the Reverend Bjug Harstad in particular. Their purpose was to establish an institution in which their people could be educated. Education was a venerated part of the Scandinavian and German traditions from which these pioneers came.

The institution opened as Pacific Lutheran Academy. Growing in stature, PLA became a junior college in 1921. Ten years later, it was organized into a three-year normal school which became a college of education in 1939.

After 1941, it expanded as Pacific Lutheran College until it was reorganized as a university in 1960, reflecting the growth of both its professional schools and liberal arts core.

ACCREDITATION

Pacific Lutheran University is fully accredited by the Northwest Association of Schools and Colleges as a four-year institution of higher education and by the National Council for the Accreditation of Teacher Education for the preparation of elementary and secondary teachers, principals and guidance counselors with the master's degree as the highest degree approved. The university is also approved by the American Chemical Society. The School of Nursing is accredited by the National League for Nursing. The School of Business Administration is accredited by the American Assembly of Collegiate Schools of Business. The Social Welfare Program is accredited by the Council on Social Work Education at the baccalaureate level.

INSTITUTIONAL MEMBERSHIPS

The University is a member of:
American Association of Higher Education
American Council on Education
Association of American Colleges
Independent Colleges of Washington, Incorporated
Lutheran Educational Conference of North America
National Association of Summer Schools
Washington Friends of Higher Education
Western Association of Graduate Schools
Western Interstate Commission for Higher Education

GROUNDS

Located in suburban Parkland, PLU has a picturesque 126-acre campus, truly representative of the natural grandeur of the Pacific Northwest.

ENROLLMENT

2,568 full-time students
660 part-time students

FACULTY

198 full-time faculty
48 part-time faculty

STUDENT/FACULTY RATIO

13:1

ACADEMIC PROGRAM

In 1969, Pacific Lutheran University adopted the 4-1-4 calendar which consists of two fourteen-week semesters bridged by a four-week interim period.

Course credit is computed by hours. The majority of courses are offered for 4 hours. Each undergraduate degree candidate is expected to complete 128 hours with an overall grade point average of 2.00.

Degree requirements are specifically stated in this catalog. Each student should become familiar with these requirements and prepare to meet them.

INTERIM

The interim provides time during the month of January for focused, creative study in a non-traditional environment. It allows both faculty and students to inquire into areas outside the regular curriculum, to develop new methods of teaching and learning, and to enhance their imaginative and creative talents. The study options are various, including foreign study, interdepartmental study, numerous other on-campus programs, and exchange programs with other institutions. Special publications highlight the interim program.

LATE AFTERNOON AND EVENING CLASSES

To provide for the professional growth and cultural enrichment of persons unable to take a full-time college course, the university conducts late-afternoon and evening classes. In addition to a wide variety of offerings in the arts and sciences, there are specialized and graduate courses for teachers, administrators and persons in business and industry. A special bulletin is printed each semester outlining the offerings and is available from the registrar of the university.

SUMMER SESSION

An extensive summer school curriculum, of the same quality as that offered during the regular academic year, is available to all qualified persons. In addition, summer session typically is a time when the faculty offers innovative, experimental courses which cover a broad range of contemporary issues and perspectives in many fields. The summer session consists of two four and one-half week terms and begins in the middle of June. Designed for undergraduates and graduate students alike, the program serves teachers and administrators seeking credentials and special courses, freshmen desiring to initiate college study, and others desiring special studies offered by the schools and departments. Transient students who enroll for the summer session need only submit a letter of academic standing or give other evidence of being prepared for college study.

A complete *Summer Session Catalog*, outlining the curriculum as well as special institutes, workshops and seminars, is printed each spring and is available from the Dean of the Summer Session at the university.

Student Life

The quality of life cultivated and fostered within the university is an essential component of the academic community. The environment produced is conducive to a life of vigorous and creative scholarship. It also recognizes that liberal education is for the total person and that a complementary relationship exists between students' intellectual development and the satisfaction of their other individual needs. Interaction with persons of differing life styles, application of classroom knowledge to personal goals and aspirations, and non-academic experiences are all invaluable and vital components of education at PLU. In a time when there is a need for meaningful community, the residential campus facilitates genuine relationships among members of the university, from diverse religious, racial, and cultural backgrounds. All of the services and facilities provided are intended to complement the academic program. At PLU, students have assumed increasing responsibility for their personal and social behavior. The Student Life Office is intended to facilitate the development of the student in whatever direction he or she may wish to go. The services provided reflect changing student needs, and the opportunities for student participation include virtually all aspects of the university. The Vice President for Student Life and staff are responsible for organizing and programming residence halls, orienting new students, assisting foreign students, acting as liaison to the Associated Students of PLU (student government), and coordinating other student activities. Individual attention is given to every student concern including a variety of specific services outlined below.

RESIDENTIAL LIFE

Residential living is an integral part of the educational process at PLU and the residence halls were constructed with that in mind. University policy reflects the commitment to the residential concept. All students not living at home with parents, guardian, or spouse are required to live in a residence hall until achieving senior status or the age of 22 years.

As a residential campus, Pacific Lutheran University offers students a valuable experience in group living. The university recognizes the importance of non-classroom activities in providing an education for the whole person. The aim of residential living is to help students grow as human beings.

Campus residence halls are small. They are organized into communities in which each individual counts as a person. New knowledge shared with friends in the residence halls takes on a very personal meaning. Men and women of many backgrounds and cultures live on campus; therefore, students in residence have a unique opportunity to broaden their cultural horizons.

The university cares about the quality of life on campus. The attractive and comfortable residence halls enrich the quality of life and enhance the learning process. The university offers students high-quality housing opportunities including student leadership experiences, formal and informal programs, and peer associations. The student governing bodies are strong and actively participate in improving the program.

A selection of modern, attractive halls, each with its own traditions and unique advantages, offer students the opportunity to establish a comfortable living pattern. All halls include informal lounges, study rooms, recreation areas, and common kitchen and laundry facilities.

Most of the halls are co-educational. Although they are housed in separate wings, men and women in co-ed halls share lounge and recreation facilities, and common residence government, and participate jointly in all hall activities. All-men's and all-women's halls are reserved for those who desire this type of living experience.

Further information regarding residence halls can be obtained from the Residential Life Office.

In addition to housing for single students, the university maintains 26 apartments on campus for married students. Two- and three-bedroom units are available. Application for these apartments can be made through the Office of General Services.

RESPONSIBILITIES OF COMMUNITY LIFE

In the close living situation in the residence halls as well as in the campus community at large, certain regulations are necessary and the university admits students with the understanding that they will comply with them. All students are expected to respect the rights and integrity of others. Conduct which is detrimental to students, their colleagues, or the university, or such conduct which violates civil law may be grounds for dismissal from the university. Specific regulations and guidelines are outlined in the *Student Handbook*, which is available at the Student Life Office and is issued to accepted students preceding their freshman year.

RELIGIOUS LIFE

Pacific Lutheran University by its very nature is a place for the interaction between studies and the Christian faith. Opportunities for the mutual celebration of that faith on campus are rich and diverse.

Chapel worship is held Monday, Wednesday, and Friday mornings during the semester for all who wish to participate. The University Congregation meets in regular worship and also celebrates the Lord's Supper each Sunday. Pastoral services of the University Pastors are available to all students who desire them.

Several denominations and religious groups have interest organizations on campus, and there are numerous student-initiated Bible Study and fellowship groups. The Campus Ministry Council, an elected student and faculty committee, coordinates these activities in a spirit of openness and mutual respect.

ACTIVITIES

The PLU *Student Handbook* enumerates over 50 academic and non-academic organizations, clubs, societies, and interest groups, which testifies to the diversity of campus extra-curricular life. Social action, religious, and political organizations; interest and sporting clubs; and service, professional, and academic societies are among the options from which to choose.

The arts are flourishing at Pacific Lutheran University. The Choir of the West, Concert Band, the University Symphony Orchestra, a jazz ensemble, a renowned collegiate stage, two art galleries, and the Liturgical Dance ensemble provide generous opportunities for the performing student. Personal expression is emphasized in debate, student government, campus radio KPLU-FM, the university yearbook, and the weekly student newspaper.

Organized and individual physical activities are for everyone. Recreational and competitive programs include football, cross country, basketball, swimming, hiking, climbing, volleyball, tennis, golf, wrestling, paddleball, bowling, squash, handball, ping pong, baseball, softball, badminton, field hockey, track and field, water polo, skiing, and rowing. Athletics emphasize development of the individual rather than the search for athletic glory, yet the university is proud of its varsity championships in many sports.

STUDENT SERVICES

***The Student Health Center** retains the services of a full-time Medex and part-time Nurse Practitioner with a backup physician and nurses for basic medical care or referral. All students are entitled to the services of the Center.

***Health and Accident Insurance** is offered by the university on a voluntary basis. The group Accident and Sickness Medical Expense Plan provides coverage 24 hours a day, 12 months a year, anywhere in the world. This plan is available at fall, interim, or spring registration only. A brochure outlining the program is available from the Student Life Office. All foreign students *must* take out the school insurance.

***The Counseling and Testing Center** assists students in coping with normal developmental problems. Trained and experienced counselors, including a staff psychiatrist, offer group and individual counseling. A variety of psychological tests and interest inventories are available to assist students with career planning, educational adjustment and personal problems.

*Details available in the *Student Handbook*.

The Academic Advising and Assistance Center provides a centralized source of advising information for students, as well as a means by which they may further develop academic skills and receive immediate, practical help with short-term academic problems.

In the Center, information is readily available to students on all PLU academic programs, policies, and procedures. During working hours and weekday evenings, trained peer advisers are available to assist students.

The AAAC offers a two-credit study skills/reading class and a variety of non-credit minicourses in basic academic skills: reading, time management, note-making, term papers, exam preparation, grammar and usage review.

The AAAC also provides individualized help with term papers and study problems, academic counseling, and private tutorials for many PLU courses.

The Center is located on the second floor of Mortvedt Library. It is open Monday through Friday 9 a.m. to 5 p.m. and Monday through Thursday evenings from 7 to 10. Generally, AAAC services are without charge to PLU students.

The Minority Affairs Office coordinates a special program which seeks to continually provide for the academic and social needs of minority students. Supportive services include admissions assistance, scholarship and financial aid assistance, counseling, book fund, and convocation programs.

The Foreign Student Office is located in the Student Life Office to provide for the various needs of foreign students. Support services include orientation to the U.S. and PLU, the Host Family Program, a liaison with Immigration, counseling, and advising the International Student Organization.

The Career Planning and Placement Office seeks to fulfill the PLU commitment to a developing program of career and life planning. Students are assisted during their education in making meaningful and realistic decisions about their life and work after graduation through conferences with professional staff, workshops and seminars, classroom and dorm presentations, and materials housed in the Careers Resource Center.

The Career Planning and Placement Office coordinates all student part-time employment (including College Work-Study and off-campus Work Study jobs), lists part-time and full-time employment opportunities, both on and off campus. The office also lists summer jobs, local and nation-wide. The office staff assists students and alumni in developing job search techniques (also faculty and staff by special arrangement). The office coordinates an on-campus interviewing schedule of recruiters from industry, business, government, and graduate schools.

Food Service, owned and operated by Pacific Lutheran University, is available to all students, faculty, staff and their guests. Students living on campus are required to take their meals in one of two cafeterias. No deductions are made for students eating fewer than three meals per day unless a conflict exists due to work. In case of a conflict, a student must obtain approval for a deduction at the Food Service Office in the University Center.

Students with special diets, approved in writing from a doctor, can in most cases be accommodated by contacting the dietitian. This service is provided at no extra cost.

Students living off-campus are encouraged to select one of the two meal plans offered. One plan provides 20 meals per week, 3 meals per day Monday through Saturday and 2 meals on Sunday. The other plan provides lunch only Monday through Friday. Students may sign up for either plan at the Food Service Office.

The Food Service operates two coffee shops. One is located on lower campus in Columbia Center and the other is located in the University Center. A discounted meal card is available at the Business Office and is designed to be used in either coffee shop by students.

Visitors may eat in any of the facilities.

Only the coffee shop in Columbia Center is open during vacation periods.

Scheduling Services are maintained in the University Center. All university activities must be scheduled through this office. Scheduling student activities is a joint responsibility of the University Center Director and the University Scheduling Committee.

Student Government is an integral part of student activities at PLU. The associated students elect a senate to govern their affairs and oversee an extensive committee program that involves hundreds of students in actively planning programs and representing student opinion on various university boards and committees.

PLU Bookstore is owned and operated by Pacific Lutheran University for the benefit of students, faculty, staff, and their guests. The bookstore sells the textbooks and supplies that are required or suggested by faculty members for their courses. Additional reading matter, supplies, gift items, greeting cards, clothing, film processing, toiletries, and other convenient items are also available.

THE UNIVERSITY CENTER

The University Center is headquarters for many of the campus activities and is the place where students and faculty gather to eat, enjoy the recreational facilities, and exchange ideas. The building itself has an interior design which features red and orange accenting the browns of Northwest timber and is a beautiful as well as functional facility.

PROGRAM FOR COMMUTING STUDENTS

Every effort is made to assure commuting students enjoy the same well-rounded university experience as those in residence. First-year students who will be at home are invited to participate in a special program which deals with enriching college for them. Of course, off-campus students are invited and encouraged to participate in the varied and frequent activities programs planned for all students.

ENVIRONS

The university's geographical setting affords the student a wide variety of both recreational and cultural entertainment options.

Recreationally, the grandeur of the Pacific Northwest country encourages participation in hiking, camping, climbing, skiing, boating and swimming.

The most conspicuous natural monument in the area is Mt. Rainier. In addition to Rainier, the distinctive realms of the Cascade and Olympic mountain ranges, and forests of Douglas Fir complete one of the most naturally tranquil environments in the United States.

Students can also enjoy the aesthetic offerings of nearby Seattle and Tacoma. These city centers host a variety of performing and recording artists, dozens of galleries and museums as well as unique shopping and dining experiences.



Admission

Applicants for admission are evaluated without regard to sex, race, creed, color, age, national origin, or handicapped condition. Although there are no arbitrary entrance requirements, admission is selective. Applicants who present academic and personal traits which our experience indicates will enable them to succeed at the university and benefit from its environment will be offered admission. The criteria considered include grade point average (2.5 or above), class rank (top half), transcript pattern, test scores, and recommendations.

It is strongly recommended, but not required, that applicants complete a program in high school which includes: English, 3-4 years; mathematics, 2 years (preferably algebra and geometry); social sciences, 2 years; one foreign language, 2 years; one laboratory science, 1 year; electives, 3 years selected from above areas but also such courses as speech, debate, typing. Those who follow this preparatory program will find most curricular offerings of the university available to them.

Students are admitted to either the fall or spring semester. Acceptance to the fall term carries permission to attend the previous summer sessions. Spring acceptance approves enrollment in the January Interim. We suggest the following application deadlines: *Fall Semester — June 1; Spring Semester — January 1.*

APPLICATION PROCEDURE:

ENTERING FRESHMEN

Students planning to enter as freshmen may submit application materials anytime after completion of the junior year of high school. Admission decisions are made beginning December 1 unless a request for Early Decision is received. Candidates are notified of their status as soon as their completed application has been received and evaluated. Credentials required are:

1. *Formal Application:* Submit the *Uniform Undergraduate Application for Admission to Four-Year Colleges and Universities in the State of Washington*. Available from high school counselors or the PLU Admissions Office.
2. *\$15.00 Application/Records Fee:* A \$15 fee must accompany your application or be mailed separately. This non-refundable service fee does not apply to your account. Make checks or money orders payable to Pacific Lutheran University and mail to the PLU Admissions Office.
3. *Transcript:* The transcript you submit must include all credits completed through your junior year of high school. If admission is offered, an acceptable final transcript which indicates satisfactory completion of the senior year and attainment of a diploma must also be presented.
4. *Recommendations:* Two recommendations must be prepared by principals, counselors, pastors, or other qualified persons. The PLU Admissions Office will supply the forms.
5. *Test Requirement:* All entering freshmen must submit scores from either the College Entrance Examination Board, Scholastic Aptitude Test (SAT) or the American College Test Assessment (ACT) or, for Washington State residents, the Washington Pre-College Test (WPCT). Registration procedures and forms are available at high school counseling offices.

EARLY DECISION

High school students who have decided upon PLU as their first choice may be offered admission as early as October 1 of their senior year. Early Decision applications must be made by *November 15* of the senior year. SAT, ACT or WPCT scores from the previous May or July are acceptable. Early Decision students are given preferential treatment in campus housing and financial aid. An Early Decision form is available from the Admissions Office. If an Early Decision is unfavorable, a student may still be considered for regular admission.

EARLY ADMISSION

Qualified students interested in accelerating their formal education may begin work toward a degree after completion of the junior year or first semester of the senior year of high school. Exceptional students who wish to enroll before completing all required units in high school must have a letter submitted by a recognized school official which approves early college admission and gives assurance that a high school diploma will be issued after completion of specified college work. Only students highly recommended for Early Admission will be considered. Generally these students rank among the top students in their class and present high aptitude test scores.

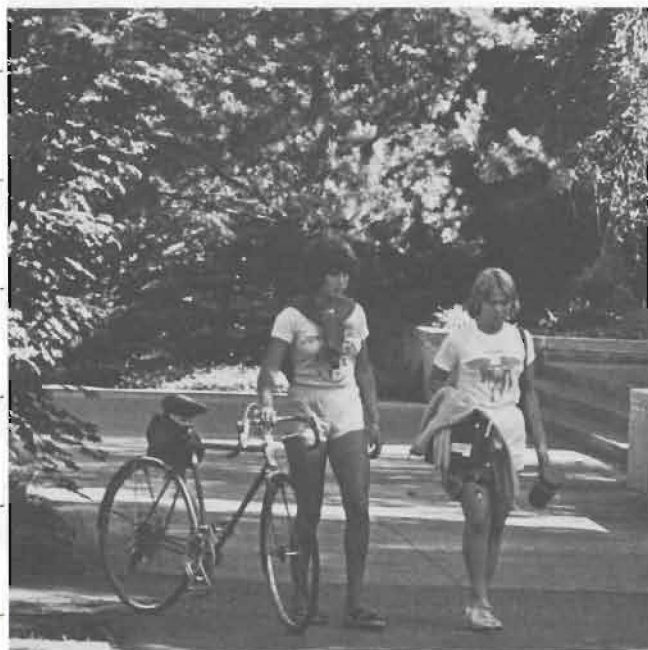


HONORS AT ENTRANCE

PLU confers Honors at Entrance to the most highly qualified freshmen who are offered admission. Certificates are mailed in early May to high schools for presentation to recipients at an honors convocation or an assembly or during their graduation ceremony itself. The granting of Honors at Entrance recognizes outstanding high school achievement and anticipates superior performance at the university level. These awards have no monetary value. (See Honor Programs, page 26.)

ADVANCED PLACEMENT OPPORTUNITIES

1. *CEEB Examinations:* Students interested in seeking advanced placement or credit toward graduation through the examination program of the College Entrance Examination Board should direct inquiries for specific information to the department or school which offers the academic subject of their choice. General inquiries about the CEEB program may be addressed to the Office of Admissions.
2. *Departmental Examinations:* A number of departments and schools offer placement examinations in order that students may be advised as to the level at which they may most advantageously pursue a given subject. Credit toward graduation may be given in certain cases, depending on the examination score and whether the subject matter was *not* part of the course work by which the high school diploma was earned. Again, inquiries for specific information should be directed to the department or school offering the particular subject.



APPLICATION PROCEDURE:

TRANSFER STUDENTS

Students who began their higher education at other accredited colleges or universities are welcome to apply for admission with advanced standing. Candidates must have good academic and personal standing at the institution last attended full-time. Although it does not guarantee admission, a C+ grade point average (2.25) in all college work attempted is required for regular admission. Test scores *may* be required for applicants who have limited college experience. Credentials required are:

1. *Formal Application:* Submit a Uniform Undergraduate Application with \$15.00 non-refundable application/records fee.
2. *Transcripts:* Official transcripts from all previous collegiate institutions attended must be sent by those institutions directly to the PLU Admissions Office. Official high school transcripts of credits are necessary if they are not listed on college transcripts.
3. *Clearance Form:* The Office of the Dean of Students at your most recently attended (full-time) institution must complete a clearance form (provided by the PLU Admissions Office).
4. *Recommendations:* Two recommendations must be prepared by instructors, counselors, pastors, or other qualified persons. The PLU Admissions Office provides the forms.

EVALUATION OF CREDITS

1. The Registrar evaluates all transfer records and creates an advising booklet (Gold Book) indicating completion of any core requirements and total hours accepted. Individual schools and departments determine which courses satisfy major requirements.
2. Generally, college-level courses carrying grade "C" or above apply toward graduation. "D" graded courses will be withheld until a student has successfully completed one semester's work at the university.
3. A community college student may transfer a maximum of 64 semester (96 quarter) hours of credit from the two-year institution.
4. To qualify as a degree candidate, a student must take the final 28 semester hours in residence.



UNACCREDITED EDUCATIONAL EXPERIENCES:

1. Credits earned in unaccredited schools are not transferable at the time of admission. Evaluation and decision on such courses will be made after the student has been in attendance at the university one semester.
2. The university allows up to 20 semester hours of USAFI credit and up to 20 semester hours for military credit, providing the total of the two does not exceed 30 semester hours.
3. The university does not grant credit for college level GED tests.
4. For information on the College Level Examination Program (CLEP), refer to the section on *Credit by Examination* (page 26).

PROCEDURES: FORMER STUDENTS

Full-time students who have not been in attendance for one semester or more may seek readmission by obtaining an application for re-entrance from the Admissions Office unless they have been approved, at the time of last enrollment, for a Leave of Absence. Students who have been dropped for academic or disciplinary reasons must identify a faculty member willing to act as a sponsor and adviser if re-admitted. Re-entering students who have attended another college in the meantime must request that a transcript be sent from that institution directly to the Director of Admissions.

PROCEDURES: FOREIGN STUDENTS

Foreign students who are qualified academically and financially are encouraged to join the university community. Information and application procedures may be obtained from the Director of Admissions or Foreign Student Adviser.



FINALIZING AN OFFER OF ADMISSION:

1. *Medical Requirement:* Before final matriculation, each new full-time undergraduate student (ten semester hours or more) must submit a Medical History and Consent Form acceptable to the PLU Health Service. Students are not finally admitted until this form is approved.
2. *Advance Payment:* A \$75.00 Advance Payment is necessary following an offer of admission. This payment is the student's acknowledgement of acceptance and both guarantees a place in the student body and reserves housing on campus if requested. It is credited to the student's account and is applied toward expenses of the first semester. *Fall applicants offered admission before May 1 must submit the payment by May 1.* If circumstances necessitate cancellation of enrollment and the Director of Admissions is notified in writing before May 1, the \$75.00 will be refunded. The refund date for Interim is December 15, and for spring semester, January 15.
3. *Two Forms:* A Student Personnel Form and a Directory Information/Housing Application Form must be completed by *all* students and returned *with* the advance payment.





Financial Aid

Recognizing that many students who want to attend Pacific Lutheran University would be unable to meet all expenses of enrollment from personal or family sources, the university attempts to provide financial assistance to all eligible students. Any student approved for enrollment or currently enrolled may request financial aid. Approximately half of the university's students receive help in the form of gift assistance (that is, scholarships, talent awards, or grants), low interest deferred loans, or employment. In many cases a financial aid award will be a combination of these forms of assistance.

The quantity and composition of an award is based upon demonstrated financial need, academic achievement, test scores, and other personal talents and interests. Need is determined from analysis of the Financial Aid Form (FAF), which is a statement of financial condition provided by the College Scholarship Service (CSS). Analysis of the Financial Aid Form determines an expected contribution for college expenses from the student and parents or guardian. "Financial Need" is defined as the difference between total student expenses for an academic year and the expected student/family contribution and is a primary factor in determining eligibility for most available aid.

Financial assistance is available to all qualified students regardless of their sex, race, creed, color, age, national origin, or handicapped condition.

APPLICATION PROCEDURE:

FRESHMEN AND TRANSFERS

1. **DEADLINE:** All materials must be in the Financial Aid Office by March 1.
2. Mail a Financial Aid Form (FAF) to the College Scholarship Service by February 1.
3. Be offered admission by March 1.
4. Submit a white PLU Application (transfers only).
5. Submit a Financial Aid Transcript (transfers only).

CONTINUING STUDENTS

1. **DEADLINE:** All materials must be in the Financial Aid Office by April 1.
2. Mail a Financial Aid Form (FAF) to the College Scholarship Service (CSS) by March 1.
3. Complete a white PLU Application.

Application for financial aid is encouraged at all times, but failure to meet the preceding application dates may result in a denial of aid even though need is demonstrated. The Financial Aid Office will consider all applicants for any award for which they might be eligible. Aid awards are for one year and most are renewable, provided re-application is completed on time, financial need continues, and satisfactory academic progress is maintained. Aid is not automatically renewed each year.

NOTIFICATION OF AWARD DECISIONS

1. Award decisions for freshmen and transfer students who meet the March 1 completion date will be made in March, and actual notification will be mailed April 1.
2. Early decision students who request financial assistance will be sent award decisions if their processed FAF is received from the CSS between January 15 and February 24. Financial aid decisions for continuing PLU students are made in April and notifications are sent out beginning in May.

VALIDATING THE AID OFFER

Aid offers must be validated by returning the signed Financial Aid Award Notice and submitting the \$75 Advance Payment required by the university. This should be done as soon as possible but must be completed by May 1. Applicants not returning their acceptance of an award by the reply date specified will have their awards cancelled. If an applicant later decides to reapply, the application will be reviewed with the group currently being processed.

Aid, with the exception of College Work-Study, is credited to the student's account when all paperwork has been completed. One-half of the award is disbursed each semester. Parents and students are responsible for the charges in excess of the award.

In some cases aid is awarded in excess of direct university charges to help with living expenses. This money will remain on the student's account unless requested by the student through the Business Office after classes have begun.

Under federal regulations, adjustments to an award package must be made if a student receives additional awards of aid from sources external to the university. In every case, however, the Financial Aid Office will attempt to allow the student to keep as much of the award package as possible. By treating aid received from external sources in this way, additional awards from the university's resources can be made to other qualified needy students.

RIGHTS AND RESPONSIBILITIES

The basic responsibility for financing an education at PLU rests with students and their families. In addition to expected contributions from parents or guardians, students are expected to assist by contributing from their savings and summer earnings. Financial assistance from the university is therefore supplementary to the efforts of a student's family. It is provided for students who demonstrate need.

Additional rights and responsibilities of financial aid recipients include:

1. Signing and returning *each* financial aid notice received.
2. Declining at any time any portion of an award.
3. Notifying the Financial Aid Office in case of a change in credit hours attempted; a change in residence (off-campus or at home); or receipt of additional outside scholarships.
4. Signing additional documents in the Financial Aid Office at the beginning of each semester.

ACADEMIC REQUIREMENTS/SATISFACTORY PROGRESS

The policy of the Financial Aid Office is to allow students to continue receiving financial assistance as long as they are in good standing at the university. To do otherwise would cause a severe hardship on students who must devote their efforts to achieving satisfactory grades. However, no institutional grants will be awarded to students with cumulative grade point averages below 2.00.

To be given priority for most types of financial aid, an applicant must be enrolled as a full-time student. For federal financial aid programs, a full-time student is defined as any person enrolled for a minimum of twelve credit hours or more per semester. Most financial aid at PLU is based on an average of 32 credit hours for the academic year. This includes the possibility of four hours during the Interim. Adjustments in an award may be made during the year if an aid recipient has not enrolled for the number of credit hours shown on the front of the award notice. In every case, full-time students will be given priority for financial aid.

TYPES OF AID

UNIVERSITY GIFT ASSISTANCE

UNIVERSITY SCHOLARSHIPS are granted on the basis of academic achievement and financial need. To be considered, a *freshman* applicant must have a 3.30 secondary school grade point average. Scholastic ability must also be reflected in test scores from the Scholastic Aptitude Test (SAT), or the American College Test (ACT), or the Washington Pre-College Test (WPCT). *Transfer* and *continuing* students must have a 3.0 cumulative grade point average to be qualified for first-time or renewal awards. PLU is a sponsor of *National Merit Scholarships*. Students who earn semifinalist standing are encouraged to contact the Financial Aid Office for information concerning a PLU Merit Scholarship.

PRESIDENT'S SCHOLARSHIPS of \$600 are awarded to entering freshmen in recognition of *outstanding* academic achievement in high school and in anticipation of superior performance at PLU. To be a candidate, a student must have a high school g.p.a. of 3.75 or higher, present high test scores, and be offered admission by March 1. *Financial need is not a determining factor* and no application is required. Only a limited number of students who meet the above requirements are selected. The awards, made in March, are renewable if a 3.3 grade point average is maintained.

ALUMNI MERIT SCHOLARSHIPS of \$1,000 are available to exceptional students. Preference will be given to sons and daughters of PLU alumni. To be eligible entering freshmen must have a cumulative high school g.p.a. of 3.5 or higher. Non-freshmen and renewal applicants must have a minimum collegiate g.p.a. of 3.3 to be eligible. Financial need is not a determining factor and a special application is required. Merit scholarship applicants must be offered admission to the university and must submit applications by March 1 of the year preceding their enrollment.

FACULTY MERIT SCHOLARSHIPS (24 scholarships) are available to those students who have completed a minimum of 45 semester hours at PLU. The \$500 scholarship is not based on need. A recipient cannot be receiving any other merit awards of \$500 or more. A faculty committee will evaluate recipients on the basis of their scholastic achievement, specific talents, and unusual service to the community or the university.

AIR FORCE ROTC SCHOLARSHIP recipients (4-year, 3-year, or 2-year) may attend Pacific Lutheran University. AFROTC classes are held at the Aerospace Studies Department on the University of Puget Sound campus, about 20 minutes driving time from the PLU campus.

TALENT AWARDS are granted to students with financial need who have exceptional ability in the fields of forensics, drama, art, music, or athletics. The candidate must make arrangements with the school or department concerned for an audition and/or a personal interview. In some cases a tape or film will be satisfactory. A recommendation from a faculty member must be on file before a student is considered for a Talent Award.

UNIVERSITY GRANTS are awarded in combination with loans and employment to students with financial need who do not qualify for scholarship assistance. *Minority Grants* are available for qualified minority students in addition to all other types of financial aid described. *Foreign Student Grants* are restricted to those foreign students who have provided their own resources for at least one year of attendance. Grants usually amount to less than one-third of the cost of attendance.

MINISTER'S DEPENDENT GRANTS are available to unmarried, dependent children of a *regularly ordained, active* minister or missionary of a Christian church. The minister's principal employment and primary source of income must be a result of church work. The minimum annual grant is \$200 but this may be increased to \$700 if the eligible student has a demonstrated financial need as determined from the Financial Aid Form. If a FAF is submitted no special MDG application is required. June 1 is the deadline for requesting this grant. Requests received thereafter will be honored only as budgeted funds permit.

SPECIAL GRANTS may be given to dependents of PLU faculty and staff. Married children are not eligible. The amount will be determined at the time of registration. An application must be submitted to the Personnel Office.

ALUMNI DEPENDENT GRANTS of \$100 for spring semester are given to full-time students whose parent(s) attended PLU (PLC) for two semesters or more. To be eligible the alumni dependent must have been a full-time student the previous fall semester and complete an application in the Financial Aid Office by December 1.

GRANTS in the amount of \$50 per semester shall be given to each of two or more full-time students from the same family attending PLU simultaneously, provided that the main support for both is from parents and provided they have not received any other university grant or award. Married students are also eligible when both are full-time students. An application must be filed in the Financial Aid Office at registration or immediately thereafter. The grant will be credited after eligibility is established.

In addition to its own scholarship funds, the university has at its disposal the following restricted funds, generally awarded to those students who complete regular application and who have finished their freshman year:

Aid Association for Lutherans Scholarships
Altrusa Club, Tacoma Chapter Scholarship
Alumni Scholarship Fund
American Association of University Women Scholarship
American Lutheran Church — North Pacific District Scholarship
Florence Spinner Anderson Memorial Scholarship
Ada Kilan Annis Scholarship
Frank S. Baker Scholarship
Helen Clift Bell Scholarship
B.E.R.G. Minority Scholarship
Binder Memorial Scholarship
Jorunn Breiland Scholarship Fund
O.A. Brown Fund
Dr. and Mrs. W.B. Burns Fund
Burzlaff Memorial Scholarship
California Scholarship Federation — Scholarship for Sealbearers
Carl Falk Memorial Scholarship
Cheney Foundation Educational Scholarship
Chevron Merit Scholars
Chau-Liang Chow Scholarship
Comerco Scholarship
Ida A. Davis Fund
R. Parcher Ellingson Scholarship
Leif Erickson Scholarship
Faculty Memorial Scholarship Fund
Faith Lutheran Church of Portland Scholarship Fund
Helen Frost Scholarship
Rebecca Schoenfeld Gardner and Joseph Gardner Scholarship
Greater Puyallup Valley Chamber of Commerce Scholarship
Olaf Halvorsen Scholarship
W.H. Hardtke Seminary Student Scholarship Fund
Vic Hurley Student Nurse Scholarship Fund
Terry Irwin Scholarship

Rev. Karl Kilian Memorial Fund
 Kindsman Award
 Melvin Kleweno Memorial Scholarship
 Ladies of Kiwanis Award
 Colonel Erwin T. Koch Annual Award
 Drs. Larson, Wicks, Reberger and Elder Scholarship in Medical Technology
 Ludvig and Clara Larson Scholarship
 Mr. and Mrs. W. Hilding Lindberg Endowed Scholarship
 Lute Club Scholarship
 Lutheran Brotherhood Legal Reserve Life Insurance Co. Scholarship
 Icc Marchinek Memorial Scholarship Fund
 Mu Phi Epsilon, Tacoma Professional Chapter, Scholarship
 Fred O. Muenscher and Associates — Shakey's Pizza Parlors Scholarship
 Mr. and Mrs. Gus H. Nieman Memorial Scholarship
 Margaret Nistad Memorial Scholarship
 Selma and Magnus Nodtvedt Scholarship
 Roger Paetel Memorial Scholarship
 Blanche Pflaum Scholarship
 PLU Faculty Wives Scholarship
 Portland Area Alumni Scholarship
 Women of Rotary Scholarship
 Drs. Richard and Walter Schwindt Scholarship
 Siqueand Youth Scholarship (North Pacific District Luther League)
 Skinner Foundation Scholarship
 Smith Endowment Scholarship Fund
 Guy Stennerodden Memorial
 Rev. and Mrs. Halvor Thormodsgard Scholarship
 Evelyn S. Tørvend Scholarship
 Tuberculosis Association of Pierce County Scholarship
 Ellen Valle Memorial Scholarship
 Hopper Memorial
 Olsen Memorial
 Hedvig Arthur Memorial
 Donald A. Brunner Memorial
 Mark Salzman Memorial
 J.P. Carlstrom Scholarship
 Louis and Leona Lamp Scholarship
 Gordon Pearson Memorial
 Washington Congress of Parents, Teachers, and Students

GOVERNMENTAL GRANTS

THE BASIC EDUCATIONAL OPPORTUNITY GRANT PROGRAM (BEOG) is a federal program designed to provide the "foundation" for a financial aid package. It is intended for students with high financial need. When completing the Financial Aid Form (FAF) applicants should indicate that the information is to be used for determining their eligibility for the BEOG by checking the appropriate box. If the Student Eligibility Report (SER) you receive indicates eligibility, all three copies should be sent to the Financial Aid Office. Basic Grants are available in amounts up to \$1,600 per year.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (SEOG) are available to students who have exceptional financial need. Grants range from \$200 to \$1,500 per year and cannot exceed one-half the total amount of financial aid. The SEOG must be matched with at least an equivalent amount of other kinds of aid (grant, loan, or employment). Eligibility is determined by federal guidelines. Residents of the State of Washington who attend PLU may be eligible for a **WASHINGTON STATE NEED GRANT**. These grants are intended for students with high need. On the basis of guidelines established by the Council on Post-Secondary Education, students with specified need as computed from the Financial Aid Form are submitted to the State for consideration. Present procedure does not require a separate application.

NURSING GRANTS to a maximum of \$2,500 per year are available, dependent on federal funding. Awards usually average \$500 per academic year. Students are eligible if accepted by or enrolled in the School of Nursing (not pre-nursing programs). Financial need must be demonstrated.

LAW ENFORCEMENT EDUCATION PROGRAM (LEEP) — Grant and Loan — LEEP is a federal program for full-time in-service law enforcement personnel. No Financial Aid Form is required. Grants range up to \$400 per semester for tuition and books. Loans cover the cost of tuition and mandatory fees to a maximum of \$2,200 per year.

STUDENT EMPLOYMENT

There are employment opportunities on campus and in the community that can help students meet college expenses. Priority for placement is given to those students who have demonstrated financial need and have been awarded a work-study eligibility. Over 800 students work on campus each year. The university's annual student payroll exceeds \$500,000. The average on-campus job approximates ten hours per week, and produces around \$800 during an academic year.

All student placements for on-campus and off-campus jobs are handled by the Career Planning and Placement Office. Actual assignments for new students are made at the beginning of the school year and at other times as vacancies occur.

The federal College Work-Study Program offers off-campus employment with non-profit employers. To participate, students must be eligible for work-study.

The State Work-Study Program offers only off-campus work opportunities with profit-making and non-profit employers. Positions must be related to students' academic interests. To participate, students must be eligible for work-study.

LOANS

Many students invest in their future by borrowing educational funds. Low interest, deferred loans make it possible to pay some of the cost of education at a later time. Loans are often included with gift assistance and work to form a financial aid package.

There are three major sources of loans at PLU:

NATIONAL DIRECT STUDENT LOAN (NDSL) — Eligibility is determined by the PLU Financial Aid Office from the Financial Aid Form and is based on *need*. Most loans average \$800 annually, but cannot exceed \$2,500 for the first two years of school, nor an aggregate of \$5,000 for an undergraduate degree. No interest accrues and no payments on principal are necessary until nine months after a recipient ceases to be a student. Simple interest is on 3% during the repayment period. Up to 100% cancellation is available for teaching the handicapped or in certain low income areas. Repayment may be deferred because of further full-time study or service in the armed forces, VISTA, or the Peace Corps. Exit interviews are required by the Business Office upon leaving PLU or transcripts, grades, and diploma are withheld.

NURSING STUDENT LOAN (NSL) — A federal loan program limited to students with need who are accepted for enrollment or are enrolled in the School of Nursing (usually not before the sophomore year). The NSL has provisions similar to the NDSL. Up to \$2,500 is available, dependent on federal funding. Loans average \$500. Repayment begins one year after graduation. Partial or full cancellation is possible under certain conditions.

FEDERALLY INSURED STUDENT LOAN (FISL) — Under this program, students may borrow from banks, credit unions, and savings and loan associations. A separate application procedure is required and forms are available from the PLU Financial Aid Office. As much as \$2,500 can be borrowed each year but most lending institutions are limiting loans to \$1,500. Repayment of principal is deferred until nine months after a recipient ceases to be a student.

The interest rate is 7% but in cases where the family's adjusted income is less than \$25,000, interest is paid by the federal government while the recipient is attending school.

Short term loans are available from various restricted PLU loan funds which include:

Alumni Association Loan Fund
American Lutheran Church Women Loan Fund
Anton Anderson Loan Fund
John S. Baker Loan Fund
J.P. Carlstrom Memorial Loan Fund
Delta Kappa Gamma Student Loan Fund
Lily Ekern Fund
Marie Huth Loan Fund
Gerhard Kirkebo Memorial Loan Fund
Jeanette Olson - Diana Paul - Miriam Stoa Memorial Student Loan Fund
J.P. Pflueger Student Loan Fund
O.J. Stuen Alumni Loan Fund
O.A. Tingelstad Loan Fund
Women's Club of Tacoma Revolving Loan Fund
Verne Graham Loan Fund

VETERANS AFFAIRS AND VOCATIONAL REHABILITATION

Pacific Lutheran University is approved by the Superintendent of Public Instruction and the Veterans Administration to offer courses leading to a degree at the bachelor's and master's levels.

Students who are eligible for veterans' or vocational benefits should contact the PLU Veterans Affairs Office regarding registration information.



Costs

TUITION

Students at Pacific Lutheran University pay only for those courses in which they are enrolled. Tuition charges are determined by the number of credit hours for which students register. The 1978-79 rate for one semester hour is \$101.00. Most courses carry a value of four semester hours. A few specialized courses, i.e., Physical Education, Art, and Private Music Lessons may require extra costs which are listed with each semester's course offerings.

SPECIAL FEES (1978-79 RATES)

Late registration clearance	\$25.00
Audit per course	25% of tuition
Credit by examination: Departmental exam	25.00
Student parking:	
Year permit	
(when registered for 10 hours or more)	12.00
Year permit	
(when registered for less than 10 hours)	3.00
Student health and accident insurance (estimated	
fee; actual fee may be higher) (24 hours, 12 month	
coverage, optional)	85.00

ROOM AND BOARD (1978-79 RATES)

Room and board, per semester, is as follows:

	Room	Board
Fall Semester Room & Board:		
Double Occupancy Room	\$355.00	\$380.00
Single Occupancy Room	\$455.00**	\$380.00
Interim Room & Board:		
Continuing* Fall Semester		
Students,		
Double Occupancy	\$0	\$90.00
New Students,		
Double Occupancy	\$65.00	\$90.00
* (Continuing students must be taking classes or file a Plan of Action in order to remain on campus during Interim.)		
Spring Semester Room & Board:		
Double Occupancy Room	\$255.00	\$380.00
Single Occupancy Room	\$355.00	\$380.00

An appropriate fee will be assessed for rooms occupied during Christmas break and spring break.

**Only a very small number of single rooms are available. They are limited to students with medical/physical handicaps which necessitate a single room, and to upperclass students. Students new to PLU normally do not receive single-room assignments.

The above room and board rates include three meals per day, Monday through Saturday, and brunch and dinner on Sunday. Meals are not provided during Thanksgiving, Christmas and Easter vacations, nor any other day when the residence halls are closed. On-campus students are required to eat in the university dining halls.

Students living off-campus are encouraged to eat meals on campus. Two plans are offered; all meals, seven days, or lunch only Monday through Friday.

<i>Fall</i>	
Off-campus full	\$380.00
Off-campus lunch 5 days	\$144.00
<i>Interim</i>	
Off-campus full	\$90.00
Off-campus lunch 5 days	\$42.00
<i>Spring</i>	
Off-campus full	\$380.00
Off-campus lunch 5 days	\$144.00

MARRIED STUDENT HOUSING

Two-bedroom (10 units), per month	\$ 65.00
Three-bedroom (4 units), per month	80.00
Evergreen Court (12 units), two-bedroom,	
includes all utilities	\$115.00

A deposit of \$65.00 must accompany a reservation for married student housing. This deposit will be held by the university until the occupant vacates the apartment, or cancels the reservation. One month's rent for apartments is required.

PAYMENTS:

PAYMENT OPTIONS

1. Payment by Semester. If this option is selected, the total estimated costs of each semester must be paid prior to the beginning of classes.
2. The PLU Budget Plan provides for prepaying the estimated annual costs in twelve installments from May 10 through April 10.

NOTE: Enrollment is not complete until payment is made.

ADVANCE PAYMENTS

New students are required to make a \$75.00 Advance Payment in order to finalize their offer of admission. For fall acceptance this is not refundable after May 1 (December 15 for interim; January 15 for spring semester).

All returning students must make a \$75.00 Advance Payment prior to early class registration and/or reservation of a room for the next academic year. This Advance Payment is not refundable after May 1.

Students will not be permitted to finalize registration as long as any bill remains unpaid.

RESTRICTIONS

The university reserves the right to withhold statements of honorable dismissal, grade reports, transcript of records, or diplomas, until all university bills have been paid. Student pay checks may be applied to unpaid balances.

REFUNDS

Full tuition refund (less \$25.00 withdrawal fee) will be made when a student withdraws from the university before the end of the second week; no refunds are allowed after the second week.

A pro-rata board refund will be made for necessary withdrawal from the university. Board refunds will not be made for any university trips, such as choir, chorus, band, orchestra, athletics, and so forth. Refunds on room will not be made.

STUDENT



Academic Structure

COLLEGE OF ARTS AND SCIENCES

Division of Humanities

English
Modern and Classical Languages
Philosophy
Religion

Division of Natural Sciences

Biology
Chemistry
Earth Sciences
Mathematics
Physics and Engineering

Division of Social Sciences

Economics
History
Political Science
Psychology
Sociology, Anthropology, and Social Welfare

SCHOOL OF BUSINESS ADMINISTRATION

SCHOOL OF EDUCATION

SCHOOL OF FINE ARTS

Art
Communication Arts
Music

SCHOOL OF NURSING

SCHOOL OF PHYSICAL EDUCATION

DIVISION OF GRADUATE STUDIES

DEGREES OFFERED

Bachelors

Bachelor of Arts
Bachelor of Science
Bachelor of Business Administration
Bachelor of Arts in Education
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Science in Nursing

Masters

Master of Arts in Education
Master of Arts in Humanities
Master of Arts in Social Sciences
Master of Business Administration
Master of Music
Master of Public Administration

MAJORS AVAILABLE

BACHELOR OF ARTS (B.A.)

Anthropology
Art
Biology
Chemistry
Classics
Communication Arts
(Broadcast/Journalism, Communication, Drama)
Earth Sciences
Economics
English
French
German
History
Mathematics
Music
Norwegian
Philosophy
Physical Education
(Concentrations: Recreation, Therapeutics)
Physics
Political Science
Psychology
Religion
Scandinavian Area Studies
Social Welfare
Sociology
Spanish

BACHELOR OF SCIENCE (B.S.)

Biology
Chemistry
Earth Sciences (Geology Specialty)
Engineering Physics
Mathematics
Physics

BACHELOR OF ARTS IN EDUCATION (B.A.E.)

Concentrations in:

Art
Biology
Business Education
Chemistry
Communication Arts
Earth Sciences
Economics
English
French
General Science
German
History
Language Arts
Mathematics
Music
Physical Education
Physics
Political Science
Social Science
Sociology
Spanish
Special Education

BACHELOR OF BUSINESS ADMINISTRATION (B.B.A.)

Concentrations in:

- Accounting
- Finance
- Marketing
- Operations Management
- Personnel and Industrial Relations

BACHELOR OF FINE ARTS (B.F.A.)

- Art
- Communication Arts
(Broadcast/Journalism, Communication, Drama)

BACHELOR OF MUSIC (B.M.)

- Piano Performance
- Organ Performance
- Vocal Performance
- Instrumental Performance
- Theory and Composition

BACHELOR OF SCIENCE IN NURSING (B.S.N.)

- Nursing

MINORS AVAILABLE

- Anthropology
- Biology
- Business Administration
- Chemistry
- Classics (Greek and Latin)
- Communication Arts
 - Broadcast/Journalism
 - Communication Theory & Research
 - Theatre
 - Dance
- Earth Sciences
- Economics
- Education
 - Reading Endorsement
 - Learning Resource Specialist Endorsement
 - Special Education
- English
 - Literature Emphasis
 - Writing Emphasis
- French
- Foreign Area Studies
- German
- History
- Mathematics
 - Computer Science
 - Mathematics (General)
- Norwegian
- Philosophy
- Physical Education
 - Coaching
 - Dance
 - Health
- Physics
- Political Science
- Psychology
- Religion
- Sociology
- Spanish
- Statistics



Academic Procedures

REGISTRATION

The normal course load for full-time students is 13 to 17 hours per semester, including physical education. A normal student load during the Interim is four hours with a maximum of five hours. The minimum semester load for a full-time student is ten hours.

Only a student with a "B" (3.00) average or higher may register for more than 17 hours per semester without the consent of the provost. A student engaged in much outside work for self-support may be restricted to a reduced academic load.

In the spring semester, students who plan to return in the fall may preregister by making a \$75.00 advance payment. Students must register for each new semester on the designated days and are not officially enrolled until their registration has been cleared by the Business Office and their Place of Residence form has been processed.

EARLY REGISTRATION PROGRAM FOR FRESHMEN

Well in advance of arrival on campus for the first semester, all accepted freshmen are sent registration materials. Most students have the opportunity to work personally with an adviser as they plan their schedules. A limited number of students register by mail, and their course selections are verified by a counselor.

Early registration for new freshmen occurs during June or January, depending on whether students begin in the fall or spring semester. Early registration is coordinated by the Office of Admissions.

COURSE SELECTIONS FOR FRESHMEN

Students should be thoroughly acquainted with all registration materials, including the current catalog and special information sent by the Admissions Office. It is important also to study the requirements of all academic programs in which one may eventually declare a major.

First semester freshmen are advised to plan a class schedule that does not exceed 16 credit hours. A normal first semester schedule will include three courses of 4 credit hours each, plus one or two of the following: Physical Education activity course (1 credit hour), music ensemble (1 credit hour), or a choice from among several 2 credit hour courses. (NOTE: Unless otherwise stated in the catalog or class schedule, most courses are valued at 4 credit hours.)

In order to insure appropriate academic progress, freshmen should plan to take an Interim course in January; and to complete 30 semester hours during their first year. The following will illustrate several typical first-year credit hour loads:

	Fall	Interim	Spring	TOTAL
(1)	13	4	13	30
(2)	13	5	13	31
(3)	14	5	13	32
(4)	13	4	16	33

The number of credit hours taken may vary from year to year, usually within a range of 30 to 34. However, in order to complete the 128 hours required for graduation within four years, an average of 32 credit hours a year is necessary.

1. *PLU does not have particular courses which are required of all freshmen.* The "General University Requirements" (or core) must be completed before graduation. And the English writing requirement must be fulfilled before the senior year.
2. *All students are responsible for selecting their courses.* Counselors and faculty advisers are always available to assist with planning and to make suggestions.
3. *Students who are sure of their major should be careful to include those courses which insure completion of that major within four years.* Some departments or schools have prerequisite courses which must be taken before entering upon the major program itself.
4. *Students who are undecided about their major course of study should take the opportunity to explore options.* A good way to begin is to take some courses that meet the General University Requirements while selecting several others for exploration of special interests.

CHANGES IN REGISTRATION

Students may add or drop classes with full refund during the first two weeks of a term. Necessary forms are available at the Registrar's Office. During the first week there is a grace period when no drop/add fee is charged. After that a fee of \$5.00 is charged for any registration change that involves the dropping of a class.

Students may officially withdraw from a class after the first two weeks by obtaining the professor's signature on the change form. The grade of W will appear on a student's grade report and transcript.

Students may also completely withdraw for medical reasons. Written evidence from a physician must support a medical withdrawal. The grade of WM will appear on a student's grade report and transcript.

An unofficial withdrawal from a course will be recorded as E. No student may withdraw during final examination week.

WITHDRAWAL FROM THE TERM

Students wishing to withdraw from the term must obtain a withdrawal form from the Office of the Registrar. IT IS ALWAYS TO THE STUDENT'S ADVANTAGE TO WITHDRAW OFFICIALLY. Students withdrawing for a specified period of time (for example, one semester to one year) may obtain a Leave of Absence form. Students are entitled to honorable dismissal from the university if their record of conduct is satisfactory and if all financial obligations are satisfied.

THE GRADING SYSTEM

Students are graded according to the following designations:

A—4.0 grade points per hour, credit given

B—3.0 grade points per hour, credit given

C—2.0 grade points per hour, credit given

D—1.0 grade point per hour, credit given

E—0 grade points per hour, no credit given

The grades listed below are not used in calculating grade point average. No grade points are earned under these designations.

H—credit given (Honors) used only for courses unique to Interim

P—credit given (Passing)

F—no credit given (Failure)

I—no credit given (Incomplete)

IP—no credit given (In Progress; applicable only to certain courses whose work extends beyond a regular term)

AU—no credit given (Audit)

W—no credit given (Withdrawal)

WM—no credit given (Withdrawal/Medical)

Incomplete (I) grades indicate that students have been unable to complete their work because of circumstances beyond their control. To receive credit an Incomplete must be converted to a passing grade WITHIN THE FIRST SIX WEEKS OF THE FOLLOWING SEMESTER. Incomplete grades which are not converted by removal are changed to the grade indicated by the instructor when the Incomplete is submitted.

Medical Withdrawal (WM) is given when a course is not completed due to medical cause. The WM does not affect the grade point average.

In Progress (IP) signifies progress in a course which normally runs more than one semester to completion. In Progress carries no credit until replaced by a permanent grade.

Any course may be repeated by an undergraduate student. The higher of the two grades earned is used in computing the cumulative grade point average, but credit toward graduation is allowed only once.

PASS-FAIL OPTION FOR UNDERGRADUATE STUDENTS

The pass-fail option permits students to explore subject areas outside their known abilities and to add a broader range of courses without being forced to compete with majors who are specializing in those areas of study.

1. The pass-fail option is limited to a total of four courses (16 hours) and to no more than two courses (8 hours) per academic year.
2. Courses required for graduation in a degree program may not be taken under this option except when a first course has been taken prior to a declaration of a major.
3. Pass-fail grades do not alter the grade point average, but credits earned count toward graduation.
4. The pass-fail option agreement MUST be filed with the instructor NO LATER than eight weeks after the beginning of the semester.
5. Pass-fail students are responsible for all course work and examinations.
6. An entire course will not be converted to the pass-fail option by student vote.

EXCLUSIVE PASS-FAIL COURSES

Departments or schools may offer courses in which only pass-fail grades are given. These courses should pursue goals primarily concerned with appreciations, value commitments, creative achievements, or the like. Decisions to offer exclusive pass-fail courses are reported to the provost and this fact is made known to students before they register for these courses.

Exclusive pass-fail courses may not be used to meet major or university requirements unless they have been approved as such by the faculty. Taking exclusive pass-fail courses in no way affects the student's personal pass-fail option.

INTERIM GRADING SYSTEM

The instructor of a 300-320 Interim course will indicate in the catalog description which of two grading systems will be used:

1. Honors (H) — for exceptional work; Pass (P); no credit — the registration will not be recorded. (H and P do not affect the grade point average.)
2. The regular letter grades: A, B, C, D, E. (Such grades contribute to the grade point average.) Students in a "regular letter-grade" course may use one of their four pass-fail options.

ACADEMIC PROBATION

Warning slips may be given to any students who are doing "D" or "E" work at the end of the sixth week.

Students shall receive an academic warning if they fail to keep their current grade point average (immediately preceding semester) at or above 2.00.

Students are placed on academic probation with transcript notation if they fail to keep their grade point average (cumulatively) at or above 2.00. Students receive official notice of such action. Probationary students may be advised to reduce their academic or extra-curricular activities or both.

The enrollment of a student on probation who fails to earn a cumulative average of 2.00 by the end of a probationary semester is terminated. A terminated student may apply for reinstatement by submitting a letter of petition to the Registrar's Office and securing a faculty sponsor. The petition and sponsorship letters are submitted to the Faculty Committee on Admission and Retention of Students for action.

A student whose petition for reinstatement has been denied may apply for readmission after the expiration of one semester unless informed otherwise.

ELIGIBILITY FOR STUDENT ACTIVITIES

Any regularly enrolled, full-time student (ten hours) is eligible for participation in university activities. Limitations of a student's activities based upon academic performance may be set by individual schools, departments, or organizations. A student on academic probation is not eligible for interscholastic competition and may also be advised to curtail participation in extra-curricular activities.

CLASSIFICATION OF STUDENTS

Freshmen: students who have met entrance requirements.

Sophomores: students who have completed 30 hours and have earned 60 grade points.

Juniors: regular students who have fulfilled lower division requirements and have completed 60 hours and have earned 120 grade points.

Seniors: regular students who have completed 90 hours and have earned 180 grade points.

HONORS PROGRAMS

Honors courses are offered by certain departments for students of superior academic ability. Registration is by invitation only.

The **SPECIAL HONORS PROGRAM** for juniors and seniors offers students an opportunity to develop a total academic program to reflect their special interests and capabilities. The student will propose a total plan of study for the time remaining until the granting of a degree; it may include any amount of the standard degree program. With the approval of a faculty sponsor and the Honors Council (in that order), the plan itself shall become the degree requirement of the university in the case of this honor student. The essentials of any plan of study are a clear topical rationale and significant work beyond regular courses — comprehensive exams, independent study projects, interdisciplinary bachelor's degree thesis, etc. Interested students should inquire at the Provost's Office for further information.

GRADUATION HONORS

Degrees with honors of cum laude, magna cum laude, and summa cum laude are granted. A student must earn an average of 3.30 for cum laude, 3.60 for magna cum laude, and 3.90 for summa cum laude. Physical education activities are not included in the determining of honors.

CREDIT BY EXAMINATION

Students are permitted, within limits, to obtain credit by examination in lieu of regular enrollment and class attendance. No more than 7½ courses (30 semester hours) may be counted toward graduation, whether it be College Level Examination Program or any other examination. Exceptions to this rule for certain groups of students or programs may be made, subject to recommendation by the Educational Policies Committee and approval by the faculty. Credit by examination is open to formally admitted, regular status students only.

Arrangements for departmental credit examinations must be made by students with respective department chairs, deans, or directors. Evidence of approval and of payment of the fee should be presented by a student to the instructor who administers the examination.

Students may, with the approval of the instructor or the department, gain credit for an audited course which they have not previously taken for credit by passing an examination set by the instructor or department. The fee for such examination is the difference between the auditing fee and the tuition students would normally pay for the course.

The various schools, divisions and departments shall determine the specific CLEP examinations which may fulfill requirements for majors, programs, or General University Requirements in their respective academic areas. These examinations are subject to recommendation by the Educational Policies Committee and approval by the faculty.

The minimum passing level for CLEP examinations taken at Pacific Lutheran University shall be the fiftieth percentile.

CLEP credits granted by other universities, colleges, and community colleges, which are earned before entrance, shall be honored by Pacific Lutheran University. The application of those credits toward majors, programs, and General University Requirements shall be consistent with school, divisional, and department policies and standards.

The university does not grant credit for college level GED tests.

INFORMAL STUDY

To encourage liberal learning of all kinds, over and beyond enrollment in courses leading toward formal degrees, the university offers a variety of opportunities for informal study:

Guest of University Status: Teachers and officials of other institutions, visiting scholars and artists, and other professional persons who wish to use university facilities for independent study may apply to the provost for cards designating them as Guests of the University. Such persons, in their use of facilities, will defer to the needs of students and faculty members.

Auditing Courses: To audit a course is to enroll, with the permission of the instructor, on a non-credit basis. An auditor is encouraged to participate fully in class activities but is not held accountable for examinations or other written work and does not receive a grade. If the instructor approves, the course may be entered upon the transcript as "Audit." With the approval of the instructor or the department, the student may gain credit for an audited course by passing an examination set by the instructor or the department. The fee for such examination is the difference between the auditing fee and the tuition the student would pay for the course.

Visiting Classes: Members of the academic community are encouraged to visit classes which interest them. No fee is charged for the privilege. Because regularly enrolled students must be given first consideration, persons desiring to visit classes are required to ask permission of the instructor. Visitors are guests of the classes and must conduct themselves accordingly.

ACADEMIC ADVISING PROGRAM

The academic advising program at PLU is set up with two major goals in mind: (1) To maintain a system by which students have an early contact with a faculty member from whom they receive a good general introduction to the value of a liberal arts education and are encouraged to explore the many fields of study open to them; and (2) To provide the option for students to receive advising from a faculty member in a chosen academic area of interest.

Each freshman student (and each transfer student who wishes) is assigned to an advising group with a faculty member responsible for general advising. If a student shows an interest in an academic area, that interest will be explored and, if it seems advisable, an area adviser will be assigned to replace the general adviser.

DEGREE REQUIREMENTS

BACCALAUREATE DEGREES

Baccalaureate degrees are conferred on students who have completed a minimum of 32 courses (128 semester hours) with a grade point average of 2.00 (School of Business Administration — 2.50; School of Education — 2.25) and who have met the following requirements for graduation:

1. The completion of a major as detailed by each school or department, consisting of a minimum of 6 courses (24 semester hours) with a minimum of 2 courses (8 semester hours) in residence.
2. The completion of a minimum of 10 courses (40 semester hours) numbered 321 or above.
3. The completion of two 4-semester-hour 300-320 Interim courses. Only one 300-320 Interim course designated as "advanced" may be used to meet this requirement. (Junior and Senior transfer students must complete only one 300-320 Interim course and it may be one which is "advanced.")
4. The completion of seven courses (28 semester hours) in residence during the senior year. (Special programs such as 3-1, 3-2, and Medical Technology excluded.)
5. The completion of all courses counted toward a major or a minor with grades of C or higher.

GENERAL UNIVERSITY REQUIREMENTS

ALL CANDIDATES FOR BACCALAUREATE DEGREES MUST FULFILL THE FOLLOWING REQUIREMENTS

WRITING — 1 course (4 hours) — Met by English 101 or an equivalent prose writing course. Because the ability to write well is essential for success in college, and later, all students are expected to fulfill this requirement as early as possible — preferably in their first or second semester. Students who have not satisfied the writing requirement may not be allowed to enroll for the senior year.

PHYSICAL EDUCATION — 4 hours — Met by four 1 hour activity courses, including PE 100. This requirement should normally be fulfilled by the end of the sophomore year. All activities are graded on the basis of A, Pass, or Fail.

INTERIM — 2 courses (4 hours each) — Only courses numbered 300-320 satisfy this requirement. Junior and senior transfer students need to complete only one 300-320 Interim course.

In addition to the foregoing general requirements, all baccalaureate candidates must complete a core curriculum. Students have the option of meeting this requirement by completing either the Distributive Core (immediately following), or by taking the Integrated Studies Program known as Core II.

DISTRIBUTIVE CORE — 28 hours

FINE ARTS — 1 course (4 hours) — Met by a course in art, communication arts, or music, as follows:

Art — any course except those in teaching methods.

Communication Arts — any of the following: 151, 162, 241, 250, 363, 364, 458, 459.

Music — any course except those in teaching methods.

HISTORY/LITERATURE — 1 course (4 hours) — Met by any course in history, in literature (Department of Modern and Classical Languages), or in English (except 101, 328, 400, 403).

NATURAL SCIENCES/MATHEMATICS — 1 course (4 hours) — Met by any course in biology, chemistry, earth sciences (except 101), physics and engineering, or mathematics.

PHILOSOPHY — 1 course (4 hours) — Met by any philosophy course except 121, 233, 328, and 385.

RELIGION — 2 courses (8 hours) — A lower division course should be taken before the end of the sophomore year. The second required course may be chosen from either lower or upper division offerings, or from the interdisciplinary Senior Seminar. Junior or senior transfer students need to complete only one course. Only one of the following may be taken to fulfill the university core requirement: 261, 361, or 362.

SOCIAL SCIENCES — 1 course (4 hours) — Met by any course in anthropology (except 221), economics, political science, psychology (except 110), or sociology.

CORE II (INTEGRATED STUDIES PROGRAM) — 28 hours

The Integrated Studies Program is especially designed as an alternative mode of satisfying the core curriculum requirement. Consisting of a constellation of interdisciplinary courses, the program as a whole explores a central theme, "The Dynamics of Change," from a variety of perspectives.

A student who chooses Core II to meet the General University Requirements will begin with Sequence I, with any two Sequences chosen from II, III, or IV taken subsequently or concurrently, and conclude the Program with the Seminar which would be taken

after, or concurrently with, completion of the last course in the Sequences selected. Individual courses in each Sequence are equivalent to four semester hours of credit each.

For further details see page 76 of this catalog. A brochure is also available from the Office of Admissions or the Registrar. A brief summary of the program follows.

The Dynamics of Change

Sequence I:

The Idea of Progress

IS 211 Course 1: Nature and Supernature

IS 212 Course 2: From Finite to Infinite

Sequence II:

Human Responsibility

IS 221 Course 1: The Developing Individual

IS 222 Course 2: The Burden of Human Responsibility

Option 1: ...20th Century Europe

Option 2: ...20th Century Asia

Sequence III:

Word and World: Exploring the Creative Imagination

IS 231 Course 1: Symbol, Language, Myth

IS 232 Course 2: Model and Metaphor: Inventing the World

Sequence IV:

Limits to Growth

IS 241 Course 1: The Technological Society and the Thrust for Growth

IS 242 Course 2: The Technological Society and the Limits to Growth

Seminar:

IS 251 Seminar

LIMITATIONS — ALL BACCALAUREATE DEGREES

1. Not more than 10 courses (40 hours) earned in one department may be applied to the B.A. or B.S. degree. Interim courses are excepted.
2. Non-music majors may count toward graduation requirements not more than eight semester hours in music ensembles.
3. A maximum of six courses (24 hours) in accredited correspondence or extension studies may be credited toward degree requirements, contingent on approval by the registrar.
4. A maximum of 16 courses (64 semester hours) will be accepted by transfer from an accredited community college.

FOREIGN LANGUAGE REQUIREMENTS

See under College of Arts and Sciences.

GRADUATION

Students expecting to fulfill degree requirements WITHIN THE ACADEMIC YEAR are required to file application for graduation with the registrar.

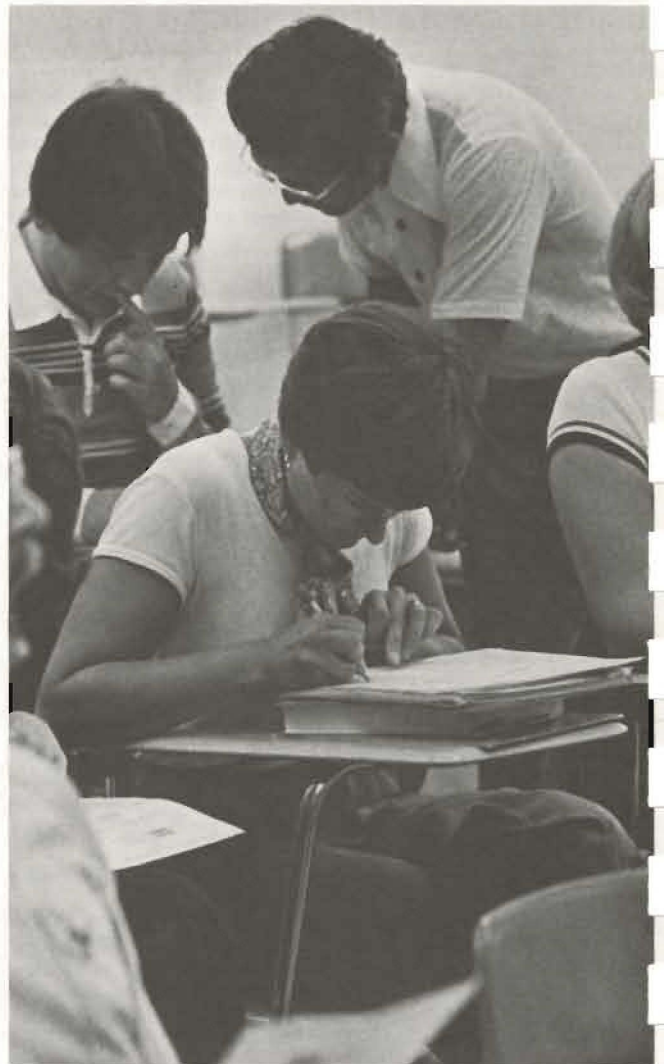
There are four degree-completion dates (end of fall semester, interim, spring semester, and second summer session). Degrees are formally conferred at May and August Commencements. Statements of completion are issued upon request to students who qualify for graduation at the end of fall semester and interim. The actual date of graduation will be recorded on the permanent records.

A student may be awarded more than one bachelor's degree simultaneously, provided that at least 28 ADDITIONAL hours are earned for the second degree. A total of 156 acceptable hours are required for two simultaneous baccalaureate degrees.

Students who are within 4 hours of meeting all requirements may participate in May Commencement provided a specific plan for earning remaining credit within ten weeks has been approved by the provost. Their status will be designated on the commencement program and their diplomas will be dated in August.

Students who plan to transfer back to Pacific Lutheran University for a degree (math, physics, engineering programs) must apply for graduation before or during the first semester of their junior year so that deficiencies may be met before they leave campus.

Attendance at commencement exercises is expected unless the candidate is excused by the provost.



COLLEGE OF ARTS & SCIENCES

Division of Humanities

English
Modern and Classical Languages
Philosophy
Religion

Division of Natural Sciences

Biology
Chemistry
Earth Sciences
Mathematics
Physics and Engineering

Division of Social Sciences

Economics
History
Political Science
Psychology
Sociology, Anthropology, and Social Welfare

Degrees Offered

Bachelor of Arts
Bachelor of Science

MAJOR REQUIREMENT

A major is a sequence of courses in one area, usually in one department. A major should be selected by the end of the sophomore year. The choice must be approved by the department chair (or in the case of special academic programs, the program coordinator). Major requirements are specified in this catalog. The quality of work must be 2.00 or better. D grades may be counted toward graduation but not toward a major.

Recognized majors are:

anthropology	mathematics
art	music
biology	Norwegian
chemistry	philosophy
classics	physical education
communication arts	physics
earth sciences	political science
economics	psychology
engineering	religion
English	Scandinavian area studies
French	sociology
German	social welfare
history	Spanish

Not more than 40 semester hours earned in one department may be applied toward the bachelor's degree in the College.

FOREIGN LANGUAGE/ALTERNATIVE REQUIREMENTS:

In addition to meeting General University Requirements, candidates in the College must meet the requirements of Option I, II or III:

- I. 16 semester hours in one foreign language*
- II. 8 semester hours in one foreign language*
4 semester hours in logic, math, or statistics
4 semester hours in history, literature, or language
- III. 4 semester hours in history, literature, or language
4 semester hours in social science, which may include geography
4 semester hours in natural science, excluding math
4 semester hours in logic, math, or statistics

*Option I may be satisfied by four years of high school study in one foreign language. If students have less than four years, placement and credit should be determined by examination. Freshmen planning to continue in a foreign language begun in high school should take the College Board Placement Test offered during orientation. (This test is required of those freshmen who plan to study German, French, or Spanish.) Continuation of a foreign language should not be deferred.

Students with 2-3 years of high school language who wish to continue should register for the second year course. Students may receive credit for any language course in which they are placed without regard to high school credit. Final decision of placement is made by the department of modern and classical languages. Students may not receive credit if they voluntarily select a course level lower than that in which the department places them.

The foreign language requirement in Option II may be met by satisfactory scores on a proficiency examination or by more than two years of high school work in a single language. Two years are sufficient if the grade point average for the total units in that language is 3.00.

Candidates for the B.A. in English, or for the B.A. in Education with concentration in English, must meet Option I.

No course will be allowed to meet both General University Requirements and College requirements. Where possible, courses taken to fulfill requirements shall be in different areas. For example, students fulfilling the university history or literature requirement with a course in history, if they elect Option II, should choose a course in literature or language to meet the requirement of the College.

DEPARTMENTS AND SCHOOLS — SPECIFIC DEGREE REQUIREMENTS AND COURSE OFFERINGS

Listed in the following section are course descriptions and summaries of degree requirements for majors and programs in the College of Arts and Sciences and the Schools of Business Administration, Education, Fine Arts, Nursing, and Physical Education. Detailed degree requirements, often including supplementary sample programs, are available in the offices of the individual schools and departments.

COURSE NUMBERINGS

100-200 Lower Division Courses: Open to freshmen and sophomores* unless otherwise restricted.

300-320 Interim Courses

321-499 Upper Division Courses: Generally open to juniors and seniors unless otherwise specified. Also open to graduate students, and may be considered part of a graduate program provided they are not specific requirements in preparation for graduate study.

500-599 Graduate Courses: Normally open to graduate students only. Upper division students may be permitted to enroll with the permission of the chair, director, or dean of the academic unit offering the course if all prerequisites have been met and the student has an above-average academic record.

*Upon approval of their adviser and course instructors, lower division students may be assigned to upper division courses if prerequisites have been met.

COURSE OFFERINGS

Most listed courses are offered every year. A system of alternating upper division courses is practiced in some departments, thereby assuring a broader curriculum. The university reserves the right to modify specific course requirements, to discontinue classes in which the registration is regarded as insufficient, and to withdraw courses.

EXPLANATION OF SYMBOLS

Most courses have the value of 4 semester hours. Parenthetical numbers immediately after the course descriptions indicate the semester hour credit given.

Other symbols are explained as follows:

- I — Course offered first semester
- II — Course offered second semester
- I, II — Course offered first and second semester in sequence
- I II — Course offered either semester
- S — Course offered in the summer
- a/y — Course offered in alternate years
- a/s — Course offered in alternate summers
- G — Course may be used on graduate programs as a major



13A



Art



In a time of rapidly changing concepts and an almost daily emergence of new media, emphasis must be placed on a variety of experiences and creative flexibility. Students with professional concerns must be prepared to meet the challenges of the modern world with both technical skills and capacity for innovation. The program therefore stresses individualized development rather than vocational tools which quickly become obsolete.

There is an explicit relationship between an art department's facilities and its quality of curriculum. The spacious studio areas of the university's art department afford an instructional capability which is unparalleled by any private institution in the Pacific Northwest. These facilities include: *painting studio, drawing studio, printmaking studio, sculpture studio, ceramics studio, film making and photography workshop, design workshop, wood shop, metal shop, kiln yard, foundry, darkroom, seminar rooms, slide library, the Wekell Gallery, and student exhibition areas.*

FACULTY

W. Tomsic, Chair; Elwell, Keyes, Kittleson, Roskos, Schwidder. Artists-in-Residence: D. Cox and Torrens.

The department has sought to minimize prerequisites, enabling students to elect courses relating to their interests as early as possible. It is recommended that students interested in majoring in art declare their major early to insure proper advising. Transfer students' status shall be determined at their time of entrance.

The department reserves the right to retain, exhibit, and reproduce student work submitted for credit in any of its courses or programs.

Use of materials fee required in certain courses.

BACHELOR OF ARTS MAJOR: Minimum of 28 semester hours, including 110, 160, 250, 230 or 350, 365, 370, and 4 semester hours in art history. A maximum of 40 semester hours may be applied toward this degree. Candidates are registered in the College of Arts and Sciences and must complete all requirements.

BACHELOR OF FINE ARTS: Minimum of 56 semester hours, including 110, 160, 250, and 280 with a minimum of 8 hours in pictorial media (drawing, design, print-making, painting, film arts), a minimum of 8 hours in materials media (sculpture, ceramics, jewelry, fibers, crafts), two period courses in art history or theory, as approved, and electives in areas of emphasis to complete requirements. Courses in art teaching methods may not be included. Students are encouraged to choose an area of emphasis by their junior year in one of the pictorial or materials media, design, or art history.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

COURSE OFFERINGS

Studio

160 DRAWING AND COMPOSITION

A course dealing with the basic pictorial concerns of form, composition and color as well as techniques and media of drawing. I II (4)

215 CRAFTS

A studio survey of contemporary craft techniques. Assigned problems in a variety of media including fused and leaded glass, enamel on metal and textiles. May be repeated for credit. (4)

216 JEWELRY

A study of form and technique in the design and execution of jewelry objects. Includes stone setting, fabrication, and casting. May be repeated for credit. (4)

230 CERAMICS I

Ceramic materials and techniques including hand-built and wheel-thrown methods, clay and glaze formation. Includes a survey of ceramic art. I II (4)

250 SCULPTURE I

Various techniques and materials of sculpture and their influence on three-dimensional form. Includes study of the human figure. I II (4)

260 LIFE DRAWING

A multi-media exploration of human form. May be repeated for credit. Prerequisite: 160 or consent. I II (4)

296 DESIGN

Introduction to design through the study of such basic concerns as color, form, kinetics, tactility and light as applied to various areas within the field including illustration, graphics and industrial design. II (4)

326, 426 PHOTOGRAPHY I, II

A studio course in photography as an art form. Primary concentration on camera techniques and use of darkroom. Student production of slide and print portfolios, with an emphasis upon creative and expressive experimentation. 326 must be taken prior to 426; 426 may be taken twice. (4, 4)

328 FILM MAKING

A studio course in film making as an art form. A study of the materials and techniques of film making and the production of student 8 mm. and 16 mm. films. Classic and experimental films will be surveyed. (4)

330, 430 CERAMICS II, III

Techniques in ceramic construction and experiments in glaze formation. 330 must be taken prior to 430, and neither may be taken more than once. Prerequisite: 230. I II (4, 4)

335 FIBERS

Exploration and development of fiber structures and soft art forms. Alternating sections in non-loom work and loom weaving. May be repeated for credit. II (4)

341 ELEMENTARY ART EDUCATION

Various projects and media suitable for the instruction of art in elementary school; emphasis on developmental theory. I II (2)

350, 450 SCULPTURE II, III

Concentration on a particular medium of sculpture. Alternating semesters in metals, wood, or other media. 350 must be taken prior to 450; 450 may be taken twice. Prerequisite: 250. I II (4, 4)

365, 465 PAINTING I, II

Media and techniques of painting in oil or acrylics. 365 must be taken prior to 465; 465 may be taken twice. Prerequisite: 160. I II (4, 4)

370, 470 PRINTMAKING I, II

Methods and media of fine art printmaking; both hand and photo processes involving lithographic, intaglio and screen printing. 370 must be taken prior to 470; 470 may be taken twice. Prerequisite: 160 or consent. I II (4, 4)

380 IMAGERY AND SYMBOLISM

A survey of symbolic, pictorial, and plastic expressions in Western tradition, from the perspective of their philosophical and theological implications. Emphasis on the development of the Christian Cultus. (4)

390 DESIGN: GRAPHICS

Design and execution of printed materials; emphasis on technical procedures and problems in mass communication. Prerequisite: 160. II (4)

395 DESIGN: RESIDENTIAL

Projects in residential design with particular emphasis on planning procedures, logistical factors, and technical illustration. (2)

398 DESIGN: ILLUSTRATION

Projects in various types of illustration from story to advertising. Prerequisite: 160. (2)

491 DESIGN: WORKSHOP

A tutorial course which may deal with any of several aspects of the design field with particular concern for building a portfolio. Prerequisite: consent. (2)

492 STUDIO PROJECTS

A tutorial course with individual investigation of a particular medium, for major students only. May be repeated for credit. Prerequisite: Senior status and consent of instructor and department chair. Materials or use fee where necessary. I II (4)

499 B.F.A. CANDIDACY EXHIBITION

Exhibition of undergraduate work by B.F.A. candidates in studio areas; students are responsible for scheduling installation, publicity and final disposition of work. I II (no credit)

History and Theory

110 THE VISUAL ARTS

Western man's expression in the visual arts seen through the perspective of historical development. I II (4)

280 TWENTIETH CENTURY ART

The visual arts in the twentieth century with an introduction to aesthetical theory. II (4)

294 20th CENTURY DESIGN AND ARCHITECTURE

A study principally concerned with developments in architecture and interiors in the twentieth century, but including references to industrial design and other related areas. I (4)

382 ANCIENT ART

Art of the ancient Near East, Greece, and Rome. I a/y (4)

383 MEDIEVAL ART

Western European styles from the decline of Rome to the beginning of the Renaissance. II a/y (4)

384 RENAISSANCE ART

European art of the fifteenth and sixteenth centuries, with an emphasis on Italian developments. I a/y (4)

385 BAROQUE ART

Styles in European art from the late sixteenth century through the period of the Rococo. II a/y (4)

440 SEMINAR IN ART EDUCATION

A study of instruction in the secondary school including appropriate media and curriculum development. II (2)

487 NINETEENTH CENTURY ART

Art of the nineteenth century from neo-classicism through Post Impressionism. I (4)

490 SEMINAR

Selected topics considering some aspect of the visual arts. May be repeated for credit. Prerequisite: consent. (4)

497 RESEARCH IN ART HISTORY

A tutorial course for major students with research into a particular period or area of art history. May be repeated for credit. Prerequisites: senior status and consent of instructor and department chair. I II (4)

597 RESEARCH

For master of arts candidates who elect to write a research paper in art. I II (4)

INTERIM COURSES OFFERED IN 1978

305 CRAFTS WORKSHOP

317 THE GOLDEN DOOR:

AMERICAN ART 1865-1914

318 LIFE SCULPTURE

380 IMAGERY AND SYMBOLISM

Biology



The Biology Department at Pacific Lutheran University is dedicated to a teaching process, not just a delivery of facts. Facts form the foundation of science but approach infinity in number. Therefore, the biology faculty stresses the gathering, processing, retrieving and interpreting of these facts.

The biology faculty believes in the notion that one of the most profound requirements in science is learning to ask the right questions and to recognize the answers. The department is therefore dedicated to permitting students to learn science in the only way that it can be effectively made a part of their thinking: to independently question it, probe it, try it out, experiment with it, experience it.

In addition to diverse faculty and balanced curriculum, the department provides numerous facilities for its students, including: herbarium, invertebrate and vertebrate museums, greenhouse, vivarium and surgery room, climate control rooms, growth chambers, vertebrate physiology and cell physiology laboratories, a field station located on State of Washington Parks land, and a boat equipped for studies of Puget Sound. Qualified students are invited to use these facilities in independent study or participation in ongoing faculty research.

FACULTY

Gee, Chair; Alexander, J. Carlson, Crayton, Hansen, J. Jensen, Knudsen, Lerum, Main, D.J. Martin, Matthias, McGinnis.

Biology majors develop their academic program in consultation with a departmental adviser. A departmental adviser must be consulted prior to completion of Biology 253, the final course in the initial three semester core courses required of all biology majors, for guidance in the selection of an appropriate upper division program of study. All biology majors are required to take the Graduate Record Examination within two semesters before graduation.

BACHELOR OF ARTS MAJOR: 28 semester hours, including 155, 156, 253, and 16 hours chosen in consultation with departmental adviser. Required supporting: Chemistry 115, 116, 331, 332, 333, 334, and Math 133 or equivalent. Additional courses in physics, earth sciences, and/or mathematics are recommended as appropriate in consultation with adviser. A maximum of 40 semester hours of biology courses may be counted toward graduation. Interim courses (300-320) cannot be counted toward the major.

BACHELOR OF SCIENCE MAJOR: 40 semester hours, including 155, 156, 253, and 28 hours chosen in consultation with departmental adviser. Required supporting: Chemistry 115, 116, 331, 332, 333, 334; one year of physics; and mathematics through 151. A maximum of 40 semester hours of biology courses may be counted for graduation. Interim courses (300-320) cannot be counted toward the major.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

MINOR: At least 20 semester hours selected from any biology courses except those numbered 300-320 (Interim), in which a grade of C or higher is earned. Pass-fail courses may not be counted. Prerequisites must be met unless a written waiver is obtained in advance from both the instructor and the department chair. Applicability of non-PLU biology credits will be determined by the department chair. Consult the chair for assignment of a minor adviser.

COURSE OFFERINGS

111 BIOLOGY AND THE MODERN WORLD

A liberal arts course for non-biology majors; selected topics which relate to the history and future of humanity and to human art and well-being; the environment, reproduction and birth control, population, heredity, evolution and biological controls. Lectures, laboratories, and discussion. I II (4)

155 PRINCIPLES OF BIOLOGY I: POPULATION BIOLOGY AND DIVERSITY OF LIFE

Introduction to science and levels of organization in biology; Mendelian genetics and population biology; history and diversity of life. Required of all biology majors. Includes laboratory. Co-registration in chemistry is strongly recommended. I (4)

156 PRINCIPLES OF BIOLOGY II: THE CELL AND BIO-ENERGETICS

Cellular and molecular levels of biological organization; cell ultra-structure and physiology, molecular genetics, energy transduction; energy flow and nutrient cycles in ecosystems. Required of all biology majors. Includes laboratory. Assumes completion of one semester of college chemistry (104 or 115). Prerequisite: 155. II (4)

201 INTRODUCTORY MICROBIOLOGY

The growth, control, physiology, isolation, and identification of micro-organisms, especially those which affect human beings. Includes laboratory. Prerequisites: 111 and Chemistry 103 or consent. This course is suitable for nurses and other non-science majors; not open to biology majors. I (4)

205, 206 HUMAN ANATOMY AND PHYSIOLOGY

First semester: matter, cells and tissues; nervous, endocrine, skeletal, and muscular systems. Laboratory includes cat dissection and experiments in muscle physiology and reflexes. Second semester: circulatory, respiratory, digestive, excretory, and reproductive systems; metabolism, temperature regulation and stress. Laboratory includes cat dissection, physiology experiments and study of developing organisms. Satisfies General University Requirement, but does not count toward the biology major except with the permission of the department chair. 205 prerequisite to 206. (4, 4)

253 PRINCIPLES OF BIOLOGY III: BIOLOGY OF THE STEADY STATE

The basic problems faced by plants and animals in maintaining themselves; structural adaptations, homeostasis, internal regulation, water and temperature control, gas exchange, vascular systems, and interaction between organisms. Required of all biology majors. Includes laboratory. Prerequisites: 155, 156 and first-year chemistry. I (4)

299 INTRODUCTORY CLINICAL PHYSIOLOGY

Functions and control mechanisms of the major human organ systems, with emphasis on clinical application and including some pharmacology. Suitable for nursing majors. Includes laboratory. Prerequisites: 111, 163 (formerly, Functional Human Anatomy), and Chemistry 103. I 1978-79 (4)

321 ORNITHOLOGY

The study of birds with emphasis on local species; designed for students with hobby interests as well as for advanced biology students. Field trips. Includes laboratory. Prerequisite: 253 or consent. II (2)

322 MICROBIOLOGY

The structure, physiology, genetics, metabolism and ecology of micro-organisms. Includes laboratory. Prerequisite: 253 or consent; one semester organic chemistry recommended. II (4)

324 NATURAL HISTORY OF VERTEBRATES

Classification, natural history and economic importance of vertebrates with the exception of birds. Field trips and laboratory. Prerequisite: 253 a/y 1979-80 (4)

326 ANIMAL BEHAVIOR

Description, classification, cause, function and development of the behavior of animals. Lecture will emphasize an ethological approach to the study of behavior focusing upon comparisons among species, as well as physiological, ecological and evolutionary aspects of behavior. Laboratory is not rigidly scheduled and will consist of a behavioral investigation of the students' choosing. Prerequisite: 253 or consent of instructor. a/y 1978-79. II (4)

331 GENETICS

Basic concepts including consideration of molecular basis of gene expression, recombination, genetic variability, and consideration of cytogenetics and population genetics. Includes laboratory. Prerequisite: 253. I (4)

340 PLANT DIVERSITY AND DISTRIBUTION

A systematic introduction to plant diversity. Interaction between plants, theories of vegetational distribution. Emphasis on higher plant taxonomy. Includes laboratory and field trips. Prerequisite: 253. II (4)

346 CELLULAR PHYSIOLOGY

Deals with how cells are organized to stay alive; enzyme kinetics and regulatory mechanisms; structure and synthesis of proteins and nucleic acids; energy metabolism; membrane structure, permeability and transport phenomena; functional ultrastructure. Prerequisites: 253 and Organic Chemistry. I (4)

347 CELLULAR PHYSIOLOGY LABORATORY

Accompanies Cellular Physiology; experience in techniques and types of instrumentation including cell fractionation, determination of metabolic sequences, use of radio tracers, protein assay, membrane phenomena, ultracentrifugation, spectrophotometry, Warburg respirometry. May be elected only by students with a serious interest and need for this type of training. Corequisite: 346 and consent. I (1)

357 PLANT FORM AND FUNCTION

Plant anatomy, function and reproduction; emphasis on seed-producing groups. Includes laboratory. Prerequisites: 253 and Chemistry 116. Organic Chemistry recommended. I (4)

358 PLANT PHYSIOLOGY

Plant growth from seed to flower; seed germination, water relations, respiration, mineral nutrition, growth regulators, photosynthesis and other light effects on plant cycles. Includes laboratory. Prerequisites: 253 and Organic Chemistry. Cellular Physiology strongly recommended. I (4)

361 COMPARATIVE ANATOMY OF THE VERTEBRATES

Taught from a phylogenetic viewpoint, considers how and why living vertebrates attained their present structure. Attempts not only to learn vertebrate anatomy, but also to understand it. Prerequisite: 253. I (4)

371 INVERTEBRATE ZOOLOGY

Introduction to the form, function, natural history and phylogeny of the major phyla of invertebrates. Laboratory exercises will include dissections, field studies and collections. Prerequisite: 253 or consent of instructor. a/y 1979-80 II (4)

372 GENERAL ENTOMOLOGY

An introduction to insect anatomy, physiology, ontogeny and behavior. Laboratory includes gross dissection, field study and the collection and classification of insects. Prerequisite: 253. a/y 1978-79. II (4)

375 BIOLOGY OF PARASITISM

Parasitism as a mode of life: the nature of the parasite and of the host-parasite association including host responses. The gamut of parasitic forms includes viruses, other microorganisms, helminths and insects as they affect plant and animal hosts. Includes laboratory. Prerequisite: 253. a/y 1978-79 I (4)

403 DEVELOPMENTAL BIOLOGY

Consideration of the development of multicellular organisms, focusing on the molecular bases for development. Topics include morphogenetic movements, cell determination and differentiation, pattern formation, cell interactions in development, chemical messengers in development, and genetic regulation of development. Laboratory includes experimental problems and descriptive embryology. Prerequisite: 253. II (4)

411 HISTOLOGY

Microscopic study of normal cells, tissues and organs of vertebrates. This study is both structurally and physiologically oriented. Prerequisite: 253. II (4)

424 ECOLOGY

Organisms in relation to their environment, including organismal adaptations, population growth and interactions, and ecosystem structure and function. Prerequisite: 253. II (4)

425 BIOLOGICAL OCEANOGRAPHY

The ocean as environment for plant and animal life; an introduction to the structure, dynamics and history of marine ecosystems. Lab, field trips, and term project in addition to lecture. Prerequisite: 253. II (4)

426 FIELD METHODS IN ECOLOGY

Sampling techniques and analysis of natural ecosystems. Independent project required. Prerequisites: 253 and 424 or consent of instructor. II (2)

441 MAMMALIAN PHYSIOLOGY

Functions of principal mammalian organ systems emphasizing control mechanisms and homeostatic relationships. Laboratory includes experiments with electrocardiography, endocrine functions, regulation of body fluids, and temperature regulation. Prerequisites: 253, Chemistry 332. Biochemistry recommended. II (4)

475 EVOLUTION

Evolution as a process: sources of variation; forces overcoming genetic inertia in populations; speciation. Evolution of genetic systems and of life in relation to ecological theory and earth history. Lecture and discussion. Term paper and mini-seminar required. Prerequisite: 253. I a/y 1978-79 (4)

490 SEMINAR

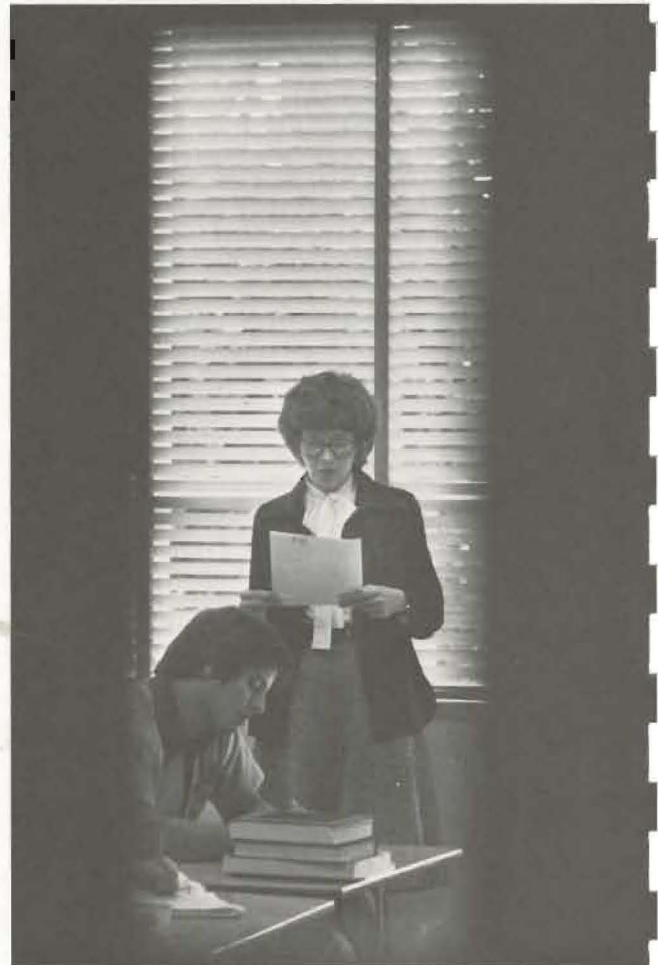
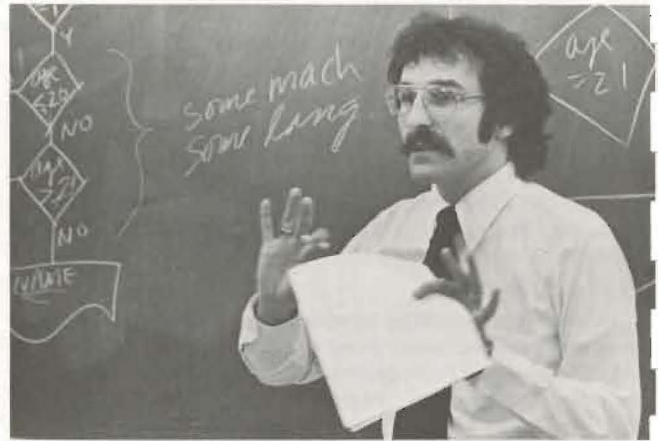
Selected topics in biology based on literature and/or original research. Open to junior and senior biology majors. (1)

491, 492 INDEPENDENT STUDY

Investigations or research in areas of special interest not covered by regular courses; open to qualified junior and senior majors; students should not elect independent study unless they know in advance the specific area they wish to investigate and can demonstrate a serious interest in pursuing it. It is suggested that the student spend one semester researching the literature and writing a proposal (for 1 sem. hr. of credit) and the next semester actually carrying out the project (for another 1 sem. hr. of credit). Students will not be permitted to use 491-492 for filling in a deficiency in their program. Prerequisite: written proposal for the project approved by a faculty sponsor and the department chair. (1-4)

INTERIM COURSES OFFERED IN 1978

- 307 SCIENCE AND POLITICS:
- THE CONTROL OF TECHNOLOGY
- 308 CURATING BIOLOGICAL MUSEUMS
- 309 INTRODUCTORY MICROTECHNIQUE
- 311 NATURAL HISTORY OF PUGET SOUND
- 313 SELF-REGULATION AND BIOFEEDBACK
- 318 CORAL ISLAND BIOLOGY, GEOLOGY



SCHOOL OF **Business** **Administration**

In concert with general university requirements, the business curriculum prepares graduates for responsible positions in business, education, and government.

Optional concentrations are offered in the fields of accounting, finance, marketing, operations management, and personnel and industrial relations.

FACULTY

King, Dean; Aaby, Bancroft, Barndt, Barnowe, Brunner, Carvey, Crooks, Dunn, Freeman, W. Hauelsen, Hutcheon, Lauer, McCarthy, O'Neill, C. Peterson, Schafer, Turner, Walton, Woolley, Zulauf.

ADMISSION

The professional Bachelor of Business Administration degree program is composed of an upper division business curriculum with a strong base in liberal arts.

Undergraduate students are admitted to the School of Business Administration upon the successful completion of at least 24 semester hours with a cumulative grade point average of 2.5 or above, and the declaration of business administration as the major field of study. Transfer students are required to have maintained the grade point average of 2.5 separately in both business and non-business courses. The student's interest to acquire a professional competence is desired and the assignment of a business faculty adviser is required.

Students considering graduate-level study should seek early planning advice from the faculty concerning appropriate undergraduate course selection.

Graduate students are admitted to the School of Business Administration when they meet the requirements specified in the procedures available from the Dean of Graduate Studies.

AFFILIATIONS

The School of Business Administration of Pacific Lutheran University is a member of the American Assembly of Collegiate Schools of Business. B.B.A. and M.B.A. programs are nationally accredited by the Accreditation Council of the AACSB. Pacific Lutheran University is accredited regionally by the Northwest Association of Schools and Colleges.

The School of Business Administration is also a member of the Northwest Universities' Business Administration Conference, the Western Association of Collegiate Schools of Business, and the National Association of Schools of Public Affairs and Administration.

DEGREE REQUIREMENTS

Sixty-four semester hours or one-half of the minimum total degree requirements are taken in fields outside the School of Business Administration. At least 40 semester hours are taken in required and elective business subjects.

The Bachelor of Business Administration degree program consists of 128 semester hours to be taken over a four-year period, and to be completed with an over-all grade point average of 2.5 or above as well as a 2.5 grade point average separately in business courses. D grades in business administration core courses (including the two upper division business electives) will not meet the BBA graduation requirements. In practice, the work can be accelerated by taking a heavier than average load and by participating in summer sessions. On the other hand, many students find it useful to exceed the minimum requirements by including related or additional advanced work in their undergraduate studies.

BACHELOR OF BUSINESS ADMINISTRATION: 230, 281, 282, 350, 364, 370, 453, 455, and 8 semester hours of upper division business electives. Required supporting: Econ 150, Math 128 (or 127 and 151) (or 151 and 331), Stat 231, and one upper division economics course. **NO MORE THAN 50 PERCENT OF THE HOURS MAY BE BUSINESS COURSES.**

The elective courses are chosen to support the students' professional career objectives or graduate study plans. They may reflect business administration concentration(s) or selections from entirely different field(s). The latter may include work in other professional schools or programs.

CONCENTRATIONS: Certificates of concentration are issued upon completion of specialized studies. The concentration is noted on the student's transcript. At least 16 hours of upper division courses in an area of specialization must be completed with a 2.5 grade point average.

Accounting — 381; 385; 387; 482; 383 or 484.

Finance — 364; 367; 464; 381, 460 or 461. Students must take Econ 352 or 361 as an upper division economics elective.

Marketing — 370; 472 or 473; 471; 470.

Operations Management — 350; 450; 451; 385.

Personnel and Industrial Relations — 350; 453; 460; Psych 450. Students must take Econ 320 as an upper division economics elective.

MINOR IN BUSINESS ADMINISTRATION: Econ 150; Math 128 (or 127 and 151) (or 151 and 331); Stat 231; BA 281, 350, 364, 370.

MASTER OF BUSINESS ADMINISTRATION: See Graduate Catalog.

MASTER OF PUBLIC ADMINISTRATION: See Graduate Catalog.

BUSINESS ADMINISTRATION COURSES

Courses numbered 100-299 are available to all students.

Courses numbered 300-499 are open to students with junior standing and the required prerequisites.

Courses numbered 500-599 are reserved for students in the MBA and MPA programs and students in other graduate programs who have an approved field in business.

The middle digit of the course number indicates the field of concentration:

3 — law

4 — general service

5 — personnel and industrial management

6 — finance

7 — marketing

8 — accounting and information systems

9 — specialized and predominantly independent studies.

COURSE OFFERINGS

230 LAW AND SOCIETY

A study of the legal system in the United States and the regulation of relationships between individual citizens, groups, and the governmental agencies and branches. Review of the rights and obligations of individual citizens and corporations, administrative law, and the procedures and practices of the courts in a modern society. I II (4)

241 BUSINESS COMMUNICATIONS

Development of applied writing skills and techniques in business communications. Included are letters of inquiry, orders and acknowledgments, sales and promotional communications, claims and adjustments correspondence, credit and collections ledgers, briefing and business reports, resumes, and application letters. (4)

243 FAMILY FINANCIAL PLANNING

Consumer saving, spending and planning techniques; intelligent buying and budgeting, estate and tax planning, insurance and investment programs, retirement planning; ethical issues in government and business from the consumer viewpoint; consumer organization and influence in finance, marketing and production. (4)

281 FINANCIAL ACCOUNTING

An introduction to accounting concepts and principles. Preparation and analysis of financial reports. I II (4)

282 ACCOUNTING INFORMATION SYSTEMS

Introduction to management information systems. Emphasis on the analysis and interpretation of accounting and economic data and their use in planning and control. Applications utilizing computer terminal. Prerequisite: 281. I II (4)

350 MANAGEMENT

A critical examination of the principles and processes of administration. Management techniques and the functions of planning, organizing, direction, and control are discussed from both the classical and the behavioral points of view. Study of the concepts and characteristics of the production function. Introduction to case analysis and problem-solving techniques. Prerequisites: Econ 150, Math 128 (or equivalent) (may be concurrent), Stat 231 (may be concurrent), and BA 281. Junior standing I II (4)

364 MANAGERIAL FINANCE

Concentrated study of the tools of financial analysis: Funds and cash flows, critical analysis of financial statements and other financial information, techniques of financial planning and budgeting, and the concepts related to capital expenditure budgeting, and the cost of capital. An introduction to financial strategies and decision-making for financing, expansion, and dividend policies. Required for business majors. Prerequisites: Econ 150, Math 128 (or equivalent), Stat 231, and BA 281. Junior standing. I II (4)

367 FINANCIAL MARKETS

Analysis of the characteristics and determinants of an efficient financial system; pricing of capital assets; supply and demand for loanable funds and the level and structure of interest rates; savings-investment process and financial intermediaries; insurance and reinsurance markets; commodity markets, and international finance. Prerequisites: Econ 150, Math 128 (or equivalent), Stat 231, BA 281, BA 364. (4)

370 MARKETING SYSTEMS

The flows of goods and services in the economy, economic and behavioral approaches to the analysis of demand; the role of the marketing functions in a business firm. Determination of the marketing mix — product policy, pricing, channels of distribution, and marketing communications. Prerequisites: Econ 150, Math 128 (or equivalent), Stat 231, and BA 281. Junior standing. I II (4)

381 INTERMEDIATE ACCOUNTING

Concentrated study of the valuation theories for assets and liabilities. Analysis of related effects on income determination. Prerequisite: 281. I II (4)

383 INCOME TAXATION

Comprehensive study of income tax concepts, regulations, and tax planning principles. Emphasis on individual and corporate income taxation. Prerequisite: 281. (4)

385 COST ACCOUNTING

Basic and advanced concepts of costs in developing information for management use in the determination of income, evaluation of capital investment alternatives, and the measurement of performance. Prerequisites: 281 and 282. I (4)

387 DATA PROCESSING SYSTEMS

A computer-laboratory-oriented course which includes basic program and system analysis and flow charting, intensive study of programming languages with emphasis on BASIC, and the development of a working knowledge with computer hardware and software systems. Prerequisites: 281 and 282. I II (4)

392 INTERNSHIP

A program of full time experience closely related to the student's specific career and academic interests. The student is expected to develop the internship opportunity with a firm or organization. Before registration, the student, the organization, and the School will prepare an internship agreement. This agreement identifies the problems to be researched, experience to be gained, and related readings to be accomplished. Monthly progress reports and other measures of achievement will be used to determine the grade. Not more than 2 hours of credit will be granted for a full month of internship, and not more than 8 hours of accumulated credit will be granted for the internships taken. The internship cannot be used to meet the minimum requirement for 2 business administration elective courses, and it must be completed prior to the last semester before graduation. Prerequisites: BA 281, 282, 350; Econ 150; Stat 231; one additional course in the student's area of concentration. (2 or 4)

435 BUSINESS LAW

Procedures, contracts, agencies, negotiable instruments, business organizations, property, trusts and wills, transportation, insurance and employment. II (4)

450 MANUFACTURING MANAGEMENT

Principles of scientific management; planning products, physical facilities, equipment and materials for production; methods and techniques of supervision and control of personnel; production control; purchasing and inventory management. The course includes supervised student projects and major case studies. Prerequisite: 350. (4)

451 OPERATIONS ANALYSIS

Introduction to and the examination of selected decision sciences techniques and their applications to accounting, finance, management, marketing, and production. Topics include modeling, inventory control, resource allocation, project planning, forecasting, and logistics. Prerequisites: BA 281, 282, 350; Econ 150; Stat 231. (4)

453 PERSONNEL AND INDUSTRIAL RELATIONS

Detailed examination of behavioral processes of individuals and groups in business organizations. Emphasis on policy issues and specific problems in managing human resources with focus on modern practices of industrial relations and personnel management in industrial and other organizations. Prerequisite: 350. I II (4)

455 BUSINESS POLICY

Formulation of policies to integrate all functions of business. Social, ethical, religious, economic, educational and international implications in the formulation of business policies and objectives. Includes comprehensive case analyses. Required for business majors. Prerequisites: Senior standing; 281, 282, 350, 364 and 370. I II (4)

456 HONORS SEMINAR

460 EMPLOYEE BENEFIT PLANS

Intensive analysis of employee benefit plans; profit sharing plans, pension plans, group health and life insurance; structure and effect of governmental regulation of various benefit plans. Prerequisites: Econ 150, Math 128 (or equivalent), Stat 231, BA 281, BA 364. (4)

461 PORTFOLIO MANAGEMENT

Discussion of sound portfolio management techniques: Security selection and construction of efficient asset portfolios; measuring investment performance; capital market efficiency; selected recent developments in portfolio analysis. Emphasis on risk and return relationships of securities and portfolios. Prerequisites: Econ 150, Math 128 (or equivalent), Stat 231, BA 281, BA 364. (4)

464 FINANCIAL PLANNING AND CONTROL

Intensive analysis of major financial decisions; financial planning and budgetary control; mergers and acquisitions; prediction or corporate failure; bond refunding; new equity issues; recent developments in capital structure theory as applied to financial decisions. Emphasis on decision-making. Prerequisites: Econ 150, Math 128 (or equivalent), Stat 231, BA 281, BA 364. (4)

470 MARKETING MANAGEMENT

Analytical approaches for the solution of marketing problems, developing strategies, planning and administering comprehensive marketing programs; evaluation and control of marketing operations. Prerequisite: 370. I (4)

471 MARKETING RESEARCH AND CONSUMER BEHAVIOR

Techniques and uses of marketing research in the business decision-making process. Emphasis is placed on research design, various survey methods, research instruments, and sampling plans as they relate to marketing consumer products and services in a changing environment. Contemporary behavioral science concepts to be examined and incorporated in selected marketing projects. Prerequisite: 370. (4)

472 ADVERTISING AND SALES MANAGEMENT

Role of advertising and personal selling in the marketing program; analysis of market targets; developing market potentials; media selection; designing the promotional message; evaluation and control of the promotional mix. Prerequisite: 370. I II (4)

473 INDUSTRIAL MARKETING AND PURCHASING

Analysis of the industrial buying and selling process; purchasing policies and procedures; selection of sources of supply; contract analysis and negotiation; marketing problems of manufacturers of industrial goods; developing and implementing industrial marketing strategies. Prerequisites: 350 and 370. II (4)

482 ADVANCED ACCOUNTING

Comprehensive study of accounting for corporations, including the accounting aspects of consolidations and mergers, and partnerships; treatment of incomplete data; specialized accounting concepts related to funds and cash flows, statement analysis, and accounting for estate and trusts. Prerequisites: 281 and 381. II (4)

484 AUDITING

The principles and procedures of auditing as they apply to the major balance sheet and income accounts; generally accepted auditing standards used by CPA's; professional ethics. Prerequisites: 281, 381 and 482. II (4)

490 SEMINAR

Seminar on specifically selected topics in business. Offered on demand. Prerequisite: consent of the instructor. (4)

491 DIRECTED STUDY

Individual studies; readings on selected topics approved and supervised by the instructor. Prerequisite: consent of the instructor. (1-4)

501 FUNDAMENTALS OF ACCOUNTING AND FINANCE

Fundamental assumptions, principles, and procedures underlying accounting; transaction analysis and the fundamental accounting model; matching of expenses with revenue; measurement and reporting of income statement and balance sheet accounts; consolidated statements; and using and interpreting financial statements. Theoretical framework for financial decisions; decision theory relative to working capital management, short- and intermediate-term financing, capital investments and valuation, capital structure and dividend policy, and long-term financing. (4)

502 FUNDAMENTALS OF MANAGEMENT AND MARKETING

Principles and processes of administration. Techniques and functions of planning, organizing, directing and controlling. The flows of goods and services in the economy; economic and behavioral approaches to the analysis of demand; the marketing functions in business firms. Determination of the marketing mix. (4)

550 ORGANIZATIONAL BEHAVIOR AND ENVIRONMENT

The study of open sociotechnical systems within which a manager must operate. It encompasses three major perspectives: the external organization environment, including legal, ethical, social, economic and political influences; the organization itself as an entity; and the internal organization environment. Prerequisite: 350 (or 502). I II (4)

551 SEMINAR IN OPERATIONS MANAGEMENT

Analytical approaches to operational management; the relationship of production to other functions and external factors; case studies of modern techniques/methodologies as applied in selected situations and industries; quantitative models, systems design and computers. Prerequisites: 350 (or 502), 550, Statistics and Econ 543. I II (4)

552 APPLIED DECISION ANALYSIS

Use and application of selected decision science techniques to projects. The focus is on the examination of managerial decision situations and the development of decision analysis methods for the manager. Applications include forecasting, resource allocation, project planning, data analysis, and simulation. Prerequisite: Econ 543. (4)

553 CONTEMPORARY ISSUES IN MANAGEMENT

Investigation of the roles of managers in the modern society. The exploration includes, but is not limited to the topics of corporate responsibility, ethical issues in management, and the impact of technological change on organizations and society. The workshop approach to these topics combines the use of cases, readings, discussions, and simulations. Prerequisites: BA 550; Econ 504, or equivalent. (4)

555 BUSINESS STRATEGY AND POLICY

Management functions of planning, organization and control. Prerequisites: 551, 564 and 570. I II (4)

557 SEMINAR IN POLICY SCIENCES

Integrate conceptual elements and decision-making techniques. Development and implementation of specific strategies appropriate to public sector programs. Case studies and field work used to explore important policy issues and management interfaces to formulate managerial improvements. Prerequisites: 551, 567, PS 457. (4)

564 SEMINAR IN FINANCIAL MANAGEMENT
Management's role in framing financial policies; case studies in the determination of needs, sources and uses of funds; the development of financial structures, evaluation of alternative financial plans and allocation of funds within the firm, the control of financial resources. Prerequisites: 364 (or 501) and 581. I II (4)

567 SEMINAR IN PUBLIC FINANCIAL MANAGEMENT
Exploration of budgeting concepts and procedures in the public sector. Consideration of recent developments and the changing functions of public budgeting; the roles of participants in the budget process; and strategies and counterstrategies in developing and gaining approval of budgets. Financial management topics include: cash, debt, revenue and expenditure management; expenditure control programs; evaluation of performance. Prerequisite: BA 587 or 582. (4)

570 SEMINAR IN MARKETING MANAGEMENT
Marketing management policies and programs; interrelated elements of the marketing mix and the relationship of marketing to other internal functions; changing social and legal environment, innovation and modern marketing philosophies. Prerequisites: 370 (or 502), and Econ 504. I II (4)

581 SEMINAR IN FINANCIAL ACCOUNTING THEORY
Advanced accounting concepts and standards; current problems and trends reflected in accounting literature; designed for professional accountants. Prerequisite: 482 or consent. (4)

582 ACCOUNTING INFORMATION AND CONTROL
Applications of accounting information, services and systems to management problems. Students excused from this course are expected to complete 581 or other advanced accounting studies. Prerequisite: 281 (or 501). (4)

587 GOVERNMENT ACCOUNTING SYSTEMS
Management information systems; accounting and economic data and their use in government agencies. Recent trends in fund accounting, and analysis of accounting requirements and techniques in program management. Case studies. Prerequisite: Econ 504. (4)

590 SPECIAL SEMINAR
Selected advanced topics; offered on demand. (4)

591 INDEPENDENT STUDY
Individual reading and studies on selected topics; minimum supervision after initial planning of student's work. Prerequisite: consent. (1-4)

593 THESIS
Research study to meet Thesis Option requirement for elective in the MBA or MPA degree programs. (4)

596 RESEARCH COLLOQUIUM
Research approaches and uses in the administrative decision making process. Emphasis is placed on the various aspects of research design: secondary data sources, survey methods, research instruments, sampling plans, data analysis, and reporting of results. Both qualitative and quantitative research approaches are examined in terms of their application to exploratory, descriptive, causal and problem-solving studies. Prerequisites: Statistics and two 500-level business courses. (4)

INTERIM COURSES OFFERED IN 1978

- 305 MANAGERS AT WORK
- 310 FINANCIAL MANAGEMENT FOR THE HEALTH CARE ADMINISTRATOR
- 315 BUSINESS-GOVERNMENT RELATIONS WORKSHOP
- 456 HONORS SEMINAR
- 553 SEMINAR ON CONTEMPORARY ISSUES IN MANAGEMENT

Chemistry



The advance of civilization is inseparable from the development of chemistry. Chemistry seeks to understand the fundamental nature of matter, changes in its composition, and the energy changes accompanying these changes. Utilization of this knowledge influences our lives in many profound ways. Whether interested in chemistry as a profession, molecular biology, or studying the influences of science and technology on the environment and society, students will find programs to meet their needs. The courses, curriculum, faculty, and facilities are approved by the American Chemical Society.

Diversity in career planning is a key word in the chemistry curriculum. Programs are available which are broadly applicable to the health-biological, physical, environmental and the fundamental chemical sciences. A staff knowledgeable in the many areas of chemistry using modern equipment for teaching and research highlight the opportunities available.

Major research and teaching equipment includes: *nuclear magnetic resonance, infrared, ultra-violet, visible, atomic absorption, flame photometry, emission and electron spin resonance spectrometers, X-ray crystallographic diffractometer, gas and liquid chromatographs, precision refractometer, dipolometer, scintillation counter, zone refiner, and a complex microprocessor system.*

Faculty research projects involving student participation are in progress in many important fields of chemistry. Some of the general areas are: *polymer structure and properties, synthesis of heterocyclic compounds, structural and magnetic studies of inorganic complexes, organic kinetics, photochemical reactions, and drug effects on birth control.*

FACULTY

C. Anderson, Chair; Giddings, Huestis, Layman, Nessel, Swank, Tobiason.

Degrees in chemistry are the Bachelor of Arts and the Bachelor of Science for students wishing to structure their undergraduate education around a full chemistry major. The B.A. program is the minimum preparation suitable for further professional studies and is often combined with extensive study or a second major in an allied field. The B.S. program involves additional chemistry courses and serves both students going directly into employment on graduation and those going into graduate programs. It is offered with emphasis in chemistry,

biochemistry, or chemical physics. The first option is an American Chemical Society certified program. The latter two options are offered in cooperation with the biology and physics departments for students wishing to work at the interfaces between chemistry and biology or physics.

Students contemplating a major in chemistry are invited to discuss their interests and plans with members of the chemistry faculty.

Students deciding to major in chemistry should officially declare their intent after having completed Chemistry 331 and after consultation with a faculty adviser in the chemistry department. Transfer students desiring to major in chemistry should contact a departmental adviser no later than the beginning of the junior year.

BACHELOR OF ARTS MAJOR: Chemistry 115, 116, 321, 331, 332, 333, 334, 341, 342, 343, and 460. Required supporting: Physics 147, 148, 153, 154; Math 151, 152.

BACHELOR OF SCIENCE MAJOR (three alternatives):

1. *General — American Chemical Society certification:* Chemistry 115, 116, 321, 331, 332, 333, 334, 341, 342, 343, 344, 435, 450, 460, and 490; Physics 147, 148, 153, 154; Math 151, 152.
2. *Biochemistry emphasis:* Chemistry 115, 116, 321, 331, 332, 333, 334, 341, 343, 404, 435, 460; Biology 155, 156, 253, 331, 346, 347; Physics 147, 148, 153, 154; Math 151, 152.
3. *Chemical — physics emphasis:* Chemistry 115, 116, 331, 332, 333, 334, 341, 342, 343, 344, 460; Physics 147, 148, 153, 154, 331, 332, 336, 356; Math 151, 152, 253.

Generalized Chemistry Curriculum for the B.S. Degree

FALL

Freshman
Chem. 115
Math 151
Foreign language
(or core course)
PE 100 or activity
(13 hours)

Sophomore
Chem. 331, 333
Physics 147, 153
Foreign language
PE activity
Core course
(15-19 hours)

Junior
Chem. 341, 343
Chem. 321
Core course
Elective

Senior
Chem. 460
Chem. 490
Electives

SPRING

Chem. 116
Math 152
Foreign language
Core course
PE 100 or activity
(17 hours)

Chem. 332, 334
Physics 148, 154
Foreign language
PE activity
Core course
(15-19 hours)

Chem. 342, 344
Core course
Elective
Elective

Chem. 435
Electives

BACHELOR OF ARTS IN EDUCATION: Students interested in this degree develop their chemistry program through the department in conjunction with the School of Education. See School of Education section.

MINOR: 22 semester hours, including 115, 116, 321, 331, 332, 333, and 334, completed with grades of C or higher.

COURSE OFFERINGS

103 CHEMISTRY OF LIFE

General, organic, and biochemistry pertinent to chemical processes in the human organism; suitable for liberal arts students, nursing students, and prospective teachers. II

104 ENVIRONMENTAL CHEMISTRY

Basic principles of chemical structure and reactions, with applications to human activities and the natural environment. No prerequisite; students without high school chemistry are encouraged to take 104 before taking 103 or 115. Physical therapy and military nursing programs requiring a year of chemistry should include 104 and 103. Also suitable for environmental studies, general science teachers, B.A. in earth science, and General University Requirements or College of Arts and Sciences Option III. I

108 MANKIND AND MOLECULES

The role of science in society and the particular influence of chemistry on our civilization. Such topics as medicine, nutrition, food additives, petroleum products, and chemical warfare are discussed. A non-laboratory liberal arts based course with no math background. Meets General University Requirements.

115, 116 GENERAL CHEMISTRY

First semester topics include the structure of matter, atomic and molecular theory, states of matter and quantitative relationships. Second semester topics include kinetics, chemical equilibrium, thermochemistry study of the elements grouped according to the periodic table, radiochemistry and inorganic qualitative analysis; designed primarily for students who want to major in biology, chemistry, engineering, geology, or physics. Includes all premedical, pre-dental, pharmacy, medical technology students, and students planning to transfer to some university dental hygiene programs. High school chemistry or permission of instructor required. Students with no high school chemistry or weak mathematical background should take 104 before this course. An honors laboratory is available to students by selection of faculty during the spring. Corequisite: Mathematics 133. Prerequisites: 115 for 116; I for 115, II for 116. (4, 4)

210 BASIC NUTRITION AND PHARMACOLOGY

Basic metabolism processes, basic endocrinology, use of drugs to modify, supplement, enhance, or block biological processes, psychological/behavioral aspects of drug use. The discussion of nutrition will include topics of "the balanced meal philosophy," food preparation and retention/development of nutritive value, and environmental/societal influences on diet and nutrition. Prerequisite: Chemistry 103 or equivalent; designed for biology, chemistry, psychology, social welfare, sociology, nursing, health and physical education majors, continuing education nurses. I (experimental course to be offered fall 1979) (2)

321 QUANTITATIVE ANALYSIS

Chemical methods of quantitative analysis, including volumetric, gravimetric, and selected instrumental methods. Prerequisites: 116 and Mathematics 133. I

331, 332 ORGANIC CHEMISTRY

An interpretation of properties and reactions of aliphatic and aromatic compounds on the basis of current chemical theory. Prerequisites: 103 and 104 or 115. Corequisites: 333, 334. I II

333, 334 ORGANIC CHEMISTRY LABORATORY

Reactions and conventional and modern techniques of synthesis, separation, and analysis of organic compounds. Must accompany 331, 332. I II (1, 1)

336 HONORS ORGANIC CHEMISTRY LABORATORY

Advanced methods of synthesis and property determination applied to organic compounds. Techniques and applications from the literature to be emphasized. May be taken by departmental invitation in place of 334. II (1)

341, 342 PHYSICAL CHEMISTRY

The relationship between structure, energy content, and physical and chemical properties of chemical systems. Topics in thermodynamics, statistical thermodynamics, quantum mechanics, atomic and molecular structure, spectroscopy and kinetics are covered. Many examples are related to biological systems. Prerequisites: 115, Math 152, Physics 154. I II

343, 344 PHYSICAL CHEMISTRY LABORATORY

Experiments in thermodynamics, solution behavior, and molecular structure designed to acquaint students with instrumentation, data handling, correlations with theory, and data reliability. Computer usage is encouraged. Corequisite or prerequisite: 341, 342. I II (1, 1)

350 INSTRUMENTATION FOR THE LIFE SCIENCES

Course designed to examine instruments from the standpoint of how and why they work, applications, and limitations. Some of the instrumental techniques to be covered are atomic absorption, gas chromatography, ultraviolet, visible and infrared spectrophotometry, and flame photometry. Prerequisites: 116 and Biology 155.

404 BIOCHEMISTRY

An overview of the field including mineral and general metabolism, biochemical structure, and discussion of drugs and pharmacology. Laboratory is designed to stimulate problem-solving techniques. Prerequisites: 332 and 334. I

435 INSTRUMENTAL ANALYSIS

Theory and practice of instrumental methods along with basic electronics. Special emphasis will be placed on radiochemical, mass spectrometric, chromatographic, and electrometric methods. Prerequisites: 341 and 343. II

450 INORGANIC CHEMISTRY

Techniques of structural determination (IR, UV, VIS, NMR, X-ray, EPR), bonding principles, non-metal compounds, coordination chemistry, organometallics, donor/acceptor concepts, reaction pathways and biochemical applications are covered. Laboratory will include synthesis and an indepth exploration of the physical properties of non-metal, coordination and organometallic compounds. Prerequisites: 331, 332. (to begin 1979-80) (3)

460 SEMINAR

Presentation by students of knowledge gained by personal library or laboratory research, supplemented with seminars by practicing scientists. Participation of all senior chemistry majors is required and all other chemistry-oriented students are encouraged to participate. Seminar program will be held during the entire year but formal registration will be in the spring semester. I II (1)

490 INTRODUCTION TO RESEARCH

A course designed to introduce the student to laboratory research techniques, use of the chemical literature, research proposal and report writing. Emphasis will be on the student developing and making progress on an independent chemical research problem chosen in consultation with a member of the chemistry faculty. I (2)

491 INDEPENDENT STUDY

Library and/or laboratory study of topics not included in regularly offered courses. Proposed project must be approved by department chair and supervisory responsibility accepted by an instructor. May be taken more than once. I II (1, 2 or 4)

497 RESEARCH

Experimental or theoretical investigation open to upper division students with consent of department chair. May be taken more than once. Generally will consist of an expanded study of the research project developed in 490. I II (1, 2 or 4)

597, 598 GRADUATE RESEARCH

Open to master's degree candidates only. Prerequisite: consent of department chair. I II (2-4)

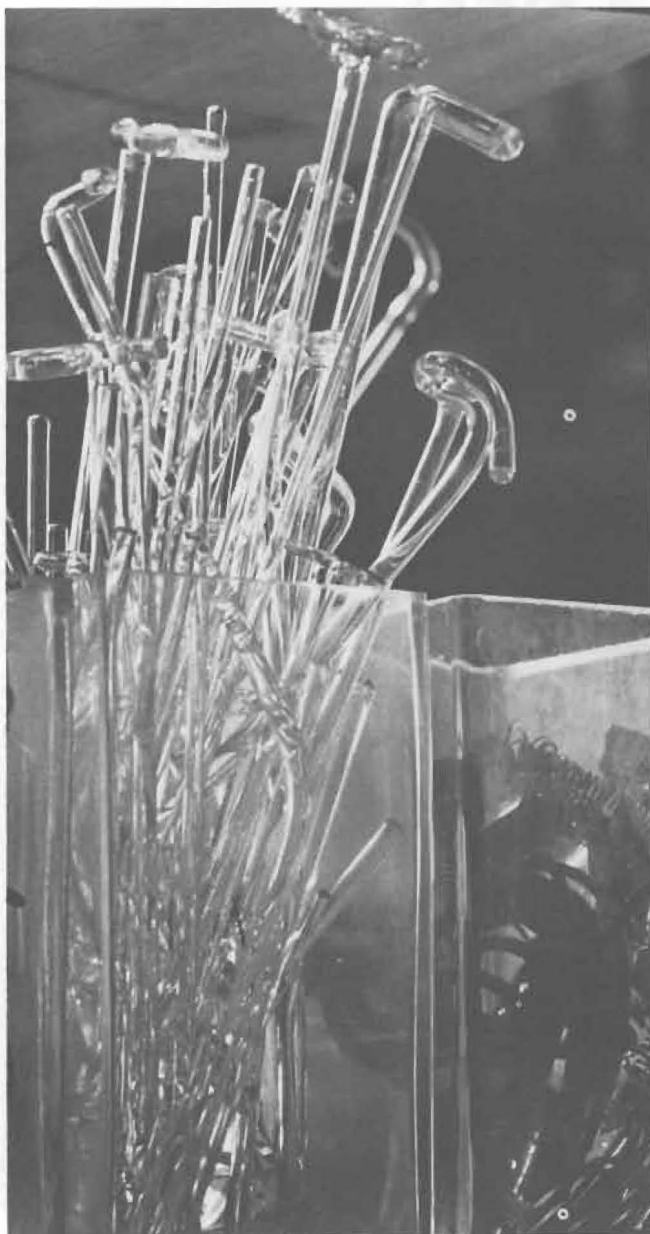
INTERIM COURSES OFFERED IN 1978

300 BUSINESS AND THE ENVIRONMENT

303 THE WORLD OF ELECTRONICS
TECHNOLOGY

307 POLYMERS AND BIOPOLYMERS

312 ON BECOMING HUMAN



Communication Arts



The communication arts program is concerned with improving interpersonal, group, and public communication through a mastery of basic rhetorical processes and a comprehension of the nature of the mass media as well as offering cultural and artistic opportunities in the field of theatre. The department offers a practical understanding of this human process to all students and prepares its majors for participation and teaching in the areas of theatre, communication and broadcast/journalism.

FACULTY

Wilson, Chair; Becvar, Doughty, Nordholm, O'Dor, Parker, Spicer, Wells; assisted by Rowe.

All students in communication arts will participate in some phase of dramatic, forensic and broadcasting co-curricular activities, and will be required to take two practicums.

BACHELOR OF ARTS MAJOR: At least 32 semester hours plus 2 practicums in one or a combination of the three areas of concentration of which Communication Arts 123 is required:

Broadcast/Journalism: Required courses: 123, 171, 272, 275, 374, 283, 384, plus 10 semester hours selected in consultation with adviser.

Communication: Required courses: 123, 233, 326 plus 20 semester hours selected in consultation with adviser.

Drama: Required courses: 123, 151, 241, 250, plus 16 semester hours selected in consultation with adviser.

In addition to requirements listed above, candidates for the B.A. degree must meet the foreign language requirement in the College of Arts and Sciences.

BACHELOR OF FINE ARTS MAJOR: At least 52 semester hours plus 2 practicums in one or a combination of the three areas of concentration of which Communication Arts 123 is required.

Broadcast/Journalism: Required courses: 123, 171, 272, 275, 374, 283, 384, plus 24 semester hours selected in consultation with adviser.

Communication: Requirements same as Bachelor of Arts plus an additional 40 semester hours selected in consultation with adviser.

Drama: Required courses: 123, 151, 241, 250, 363, 452 or 454, plus 28 semester hours selected in consultation with adviser.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

MINORS PROGRAMS

Broadcast/Journalism: 18-19 semester hours, including 171, 275, 283, 374, and one course from 378, 384, and 475.

Communication Theory and Research: 20 semester hours, including 123, 233, and three courses from 128, 326, 435, and 436.

Theater: 20 semester hours, including 151, 241, 250, 358, and 454.

The Dance Minor is cross-referenced with the School of Physical Education. See the description of the Dance Minor in that school's section of this catalog.

Only the following courses from Communication Arts may be used to meet the General University Requirement in Fine Arts: 151, 162, 241, 250, 363, 364, 458, 459. All Communication Arts majors should fulfill the General University Requirement with a course from another department in the School of Fine Arts.

COURSE OFFERINGS

123 FUNDAMENTALS OF ORAL COMMUNICATION

Foundations course dealing with basic theories of oral communication. Emphasis on group activity with some platform work. I II S (4)

128 ARGUMENTATION

Methods for evidence research, argumentation, proof and the adaptation and application of argument to communication. Various debate models, their preparation and presentation are used. I (4)

151 STAGE TECHNOLOGY

Basic theory and procedure of technical aspects in set building, costume construction, basic drafting, scenery, the assembling, handling, management of the stage, and extensive shop work. I (4)

162 HISTORY OF AMERICAN FILM

Concentrates on the development and growth of the motion picture in the United States from 1895 to the present. Emphasis is placed on the film director, whose implementation of film technique and theory serves as the formative artistic force in the cinema. Societal influences such as economic factors, public attitudes and mores, and political positions reflected in the United States throughout the past 75 years which provide the film media with shape and thematic focus will provide parallel points of reference. (4)

171 MASS MEDIA IN CONTEMPORARY SOCIETY

Survey of the mass media, including newspapers, magazines, books, television and the cinema. History, organization and mechanics of printed and electronic media. Role of the mass communication in developing the political, social, and economic fabrics of a democratic society. Analysis of the journalist's audience, journalistic vocations and social and legal responsibilities of the media. I (4)

225, 425 COMMUNICATION ARTS PRACTICUM

One semester hour credit may be earned each semester, but only 4 semester hours may be used to meet university requirements. Majors are required to take at least two practicums in one or a combination of the three areas of interest. Instructor's consent required. I II

233 FOUNDATIONS OF COMMUNICATION THEORY

Contemporary theories on the nature, processes and effects of individual and mass communication behaviors. (4)

241 ORAL INTERPRETATION OF LITERATURE

The art of communicating the essence of a piece of literature to an audience, interpreting it experientially, logically, and emotionally. Individual and group performance. I II (4)

250 FUNDAMENTALS OF ACTING

An examination of the work of actors and actresses, their natural and learned skills; exercises in memory, imagination, and observation; improvisations and scenes from modern plays; theory and practice of stage make-up. I (4)

272 THE BROADCASTER AND SOUND

The theory and structure of sound for the broadcaster; instruction and practice in the use of typical audio-control equipment in radio, TV and recording studios. I (2)

275 RADIO PRODUCTION

Elements of radio production; analysis of program design, writing for radio and production tools and techniques. Lecture and laboratory. I (4)

283 NEWS REPORTING

Techniques of basic news and feature writing for the media. Newspaper and broadcast-media, news organization, procedures and libel. Preparation of varied stories, analysis of news sources, techniques of interviewing and essential fact gathering. Typing ability highly preferred. Prerequisite: 171 or concurrent enrollment. Student must register for Newspaper or Radio News practicum laboratory at the same time. I (3)

326 GROUP COMMUNICATION

Survey and analysis of small group communication theory and research. II (4)

344 ADVANCED INTERPRETATION OF LITERATURE

Projects and exercises directed toward program planning. Advanced skills in the communication of the experience of a piece of literature through performance. Prerequisite: 241. II (4)

356 STAGE LIGHTING

Stage lighting from the basic development of electricity and lighting instruments to the complete design of lighting a show. II (4)

358 ADVANCED ACTING

Study of the work of an actor; character analysis and embodiment, using improvisations and scenes from plays; includes styles of acting. Prerequisite: 250. II (4)

363 HISTORY OF THE THEATRE: AESCHYLUS THROUGH TURGENIEV

Theatre as it evolved from its primitive origin through representative societies; Ancient Greece, Rome, Renaissance, modern European and American. Emphasis is upon religious, philosophical, and political thought as reflected in the drama of each period. I (4)

364 HISTORY OF THE THEATRE: IBSEN THROUGH TO THE PRESENT

Theatre as it evolved from its primitive origin through representative societies; Ancient Greece, Rome, Renaissance, modern European and American. Emphasis is upon religious, philosophical, and political thought as reflected in the drama of each period. II (4)

374 TELEVISION PRODUCTION

Analysis of program design, writing and production tools and techniques, lecture and laboratory; extensive use of KPLU-TV studios. I (4)

378 RADIO-TELEVISION NEWS REPORTING

Provides students with some of the basic techniques and problems of radio and television journalism. The course provides fundamentals upon which further study in Broadcast/Journalism can build. It is an advanced journalism course assuming prior proven ability in news writing and reporting. Prerequisite: CA 283. II (4)

384 ADVANCED NEWS REPORTING

In-depth reporting, investigative news writing and practice in handling advanced news reporting assignments in the environment of the newsroom. Typography, headline writing, copy editing as well as printing processes. Typing at 40 words per minute required. Prerequisites: 171 and 283. II (3)

402 COMMUNICATION ARTS IN THE ELEMENTARY CLASSROOM

Communication arts problems and opportunities which confront the teacher in grades one through eight. I (2)

404 COMMUNICATION ARTS IN THE SECONDARY SCHOOL

Curriculum construction, communication arts philosophy; co-curricular activities; administration of drama, radio and forensic activities. I (2)

435 ORGANIZATIONAL COMMUNICATION

Communication systems and studies within formal organization. Focused on theory and research of informational and directive communication as related to channels, structures, status, involvements, morale and leadership. Prerequisite: 233. (4)

436 PERSUASION

Analysis and evaluation of the dimensions of persuasion in communication emphasizing contemporary theoretical models and research. Investigation of how research and models may be applied in contemporary settings. Prerequisite: 233. (4)

452 SCENIC DESIGN

Artistic and technical development of abilities in designing scenery, costumes and make-up for plays of all periods; various styles and periods as well as preparation of models, renderings, working drawings and scenic painting. Prerequisite: 251. II (4)

454 PLAY DIRECTION

The role of the director, historically and critically; an intensive study that is both practical and theoretical in its approach to the art of the play director. Many different directing philosophies are studied and each student is required to direct scenes from plays representative of all periods of theatre history. Prerequisites: 250, 251, and junior status. II (4)

458 CREATIVE DRAMATICS

This course is designed to acquaint the student with materials, techniques, and theories of creative dramatics. Students will participate in creative dramatics. This course is intended for elementary and junior high school teachers or prospective teachers; theatre majors, religious leaders, youth and camp counselors, day care workers, social and psychological workers, and community theatre leaders interested in working with children. S (4)

459 SUMMER DRAMA WORKSHOP

One session of intensive work in drama, acting, stage management, lighting instruction and all other phases of production. S (4)

**474 TELEVISION AND
THE CLASSROOM TEACHER**

Television as a teaching tool; general criteria for technology in teaching and specific criteria for the use of television in the classroom. II (2)

475 DIRECTING FOR BROADCAST MEDIA

An analysis of the structure, form, and technique of directing for the Broadcast Media — extensive use of Radio and TV studio facilities. II (4)

478 SUMMER TELEVISION WORKSHOP

Creative and production techniques of television programming; extensive use of KPLU-TV studios; for the mature student. S (4)

490 SEMINAR IN BROADCAST/JOURNALISM

Selected topics in Broadcast/Journalism. Prerequisite: Departmental permission. (2)

**491, 492, 493 SPECIAL STUDIES IN
COMMUNICATION ARTS**

Investigations or research in area of special interest not covered by regular courses; open to qualified junior or senior students. A student should not begin registration for independent study until the specific area for investigation has been approved by a departmental sponsor. (1-4)

**596-598 RESEARCH IN
COMMUNICATION ARTS**

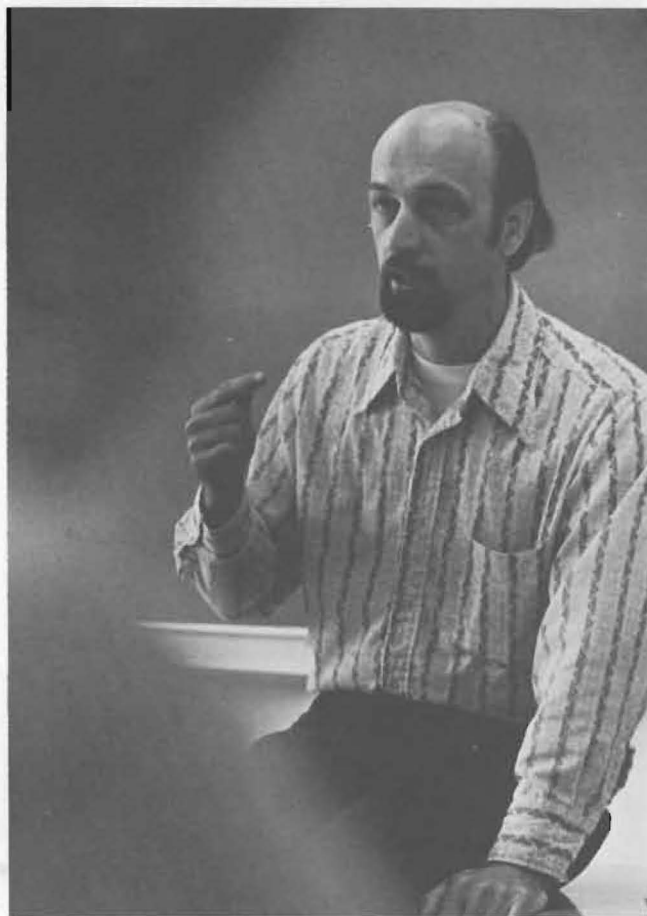
For graduate students only. (1-4)

**INTERIM COURSES
OFFERED IN 1978**

**300 INDIVIDUALISM AND HUMAN VALUES IN
THE BUSINESS COMMUNITY AS
PORTRAYED ON FILM**

**305 NONVERBAL COMMUNICATION:
I SEE WHAT YOU ARE SAYING**

**310 TELEVISION SCENERY AND
GRAPHICS DESIGN AND
CONSTRUCTION**



Earth Sciences



Earth Sciences explore the components of the physical universe from humanity's existing habitat to the foundations of the earth, and beyond to the planets and the stars. A program of studies in these fields acquaints students with their physical world and provides perspective on human development in time and space. Environmental problems also are approached through the earth sciences, which impart a realistic appreciation of society's dependence on earth's physical resources.

In providing such a perspective, the department fulfills the needs of a variety of students seeking to broaden their liberal arts education, and also provides more specialized knowledge in support of several fields, particularly for minor or major studies leading to careers in resources and environmental management or scientific research. Situated between the Olympic Mountains and the Cascade Range, the department is ideally located to examine geologic and marine environments, which are unsurpassed for teaching and learning purposes.

FACULTY

Lowes, Chair; Chauff; assisted by Churney, Fisk, and Huestis.

The department's programs remain flexible, allowing fairly easy scheduling of courses. However, students should notice that upper division courses are offered on a two-year cycle. Early declaration of majors or minors in earth sciences will facilitate development of individual programs and avoid conflicts.

BACHELOR OF SCIENCE (GEOLOGY SPECIALTY)

MAJOR: 40 semester hours in geology, including 131, 132, 323, 324, 325, 327, 328, and at least two courses from 326, 360, 365, and 491; also required is approved experience in field study techniques. Necessary supporting courses include: Chemistry 115, 116; recommended for petrologists are Chemistry 341, 342; Physics 125, 126, 147, and 148 (or Physics 153, 154 and labs); recommended — Physics 223; Mathematics 151, 152; biology courses are recommended where paleontology is elected major interest.

BACHELOR OF ARTS MAJOR: 32 semester hours, including 131, 132, 136, 202, 324, 327, plus at least two upper division earth science courses. A field course such as 351, 360, or 365 is recommended. Required supporting courses include: Chemistry 103, 104 or 115, 116, Physics 125, 126, 147, 148; Mathematics 151, recommended 152; appropriate biology courses also recommended. Options reflect a student's earth science interests and are discussed with an adviser.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

MINOR: 20 semester hours of earth science courses, excluding 122 and Interim courses, completed with grades of C or higher.

COURSE OFFERINGS

101 WORLD GEOGRAPHY

Patterns of physical, climatic, and ecological features and their relationship to the development of human cultures. 101 does not meet the natural sciences core requirement. I (4)

122 INTRODUCTION TO PHYSICAL SCIENCE

An integration of the sciences of chemistry, geology, meteorology and physics which considers the physical nature of the earth: its materials, processes, history and environment; intended for students with no previous background in chemistry, physics, or geology. I (4)

131 EARTH PROCESSES

An introductory course dealing with the human geologic habitat, both at present and as it has developed through time; materials of earth (and lunar) crusts, their derivation through major earth processes and formation of surface features — with emphasis on their significance to cultural development and civilization; laboratory study of rocks, minerals, and geologic mapping; field trips are arranged. I (4)

132 HISTORICAL GEOLOGY

A sequel to 131 which concentrates on earth history, particularly the formation of the North American continent: sedimentary rocks, fossils and stratigraphic record are related to tectonic upheaval and growth; field trips are arranged. II (4)

136 DESCRIPTIVE ASTRONOMY

The moon, the solar system, the coordinate systems for locating stellar objects and characteristics of stars. (4)

202 GENERAL OCEANOGRAPHY

Oceanography and its relationship to other fields; physical, chemical, biological, climatic and geological aspects of the sea; field trips. II (4)

222 CONSERVATION OF NATURAL RESOURCES

Principles and problems of public and private stewardship of our resources with special reference to the Pacific Northwest. (2)

323 MINERALOGY

Crystallography and mineralogy, both ore- and rock-forming minerals. Prerequisites: 131 and high school chemistry or consent. Available periodically, or at UPS. I (4)

324 PETROLOGY

The occurrence and classification of common rock types; processes by which they were formed with reference to theoretical principles. Prerequisites: 131 or consent. II a/y (4)

325 STRUCTURAL GEOLOGY

The form and spatial relationships of various rock masses and an introduction to rock deformation; consideration of basic processes to understand mountain building and continental formation; laboratory emphasizes practical techniques which enable students to analyze regional structural patterns. Prerequisite: 131 or consent. II a/y 1979-80 (4)

326 OPTICAL MINERALOGY

Theory and practice of mineral studies using the petrographic microscope, including immersion oil techniques, production of thin sections and determination of minerals by means of their optical properties. This provides an introduction to the broader subject of petrography. I (4)

327 STRATIGRAPHY AND SEDIMENTATION

Formational principles of surface-accumulated rocks, and their incorporation in the stratigraphic record. This subject is basic to field mapping and structural interpretation. I a/y 1978-79 (4)

328 PALEONTOLOGY

A systematic study of the fossil record, combining principles of evolutionary development, paleohabitats and preservation, with practical experience of specimen identification. These studies are fundamental to the understanding of stratigraphy and the geologic time scale. I a/y 1979-80 (4)

351 NATURAL HISTORY OF THE PACIFIC NORTHWEST

A field and laboratory course examining regional natural history; an outdoor workshop designed for science teachers at elementary and junior high levels. Not to be counted toward a major or graduate credit in biology. Prerequisite: consent. S (6)

360 GEOLOGY OF WESTERN WASHINGTON

The minerals, rocks and geological history of the region extending from the Columbia Plateau to the Pacific Ocean. Includes field trips. Prerequisite: one year of college laboratory science or consent. S 1978

365 GLACIAL GEOLOGY

Glacial ice, deposits and land forms resulting from the Pleistocene glaciation in North America. Field trips included. Prerequisite: one year of college laboratory science or consent. 5

490 SEMINAR

(1-2)

491, 492 INDEPENDENT STUDY

(1-4)

597 GRADUATE RESEARCH

(1-8)

**INTERIM COURSES
OFFERED IN 1978**

318 CORAL ISLAND BIOLOGY, GEOLOGY

323 MINERALOGY



Economics

"Want is a growing giant whom the coat of Have was never large enough to cover." — Ralph Waldo Emerson

Economics is the study of how people establish social arrangements for producing and distributing goods and services to sustain and enhance human life. Its main objective is to determine a wise use of limited economic resources so that people receive the maximum possible benefit at the lowest cost.

The economics discipline embraces a body of techniques and conceptual tools that are useful for understanding and analyzing our complex economic system. Career avenues for graduates are numerous since their understanding of the economy and their problem-solving and thinking abilities are applicable to a wide range of activities in business and/or government.

FACULTY

R. Jensen, *Chair*; **Ankrim, Brue, Miller, Vinje, Wentworth**.

BACHELOR OF ARTS MAJOR: Minimum of 32 semester hours including 150, 351, 352, 486, two upper division economics electives, Statistics 231 or 341, and Business Administration 281.

MINOR: 20 semester hours, including 150, 351, 352, one elective in economics and one elective in economics or statistics.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

COURSE OFFERINGS

150 PRINCIPLES OF ECONOMICS

Introduction to the scope of economics, including Macro and Micro Economics; analysis of U.S. economic system; emphasis on current economic policy. (4)

290 CONTEMPORARY ECONOMIC PROBLEMS

Current economic issues; unemployment, inflation, poverty, and pollution; interests of the class determine specific topics. Prerequisite: 150 or consent. (4)

321 HUMAN RESOURCE ECONOMICS

The nature and treatment of human resource problems in the United States; wage determination, unionism, collective bargaining, unemployment, poverty and discrimination, investment in human capital and manpower policies. Prerequisite: 150 or consent. (4)

331 INTERNATIONAL ECONOMICS

Regional and international specialization, comparative costs, international payments and exchange rates; national policies which promote or restrict trade. Prerequisite: 150. (4)

343 OPERATIONS RESEARCH

Quantitative methods for decision problems. Emphasis on linear programming and other deterministic models. Prerequisite: Statistics 231 or equivalent. (2)

344 APPLIED REGRESSION ANALYSIS

Simple and multiple regression analysis as investigative tools. Course stresses construction of elementary linear models and interpretation of regression results. Prerequisite: Statistics 231 or equivalent. (2)

351 INTERMEDIATE MACRO ECONOMIC ANALYSIS

National income determination including policy implications within the institutional framework of the U.S. economy. Prerequisite: 150. (4)

352 INTERMEDIATE MICRO ECONOMIC ANALYSIS

Theory of consumer behavior; product and factor prices under conditions of monopoly, competition and intermediate markets; welfare economics. Prerequisite: 150. (4)

361 MONEY AND BANKING

The nature and function of money and credit institutions; relationship of money and bank deposits to the national economy. Prerequisite: 150. (4)

362 PUBLIC FINANCE

Public taxation and expenditure at all governmental levels; the incidence of taxes, the public debt and the provision of public goods such as national defense, education, pure air and water. Prerequisite: 150. (4)

381 COMPARATIVE ECONOMIC SYSTEMS

An analysis and comparison of major contemporary economic systems. Includes an examination of capitalism, market socialism, centrally planned economies, and systems used in selected countries. Prerequisite: Economics 150 or consent. (4)

432 URBAN AND REGIONAL ECONOMICS

Economic growth process in developing regions of the U.S.; the inter-relationship of political, economic, cultural and institutional factors in the growth process. Prerequisite: 150. (4)

434 INDUSTRIAL ORGANIZATION AND PUBLIC POLICY

An analysis of the structure, conduct, and performance of American industry and the public policies that foster and alter industrial structure and behavior. Topics include the economics of firm size, motivations of the firm, concentration, mergers, patents, antitrust, public utility regulation, public enterprise, and subsidization. Prerequisite: Economics 150 or consent. (4)

486 EVOLUTION OF ECONOMIC THOUGHT

Economic thought from ancient to modern times; emphasis on the period from Adam Smith to J.M. Keynes; the classical economists, the socialists, the marginalists, the neo-classical economists, and the Keynesians. (4)

490 SEMINAR

Seminar in economic problems and policies with emphasis on encouraging the student to integrate problem-solving methodology with tools of economic analysis. Topic(s) selected by class participants and instructor. Prerequisite: consent. (4)

491, 492, 493 INDEPENDENT STUDY

Prerequisite: consent. (1-4)

500 APPLIED STATISTICAL ANALYSIS

An intensive introduction to statistical methods for graduate students who have not previously taken Introductory Statistics. Emphasis will be on the application of inferential statistics to concrete situations. Topics covered will include: measures of location and variation, probability, estimation, hypothesis tests, and regression. (4)

504 ECONOMIC ANALYSIS AND POLICY DECISIONS

Basic economic concepts applied to policy formation and operating decisions. (4)

543 QUANTITATIVE METHODS

The concepts of probability, sampling, statistical decision theory, linear programming and other deterministic models applied to managerial problems. Prerequisite: Statistics 231 or 341. (4)

591, 592, 593 INDEPENDENT STUDY

(1-4)

599 THESIS

(1-4)

INTERIM COURSES OFFERED IN 1978

- 150 PRINCIPLES OF ECONOMICS
- 302 A SAMPLING OF ASSET PURCHASES: AN ECONOMIC PERSPECTIVE
- 309 SMALL, IS IT BEAUTIFUL?



SCHOOL OF Education

The School of Education offers programs of study leading to certification for elementary and secondary teachers, counselors, nurses, and administrators. The curriculum is designed to provide graduates with a blending of the liberal arts and a variety of practical exposures to guided field experiences beginning early in the educational sequence. The faculty is committed to the development of educational personnel sensitive to the varied individual needs of learners.

FACULTY

Johnston, Dean; Baughman, Brochtrup, Churney, L. Cox, DeBower, Fletcher, M. Hanson, Mathers, Minetti, Moe, Nokleberg, F. Olson, Pederson, Rickabaugh, Smith, Stein, Wentworth, Williamson; assisted by Beal, Ehlers, Gray, Ramsey, and Yetter.

The School of Education is accredited by the National Council for Accreditation of Teacher Education (NCATE), the Northwest Association of Schools and Colleges, and the Washington State Board of Education for the preparation of elementary and secondary teachers, principals and guidance counselors, with the Master of Arts, the highest degree approved. The accreditation gives PLU graduates reciprocity in twenty-eight states.

Programs for the preparation of school librarians, school nurses, school counselors, administrators, supervisory personnel, and special education teachers are available. The School offers course work toward the conversion, renewal or reinstatement of teaching certificates.

The School of Education offers graduate degrees in Elementary Education, Secondary Education, Reading, School Administration, and Counseling and Guidance. Information regarding these programs is available through the Dean of Graduate Studies.

ADMISSION REQUIREMENTS

In the sophomore year, students with a cumulative grade point average of 2.15 or above may register for Ed. 251. Students will make application for admission to the School of Education during the semester enrolled in Ed. 251. Prior to Ed. 251 students should meet the following requirements:

1. They must have "C" or better grades in English 101 and Psychology 101 or Sociology 101.
2. They must have completed CA 123.

Transfer students who may have had education courses in other institutions should meet with an education adviser for evaluation of work completed and must arrange for screening into the School of Education.

Students who have earned a bachelor's degree at PLU or another institution, and who contemplate meeting certification requirements are expected to meet the same requirements for admission and certification. The certification sequence will normally require a summer session and two or three semesters.

BAE and/or CERTIFICATION REQUIREMENTS

Students become candidates for certification when they have satisfied the following:

1. Have a cumulative GPA of 2.25
2. Have completed the Professional Education Sequence.
3. Have completed approved teaching major(s) or concentrations (see requirements as listed under Academic Preparation.)
4. Complete PE 295.
5. Complete all courses in education and in major and minor fields with grades of C or higher. Grades of D are applicable toward a degree but not for excess hours toward fifth year programs.

TEACHER CERTIFICATION

Guidelines for the preparation and certification of teachers have been established by the State Board of Education. The recommended program pattern includes: broad liberal education, 35 per cent; professional study, 20 per cent; and electives, 10 per cent.

The four-year curriculum leads to the Bachelor of Arts in Education degree and the Provisional Certificate, an initial license to teach, issued for a period of three years. PLU recommends candidates for their first teaching position on the basis of their preparation.

Students may earn a baccalaureate degree in an academic field and qualify for a teaching credential upon completion of teacher certification requirements. These requirements include a major as described under "Academic Preparation" (majors and minors) as listed in this section of the catalog.

ELEMENTARY PREPARATION

In addition to the general university courses required in all curricula, certain specific requirements in general education must be met:

1. History 460, required of all elementary teacher candidates.
2. ES 101, World Geography, or Anthropology 101, required of all elementary teacher candidates.
3. Prospective elementary teachers usually meet the science general education requirement by completing Biology 111, or another life science course, and ES 122. A year course in one laboratory science may be substituted by those who have adequate high school background in science.

Professional Sequence

Ed. 251	Learner and Society
Ed. 322	General Methods (Primary Level)
or	
Ed. 323	General Methods (Upper Elementary Level)
or	
Ed. 324	General Methods (Elementary Education Model) September Experience
Ed. 430	Student Teaching (Primary Level) 10 hours
or	
Ed. 432	Student Teaching (Upper Elementary) 10 hours
Ed. 435	Professional Seminar (to be taken concurrently with Ed. 430 or 432) 2 hours

Professional Subject Minor (Required of all elementary candidates)

Required — 8 semester hours

- Ed. 325 Reading in the Elementary School
Ed. 326 Mathematics in the Elementary School (2)
(Prerequisite: Math 323 or equivalent)

Art 341 Elementary Art Education (2)

or

Music 341 Music in the Elementary School (2)

Electives — 4 semester hours

- Ed. 408 Language Arts in the Elementary School (2)
Ed. 410 Science in the Elementary School (2)
Ed. 412 Social Science in Elementary School (2)
Ed. 457 Preparation and Utilization of Media (3)
Ed. 483 Primary Reading (2)
English 323 Children's Literature
PE 322 PE in the Elementary School
Additional choices in consultation with education adviser.

SECONDARY PREPARATION

Professional Sequence (minimum of 24 hours)

- Ed. 251 Learner and Society (GPA 2.15 required; sophomore level course; prerequisites: Psy 101, CA 123. CA 123 may be taken concurrently) (4)
EdPsy 468 Educational Psychology (prerequisite: Ed. 251) (4)
Ed. 425 General Methods — Secondary (prerequisites: Ed. 251, EdPsy 468) (2), and ENGLISH use Ed. 444, Eng. in Sec. School (2); or SCIENCE use Ed. 447, Sci. in Sec. School (2); or SOCIAL STUDIES use Ed. 448, Soc. Stud. in Sec. School (2); or up to 2 semester hours may be taken outside of the School of Education in those academic majors other than the above (Eng., Sci., Soc. Sci.).
Ed. 434 Student Teaching — Secondary (GPA 2.25 required; prerequisites: Ed. 251, EdPsy 468, Ed. 425, and Special Methods) (10)
Ed. 467 Evaluation (prerequisite: Ed. 425; may be taken concurrently with Ed. 434) (2)
Professional Semester (Senior Year) — Students must contact the School of Education for application procedures. Applications must be submitted no later than six weeks before the end of the preceding semester.

SPECIAL PROGRAMS

The following specialized endorsements in education are available to all students pursuing teacher certification. Students desiring to work toward a specialized endorsement should consult an adviser in the School of Education for assistance in planning their program.

READING — 14 semester hours

Prerequisite: Ed. 325 Reading in the Elementary School
Required

- Ed. 408 Language Arts in the Elementary School (2)
Ed. 483 Primary Reading (2)
Ed. 479 Diagnosis and Practicum in Reading

*Electives — minimum of 6 semester hours

- PE 401 Perceptual Motor Skills (1)
CA 402 Communication Arts in the Elementary Classroom (2)
Ed. 456 Storytelling (4)
English 323 Children's Literature (4)

*Other similar courses may be used as electives if approved by the program adviser before registration is completed.

SPECIAL EDUCATION — Teaching major: 30 semester hours.
Teaching minor: 16 semester hours. See page 61.

LEARNING RESOURCE SPECIALIST (Preparation of School Librarians)

16 semester hours

Students interested in preparing for the responsibility of administration of a school library may meet suggested standards through the following program: Select a minimum of one course from each of the following divisions:

Book and Media Selection

- Ed. 456 Storytelling (4)
Ed. 454 Selection of Learning Resource Materials (2)
English 323 Children's Literature (4)

Administration

Ed. 451 Administration of the School Library (2)

Cataloging

Ed. 453 Processing School Library Materials (2)

Reference

Ed. 452 Basic Reference Materials (2)

Media Utilization and Production

Ed. 457 Preparation and Utilization of Media (3-4)

Curriculum

Ed. 580 Curriculum Development (2)

ACADEMIC PREPARATION

A major from those listed must be completed. Completion of a teaching major/minor in a second academic area is strongly recommended. (Students do not major in education.) Teaching majors are offered in the following areas: art, biology, business education, chemistry, communication arts, earth and general sciences, economics, English, French, German, history, language arts, mathematics, music, physical education, physics, political science, social sciences, sociology, and Spanish.

PREPARATION FOR ELEMENTARY TEACHING: A student preparing for elementary school teaching must complete 24 semester hours in a major teaching area, and two minors consisting of 12 semester hours each. One of the minors must be in the professional subjects and one in a teaching field other than that covered in the 24 semester hour concentration. The courses included in the two minors are to be determined in consultation with the School of Education.

PREPARATION FOR JUNIOR HIGH TEACHING: Students preparing for teaching on the junior high level are required to complete a teaching major of approximately 24-32 semester hours. A teaching minor is also required. Students must consult an education adviser regarding teaching major and minor combinations.

PREPARATION FOR SENIOR HIGH SCHOOL

TEACHING: Students preparing for senior high teaching must complete approximately 44-48 semester hours in the academic area in which they plan to teach. A minor in a second teaching area is recommended. Students may also find it advantageous to their career goals to 1) develop skills in one or more coaching areas in response to Title IX legislation, and 2) develop competencies in special education in response to federal special education legislation. In all cases, students must discuss their program with an adviser from the School of Education.

PREPARATION FOR K-12 TEACHING: Students preparing for K-12 teaching in art, music, or physical education must have student teaching experience on both the elementary and secondary levels. Detailed information regarding K-12 certification is available in the School of Education office.

ART

Senior High Teaching Major: 46 semester hours* required: Art 110, 160, 230, 250, 365, 370, 440, two courses in art history plus electives.

Junior High Teaching Major: 30 semester hours required: Art 110, 160, 230, 250, 365, 440 plus electives. Teaching Minor: 20 semester hours required: Art 110, 160, 230, 250 and 365.

Elementary Teaching Major: 24 semester hours required: Art 110, 160, 250, 341, and eight semester hours of 230, 365 or 370. Teaching Minor: 12 semester hours as determined by the School of Education.

*Up to three supporting courses may be recommended.

BIOLOGY

Senior High Teaching Major: 44 semester hours required: Biology 155, 156, 253, 322, 340; a choice of four semester hours from Biology 324, 371, or 372 and four semester hours from Biology 346, 358, or 441; 12 semester hours in Chemistry (115, 331, 332, 333, 334); Math 133. Recommended: Chemistry 116, Earth Sciences 131, 132, Math 151.

Elementary Teaching Major: 24 semester hours required: Biology 155, 156, 253; Chemistry 115, 166, plus electives. Teaching Minor: 12 semester hours: 155, 156, 253.

BUSINESS EDUCATION

Senior High Teaching Major: 48 semester hours required: Econ 150, Ed. 450, BA 230 or 435, 241, 243, 281 and 2 semester hours of Advanced Typing; elect 4 semester hours from BA 350, 364, or 370; elect four hours of emphasis: Accounting: BA 381 plus 4 hours of upper division accounting; or Shorthand: one year of advanced shorthand. (Strongly recommended: the following courses not taken during the four-year program should be included in the fifth-year: BA 350, 364, 370, 387, and 488.) Also Ed. 340, and 441 or 442.

Typing and shorthand are not offered on campus; these courses may be taken to meet degree requirements at Fort Steilacoom Community College for transfer credit anytime during the four-year program.

CHEMISTRY

Senior High Teaching Major: 49 semester hours required: Chemistry 115, 116, 321, 331, 332, 333, 334, 341, 342, and 343; Physics 147, 148, 153, and 154; Math 151, 152.

Elementary Teaching Major: 24 semester hours required: 16 hours of approved chemistry and 8 hours as determined by the School of Education. Teaching Minor: 12 hours as determined by the School of Education.

COMMUNICATION ARTS

Senior High Teaching Major: 44 semester hours required: 16 semester hours of Communication Arts 123, 128 or 250, 241 and 404, plus 12-29 semester hours chosen in consultation with the major adviser. Supporting classes: Alternative of 16-20 semester hours in English or modern or classical language.

Junior High Teaching Major: 24-28 semester hours required: 12 semester hours of Communication Arts 123, 128 or 250, 241 and 404, plus additional 8 semester hours in Communication Arts. Additional 8-12 semester hours to be determined with department and School of Education. Teaching Minor: 16-20 semester hours required: Communication Arts 123 and 241, plus 8-12 elective semester hours.

Elementary Teaching Major: 24 semester hours required: Communication Arts 123 and 402, plus 8 semester hours in Communication Arts and 8 semester hours in English. Teaching Minor: 12 semester hours to be determined in consultation with the School of Education.

EARTH SCIENCES

Senior High Teaching Major: (Earth Sciences) 44 semester hours required: including 131, 132, 136, 202, 324 or 325; plus one additional course in ES, preferably a field course such as: 351, 360 or 365. Required supporting: Chemistry 103, 104 or 115, 116; Physics 125, 126 (and labs) or 153, 154 (and labs); Math 133; appropriate biology courses. Additional supporting courses should be discussed with adviser.

Junior High Teaching Major: (Earth Sciences) 28 semester hours required, including: 131, 132, 136, 202, 324 or 325; plus one additional course in ES. A field course such as 351, 360 or 365 is recommended. Suggested supporting: Chemistry 104 or 115, 116; Physics 125, 126 (and labs) or 153, 154 (and labs); Math 133; appropriate biology courses. Additional supporting courses should be discussed with adviser.

Elementary Teaching Major: (Earth Sciences) 24 semester hours required: ES 131, 132, 136 and 202; Chemistry 104 or 115 and one upper division science course. Teaching Minor: 12 semester hours in earth and physical sciences.

ECONOMICS

Senior High Teaching Major: 44 semester hours required: Economics 150, 351, 352, 486; 12 semester hours from the following: Econ 321, 331, 361, 362, 434; History 460 plus 12 semester hours distributed over areas of sociology, political science, or anthropology. (Recommended: Ed. 448 to meet professional education requirement.)

Junior High Teaching Major: 28 semester hours required: Economics 150, 434, 486; 4 hours from: Econ 321, 331, 351, 361, 432; History 460 plus 8 semester hours distributed over areas of sociology or political science. Teaching Minor: 12 semester hours required: Econ 150, plus 12 hours of upper division economics. Ed. 448 to meet professional education requirement.

Elementary Teaching Major: 24 semester hours required: Economics 150, 434, 486; 4 semester hours from: Econ 321, 331, 351, 352, 361, 362, 432; History 460, 4 semester hours from the areas of sociology or political science. Teaching Minor: 12 semester hours required: Economics 150 and 8 hours of upper division economics. Ed. 412 to meet professional education requirement.

ENGLISH

Senior High Teaching Major: A minimum of 32 semester hours, 16 of which are to be upper division, is required beyond 101 and with the following distribution: (a) one course in American literature; (b) two courses in British literature (one before 1700 and one after); (c) one course in advanced composition, English 328; and (d) one course from 382, 400 or 403. All majors must present two years of one foreign language at the college level or show equivalent proficiency. Ed. 444 is required to meet professional education requirement. Recommended: CA 404 or MCL 445 and Ed. 420.

Junior High Teaching Major: A minimum of 32 semester hours in English beyond 101 as stated in Senior High Teaching Major above including the distribution requirements. Majors must present two years of one foreign language at the college level or show equivalent proficiency and must take Ed. 444 to meet professional education requirement.

Elementary Teaching Concentration: 24 semester hours; 12 hours in English distributed as in (a) and (b) under Senior High Teaching Major above, and 12 additional hours in English as determined by the School of Education. Recommended: English 323. Teaching Minor: 12 hours required, as determined by the School of Education.

FRENCH

Senior High Teaching Major: 44 semester hours required: French 201, 202 (or equivalent), 321, 351, 352, 445 and 12 additional hours; 445 will meet part of the professional education elective requirement. Supporting courses: 12 hours in related areas selected with the approval of the department.

Junior High Teaching Major: 28 semester hours required as listed for senior high preparation; supporting courses chosen in consultation with major adviser. Secondary Teaching Minor: 16 semester hours above 200 level.

Elementary Teaching Major: 24 semester hours required, including 20 hours in French and 4 additional hours selected in consultation with the department and the School of Education. Teaching Minor: 12 hours required, as determined by the department and the School of Education.

GENERAL SCIENCE

(See adviser.)

GERMAN

Senior High Teaching Major: 44 semester hours required: German 201, 202 (or equivalent), 321, 351, 352, 445 and 12 additional hours; 445 will meet part of the professional education elective requirement. Supporting courses: 12 semester hours in related areas selected with the approval of the department.

Junior High Teaching Major: 28 semester hours required as listed for senior high preparation; supporting courses chosen in consultation with major adviser. Secondary Teaching Minor: 16 semester hours above 200 level.

Elementary Teaching Major: 24 semester hours required, including 20 hours in German and 4 additional hours selected in consultation with the department and the School of Education. Teaching Minor: 12 hours required, as determined by the department and the School of Education.

HISTORY

Senior High Teaching Major: 44 semester hours required: History 107 or 109; 108 or 110; 8 hours of 251, 252 and 253; 460 and 12 additional upper division hours in history including a senior seminar. Supporting courses: 12 additional semester hours selected from economics, geography, political science, psychology, and sociology. Recommended: Ed. 420, Ed. 448 to meet professional education requirements.

LANGUAGE ARTS

Junior High Teaching Major: 32 semester hours required: English 328; 4 hours of English 403 or Linguistics 400; 4 hours of upper division literature (in addition to course taken to meet general education requirement); CA 241 or 326, and CA 404; Ed. 444 and 12 semester hours from areas of English, journalism, CA or foreign language beyond freshman level (at least 8 of the 12 hours must be in the same discipline, and 4 hours must be upper division). Teaching Minor: 16 semester hours required, selected from offerings in English, journalism, CA or foreign language beyond freshman level; English 328 is required. Recommended: Ed. 420.

Elementary Teaching Major: 24 semester hours required: English 328, one of English 403 or Linguistics 400; English 323, CA 402 and one of CA 241 or 326 or 436; 2 courses selected from one of the following areas: English, CA or foreign language beyond freshman level. Teaching Minor: 12 semester hours required as determined by the School of Education. English 328 is required.

MATHEMATICS

Senior High Teaching Major: 44 semester hours required in addition to Math 446. Prerequisite: Math 133 or equivalent. Required: Math 140 or 144, 151, 152, 331, 433, 446; 321 or 434 or 455; four additional upper division hours in math; eight hours of chemistry or physics; and four additional science hours.

Junior High Teaching Major: 24 semester hours required. Prerequisite: Math 133 or equivalent. Required: Math 140 or 144, 151, 152, 331, 433, 446. Teaching Minor: 16 semester hours required in addition to Math 446. Prerequisite: Math 133 or equivalent. Required: Math 151, 152; 127 or 144 or 331; 321 or 433; 446. Math 140 is recommended if 144 is not taken.

Elementary Teaching Major: 24 semester hours. Required: Math 133 or equivalent; 127, 151, 152; 323 or equivalent; 324 or equivalent. Math 140 or 144 is also strongly recommended. Teaching Minor: 12 semester hours. Required: Math 323 or equivalent; 324. Math 140 is strongly recommended.

MUSIC

Secondary Teaching Major — Choral: 49 semester hours required: Music 123, 124, 125, 126, 223, 224, 225, 226, 231, 232, 343, 366, 445, 453, eight hours of large ensemble, four hours of piano lessons (minimum class level 6)*, six hours of voice lessons, and two hours of guitar lessons. Music 341 and 441 are required in the Professional Education sequence for Certification.

Secondary Teaching Major — Instrumental: 51 semester hours required: Music 123, 124, 125, 126, 223, 224, 225, 226, 231, 232, five hours from 241/242, 243/244, 245/246, and 247; ten hours of large ensemble, two hours of piano lessons (minimum class level 4)*, seven hours of private instruction on principal instrument, 345, 445. Music 444 is required for the Professional Education sequence for Certification.

Junior High Teaching Major: 28 semester hours required: Music 123, 124, 125, 126, 223, 224, 225, 226, 231, 232, 345, two hours of large ensemble, two hours of piano lessons (minimum class level 4)*, and two hours private lessons on principal instrument or voice. Two to four semester hours of Music 443 and 444 are required in the Professional Education sequence for certification. Teaching Minor: two to four semester hours from Music 341, 441, 443 and 444 plus 20 hours to be determined in consultation with the School of Education and the Department of Music.

Elementary Music Specialist — Choral: Music 123, 124, 125, 126, 223, 224, 225, 226, 231, 232, 345, 453, eight hours of large ensemble, four hours piano lessons (minimum class level 8)*, six hours voice lessons, two hours guitar lessons. Music 341 and 441 are required in the Professional Education sequence for Certification.

*See Department of Music Handbook for descriptions of class piano levels.

Elementary Music Specialist — Instrumental: See Secondary Teaching Major — Instrumental above.

Elementary Teaching Major: Two to four semester hours from Music 341, 441, 443, and 444 plus 20 hours to be determined in consultation with the School of Education and the Department of Music. **Elementary Teaching Minor:** Two to four semester hours from Music 341 and 441 plus 12 hours to be determined in consultation with the School of Education and the Department of Music.

PHYSICAL EDUCATION

Secondary Teaching Major (44 hours): Required (24 hours): PE 277, 328, 478, 481, 482, and 485; Biology 205-206; participation in a varsity or club sport. Electives: 20 hours from among the following: PE 275, 282, 283, 284, 285, 287, 288, 332, 360, 362, 484, and 491. Students desiring K-12 Certification must complete PE 283, 322, 362, and 284 or 288 in addition to meeting requirements as set forth by the School of Education.

Secondary Teaching Minor (18 hours): Required: PE 277, 334, and 485 and 12 hours of electives from among the following: PE 282, 283, 284, 285, 287, and 328.

Elementary Teaching Major (24 hours): Required: PE 277, 284 or 288, 283, 322, 334, 362 and 4 hours of electives in physical education with approval of school director.

Elementary Teaching Minor (12 hours): PE 322 and 8 hours from among the following: 284 or 288, 283, and 362.

K-6 Physical Education Specialist and K-6 Classroom Teacher (32 hours): Required: PE 277, 283, 284 or 288, 322, 481, 482, 485; Biology 205-206.

Elementary School Physical Education Specialist: Required: PE 277, 283, 284 or 288, 322, 360, 481, 482, 484, 485; Biology 205-206, and eight hours of electives (Education 457 and Music 341 are recommended.)

PHYSICS

Senior High Teaching Major: 44 semester hours required: Physics 106, 147, 148, 153, 154, 205, 223, 355, 421 (2 semester hours); Math 151, 152; 4 hours of chemistry.

Junior High Teaching Major: 28 semester hours required: Physics 106 or 355, 125*, 126*, 147, 148, 205, 223, 272, 421 (2 semester hours), and 8 hours from the following: 106, 205, 223, 272, 355.

*Physics 153 and 154 may be taken instead of 125 and 126, with concurrent or prior registration in Math 151 or 152.

POLITICAL SCIENCE

Senior High Teaching Major: 44 semester hours required: Political Science 101, 151, 331, plus 16 hours of political science electives; History 460; 12 hours from the following supporting areas: economics, geography, history, sociology, anthropology, or psychology. Ed. 448 to meet professional education requirement.

SCIENCE (GENERAL)

See Earth Sciences.

SOCIAL SCIENCE

Senior High Teaching Major: 44 semester hours required: 4 hours from History 251, 252, 253; History 460; 4 hours from each of the following areas: anthropology, economics, geography, political science, psychology, and sociology; 12 upper division hours from two of the following areas: economics, political science, and sociology. Ed. 448 to meet professional education requirement.

Junior High Teaching Major: 28 semester hours required: 4 hours from History 251, 252, 253; History 460; 4 hours from three of the following areas: anthropology, economics, geography, political science, psychology, and sociology; 8 upper division hours from two of the following areas: economics, political science, and sociology. Teaching Minor: 12 hours required: 4 hours from History 251, 252, 253; History 460; and 8 hours from economics, political science, and sociology. Ed. 448 to meet professional education requirement. Recommended: Ed. 420.

Elementary Teaching Major: 24 semester hours required: 4 hours from History 251, 252, 253; History 460; and 16 hours from the following: anthropology, economics, political science, psychology, sociology, and geography. Teaching Minor: 12 semester hours required, as determined by the School of Education. Ed. 412 to meet professional education requirement.

SOCIOLOGY

Senior High Teaching Major: 44 semester hours required: Sociology 101 or 331; 24 hours of sociology; History 460; 12 semester hours distributed over three areas of other social sciences. Ed. 448 to meet professional education requirement. NOTE: Students may elect one of the specialized areas in sociology.

SPANISH

Senior High Teaching Major: 44 semester hours required: Spanish 201, 202 (or equivalent), 321, 351, 352, 445 and 12 additional hours; 445 will meet part of the professional education elective requirement. Supporting courses: 12 hours in related areas selected with the approval of the department.

Junior High Teaching Major: 28 semester hours required: as listed for senior high preparation; supporting courses chosen in consultation with major adviser. Secondary Teaching Minor: 16 semester hours above 200 level.

Elementary Teaching Major: 24 semester hours required, including 20 hours in Spanish and 4 additional hours selected in consultation with the department and the School of Education.

SPECIAL EDUCATION

This 30 semester hour teaching major must be taken in conjunction with another academic teaching major. The screening process for the teaching major in special education must be completed in addition to the screening procedure in the regular education program. Students should make application for admission to the special education program during the first

semester of the training sequence. This should occur during matriculation in Ed. 490 or 492. Application forms may be obtained from the School of Education.

Prerequisites: Elementary — Ed. 251, 32.5, 326, 322., 32.3, or 324; Math 323; Psychology 101. **Secondary** — Ed. 251, 32.5, 326; 423 or 425; Math 323; Psychology 101. Student teaching in regular education must be taken before student teaching in special education.

Elementary Major — 30 semester hours total. 22 semester hours required: Ed. 473, 490, 492, 493, 494, and 499. 8 semester hours of electives from Ed. 479, 495, or 498.

Secondary Major — 30 semester hours total. 26 semester hours required: Ed. 473, 490, 492, 493, 494, 498, and 499. 4 semester hours of electives from Ed. 479 or 495.

Minor — 16 semester hours total. 4 semester hours required from Ed. 490 or 492. 12 semester hours of electives from Ed. 473, 479, 490, 492, 493, 494, 495, 498, and EdPsy 578.

FIFTH-YEAR AND STANDARD CERTIFICATION

The fifth-year of teacher education is to follow a period of one year of initial teaching experience. Students must complete a minimum of eight semester hours applicable toward the fifth year, before the beginning of the fourth year of teaching. Thirty semester hours in an approved program must be completed before the beginning of the seventh year of teaching. Students may choose the institution in which they wish to take advanced work as follows:

1. If they choose to work at PLU or any other of the teacher education institutions in the State of Washington, that institution shall be responsible for recommending them for the Standard Certificate upon completion of the fifth-year program.
2. If PLU graduates wish to undertake the fifth year in an out-of-state institution, PLU will be responsible for recommending them for the Standard Certificate. Students must secure general approval of their plan from the university in advance. There are four provisions governing the fifth-year pattern of work, according to State Board Regulations:

1. The fifth year must include a minimum of 30 semester hours of which at least fifty per cent must be upper division and/or graduate courses.
2. No more than three semester hours of correspondence study may be approved as a part of the 30 semester hours in the student's fifth-year program.
3. PLU graduates must take 15 semester hours of the fifth year in residence at PLU. A non-PLU student who wishes to be recommended by PLU must take a minimum of 20 semester hours in residence at PLU.
4. Students may take 15 of the required 30 semester hours prior to or during the first year of teaching experience with prior permission of the School of Education.

Following are requirements and procedures for the approval of fifth-year programs of work at PLU:

1. Specific course requirements are:
 - Elementary
 - a. Required course: Ed 467, Evaluation (2 hours)
 - b. One required from the following (4 hours): EdPsy 535, Foundations of Guidance; EdPsy 578, Behavioral Problems of Students; EdPsy 575, Mental Health.

- c. 2 hours from the following suggested courses: Ed 473, Parent-Teacher Relationships; Ed 501, Sex Role Stereotyping in Education; EdPsy 475, Reality Discussion Techniques; EdPsy 474, Affective Classroom Techniques; 501 Workshops, for example, Discipline in the Classroom, Encouraging Process.

Secondary

- a. Required courses (4 hours): Ed 420, Problems of Reading in the Secondary School; Ed 467, Evaluation.
- b. Electives (4 hours): *Group A* — 2 hours — courses in a theoretical or interpersonal framework — Ed 473, Parent-Teacher Relationships; Ed 501, Sex Role Stereotyping in Education; EdPsy 475, Reality Discussion Techniques; or appropriate substitutions; *Group B* — 2 hours — courses in a methodological or instructional framework — Simulation, Film, Interaction Analysis, Program Ideas in the Junior High School, Plants of the Pacific Northwest, etc.
2. Any courses recommended for the individual student prior to the granting of the bachelor's degree must be completed. These may be recommended by either the undergraduate adviser or the School of Education.
3. Any course work required by the undergraduate institution and/or the employing school district must be completed.
4. Courses taken should strengthen areas of concentration and build stronger general education background as well as fill needs in the professional field. This program of studies is to be selected by students with the guidance of those who have worked with them during their period of initial teaching and the advisers at the recommending institutions.
5. Students secure approval of the recommending institution for work taken elsewhere before the work is begun.

Some of the work taken during the fifth year may also apply toward a master's degree. Graduate students may undertake a program coordinating requirements for standard certification and the master's degree upon the approval of their committee chair and the coordinator of fifth-year programs.

PRINCIPAL'S CREDENTIALS*

Candidates for the principal's credentials will be guided by the following:

1. They must meet graduate standards for the master's degree.
2. They must complete course and internship requirements for the provisional principal's credentials at their chosen level. To receive this they must have completed work for their Standard Teaching Certificate plus six semester hours.
3. They must complete experience and study requirements for the Standard Principal's Credential at their chosen level. To receive this they need to have (1) had administrative experience, (2) earned a minimum of eight more semester hours since issuance of the Provisional Certificate, and (3) earned their master's degree.

Students who intend to work toward the master's in the field of education must apply for admission to the Graduate Division and meet the requirements outlined by that division. Candidates should see the course requirements as set forth in the Graduate Catalog. **

*Details of the program are available at the School of Education upon request.

**Available at the office of the Dean of Graduate Studies upon request.

CERTIFICATION REQUIREMENTS FOR SCHOOL COUNSELORS AND SCHOOL NURSES

(Subject to new certification requirements as of October 1973)

Educational Staff Associate certification for school counselors or school nurses is individually designed through a consortium consisting of a school district, related professional associations, and Pacific Lutheran University. Additional information on these programs can be obtained by contacting the Dean of the School of Education.

COURSE OFFERINGS

251 LEARNER AND SOCIETY: GROWTH AND DEVELOPMENT

Orientation to contemporary schools; human development in relation to individuals and groups in an educational setting. Public school observation required weekly with students responsible for their own transportation. Prerequisite: Psychology 101 or Sociology 101. (4)

321 HUMAN DEVELOPMENT

Emotional, social, intellectual and physiological development from infancy through adolescence. A weekly two-hour observation of the public school is required. (Individually assigned.) Students responsible for their own transportation. Prerequisite: Psychology 101 or Sociology 101. (4)

322 GENERAL METHODS — PRIMARY

Competencies will be developed for teaching in grades K-3; with observation and participation in public schools. Prerequisite: 251 or 321. (4)

323 GENERAL METHODS — UPPER ELEMENTARY

Competencies will be developed for teaching in grades 4-6, with observation and participation in public schools. Prerequisite: 251 or 321. (4)

324 GENERAL METHODS — ELEMENTARY MODEL

Competencies will be developed for teaching in grades K-6. Extended experience and participation in public school classrooms will be provided. Prerequisites: 251 or 321, Math 323, and concurrent enrollment in EEM block courses, 325, 326, 408, 410, 412. (4)

325 READING IN THE ELEMENTARY SCHOOL

Teaching reading in elementary grades, including modern approaches, materials, methods, techniques, procedures and some diagnosis of reading difficulties. Prerequisite: 250 or 321. (4)

326 MATHEMATICS IN THE ELEMENTARY SCHOOL

Basic mathematical skills and abilities needed by elementary school teacher; recent developments and materials. Prerequisite: Math 323, 324, or equivalent. (2)

340 BUSINESS EDUCATION

First part includes the objectives of high school business programs, the business curriculum, layout and facilities planning, the evaluation of business teachers and competence for business occupations. Also included is the examination of information resources and current thought in business education. The second part of the course concentrates on the application of research findings and psychological principles to the teaching of typewriting and bookkeeping in secondary schools. Required for business education majors. Prerequisite: Advanced Typing and BA 281 or equivalent. (4)

401 WORKSHOPS

Workshops in special fields for varying periods of time. (1-6)

408 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL

The functional teaching of communication skills, grades K-6; areas include: oral and written expression, listening, reading, literature, dramatization, spelling, grammar, handwriting, children's language and language study, vocabulary development and lexicography. (2)

410 SCIENCE IN THE ELEMENTARY SCHOOL

The objectives, materials and methods of teaching science. (2)

412 SOCIAL STUDIES IN THE ELEMENTARY SCHOOL

Objectives, materials and methods of teaching the social studies, recommended to student teachers and experienced teachers. (2)

420 PROBLEMS OF READING IN THE SECONDARY SCHOOL

Teaching secondary reading in content areas; attention to developmental reading problems; materials, methods, techniques, procedures and some observation and diagnosis of reading difficulties. Prerequisite: 251; taken concurrently with 425 and 434. (2)

425 GENERAL METHODS — SECONDARY

Curriculum, materials, and methods of secondary teaching; observation and discussion. Prerequisite: 251, 468. (4)

430 STUDENT TEACHING — PRIMARY

Teaching in the public schools under the direction and supervision of classroom and university teachers. Prerequisites: 251 or 321, 322 or 324, and 325; concurrent enrollment in 435. (10)

**432 STUDENT TEACHING —
UPPER ELEMENTARY**

Teaching in the public schools under the direction and supervision of classroom and university teachers. Prerequisites: 251 or 321, 323 or 324, and 325; concurrent enrollment in 435. (10)

434 STUDENT TEACHING — SECONDARY

Teaching in the public schools under the direction and supervision of classroom and university teachers. Prerequisites: 251, 468, and 425. May be taken concurrently with Ed. 467. (10)

435 PROFESSIONAL SEMINAR

An opportunity for students to share experiences with an exchange of ideas on pupil behavior, curriculum practices, and ways of improving teaching performance. (Taken concurrently with 430 or 432.) (2)

**436 ALTERNATE LEVEL
STUDENT TEACHING — ELEMENTARY**

A course designed to give some knowledge, understanding, and study of children, subject matter fields, and materials in the student's alternate teaching level plus student teaching on that level. Students who have completed secondary preferred level student teaching should enroll in this course. (4)

**437 ALTERNATE LEVEL
STUDENT TEACHING — SECONDARY**

A course designed to give some knowledge, understanding, and study of children, subject matter fields, and materials in the student's alternate teaching level plus student teaching on that level. Students who have completed elementary preferred level student teaching should enroll in this course. (4)

**440-448 SPECIAL METHODS IN TEACHING
SECONDARY SCHOOL SUBJECTS**

Curriculum, methods and materials of instruction in a variety of subjects; may be taken for graduate credit.

**440 SEMINAR IN
SECONDARY ART EDUCATION (2)**

441 TEACHING SECRETARIAL SUBJECTS

The application of research findings and psychological principles to the teaching of shorthand, office practice, and related subjects in secondary schools. Intended for business education majors. Prerequisites: Advanced Shorthand, Advanced Typewriting, BA 241 and BA 340 or equivalent. (2)

**442 TEACHING GENERAL BUSINESS
SUBJECTS**

The application of research findings and psychological principles to the teaching of general business, consumer economics, economics, business law, business mathematics, and business communications subjects in secondary schools. Prerequisites: BA 241, 243, 290 or 495, 350, Economics 150, or consent of the instructor. (2)

**443 CHEMISTRY IN
THE SECONDARY SCHOOL (2)**

444 ENGLISH IN THE SECONDARY SCHOOL
Development of teaching aids and methods; demonstrations of method and strategy of master teachers. (2)

**445 METHODS IN TEACHING
FOREIGN LANGUAGES**

Theory and techniques of foreign language teaching; special problems in the student's major language, emphasis on audiolingual techniques. G (2)

**446 MATHEMATICS IN
THE SECONDARY SCHOOL (2)**

447 SCIENCE IN THE SECONDARY SCHOOL (2)

**448 SOCIAL STUDIES IN
THE SECONDARY SCHOOL (2)**

**451 ADMINISTRATION OF
THE SCHOOL LIBRARY**

Library organization and administration in the elementary school. G (2)

452 BASIC REFERENCE MATERIALS

Those services of a school librarian related to the preservation of all materials which form the sources of reference. G (2)

**453 PROCESSING SCHOOL LIBRARY
MATERIALS**

Classification, cataloging and technical processing of materials. G (2)

**454 SELECTION OF
LEARNING RESOURCE MATERIALS**

Criteria, professional literature and techniques of evaluation of library materials (print and non-print); the librarian's responsibility to faculty, students and the general public. G (2)

455 INSTRUCTIONAL MATERIALS

Audio and visual materials and aids, their use, organization, and administration. G (2)

56 STORYTELLING

A combination of discovery and practicum in the art of storytelling. Investigates the values and background of storytelling, the various types and forms of stories; techniques of choosing and of telling stories. Some off-campus practice. Demonstrations and joint storytelling by and with instructor. (4)

57 PREPARATION AND UTILIZATION OF MEDIA

The production and use of a variety of instructional materials, flat pictures, charts, maps and the 35mm camera; techniques of choosing and of telling stories. Some off-campus practice. Demonstrations and joint storytelling by and with instructor. (4)

467 EVALUATION

Evaluation of school experiences; problems in connection with development, organization and administration of tests (standardized and teacher-made). Required of fifth-year students. Prerequisite: student teaching or teaching experience. Ed 251 - EdPsy 468. May be taken concurrently with student teaching. G (2)

73 PARENT-TEACHER RELATIONSHIPS

An examination of the philosophy and implementation of parent-teacher conferencing. Related issues such as the parental role in education, home visits, and the role of the student in the conferencing process are also considered. Listening and communication skills useful in conferencing are studied and practiced. Provisions for the needs of parents of the handicapped will be studied by students in the special education program. Prerequisite: student teaching or teaching experience. (2)

479 SPECIAL TECHNIQUES IN READING

Individual diagnostic assessment of reading problems using both formal and informal testing techniques. Special instructional methods for remediation for both Title I and Special Education children. Practicum required. Prerequisite: Ed 325 or equivalent. (4)

483 PRIMARY READING

Materials and methods of the primary reading program and its relation to other activities. Prerequisite: teaching experience. G (2)

485 THE GIFTED CHILD

A study of the gifted child, characteristics and problems, and school procedures designed to further development. G (2)

488 READING CENTER WORKSHOP

Clinical study of reading problems and suggested corrective measures; to be taken concurrently with 489. Prerequisite: teaching experience. S G (2)

489 DIRECTED TEACHING IN READING CENTERS

Directed observation and teaching in summer remedial classes in public schools; to be taken concurrently with 488. Prerequisite: teaching experience. S G (4)

490 INTRODUCTION TO SPECIAL EDUCATION

Definitions, characteristics and psychological aspects of all categories of exceptionality. Federal and state legislation. Current issues and practices in delivering services to handicapped people. The classroom teacher's role in mainstreaming. Practicum required. Prerequisites: Ed 251, 325, 326, and General Methods. (4)

492 CHARACTERISTICS OF LEARNING DISABILITIES

Current issues, practices and research in learning disabilities. Emphasis will be on special instructional techniques to accommodate this type of child's special needs. Practicum required. Prerequisites: Ed 251, 325, 326, and General Methods. (4)

493 LEARNING DISABILITIES: DIAGNOSTIC PROCEDURES

A broad range of screening and diagnostic procedures will be studied. Data from other professionals such as the school psychologist, communication disorder specialist, occupational therapist, and medical doctor will be used to prepare a hypothesis regarding the child's disabilities. Various educational tests, formal and teacher-made, will be used to determine where a child is functioning academically. Practicum required. Prerequisite: Ed 490, or 492, or concurrent enrollment, or permission of instructor. (4)

494 LEARNING DISABILITIES: PROGRAMMING

Diagnostic information is used as the basis for writing an IEP (individualized educational plan). Course includes behavioral objectives, task analysis, learning sequences, behavior modification, and evaluation of learning using precision teaching techniques. Practicum required. Prerequisite: Ed 493 or permission of instructor. (4)

495 LANGUAGE PROBLEMS OF EXCEPTIONAL CHILDREN

Principles of receptive and expressive language development including speech, word meaning, dialect, and reading. Assessment and remediation strategies from early childhood through adolescent. Course is designed for regular and special education teachers. Prerequisite: Ed 251. (4)

496 LABORATORY WORKSHOP

Practical course using elementary-age children in a classroom situation working out specific problems; provision will be made for some active participation of the university students. Prerequisite: conference with the instructor or the Dean of the School of Education. G

497 SPECIAL PROJECT

Individual study and research on educational problems or additional laboratory experience in public school classrooms. Prerequisite: consent of the Dean. G (1-4)

498 CURRICULUM FOR EXCEPTIONAL STUDENTS IN THE SECONDARY SCHOOL

Curriculum content and planning including academic subjects, life adjustments, and career counseling for exceptional adolescents and adults. Focus of the course will be for the learning disabled and other mildly handicapping conditions. Prerequisites: Ed. 490 or Ed. 492. (4)

499 SPECIAL EDUCATION: STUDENT TEACHING

Teaching in public schools Special Education classrooms under the direction and supervision of classroom and university teachers. Prerequisite: Ed. 494. (4)

501 WORKSHOPS

Graduate workshops in special fields for varying lengths of time. (1-4)

525 CURRENT PRACTICES AND ISSUES IN READING

To examine current practices and issues in the field of reading as described through educational research. The research findings will be applied to current classroom practices. Students will be encouraged to pursue specific areas of interest within the broad area of reading instruction. Prerequisite: 325 or equivalent and teaching experience. (2-4)

527 PSYCHOLOGY OF READING

Principles of reading, perception, word recognition, concept development and meaning in reading will be explored. The psychological and physiological aspects of the reading act will be examined in relationship to successful reading achievement. Prerequisite: 325 or equivalent and teaching experience. (2)

545 METHODS AND TECHNIQUES OF RESEARCH

Seminar in research methods and techniques in education with emphasis on designing a research project in the student's area of interest. Required for M.A. Prerequisite: Consultation with student's adviser and admittance to the graduate program. (2)

550 SCHOOL FINANCE

Local, state and federal contributors to school finance, its philosophy and development; the development and administration of a school budget. (2)

552 PUBLIC SCHOOL ADMINISTRATION

Administration and supervision of school personnel, plant and program; the structure and organization of the school system. Prerequisite: teaching experience or consent of the Dean. (3)

554 HIGH SCHOOL ORGANIZATION AND ADMINISTRATION

Planning and organizing the high school curriculum scheduling, extra-curricular activities, teachers' meetings, public accounting and control, finance and reports. Prerequisite: 552. (2)

555 ADMINISTRATION AND SUPERVISION WORKSHOP

Projects discussed determined by the class; typical projects include curriculum planning and adjustment, public-relations programs, personnel employment and in-service training; financing building and educational programs. Prerequisite: one course in administration and/or supervision. (2)

558 ADMINISTRATIVE INTERNSHIP

Internship in school administration planned with the School of Education in cooperation with selected school administrators. Prerequisite: course work in school administration and admission to the graduate program (2-4)

571 HISTORY AND PHILOSOPHY OF HIGHER EDUCATION

Historical perspective and current status; development of functions and structures; issues in curriculum; philosophy of administration; case studies. (4)

573 STUDENT PERSONNEL WORK IN HIGHER EDUCATION

Student personnel services in higher education; use of personnel data; co-curricular activities; student welfare; contemporary trends in counseling problems related to student life. (4)

579 DIAGNOSIS AND REMEDIATION IN READING

Causative factors relating to reading difficulties; some opportunity to apply remediation techniques; open to those with teaching experience. (2)

580 CURRICULUM DEVELOPMENT

Types of curriculum organizations, programs and techniques of curriculum development. (2)

583 EDUCATIONAL ISSUES AND PROBLEMS

Individual reading, investigation, research and/or practicum experience in school or agencies. (1-4)

585 COMPARATIVE EDUCATION

Comparison and investigation of certain material and cultural systems of education throughout the world. (2)

586 SOCIOLOGY OF EDUCATION

The nature of functioning of the educational system will be examined from a sociological perspective. Topics will include: education, stratification, and social change; school as a complex organization; the school as a social institution; and the sociology of learning. (4)

587 HISTORY OF EDUCATION

Great educators, educational theories and educational systems from antiquity to the present. (2)

589 PHILOSOPHY OF EDUCATION

Philosophical and theoretical foundations of education. (3)

590 GRADUATE SEMINAR

A workshop for all Master of Arts candidates in the School of Education which provides a forum for exchange of research ideas and problems; candidates should register for this seminar for assistance in fulfilling requirement. No credit is given, nor is tuition assessed. (0)

596 RESEARCH STUDIES IN EDUCATION

For Master of Arts candidates who elect to write two research papers instead of a thesis. (One paper may be in the candidate's minor field under the supervision of the minor adviser.) Candidates will be required to review their research papers before their Graduate Committee (see Graduate Catalog). (1)

597 RESEARCH STUDIES IN EDUCATION

See Education 596. (2)

599 THESIS

For Master of Arts candidates who elect to write a thesis instead of two research papers. The thesis problem will be chosen from the candidate's major field of concentration and must be approved by the candidate's Graduate Committee. Candidates will be expected to defend their thesis in a final oral examination conducted by their committee. (3-4)

EDUCATIONAL PSYCHOLOGY

461 GROUP PROCESS AND THE INDIVIDUAL

A human interaction laboratory to facilitate the exploration of the self concept through the mechanisms of interpersonal interactions and feedback. Emphasis placed on the acquisition of skill in self-exploration, role identification and climate-making. G (2)

466 INTRODUCTION TO STUDENT DEVELOPMENT IN HIGHER EDUCATION

Introduction to the concept of student development in higher education; exposure to student personnel services offered by colleges and universities; familiarization with the literature in the field; field trips to student personnel operations at local post-secondary institutions. G (2)

468 EDUCATIONAL PSYCHOLOGY

Principles and research in human learning and their implications for curriculum and instruction. Prerequisite: 251. (4)

469 CAREER GUIDANCE

A study of careers, theories of choice and guidance techniques. (4)

474 AFFECTIVE CLASSROOM TECHNIQUES

This course will explore various techniques designed to facilitate understanding of self and others; methods for working with students. Prerequisite: student teaching or graduate status. Laboratory experience as arranged. G (2)

475 REALITY DISCUSSION TECHNIQUES

The use of Reality Therapy in a helping relationship — schools, social agencies, mental health clinics, university residences, etc. Laboratory experience as arranged. G (4)

490 INTRODUCTION TO SPECIAL EDUCATION

(Same as Education 490)

501 WORKSHOPS

Graduate workshops in special fields for varying lengths of time. (1-4)

535 FOUNDATIONS OF GUIDANCE

The focus is on developing an understanding of the services and processes available to assist individuals in making plans and decisions according to their own life pattern. G (4)

560A CONTINUING PRACTICUM

A practical experience in the techniques of counseling; enrollment limited to students beginning the master's programs in Counseling and Guidance and Student Personnel Administration in Higher Education, and is a prerequisite to admission to the Counseling and Guidance master's program; practicum makes use of counseling sessions with clients utilizing verbal and non-verbal attending behavior. (1)

560B CONTINUING PRACTICUM

A practicum experience in individual counseling to assist students to integrate cognitive and affective learnings. Opportunity for problem identification, contract and decision making. Prerequisite: 560A. (1)

560C CONTINUING PRACTICUM

Experience in individual counseling with emphasis on Gestalt therapy techniques. Prerequisites: 560B and EdPsy 561. (1)

560D CONTINUING PRACTICUM

Experience in small group settings, following Adlerian psychology consultation model. Prerequisites: 560C and 578. (1)

560E CONTINUING PRACTICUM (ADMINISTRATIVE)

Experience working in an administrative setting in student personnel for 5-10 hours per week. Exposure to the literature associated with the specialized field chosen. May be taken twice, with experiences to be in different settings each time. Prerequisites: 466, 560A. (1)

561 BASIC RELATIONSHIPS IN COUNSELING

A study of the theory, process, techniques and characteristics of the counseling relationship. A basic course for M.A. students in the Counseling and Guidance program. (Formerly Counseling Theory). (4)

563 PRACTICUM IN GROUP PROCESS AND LEADERSHIP

A human interaction laboratory which explores interpersonal operations in groups and facilitates the development of self-insight; emphasis on leadership and development of skill in diagnosing individual, group and organizational behavior patterns and influences. Prerequisite: 461. (2)

565 SEMINAR: NON-TEST APPRAISAL

Assessment of personal characteristics and behavioral patterns to better understand the individual; use of non-test data (sociometric scales, case studies, autobiographies, interviews, interaction analysis). Prerequisites: student teaching, graduate status. (4)

570 PRACTICUM AND FIELDWORK IN COUNSELING AND GUIDANCE

A culminating practicum of field experience in schools or agencies using theory, skills and techniques previously learned; a variety of work experiences with individual groups. Seminar included. Prerequisites: 560C, 469, Ed. 545, Psychology 450. (4)

572 PRACTICUM IN STUDENT PERSONNEL ADMINISTRATION

A culminating practicum of supervised collegiate experience in residence halls, administrative offices, service agencies, research on projects associated with practicum. (4)

573 SEMINAR IN STUDENT PERSONNEL ADMINISTRATION

Student personnel services in higher education; use of personnel data; co-curricular activities; student welfare; contemporary trends in counseling problems related to student life. (4)

575 MENTAL HEALTH

Basic mental health principles as related to interpersonal relationships. Focus upon self understanding. Laboratory experience as arranged. (4)

578 BEHAVIORAL PROBLEMS OF STUDENTS

Adlerian concepts provide basis for observation, motivation, modification, and life style assessment. Skills for assisting students develop responsibility for their own behavior is focus. Laboratory experience as arranged. (4)

INTERIM COURSES OFFERED IN 1978

307 CREATIVE MEDIA

320 INDEPENDENT STUDY

English



As a discipline English assists students in achieving excellence in writing, discernment in reading, appreciation of human experience and aesthetic values, and an understanding of the processes of critical and creative expression.

The English department offers a full semester in London in the fall, and often a study tour of the British Isles during interim. A special program exploring careers in publishing with a summer internship was begun in 1975.

FACULTY

Van Tassel, Chair; Benton, Bergman, L. Johnson, Jones, Klopsch, D.M. Martin, Reigstad, Seal.

BACHELOR OF ARTS MAJOR: 28 to 40 semester hours of English beyond English 101, including: 4 hours in American literature, 4 hours in British literature before 1700, and 4 hours in British literature after 1700. At least 16 hours should be upper division.

Individual programs are designed by students and their advisers, with approval by the full department in a review during the junior year. Advanced courses in writing or grammar may be required.

All English majors must complete at least two years of a foreign language at the college level, or the equivalent.

MINOR: 16 semester hours, excluding courses for Interim credit, of which at least 8 hours should be upper division. These courses should include 4 hours in American literature, 4 hours in British literature before 1700, and 4 hours in British literature after 1700.

MINOR (EMPHASIS ON WRITING): 16 semester hours, excluding courses for Interim credit, of which at least 8 hours should be upper division. These courses should include 4 hours in British literature before 1700, 4 hours in American or British literature after 1700, and 8 hours in writing courses drawn from 327, 328, and 403.

All English minors must complete at least one year of a foreign language at the college level, or the equivalent.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

COURSE OFFERINGS

101 COLLEGE ENGLISH

Develops a student's powers to read, think, and write critically. (Students whose English skills are weak are encouraged to work in the skills programs of the Academic Advising and Assistance Center before registering for English 101.) I II (4)

217 SHORT STORY

Themes and techniques in short fiction. II (4)

221 LITERARY FORMS AND ANALYSIS

Designed to familiarize students with forms of literature (poetry, fiction, drama), with basic literary terms, and with major critical approaches. II (4)

230 INTRODUCTION TO CONTEMPORARY LITERATURE

Emphasis on American fiction since 1950. I (4)

231 MASTERPIECES OF EUROPEAN LITERATURE

Representative works of the literature of Western Europe, especially classical, medieval, and Renaissance. I (4)

241 INTRODUCTION TO AMERICAN LITERATURE

The continuity of themes and forms in American prose, poetry, and fiction from colonization to the First World War. Emphasis on major works of the 19th century. I II (4)

251 INTRODUCTION TO ENGLISH LITERATURE: BEGINNINGS TO 1750

Emphasis on the continuity and variety of English literature from Beowulf through Neoclassicism. I (4)

252 INTRODUCTION TO ENGLISH LITERATURE: AFTER 1750

English literature, especially poetry, from the emergence of romanticism to the 20th century. II (4)

323 CHILDREN'S LITERATURE

An introduction to a rich literary tradition to guide reading and book selection in the schools and the family. I II (4)

327 IMAGINATIVE WRITING

A workshop in writing poetry and short fiction. Includes practical study of techniques and forms to develop critical standards and an understanding of the process of composition. I II (4)

328 ADVANCED COMPOSITION

A study of rhetorical principles used in writing persuasively and imaginatively. Required for certification by the School of Education. I II (4)

341 FREE-LANCE WRITING

A course in writing for publication, with primary emphasis on the feature article. Intended to help students develop research and editorial skills; to help them produce writing that is clear, informative, and expressive; to enhance their sense of audience; and to introduce them to procedures for submitting for magazine publication. (4)

349 MODERN POETRY

Emphasis on American poetry since 1950. II (4)

351 MODERN DRAMA

A study of modern classics from Ibsen to Ionesco: Scandinavian, German, French, Italian, Spanish, Russian, English, Irish, and American. II (4)

358 THE BRITISH NOVEL

A study of the form from Defoe and Fielding to Lawrence, Joyce, and the moderns. II (4)

382 CHAUCER AND HIS AGE

A study of Chaucer's major works, especially The Canterbury Tales, in their lively 14th-century setting. Includes an introduction to the development of the English language. I (4)

383 SHAKESPEARE

Ten to twelve representative plays. Recommended as background: 251. I (4)

388 MILTON AND HIS AGE

A study of Milton's work, especially Paradise Lost, and the work of other major authors (Donne, Herbert) of the 17th century, the golden age of religious poetry in England. II (4)

389 ENGLISH SATIRE AND SENSIBILITY, 1660-1800

A study of neo-classic writings and the developing social awareness of the pre-romantic age: Dryden and Pope to Johnson and Blake. I (4)

390 THE ENGLISH ROMANTIC MOVEMENT

A study of the romantic awakening in England: Blake, Wordsworth, Coleridge, Shelley, Keats, Byron, and others. I (4)

391 LIFE AND LETTERS IN VICTORIAN ENGLAND

Selected authors and topics from a period of rapid and momentous social change. II (4)

392 TWENTIETH CENTURY BRITISH LITERATURE

Selected playwrights from Shaw to Beckett; poetry of Yeats, Thomas, and Auden; fiction of Joyce, Lawrence, Greene, and others. II (4)

400 LINGUISTICS

See Modern and Classical Languages.

403 MODERN ENGLISH GRAMMAR

A study of three major approaches to grammar: the traditional, the structural, and the transformational. Includes introduction to the history of the English language. I (4)

441 AMERICAN ROMANTIC LITERATURE, 1820-1880

Studies in literary romanticism from Cooper to James, with emphasis on the Age of Emerson. Readings in Thoreau, Whitman, Poe, Melville and Hawthorne for upper division students. I (4)

**442 AMERICAN REALISM AND
NATURALISM, 1880-1915**

Fiction and criticism in the years of America's urbanization and emergence as an industrial power: Twain, James, Crane, Norris, Dreiser. (4)

443 AMERICAN LITERATURE SINCE 1915

Introduction to the modern tradition in poetry (Frost, Williams, Pound) and fiction (Fitzgerald, Hemingway, Faulkner) for upper division students. II (4)

**491, 492 INDEPENDENT READING AND
RESEARCH**

An intensive course of reading. May include a thesis. Intended for upper division majors. I II (2-4)

597 GRADUATE RESEARCH

(2-4)

**INTERIM COURSES
OFFERED IN 1978**

101 COLLEGE ENGLISH

**301 POETRY AND THE MYSTICAL
EXPERIENCE**

**303 REFLECTIVE READING: FAULKNER'S
ABSALOM, ABSALOM!**

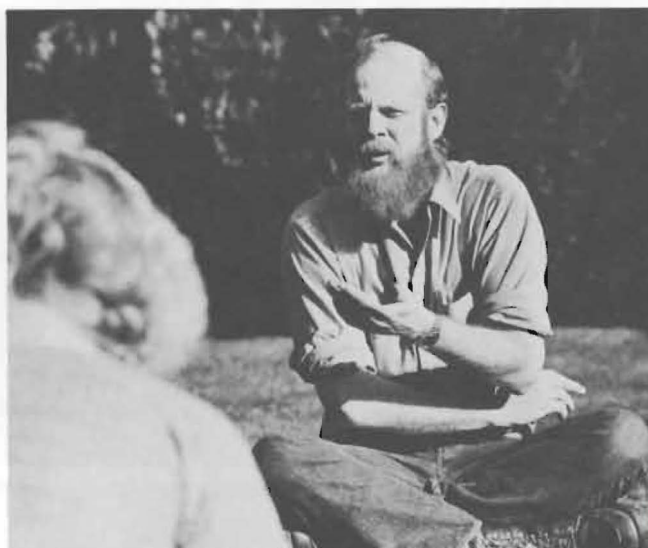
305 GROWING UP IN THE NOVEL

**307 WOMAN AS WRITER: THE FEMALE
IMAGINATION**

309 THE INTERPRETATION OF FAIRY TALES

**310 EUROPEAN MUSIC, DRAMA, CULTURAL
TOUR**

312 THE WORLD OF THE BOOK



SCHOOL OF Fine Arts



The School of Fine Arts of Pacific Lutheran University is a community of artists dedicated:
to provide energies and facilities for the focused refinement of creative activity;

to operate in the vanguard of artistic understanding and to assume an additive rather than imitative position relative to that understanding;

to pursue study of both the historical and theoretical aspects of our creative legacy;

to recognize change in artistic criteria without devaluing the traditional concepts of discipline, craftsmanship, and academic professionalism;

to foster activity free from the caprice of the marketplace but, by virtue of its substance, not aloof from nor incompatible with practical concerns;

to animate and "humanize" the academic climate of Pacific Lutheran University via the creative presence by sponsoring a rich and varied program of events in the arts;

and to provide the students of Pacific Lutheran University an opportunity to experience first hand the unique "chemistry" of the creative process.

FACULTY

Moe, Dean: faculty members of the departments of art, communication arts, and music.

Degrees offered by the School of Fine Arts include the B.F.A. (Bachelor of Fine Arts) in art or in communication arts, the B.M. (Bachelor of Music), and the M.M. (Master of Music). Students may also earn the B.A. (Bachelor of Arts), but this degree is awarded through the College of Arts and Sciences. Candidates for the B.F.A. and B.M. as well as for the B.A. in art, communication arts, or music must meet general university requirements and the specific requirements of the departments of art, communication arts, or music.

For details about the B.A.E. (Bachelor of Arts in Education) in art, communication arts, or music, see the School of Education.

For course offerings, degree requirements, and programs in the School of Fine Arts, see:

ART
COMMUNICATION ARTS
MUSIC

History



The department is interested in providing students with the tools of critical thought and appropriate methods for finding and testing historical evidence, for weighing values, and for discovering truth. The history faculty pursues these goals through courses and directed research both on and off campus, through joint faculty-student projects, and through public workshops, lectures, and other events.

As an academic inquiry which emphasizes the development of analytical skills, the study of history depends on the availability of a wide variety of primary and secondary source material. Historical holdings in the Robert A.L. Mortvedt Library are strong and diverse, including significant resources in American, European, and non-Western fields. Regional archival material is housed in the Nisqually Plains Room of the Library.

FACULTY

Martinson, Chair; Browning, Halseth, D. Johnson, Nordquist, Rozanski.

BACHELOR OF ARTS MAJOR: Minimum of 32 semester hours, including 4 hours — American field, 4 hours — European field, and 4 hours — non-Western field. Students are expected to work closely with the department's faculty advisers to insure the most personalized programs and instruction possible. Majors are urged to meet the foreign language requirements of the College of Arts and Sciences under either Option I or Option II. Those majors who are preparing for public school teaching can meet the state history certification requirement by enrolling in History 460. All senior majors are required to take four hours of seminar credit.

MINOR: 20 semester hours, 12 hours from courses numbered above 300. The minor in history emphasizes a "program focus" and a "program plan," which is arranged by the student in consultation with a departmental adviser.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

COURSE OFFERINGS

American Field

251 COLONIAL AMERICAN HISTORY

American institutions from colonial times to the 1790's; the growth of the colonies and their relationship to the British imperial system. (4)

252 **NINETEENTH CENTURY
AMERICAN HISTORY**

From Jefferson to Theodore Roosevelt; interpretation of eras from social, political, economic, and biographical viewpoints. (4)

253 **TWENTIETH CENTURY
AMERICAN HISTORY**

Trends and events in domestic and foreign affairs since 1900; affluence, urban growth, and social contrasts. (4)

356 **HISTORY OF AMERICAN
FOREIGN POLICY**

The practice, function, and structure of American foreign policy with particular emphasis on the twentieth century. (4)

451 **AMERICAN CONSTITUTIONAL HISTORY**

Dimensions of American law as it relates to changing historical periods. (4)

460 **WEST AND NORTHWEST**

The American West in the 19th and 20th centuries. Frontier and regional perspectives. Interpretive, illustrative history, and opportunities for off-campus research. (4)

471 **HISTORY OF AMERICAN THOUGHT
AND CULTURE**

Dimensions of American social and intellectual history. (4)

494 **SEMINAR: AMERICAN HISTORY**

(4)

European Field

107, 108 **HISTORY OF WESTERN
CIVILIZATION**

Analysis of institutions and ideas of selected civilizations. Mesopotamia, Egypt, the Hebrews, Greece, Rome, the rise of Christianity, and Medieval Europe in the first semester; Europe from the Renaissance to the present in the second semester. I II (4, 4)

321 **CLASSICAL CIVILIZATION**

The ancient Mediterranean world with emphasis upon Greek and Roman civilizations. (4)

323 **THE MIDDLE AGES**

Europe from the disintegration of the Roman Empire to 1300; reading and research in medieval materials. (4)

324 **RENAISSANCE**

Europe in an age of transition — 1300 to 1500. (4)

325 **REFORMATION**

Political and religious crisis in the 16th century: Lutheranism, Zwinglianism, Anglicanism, Anabaptism, Calvinism, Roman Catholic reform; Weber thesis, the beginnings of Baroque art. (4)

328 **NINETEENTH CENTURY EUROPE**

The expansion of European civilization from 1800 to 1914. (4)

329 **TWENTIETH CENTURY EUROPE**

World War I; revolution and return to "normalcy"; depression and the rise of fascism; World War II. (4)

332 **ENGLAND: TUDORS AND STUARTS**

Political, social, economic, legal, and cultural developments. (4)

334 **MODERN GERMANY, 1848-1945**

The Revolutions of 1848 and unification of Germany; Bismarckian and Wilhelminian empires; Weimar Republic and the rise of National Socialism; the Third Reich. (4)

341 **SEVENTEENTH CENTURY FRANCE**

Structure of society, development of absolutism, protest of popular classes, role of France in international affairs, origins of the Enlightenment. (2)

342 **THE FRENCH REVOLUTION**

Structure of society, origins and course of the Revolution, and its impact on France and Europe. (2)

495 **SEMINAR: EUROPEAN HISTORY**

(4)

Non-Western Field

109, 110 **HISTORY OF
EASTERN CIVILIZATIONS**

The historical evolution of the civilizations of China, Japan, and India. First semester focuses on cultural, political, and social developments; second semester examines western imperialism, the rise of Asian nationalism and colonial revolution, and Asia's communist and non-communist roads to modernization. I II (4, 4)

333 **REVOLUTIONARY RUSSIA**

Post-Peter the Great Russia; the establishment of Czarist autocracy; the Great Reforms of the 19th century; the rise of the revolutionaries; Bolshevism, Lenin, and the Revolutions of 1917; the consolidation of the Soviet state. (4)

335 **LATIN AMERICAN HISTORY**

A survey of the major aspects of Latin American history from colonial to modern times. Spanish and Portuguese institutions, inter-American relations, and case studies of Mexico, Argentina, Brazil, and Cuba. (4)

340 **MODERN CHINA AND JAPAN**

The modern transformation of East Asia: Western imperialism and dynastic decline; Japan's "miracle" modernization; China's semi-colonialism, nationalism, and Republican revolution; the rise of Mao and communist revolution; Japan's militarism and the road to Pearl Harbor. (4)

Relevant To All Fields

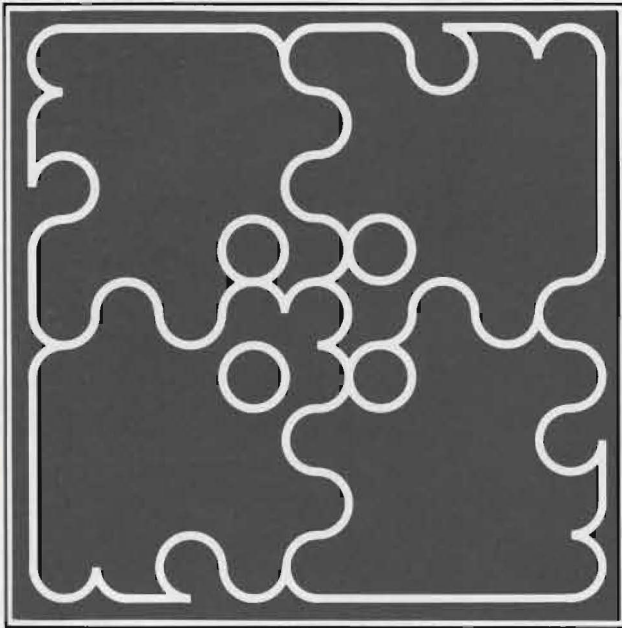
- 492 INDEPENDENT STUDY
(1-4)
- 496 SEMINAR: HISTORY AND HISTORIANS
(4)
- 596 GRADUATE RESEARCH
(1-4)
- 599 THESIS
(4)

INTERIM COURSES OFFERED IN 1978

- 301 THE BODY BEAUTIFUL
- 306 HOLOCAUST: THE DESTRUCTION OF
THE EUROPEAN JEWS
- 312 JIMMY CARTER'S SOUTH:
THE SOUTH SINCE 1925
- 313 CHINESE CONVERSATION,
CALLIGRAPHY, AND CUISINE
- 315 THE PICTURED WORD: EMBLEMS,
COATS-OF-ARMS, DEVICES, MASQUES



Integrated Studies Program



Symbol Design: Paul Porter

The Integrated Studies Program is especially designed as an alternative mode of satisfying the Core curriculum requirement. Consisting of a constellation of interdisciplinary courses, the program as a whole explores a central theme, "The Dynamics of Change," from a variety of perspectives.

FACULTY

Huber, *Director*; selected faculty from the disciplines of the arts and sciences, including Anthropology, Art, Biology, Chemistry, Communication Arts, Economics, English, History, Mathematics, Modern and Classical Languages, Philosophy, Physics, Political Science, Psychology, Religion, and Sociology.

A student who chooses Core II to meet the General University Requirements will begin with Sequence I, with any two Sequences chosen from II, III, or IV taken subsequently or concurrently, and conclude the Program with the Seminar which would be taken after, or concurrently with, completion of the last course in the Sequences selected. Individual courses in each Sequence are equivalent to four semester hours of credit each.

A brochure with further details is available from the Office of Admissions or the Registrar. A brief summary of the program follows.

THE DYNAMICS OF CHANGE

SEQUENCE I:

The Idea of Progress

IS 211 Course 1: Nature and Supernature

IS 212 Course 2: From Finite to Infinite

SEQUENCE II:

Human Responsibility

IS 221 Course 1: The Developing Individual

IS 222 Course 2: The Burden of Human Responsibility

Option 1: ...20th Century Europe

Option 2: ...20th Century Asia

SEQUENCE III:

Word and World: Exploring the Creative Imagination

IS 231 Course 1: Symbol, Language, Myth

IS 232 Course 2: Model and Metaphor: Inventing the World

SEQUENCE IV:

Limits to Growth

IS 241 Course 1: The Technological Society and the Thrust for Growth

IS 242 Course 2: The Technological Society and the Limits to Growth

SEMINAR:

IS 251 Seminar

REGULATIONS GOVERNING CORE II

1. Sequence I is prerequisite or corequisite to all following sequences. A waiver of this sequence may be allowed for a student whose previous work in liberal studies is judged to have been sufficiently broad and relevant to the principal ideas to be studied in the remaining sequences. A committee of the Program's faculty will evaluate such a waiver request.
2. Sequences II, III, or IV may be taken independently of enrollment in the Program as a whole, but will not satisfy any portion of the General University Requirements. Credit will be given for such courses, however, and may count as elective credit or credit toward a major if a course is specifically allowed by the appropriate department(s).
3. If, for any reason, students who enrolled in the Program do not complete it, a Transfer Committee (composed of the three Divisional Chairs and the Dean of the School of Fine Arts) will evaluate their work in the light of its scope and in view of the General University Requirements to make a decision concerning what areas of study such students must still take to satisfy the regular General University Requirements.
4. Enrollment in the concluding Seminar is open only to students who complete Sequence I and any two of II-IV, or any two of II-IV with a waiver of Sequence I.
 5. Sequence I may be taken in the freshman year, and any two of Sequences II-IV may be taken in the freshmen, sophomore, and/or junior years. The concluding Seminar may be taken after or concurrently with the last course in the Sequences.
 6. Students successfully completing the components of this Program as outlined above will be regarded as having fulfilled all the General University Requirements except courses in Writing and Physical Education and the Interim requirement.
7. Since one of the emphases of this Program is to develop the writing, critical and analytical skills of students, participation in the actual course work and discussion is essential. Therefore, component courses in the Program may not be taken by means of challenge examinations, nor will CLEP credit, work-study or other academic experience be substitutable for course credit in this Program.
8. Pass-fail credit may not be elected by students enrolled in this Program in any sequence of courses after the first or in the Seminar. No component course may be offered by the instructional staff as an exclusive pass-fail course.
 9. Since a sequence of courses is especially designed as a consecutive and interrelated whole, the first course in each sequence is prerequisite to the second. They may not, therefore, be interchanged.

IS 211 NATURE AND SUPERNATURE

Study of the creative and reactionary responses of the Renaissance, Reformation and counter-Reformation periods to the authoritarian Medieval mentality. Luther, Galileo, Kepler and Newton are given special emphasis together with developments from 1500-1700 in art and political history. Analysis of the emerging idea of progress. Prerequisite to 212, From Finite to Infinite. (4)

IS 212 FROM FINITE TO INFINITE

Developments in literature, politics and industrialization in the 18th and 19th centuries. Emphasis is given to the influence of the Enlightenment on the development of the idea of progress, and to the formation of Darwinism, the Romantic movement and Marxism. (4)

IS 221 THE DEVELOPING INDIVIDUAL

The development of moral values and conscience are studied from a biological, philosophical and sociological point of view, in connection with contemporary moral issues. Particular attention is given to criminal behavior and gene manipulation and the pertinent moral and social questions raised by these phenomena. Prerequisite to 222, Burden of Human Responsibility. (4)

IS 222 THE BURDEN OF HUMAN RESPONSIBILITY

Option 1: ...20th CENTURY EUROPE

Topics in history and literature selected from the sequence of events from industrialization to the Second World War are examined. Emphasis lies on the crisis of values posed by rapid industrialization and technological growth. Naive deterministic notions of progress are contrasted with the experience in the coal mines of Northern France and the trenches in World War I. Two contrasting Marxist models of revolution, those of Lenin and Rosa Luxemburg, are studied. The cultural experimentation of the Twenties is shown to be a search for new values; the iconoclastic work of artists and writers reveals itself as an exercise of responsibility. Finally, the moral dilemmas posed by German National Socialism and World War II are considered. a/y (4)

Option 2: ...20th CENTURY ASIA

The modernization of Asia is critically examined, using the life struggles of "paradigmatic individuals" such as Gandhi and Mao Tse-tung, and emphasizing their efforts to transform India and China. Japan will be treated similarly. Dominant themes include colonialism, westernization versus modernization, the rise of nationalism and revolution, national integration and the individual in tension between past and future. a/y (4)

IS 231 SYMBOL, LANGUAGE AND MYTH

The phenomenon of language is examined through a study of its role in shaping knowledge, its history as a symbolic system, and its nature as a depository of cultural traits. The nature of symbolic systems generally, including numerical systems, and the role of myth as a genre for expressing "reality" are given emphasis. Prerequisite to 232, Model and Metaphor: Inventing the World. (4)

IS 232 MODEL AND METAPHOR: INVENTING THE WORLD

This course takes the language, number, symbol and ritual discussed in IS 231 and shows how they can be used to construct larger structures of thought, feeling, and perception that not only describe the world, but to some extent invent it. Model and metaphor are seen as tools which, through the practice of various disciplines (social, mathematical and artistic), give us a variety of perspectives upon selves and worlds which are seen increasingly to be interpretive rather than given. (4)

IS 241 THE TECHNOLOGICAL SOCIETY AND THE THRUST FOR GROWTH

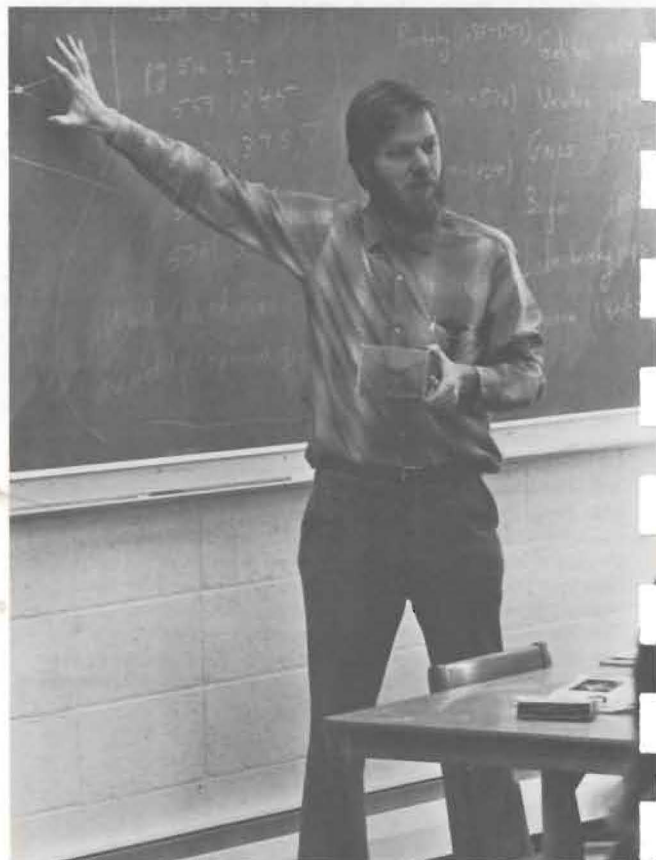
An analysis of the impact of technology on modern society and of the emergent concept of secularism is developed in an effort to understand contemporary culture. Problems of the interface of technology with culture are examined from philosophical, religious, biological and economic points of view. Prerequisite to IS 242, The Technological Society and the Limits to Growth. (4)

IS 242 THE TECHNOLOGICAL SOCIETY AND THE LIMITS TO GROWTH

An exploration of creative futures beyond a technological society. Emphasis is given to a study of the limits to growth in connection with food production, energy, pollution and material resources. The moral choices involved in alternative futures are examined together with aesthetic values and their implications for future social order. (4)

IS 251 SEMINAR

(4)



Mathematics

Mathematics is a many faceted subject that is extremely useful in its application, but at the same time is fascinating and beautiful in the abstract. It is an indispensable tool for industry, science, government, and the business world, while the elegance of its logic and beauty of form have intrigued scholars, philosophers, and artists since earliest times.

The mathematics program at Pacific Lutheran University is designed to serve five main objectives: (1) to provide backgrounds for other disciplines, (2) to provide a comprehensive preprofessional program for those directly entering the fields of teaching and applied mathematics, (3) to provide a nucleus of essential courses which will develop the breadth and maturity of mathematical thought for continued study of mathematics at the graduate level, (4) to develop the mental skills necessary for the creation, analysis, and critique of mathematical logic within the context of mathematical topics, and (5) to provide a view of mathematics as a part of humanistic endeavor.

FACULTY

G. Peterson, *Chair*; **E. Anderson**, **Batker**, **Brink**, **Fisk**, **Herzog**, **Liebelt**, **N.C. Meyer**, **Yiu**.

The foundation of the mathematics program for majors is the four semester calculus and linear algebra sequence, Math 151, 152, 253, and 331. These courses are usually taken in sequence the first four semesters. Students with a calculus background in high school may receive advanced placement into the appropriate course in the sequence. Upper division work includes courses in modern algebra, analysis, statistics, applied mathematics, and topology. There is a basic core of courses in the computer science area such as FORTRAN, BASIC, assembly language, and numerical analysis.

Students may earn a Bachelor of Arts or a Bachelor of Science degree in the College of Arts and Sciences majoring in mathematics or a Bachelor of Arts in Education degree majoring or minoring in mathematics. Minors in mathematics, computer science, or statistics are also available.

During their sophomore year, students intending to major in mathematics should complete an application form available from the departmental secretary. If accepted, they will be assigned to an adviser on the mathematics faculty.

BACHELOR OF ARTS MAJOR: Minimum of 28 semester hours in courses numbered above 150, including 331, 433, 455, 486, and either 434 or 456. The 434 or 456 choice may be replaced by taking eight semester hours from 321, 341, 345-346, 351, and 460. Eight semester hours in physics are strongly

recommended. Students planning to do graduate work in mathematics should complete both 434 and 456.

BACHELOR OF SCIENCE MAJOR: 40 semester hours, including 331 and 486 and at least 20 semester hours of upper division courses. Twelve hours of the upper division requirement must come from 433, 434, 455, and 456. Required supporting: 8 semester hours in physics. Physics 356 may be substituted for one course of upper division mathematics.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

MINORS: Two minors are available in the mathematics department. A statistics minor is also available.

MATHEMATICS MINOR: 20 semester hours, including 151, 152, 253 and two upper division courses. Interim courses and 323, 324, and 446 may not be counted toward the mathematics minor.

COMPUTER SCIENCE MINOR: 20 semester hours, including 144, 151, 152, 244, 345 and four semester hours from 140, 346, Business Administration 387, Engineering 352, or other computer-related courses approved by the Mathematics Department.

NOTE: Only 151 and 152 may be counted towards more than one major or minor in the Mathematics Department.

STATISTICS MINOR: See statistics section of this catalog.

COOPERATIVE PROGRAMS

Pacific Lutheran University has cooperative programs with two other universities. A 3-2 program in Engineering/Computer Science is described in the Physics/Engineering section of this catalog and interested students should consult with the engineering professors in regard to this program.

The Mathematics Department has two cooperative programs in Computer Science and in Applied Mathematics in cooperation with Washington State University.

(1) a 3-1 program leading to a B.A. or B.S. degree in Mathematics/Computer Science or Applied Mathematics from PLU; and

(2) a 3-2 program leading to a B.A. or B.S. degree in Mathematics from PLU and a B.S. or M.S. degree in Computer Science or Applied Mathematics from Washington State University.

Students in these programs must satisfy the PLU requirements for a B.A. degree in Mathematics except for the Senior Seminar. The required courses together with recommended semesters and years for taking them are as follows:

Math 151: Analytic Geometry and Calculus — Fr I

Math/Egr 144: Introduction to Computer Science — Fr I

Math 152: Analytic Geometry and Calculus — Fr II

Math 253: Multivariable Calculus and Differential Equations — So I

Phys 153: General Physics — So I

Math 331: Linear Algebra and Calculus — So II

Math 244: Data Structures and Assembly Language Programming — So II (or Fr II)

Phys 154: General Physics — So II

Math 433: Modern Algebra — Jr I

Math 351: Applied Mathematics — Jr I

Math/Egr 345: Introduction to Numerical Analysis — Jr I (or So I)
Math/Egr 346: Numerical Analysis — Jr I (or So I)
Egr 354: Engineering Analysis — Jr II
Math 140 or Business Administration 387 is also required and can be scheduled as appropriate.

SENIOR YEAR AT WASHINGTON STATE UNIVERSITY:

Computer Science Option: 6-12 hours of math, including Advanced Calculus, and 12 hours of Computer Science.

Applied Math Option: 6-12 hours of math, including Advanced Calculus, and 12 hours of supporting applied courses.

The remaining courses at PLU must be chosen to fulfill General University Requirements, Interim requirements, and one of the three foreign language options. Students in this program must schedule their courses carefully and are urged to contact the Mathematics Department early in their college career, preferably in their first semester, to design an appropriate schedule.

COURSE OFFERINGS

101 INTERMEDIATE ALGEBRA

A thorough review of first year high school algebra and material beyond quadratics. Does not count toward university core requirements. I II (2)

112 PLANE TRIGONOMETRY

Radian measure, trigonometric and inverse trigonometric functions, identities, graphing, solution of triangles, and complex numbers. Prerequisite: two years of high school algebra. Students with only one year of high school algebra should take 133. I II (2)

127 FINITE MATHEMATICS

Truth tables, sets, elementary probability, matrices, linear programming, Markov chains. Prerequisites: high school algebra and geometry. I II (4)

128 MATHEMATICS FOR BUSINESS AND THE BEHAVIORAL SCIENCES

Review of algebra, matrix theory and linear programming, probability theory, introduction to differential and integral calculus. Concepts are developed intuitively with applications. The use of mathematical tools is stressed throughout the course. Prerequisite: high school algebra or 101. I II (4)

133 COLLEGE ALGEBRA AND TRIGONOMETRY

Solving equations, functions, exponentials, logarithms, radian measure, trigonometric identities, graphing and other topics such as complex numbers. Prerequisites: two years of high school algebra or 101 or consent. I II (4)

140 BASIC COMPUTER LANGUAGE

The BASIC computer language is applied to problems occurring in business, science, social science, and other fields in a conversational mode. Topics include data, expression formation input/output, transfer commands, arrays and subprograms. Prerequisite: high school algebra. I II (2)

144 INTRODUCTION TO COMPUTER SCIENCE

Computer science and a working knowledge of FORTRAN is applied to scientific problems; computer classification, organization, data structure, algorithms, flow charts and FORTRAN IV. Prerequisite: 127 or 133 or consent. I II (4)

151 ANALYTIC GEOMETRY AND CALCULUS

Analytic geometry, functions, limits, derivatives and integrals with applications. Prerequisite: two years of high school algebra and trigonometry (or concurrent registration in 112) or 133 or equivalent. I II (4)

152 ANALYTIC GEOMETRY AND CALCULUS

Integration, applications and techniques of integration, transcendental functions, polar coordinates, improper integrals, L'Hospital's Rule, infinite series. Prerequisite: 151. I II (4)

199 DIRECTED READING

Supervised study of topics selected to meet the individual's needs or interests; primarily for students awarded advanced placement. Admission only by departmental invitation. (1-2)

244 DATA STRUCTURES AND ASSEMBLY LANGUAGE PROGRAMMING

Computer assembly language, instruction execution, addressing techniques, representation of data, macro definition, program segmentation and linkage. Prerequisite: 144 or consent. II a/y 1978-79 (2)

253 MULTIVARIABLE CALCULUS AND DIFFERENTIAL EQUATIONS

An introduction to vectors, multidimensional calculus, and differential equations. Emphasis will be on using these topics as tools for solving physical problems. Prerequisite: 152. I II (4)

321 GEOMETRY

Foundations of geometry and basic theory in Euclidean, projective and non-Euclidean geometry. Prerequisite: 152 or consent. a/y 1978-79 (4)

323 MODERN ELEMENTARY MATHEMATICS

Concepts underlying traditional computational techniques; a systematic analysis of arithmetic; an intuitive approach to algebra and geometry. Intended for elementary teaching majors. Prerequisite to Ed. 326. Prerequisite: consent. I II S (4)

324 ALGEBRA AND GEOMETRY FOR THE ELEMENTARY SCHOOL TEACHER

Properties of real numbers, linear and quadratic equations and inequalities, complex numbers, polynomials, algebraic structures, functions; a study of informal geometry from a mature viewpoint using modern vocabulary and notation. Geometry topics include congruence, similarity, symmetry, properties of geometry figures such as quadrilaterals and circles, and relationships among geometrical figures. Prerequisite: 323 or by placement exam. II (4)

331 LINEAR ALGEBRA AND CALCULUS

Vectors and vector spaces, matrices, quadratic forms, linear transformations, multivariable calculus. Prerequisite: 152. II (4)

334 ANALYSIS OF VARIANCE AND EXPERIMENTAL DESIGN

Random sampling, factors which destroy experimental design, one-way analysis of variance, two-way analysis of variance, factored design, block and latin square design. Students will also critique published experiments and perform an experimental design project. Prerequisites: Statistics 231 or equivalent. II (2)

341 MATHEMATICAL STATISTICS

Probability theory, discrete and continuous distribution functions, moment generating functions, sampling distributions and hypothesis-testing; introduction to regression, correlation, and analysis of variance. Prerequisite: Math 152. II a/y 1978-79 (4)

345 INTRODUCTION TO NUMERICAL ANALYSIS

Numerical theory and applications in the areas of solutions of equations, linear systems, interpolation, and approximation. Prerequisite: 152 and (144 or 140) or consent. I a/y 1979-80 (taught during first half of semester) (2)

346 NUMERICAL ANALYSIS

Continuation of 345, including numerical theory and applications in the areas of matrix theory, numerical differentiation and integration, and solution of differential equations. Prerequisite: 253 and 345 or consent. I a/y 1979-80 (taught during second half of semester) (2)

351 APPLIED MATHEMATICS

Real, ordinary differential equations. Theory of functions of a complex variable, power series and a treatment of second order linear differential equations on a complex plane, Orthogonal functions. Prerequisite: 253. I (4)

433, 434 MODERN ALGEBRA

Linear Algebra, groups, rings, modules, fields, field extensions. Prerequisite: 331, 433 offered I each year; 434 offered II a/y 1979-80 (4)

446 MATHEMATICS IN THE SECONDARY SCHOOL

Methods and materials in secondary school math teaching. Basic mathematical concepts; principles of number operation, relation, proof, and problem solving in the context of arithmetic, algebra, and geometry. Prerequisite: 253 or 331 or equivalent. I (2)

455, 456 MATHEMATICAL ANALYSIS

Extended treatment of topics introduced in elementary calculus. Prerequisite: 253. 455 offered I each year; 456 offered II a/y 1978-79 (4)

460 ELEMENTARY TOPOLOGY

An introduction to point-set topology. Prerequisite: consent. II a/y 1979-80 (4)

486 SENIOR SEMINAR

Presentation by students of knowledge gained in research under the direction of an assigned professor. Required of all senior math majors seeking a B.A. or B.S. degree. Seminar program will be held both semesters, but formal registration will be in the spring semester. Prerequisite: senior math major or consent of department chair. II (1)

490 SEMINAR

Prerequisite: consent of department chair. (1-4)

491, 492 INDEPENDENT STUDY

Prerequisite: consent of department chair. I II (1-4)

597, 598 GRADUATE RESEARCH

Open to master's degree candidates only. Prerequisite: consent of department chair. I II (1-4)

INTERIM COURSES OFFERED IN 1978

308 FINANCIAL MATHEMATICS

312 MATHEMATICAL PUZZLES AND PARADOXES

316 COMPUTERS AND SOCIETY

Modern and Classical Languages



Foreign language learning provides an urgently needed element in our domestic and global community: the ability to communicate effectively with and within other cultures. Through the medium of language, students increase their knowledge of the contributions other peoples have made to civilization, history, literature, and the arts and sciences.

The Department of Modern and Classical Languages in cooperation with several European universities provides specific students with an opportunity to study abroad in France, Spain, Germany, Austria (Vienna), and Scandinavia.

FACULTY

Spangler, Chair; Carleton, Faye, Payne, Predmore, Rasmussen, Sudermann, R. Swenson, Toven, Webster; assisted by Pilgrim.

There are no departmental prerequisites for the study of foreign languages. Potential majors are, however, encouraged to obtain as much high school preparation as possible. Students with previous experience may qualify for placement into intermediate or advanced courses. To determine the appropriate level students are encouraged to take the language placement examination at the beginning of the fall semester or to consult with a departmental adviser. Those qualifying for advanced placement may also receive credit toward the major for work completed in high school, thus enabling them to pursue a second major.

Major and minor programs are available in Classics, French, German, Norwegian and Spanish. Departmental courses are a primary component in the interdisciplinary majors offered in Classics and Scandinavian Area Studies. Minors are also offered in Greek and Latin.

BACHELOR OF ARTS: Major in French, German or Spanish — Minimum of 32 semester hours beyond 101-102, including 201, 202, 321, 351, 352, plus upper-division electives, including at least four semester hours of literature. Spanish 322 may be substituted for Spanish 321. Major in Norwegian — Minimum of 32 semester hours, including 101, 102, 201, 202, 351, 352, and at least one of the 400-level literature courses from Scandinavian Studies.

Major in Classics — 40 semester hours, including eight semester hours of Greek and eight semester hours of Latin and an additional eight hours of either Greek or Latin. Remaining courses are selected in consultation with the Classics Coordinator. Major in Scandinavian Area Studies — 40 semester hours, including sixteen semester hours in Danish, Norwegian, or Swedish and four semester hours each in Scandinavian literature and Scandinavian history. Remaining courses are selected in consultation with the program coordinator. See the Special Programs section of this catalog for additional information about the interdepartmental major programs in Classics and Scandinavian Area Studies.

MINOR IN FRENCH, GERMAN, NORWEGIAN, OR SPANISH — 24 semester hours, including 101, 102, 201, 202, 351, and one other upper division course. **MINOR IN CLASSICS (GREEK OR LATIN)** — 20 semester hours which may include 101-102. Courses in all minors programs will be chosen in consultation with a departmental adviser. Advanced placement may be granted.

BACHELOR OF ARTS IN EDUCATION: Students enrolled in this program are required to take 445. For further details, see School of Education.

COURSE OFFERINGS

100 ENGLISH AS A FOREIGN LANGUAGE

A course adapted to the needs of students whose native language is not English. Course content will emphasize idiom, especially American usage, vocabulary building, comprehension, and intonation. Considerable oral practice, with goal of improving fluency in speaking. (4)

400 STRUCTURAL LINGUISTICS

The study of the nature of language; principles and techniques of descriptive language analysis; elementary application of linguistic analysis to selected materials. No prerequisites. (4)

445 METHODOLOGY OF TEACHING FOREIGN LANGUAGES

Theory and techniques of foreign language teaching; special problems in the student's major language; emphasis on audio-lingual techniques. (2)

French

101, 102 ELEMENTARY FRENCH

Essentials of pronunciation, intonation and structure; basic skills in listening, speaking, reading and writing. Laboratory attendance required. I II (4, 4)

201, 202 INTERMEDIATE FRENCH

A continuation of elementary French; reading selections which reflect the French cultural heritage as well as contemporary materials. Laboratory attendance required. I II (4, 4)

205, 206 FRENCH CONVERSATION

Offers the opportunity for practice in French conversation in an informal setting during the noon lunch hour. All students with a basic knowledge of French are invited to participate. Conversation may include recent news events, contemporary life, or other topics of student interest. Pass/Fail only. I II (1)

321 CIVILIZATION AND CULTURE

Present-day France as reflected in current literature, periodicals, television and films; written compositions and oral reports; conducted in French. Prerequisite: French 202. (4)

351, 352 COMPOSITION AND CONVERSATION

Advanced grammar, stylistics, composition and conversation; written compositions on culture and civilization; conversations on current topics; conducted in French. Prerequisite: 202. I II (4, 4)

421, 422 MASTERPIECES OF FRENCH LITERATURE

Authors representative of major periods from the Middle Ages through the nineteenth century; the style and structure and the moral and artistic intentions of such authors as Rabelais, Montaigne, Moliere, Corneille, Pascal, Voltaire, Rousseau, Hugo and Baudelaire. Prerequisite: 202. I II a/y (4, 4)

431, 432 TWENTIETH CENTURY FRENCH LITERATURE

Major twentieth century writers; emphasis on the period since World War II. Prerequisite: 202. I II a/y (4, 4)

442 HISTORY OF ROMANCE LANGUAGES

The historical development of Romance Languages with reference to current languages; same as Spanish 442. II a/y (4)

491, 492 INDEPENDENT STUDY (2-4)

597, 598 GRADUATE RESEARCH (2-4)

German

101, 102 ELEMENTARY GERMAN

Introduction to the German language. Basic skills of oral and written communication in classroom and laboratory practice. Use of materials reflecting contemporary German life. Meets five hours weekly. I II (4, 4)

201, 202 INTERMEDIATE GERMAN

Continued practice in oral and written communication in classroom and laboratory. Use of materials which reflect contemporary life as well as the German cultural heritage. Concurrent enrollment in German 205 (206) is encouraged. Meets four hours weekly. I II (4, 4)

205, 206 GERMAN CONVERSATION

Offers the opportunity for practice in German conversation in an informal setting during the noon lunch hour. All students with a basic knowledge of German are invited to participate. Conversation may include recent news events, contemporary life, or other topics of student interest. Pass/Fail only. I II (1)

321 GERMAN CIVILIZATION

German cultural and linguistic history from the 17th century to the present. Aesthetic and historical consideration of representative works from the Enlightenment, the Age of Goethe, the 19th and 20th centuries. Prerequisite: 202 or equivalent. II a/y (4)

351, 352 COMPOSITION AND CONVERSATION

Intensive review of grammar with emphasis on idiomatic usage; use of contemporary authors as models of style. Conversation on topics of student interest. Conducted in German. Prerequisite: 202 or equivalent. I II (4, 4)

421 GERMAN LITERATURE: THE AGE OF GOETHE

Representative works from the Enlightenment to Goethe's death, circa 1750-1832, including Storm and Stress, Classicism and Romanticism. Prerequisite: 202 or equivalent. I a/y (4)

422 GERMAN LITERATURE: THE NINETEENTH CENTURY

Representative works from the various literary movements of the nineteenth century, 1820-1890, including Biedermeier, Young Germany and Realism. Prerequisite: 202 or equivalent. II a/y (4)

431 GERMAN LITERATURE: THE TWENTIETH CENTURY

Representative works of German literature from Naturalism to Expressionism, 1890-1925. Prerequisite: 202 or equivalent. I a/y (4)

432 CONTEMPORARY GERMAN LITERATURE

Representative works from 1925 to the present; authors from East and West Germany, Austria and Switzerland. Prerequisite: 202 or equivalent. II a/y (4)

442 HISTORY OF THE GERMAN LANGUAGE
Historical development of German with reference to contemporary language; conducted in German. Prerequisite: 202. II a/y (4)

491, 492 INDEPENDENT STUDY
(2-4)

597, 598 GRADUATE STUDY
(2-4)

Greek

Currently offered cooperatively with the University of Puget Sound on our campus.

101, 102 ELEMENTARY GREEK
Basic skills in reading Classical, Koine and Patristic Greek. I II (4, 4)

201, 202 INTERMEDIATE GREEK
Selected *koine* readings from Hellenistic Greek literature with major emphasis on the New Testament. I II (4, 4)

421, 422 MASTERPIECES OF GREEK LITERATURE
Available through consultation with the department. Prerequisites: 101, 102. I II (4, 4)

491, 492 INDEPENDENT STUDY
(2-4)

Latin

Currently offered cooperatively with the University of Puget Sound on our campus.

101, 102 ELEMENTARY LATIN AND ENGLISH WORD BUILDING
Basic skills in reading Latin; excursions into Roman history and mythology; English vocabulary building from Latin and English word construction from Latinate prefixes and suffixes are emphasized. I II (4, 4)

201, 202 INTERMEDIATE LATIN
Lyric and epic poetry, its translation and adaptation by English and American poets; the second semester includes the reading of an Italian author. I II (4, 4)

491, 492 INDEPENDENT STUDY
(2-4)

Norwegian

101, 102 ELEMENTARY NORWEGIAN

Introduces the students to the pleasure of speaking, reading and writing a foreign language. These skills are developed through a conversational approach, using songs and other cultural materials, as well as audio-visual media. I II (4, 4)

201, 202 INTERMEDIATE NORWEGIAN

Develops the students' command of the language while further acquainting them with the Norwegian cultural heritage. Reading selections introduce the students to Norwegian short stories, poetry, novels, and plays. III (4, 4)

351 CONVERSATION AND COMPOSITION: FOLKTALES

Develops the students' ability to express themselves well in the language, orally and in writing. Selected folktales and other material will be used as models of style and usage. Prerequisite: 202 or equivalent. (4)

352 ADVANCED CONVERSATION AND COMPOSITION: BALLADS AND POETRY

Develops the students' command of the language by emphasizing finer points of structure, style, and good taste. The subject matter will be selected poetry from the beginning to the present. Prerequisite: 351 or equivalent. (4)

491, 492 INDEPENDENT STUDY (2-4)

Scandinavian

321 VIKINGS AND EMIGRANTS

Highlights of Scandinavian history, from the beginning to the present. Emphasis on periods and ways in which Scandinavia has contributed to world history. Readings in the original for majors; class conducted in English. I a/y (4)

322 MODERN SCANDINAVIAN CIVILIZATION

Scandinavian cultural history from the beginning to the present. Discussion of literature, music, visual arts, and their backgrounds, as well as social and political issues. Readings in the original for majors; class conducted in English. a/y (4)

421 IBSEN, STRINDBERG, AND THEIR CONTEMPORARIES

Selected authors from the romantic and realistic periods in Scandinavian literature. Readings in the original for majors; class conducted in English. a/y (4)

422 CONTEMPORARY SCANDINAVIAN LITERATURE

Literature in all genres, reflecting current trends and issues in Scandinavia. Readings in the original for majors; class conducted in English. a/y (4)

491, 492 INDEPENDENT STUDY (1-4)

Spanish

101, 102 ELEMENTARY SPANISH

Essentials of pronunciation, intonation and structure, basic skills in listening, speaking, reading and writing. Laboratory attendance required. I II (4, 4)

201, 202 INTERMEDIATE SPANISH

A continuation of elementary Spanish; reading selections which reflect the Hispanic cultural heritage as well as contemporary materials. Laboratory attendance required. I II (4, 4)

205, 206 SPANISH CONVERSATION

Offers the opportunity for practice in Spanish conversation in an informal setting during the noon lunch hour. All students with a basic knowledge of Spanish are invited to participate. Conversation may include recent news events, contemporary life, or other topics of student interest. Pass/Fail only. I II (1)

321 CIVILIZATION AND CULTURE

Historic and artistic elements which have shaped Spanish thought and behavior from the beginnings to the present; conducted in Spanish. Prerequisite: 202. I (4)

322 LATIN AMERICAN CIVILIZATION AND CULTURE

Historic, artistic, literary, sociological and geographic elements shaping the development of the Spanish-speaking New World. Both Hispanic and non-Hispanic elements will be studied. Prerequisite: 202 or four years of high school Spanish. II (4)

351, 352 COMPOSITION AND CONVERSATION

Topics of current interest as a basis for improved oral and written expression; conducted in Spanish. Prerequisite: 202. I II (4, 4)

421, 422 MASTERPIECES OF HISPANIC LITERATURE

All genres of major literary works from the *Poema del Cid*, to 1898; forces which produced the literature; appreciation of literature as a work of art. Prerequisite: 202. I II a/y (4, 4)

431, 432 TWENTIETH CENTURY HISPANIC LITERATURE

The first semester deals with the literature of Spain from the "Generacion de '98" to the present. The second semester deals with the literature of Spanish America from the modernista movement (1888) to the present. Emphasis on period will vary. (4, 4)

442 HISTORY OF ROMANCE LANGUAGES

Historical development of Romance languages with reference to current language; same as French 442. II a/y (4)

491, 492 INDEPENDENT STUDY

(2-4)

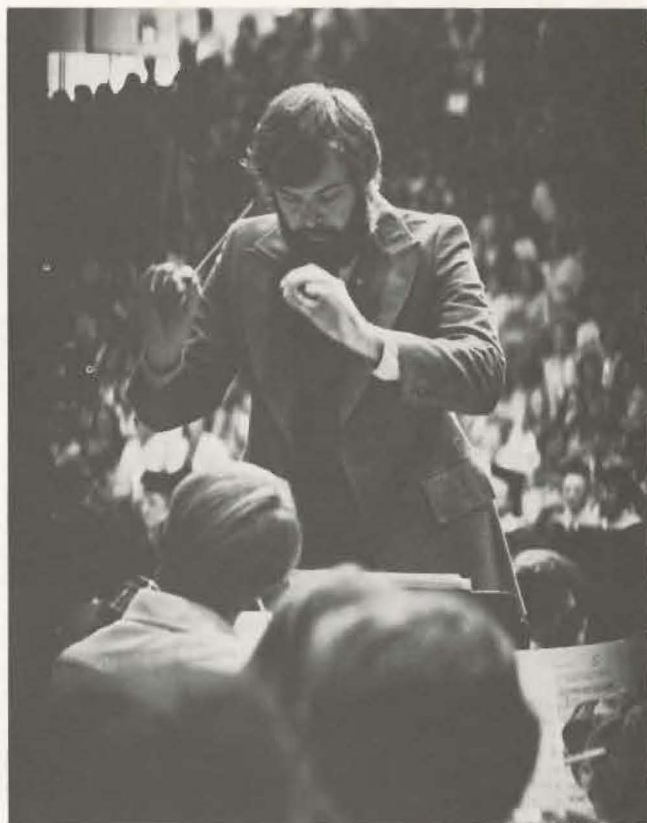
INTERIM COURSES OFFERED IN 1978

313 INTRODUCTION TO SPOKEN GERMAN

315 THE PICTURED WORD: EMBLEMS, COATS-OF-ARMS, DEVICES, MASQUES

317 SCANDINAVIAN LITERATURE IN FILM

319 THE CONTEMPORARY LATIN AMERICAN NOVEL IN TRANSLATION



Music

The music department offers programs for students seeking intensive training in music history and literature, theory and composition, sacred music, and performance.

The curriculum is also designed for students planning careers in music education, as well as those students who wish to increase their general musical knowledge and appreciation.

Pacific Lutheran University Department of Music is noted both regionally and nationally, for its performing ensembles, which include: Choir of the West, University Chorale, Concert Choir, University Singers, Vocal Jazz Ensemble, University Wind Ensemble, University Concert Band, Jazz Ensemble, University Symphony Orchestra, and Contemporary Directions Ensemble.

FACULTY

Skones, *Chair*; Dahl, Farner, Gard, G. Gilbertson, Harmic, Hoffman, Knapp, Kracht, L. Meyer, B. Poulshock, Robbins, Tremaine; assisted by S. Anderson, Bergeson, Byrnes, Crockett, Frohnmayer, Knuth, Kruse, McCarty, Moore, Pedersen, S. Peterson, N. Poulshock, Schindler, Smith, Storaasli, Thompson, Ziegenfelder.

Students intending to major in music should begin the major music sequences in the first year. Failure to do so may mean an extra semester or year to complete the major program.

Music majors should fill out a declaration of major form during their first semester of enrollment in the program and be assigned to a music faculty adviser.

Only grades of "C" or better in music courses may be counted toward a music major. Courses in which the student receives lower than a "C" must be repeated unless substitute course work is authorized by the department.

BACHELOR OF ARTS MAJOR: Maximum of 40 semester hours including 111, 123, 124, 125, 126, 131, 132, 223, 224, 225, 226, 231, 232 plus 4 hours of ensemble; 6 hours of literature/theory electives from 327-339, 426-438; 8 hours of private instruction, piano (minimum class level 2). In addition to requirements listed above, candidates for the B.A. degree must meet the foreign language requirement in the College of Arts and Sciences.

BACHELOR OF ARTS IN EDUCATION: Consult the School of Education, and the Department of Music Handbook.

The department of music also offers the following degree programs:

1. Bachelor of Music in Piano Performance
2. Bachelor of Music in Organ Performance
3. Bachelor of Music in Vocal Performance
4. Bachelor of Music in Instrumental Performance
5. Bachelor of Music in Theory and Composition
6. Bachelor of Arts in Education — Elementary Music Specialist
7. Bachelor of Arts in Education — Secondary and Elementary Instrumental
8. Bachelor of Arts in Education — Secondary Choral
9. Master of Music Education

Consult the *Department of Music Handbook*, available in the music office for complete details concerning required courses, recommended four-year programs by the semester, progress charts and other pertinent information.

Consult the *Graduate Catalog* for details of the Master of Music program.

COURSE OFFERINGS

101 INTRODUCTION TO MUSIC

Introduction to music literature with emphasis on listening, structure, period and style. Designed to enhance the enjoyment and understanding of music. Not open to majors. (4)

111 MUSIC SURVEY

An overview of musical language, musical forms, and the evolution of musical style, the course provides an opportunity to evaluate music as a possible major and career. The entire music faculty will be utilized to help provide a foundation for all other music courses. Open to majors and prospective majors, and required for entering freshmen who will be continuing in any music curriculum. (2)

123 THEORY I

The study of musical terms, fundamentals, notation, melody writing, and harmonization through analysis and writing. (2)

124 THEORY II

A continuation of Music 123. (2)

125 EAR TRAINING I

Development of aural skills in simple rhythmic dictation, intervals, sight-singing using progressive exercises consisting of short melodies. (1)

126 EAR TRAINING II

Continued development of aural skills in sight-singing, melodic and rhythmic dictation. Elementary harmonic dictation. (1)

131 MUSIC HISTORY I

The evolution of Western music from the early Christian era through the Middle Ages and Renaissance. (2)

132 MUSIC HISTORY II

The evolution of music in the Baroque Era (1600-1750). (2)

201 CLASS INSTRUCTION: PIANO (1)**202 PRIVATE INSTRUCTION: PIANO (1-4)****203 PRIVATE INSTRUCTION: ORGAN (1-4)****204 PRIVATE AND CLASS INSTRUCTION: VOICE: (1-4)****205 PRIVATE INSTRUCTION: VIOLIN/VIOLA (1-4)****206 PRIVATE INSTRUCTION: CELLO/BASS (1-4)****207 PRIVATE INSTRUCTION: FLUTE (1-4)****208 PRIVATE INSTRUCTION: OBOE/ENGLISH HORN (1-4)****209 PRIVATE INSTRUCTION: BASSOON (1-4)****210 PRIVATE INSTRUCTION: CLARINET (1-4)****211 PRIVATE INSTRUCTION: SAXOPHONE (1-4)****212 PRIVATE INSTRUCTION: TRUMPET (1-4)****213 PRIVATE INSTRUCTION: FRENCH HORN (1-4)****214 PRIVATE INSTRUCTION: TROMBONE/BARITONE (1-4)****215 PRIVATE INSTRUCTION: TUBA (1-4)****216 PRIVATE INSTRUCTION: PERCUSSION (1-4)****217 PRIVATE AND CLASS INSTRUCTION: GUITAR (1-4)****218 PRIVATE INSTRUCTION: HARP (1-4)****219 PRIVATE INSTRUCTION: HARPSICHORD (1-4)**

One half-hour private, or two one-hour class lessons per week in addition to daily outside practice. Students receiving permission to register for two semester hours of credit will receive two one-half hour private lessons per week. Students in piano, voice and guitar may be assigned to class instruction at the discretion of the music faculty. Special fee in addition to tuition.

223 THEORY III

Systematic study of emergent theoretical constructs from the 18th and 19th century as represented in literature of that period. (2)

224 THEORY IV

Systematic study of emergent theoretical constructs from the 20th century as represented in literature of that period. (2)

225 EAR TRAINING III

Advanced aural skills through extended rhythms and melodies. Emphasis on harmonic dictation. (1)

226 EAR TRAINING IV

Sight-singing, including pan-tonal melodies. Harmonic dictation of modulatory chord progressions involving chromatic alteration. Advanced rhythmic dictation. (1)

231 MUSIC HISTORY III

The evolution of music in the Classic and Romantic Eras (1750-1910). (2)

232 MUSIC HISTORY IV

Literature of the 20th century: Early development and current trends. (2)

241-242 STRING LABORATORY

Methods and materials of teaching and playing string instruments in the public schools. (1, 1)

243-244 WOODWIND LABORATORY

Methods and materials of teaching and playing woodwind instruments in the public schools. (1, 1)

245-246 BRASS LABORATORY

Methods and materials of teaching and playing brass instruments in the public schools. (1, 1)

247 PERCUSSION LABORATORY

Methods and materials of teaching and playing percussion instruments in the public schools. (1)

249 ELECTRONIC MUSIC LABORATORY

A laboratory experience dealing with materials and methods of elementary electronic music synthesis. Real-time experience in the Electronic Music Studio, as well as discussion of various popular synthesizers, electronic music aesthetics, and the use of electronic instruments in secondary education. (1)

323 LINEARITY I

Linear-structural analysis of literature of the 20th and 19th centuries; introduction to Schenkerian analysis; writing and performance experience in the contrapuntal styles of these periods. (2)

324 LINEARITY II

Linear-structural analysis of literature of the 18th and 16th centuries; further refinement of analytical techniques, writing and performance experience in the contrapuntal styles of these periods. Prerequisite: Music 323. (2)

325 KEYBOARD HARMONY

Development of a functional use of harmony at the keyboard. Improvisation and score reading. a/y (2)

326 ORCHESTRATION

The range, transposition, sound and technical characteristics of instruments. Notation, scoring and arranging for conventional and unique instrument groupings. Prerequisite: Music 224. a/y (3)

327 COMPOSITION

A systematic approach to contemporary musical composition; students create and notate works for solo, small and large ensembles. May be repeated for additional credit. (1-4)

All music literature courses numbered from 331 to 339 are open to all university enrollment without prerequisite.

331 MUSIC OF JOHANN SEBASTIAN BACH

A study of selected works representing each of the primary areas of the creative genius of J.S. Bach. a/y (2)

332 ORNAMENTATION AND PERFORMANCE PRACTICES OF THE BAROQUE

A practical study of vocal and instrumental ornamentation as it evolved in the 17th and 18th centuries. a/y (2)

333 MUSIC OF HAYDN AND MOZART

Score analysis and study of the historical significance of selected works of Haydn and Mozart. a/y (2)

334 MUSIC OF BEETHOVEN

A general survey with in-depth study of selected works. a/y (2)

335 LATE NINETEENTH CENTURY MUSIC

A survey of selected music of Wagner, Bruckner, Mahler and Strauss. a/y (2)

336 CHAMBER MUSIC LITERATURE

A general survey with in-depth study of selected chamber works for representative genres. a/y (2)

337 THE NINETEENTH CENTURY ART SONG

A study of selected art song literature of Schubert, Schumann, Brahms, Wolf, Strauss, Beethoven, Faure, Debussy, and DuParc. Style analysis and interpretation with performance in class. a/y (2)

338 HISTORY OF OPERA

A general survey with in-depth study of selected opera scores. a/y (2)

339 HISTORY OF JAZZ STYLES

A survey of the evolution of jazz from 1900 to present, including early development and trends. a/y (2)

341 MUSIC IN THE ELEMENTARY SCHOOL

Methods and procedures for the classroom teacher in developing the various music activities in the elementary school. Offered in the Fall Semester for students preparing to become Music Specialists. Offered in the Spring Semester for those students preparing for elementary classroom teaching. (2)

343 VOCAL JAZZ TECHNIQUES

Methods, literature, style and technique for the vocal jazz ensemble. Emphasis on the acquisition of skills necessary for teaching vocal jazz in the secondary school. (1)

344 JAZZ LABORATORY ENSEMBLE

Rehearsal and study of representative jazz literature, designed for students unfamiliar with jazz idioms. Prerequisite: Consent of the Instructor. (1)

345 BASIC CONDUCTING

Introduction to basic patterns, gestures and conducting techniques; application to appropriate vocal and instrumental scores. (2)

349 ELECTRONIC MUSIC PRACTICUM

Application of electronic techniques to compositional process. For non-composition majors only. Assigned studio time on a regular basis. Prerequisite: Music 249. (1)

351 ACCOMPANYING

Practice in accompanying; representative vocal and instrumental solo literature from all periods. (1)

352 ORGAN IMPROVISATION

Basic techniques of improvisation, particularly as related to hymn tunes. a/y (2)

353 SOLO VOCAL LITERATURE

Survey of solo vocal literature. (2)

354 PERFORMER'S PRIMER

Techniques of stage presence and procedures for performing vocal and instrumental music. Includes the historical aspects of performance, program planning, wardrobe, stage poise and memorizing. a/y (1)

360 CHOIR OF THE WEST

A study of choral literature and technique through rehearsal and performance of both sacred and secular music. Auditions at the beginning of Fall Semester. (1)

361 UNIVERSITY CHORALE

A study of choral literature and technique through rehearsal and performance of both sacred and secular music. Emphasis on individual vocal development through choral singing. Auditions at the beginning of Fall Semester. (1)

362 CONCERT CHOIR

A study of choral literature and technique through rehearsal and performance of both sacred and secular music. Emphasis on individual vocal development through choral singing. Auditions at the beginning of Fall Semester. (1)

363 UNIVERSITY SINGERS

A study of choral literature and technique through rehearsal and performance of both sacred and secular music. Emphasis on individual vocal development through choral singing. Open to all students in the University and interested community musicians regardless of previous musical experience. (1)

364 MADRIGAL

A study of secular part song through reading and performance. (1)

366 OPERA WORKSHOP

Stage production of opera, chamber opera and opera scenes. Participation in all facets of production. Prerequisite: Consent of the Instructor. (2)

370 UNIVERSITY BAND

Study of selected wind ensemble literature through rehearsal and performance. Membership by audition. (1)

372 UNIVERSITY JAZZ ENSEMBLE

Study of selected jazz literature through rehearsal and performance. Membership by audition. (1)

Section A — Instrumental; Section B — Instrumental; Section C — Vocal

380 UNIVERSITY SYMPHONY ORCHESTRA

Study of selected orchestral literature through rehearsal and performance. Membership by audition. (1)

381 CHAMBER ENSEMBLE

Reading, rehearsal and performance of selected instrumental chamber music. Prerequisite: Consent of Chamber Music Coordinator. (1)

Section A — String; Section B — Brass; Section C — Woodwind

382 CONTEMPORARY DIRECTIONS ENSEMBLE

Public and laboratory performance of contemporary music. (1)

383 TWO PIANO ENSEMBLE

Techniques and practice in the performance of two-piano and piano duet literature; includes sight reading and program planning. (1)

402 PRIVATE INSTRUCTION: PIANO (1-4)

403 PRIVATE INSTRUCTION: ORGAN (1-4)

404 PRIVATE INSTRUCTION: VOICE (1-4)

405 PRIVATE INSTRUCTION: VIOLIN/VIOLA (1-4)

406 PRIVATE INSTRUCTION: CELLO/BASS (1-4)

407 PRIVATE INSTRUCTION: FLUTE (1-4)

408 PRIVATE INSTRUCTION: OBOE/ENGLISH HORN (1-4)

409 PRIVATE INSTRUCTION: BASSOON (1-4)

410 PRIVATE INSTRUCTION: CLARINET (1-4)

411 PRIVATE INSTRUCTION: SAXOPHONE (1-4)

412 PRIVATE INSTRUCTION: TRUMPET (1-4)

413 PRIVATE INSTRUCTION: FRENCH HORN (1-4)

414 PRIVATE INSTRUCTION: TROMBONE/BARITONE (1-4)

415 PRIVATE INSTRUCTION: TUBA (1-4)

416 PRIVATE INSTRUCTION: PERCUSSION (1-4)

417 PRIVATE INSTRUCTION: GUITAR (1-4)

418 PRIVATE INSTRUCTION: HARP (1-4)

419 PRIVATE INSTRUCTION: HARPSICHORD (1-4)

One half-hour lesson per week. Students receiving permission to register for 2-4 semester hours of credit will receive two one-half hour private lessons per week. Special fee in addition to tuition. All 400 series private instruction requires permission from the Music Department before registration.

423 FORM I

Advanced analysis of literature from Classic, Early and Middle Romantic styles in representative genres and media. a/y (2)

424 FORM II

Advanced analysis of literature from late Romantic, Impressionist and Nationalistic styles in representative genres and media. Prerequisite: Music 423. a/y (2)

425 FORM III

Advanced analysis of literature from Modern and Contemporary styles in representative genres and media. Prerequisite: Music 423. a/y (2)

426 ADVANCED ORCHESTRATION

Directed study and scoring of selected piano works for large ensemble; independent study, may be repeated for additional credit. Offered on demand. (2)

All music literature courses numbered from 431 to 438 are open to all university enrollment without prerequisite.

431 HISTORY OF PIANO LITERATURE AND PERFORMANCE

A study of representative piano compositions of all periods. a/y (2)

433 MUSIC OF BELA BARTOK

A study of representative works of various periods of Bartok. a/y (2)

434 SCANDINAVIAN MUSIC

A survey of selected music of various Scandinavian composers; folk music influences and nationalistic element. a/y (2)

**435 MUSIC IN THE UNITED STATES:
A HISTORICAL INTRODUCTION**

A survey from the Colonial period to the present covering both the cultivated and the vernacular traditions. a/y (2)

436 HISTORY OF ORGAN BUILDING

A two-fold study, involving both the technical evolution of the pipe organ, (key-actions, windchest designs, pipework varieties and construction, the organ case) as well as the historical evolution of the various concepts of tonal design as these relate to the performance of organ literature. a/y (2)

437 SACRED MUSIC LITERATURE

A survey of church music primarily through the study of representative major works. a/y (2)

**438 HYMNOLOGY AND
THE MUSIC OF THE LITURGY**

A survey of Christian hymnody, considered from both a musical and poetic viewpoint. Also considered will be the concept and performance of music for the liturgy, both historic and contemporary, primarily from the Roman, Anglican and Lutheran traditions. a/y (2)

**441 RECENT TECHNIQUES FOR
ELEMENTARY MUSIC**

The concern of the upper elementary and middle school music teacher, including Orff and Kodaly techniques. (2)

**443 METHODS AND MATERIALS FOR
SECONDARY CHORAL MUSIC**

The organization and administration of the secondary school music curriculum with particular attention to the needs of the choral program. Organization, management, teaching methods, rehearsal techniques and choral literature appropriate for the various age and experience levels of students in grades 7-12. (2)

**444 METHODS AND MATERIALS FOR
SCHOOL INSTRUMENTAL MUSIC**

The organization and administration of the secondary school music curriculum with particular attention to the needs of the instrumental program. Organization, management, teaching methods, rehearsal techniques and instrumental literature appropriate for the various age and experience levels of students in grades 4-12.

445 ADVANCED CONDUCTING

Refinement of patterns, gestures and conducting techniques; application to appropriate vocal and instrumental scores. Prerequisite: Music 345. (2)

451 PIANO PEDAGOGY

Teaching techniques for prospective teachers of piano, including techniques of private and class piano instruction. Methods and materials from beginning through advanced levels. (2) Section A — Basic; Section B — Lower Elementary; Section C — Upper Elementary; Section D — Advanced

452 ORGAN PEDAGOGY AND REPERTOIRE

Methods and techniques of private organ instruction, including supervised practical experience. A survey of organ literature representative of all major composers and style periods. a/y (2)

453 VOCAL PEDAGOGY

Physiological, psychological and pedagogical aspects of singing. (2)

454 STRING PEDAGOGY

The physiological and psychological approach to string playing and teaching. Includes discussion and demonstration of instrument and bow techniques, private lesson approach and materials, general and specific string problems. a/y (2)

491-492 INDEPENDENT STUDY

Prerequisite: Consent of the Instructor. May be repeated for additional credit. (1-4)

502 PRIVATE INSTRUCTION: PIANO (1-4)

503 PRIVATE INSTRUCTION: ORGAN (1-4)

504 PRIVATE INSTRUCTION: VOICE (1-4)

**505 PRIVATE INSTRUCTION: VIOLIN/VIOLA
(1-4)**

**506 PRIVATE INSTRUCTION: CELLO/BASS
(1-4)**

507 PRIVATE INSTRUCTION: FLUTE (1-4)

**508 PRIVATE INSTRUCTION:
OBOE/ENGLISH HORN (1-4)**

509 PRIVATE INSTRUCTION: BASSOON (1-4)

510 PRIVATE INSTRUCTION: CLARINET (1-4)

**511 PRIVATE INSTRUCTION: SAXOPHONE
(1-4)**

512 PRIVATE INSTRUCTION: TRUMPET (1-4)

**513 PRIVATE INSTRUCTION: FRENCH
HORN (1-4)**

- 514 **PRIVATE INSTRUCTION:
TROMBONE/BARITONE (1-4)**
- 515 **PRIVATE INSTRUCTION: TUBA (1-4)**
- 516 **PRIVATE INSTRUCTION: PERCUSSION
(1-4)**
- 517 **PRIVATE INSTRUCTION: GUITAR (1-4)**
- 518 **PRIVATE INSTRUCTION: HARP (1-4)**
- 519 **PRIVATE INSTRUCTION: HARPSICHORD
(1-4)**

One half-hour lesson per week. Students receiving permission to register for 2-4 semester hours of credit will receive two one-half hour private lessons per week. Special fee in addition to tuition. All 500 series private instruction requires permission from the Music Department before registration.

527 COMPOSITION

A systematic approach to contemporary musical composition; students create, notate and perform works for solo, small and large ensembles. May be repeated for credit. (1-4)

**532 MUSIC BIBLIOGRAPHY AND
RESEARCH TECHNIQUES**

Survey of the main research tools available for advanced work in music. Course content can be adapted to needs of students in music education, theory or performance. a/y (2)

**545 SEMINAR IN ADVANCED CONDUCTING:
CONTEMPORARY LITERATURE**

Directed study of selected contemporary scores containing conducting problems unique to recent compositions in a wide range of genres and media, including electronics, controlled improvisation, multimedia, and texture for large and small ensembles, vocal and instrumental. (2)

590 GRADUATE SEMINAR (1-4)

596-598 RESEARCH IN MUSIC (1-4)

599 THESIS (2-4)

**INTERIM COURSES
OFFERED IN 1978**

- 301 **THE MUSICAL EXPERIENCE**
- 303 **BEGINNERS BAND**
- 310 **EUROPEAN MUSIC, DRAMA,
CULTURAL TOUR**
- 317 **INTENSIVE PERFORMANCE**



SCHOOL OF Nursing

A nursing career offers great opportunity for a rich and rewarding professional life. It affords virtually unlimited choice of location, environment, and type of service. The physical, mental, social, and spiritual health of people is of universal concern, and those prepared to maintain their good health are in constant demand.

The School of Nursing is a professional school which combines professional and liberal arts studies in assisting students to develop a sense of responsibility for acquiring the attitudes, knowledge, and skill necessary for meeting nursing needs of the community.

The generic program is designed for students who have had no previous preparation in nursing, and graduates of this program who successfully complete the State Board examinations (Registered Nurse) are prepared for beginning positions in professional nursing. The School also offers a special program to registered nurses who wish to complete requirements for the Bachelor of Science in Nursing and prepare for leadership positions. Graduates from either program are prepared for continuing their formal education at the graduate level.

The School of Nursing is accredited by the Washington State Board of Nursing and by the National League for Nursing. It is a charter member of the Western Council on Higher Education for Nursing.

Under the direct supervision of its faculty members, the School uses facilities of hospitals, health agencies, and schools in the community in providing optimal clinical learning experience for its students.

FACULTY

Stucke, Director; Acuff, Aikin, Bradford, Carpenter, Carper, Carter, Cone, Gillett, Gough, Hefty, Hostetter, Jacobson, E. Johnson, Lawrence, Mason, L. Olson, Page, Roediger, Schultz, Stiggelbout, Storlie, Weirick, Zierath.

ADMISSION AND CONTINUATION POLICIES

Students seeking admission to either the generic program or the special program for registered nurses must make formal application to both the university and the School of Nursing. Applications for admission to the School of Nursing are to be

submitted between January 1 and February 15, and are considered for the following academic year only if the applicant has been offered admission to the university and has provided transcripts and Allied Health Professions Admission Test scores as requested by the Admissions Committee. Information about the Allied Health Professions Admission Test may be secured from the School early in the fall.

When there are more qualified applicants than the School can accept, selection is made on a competitive basis. In making the selection, the School of Nursing Admissions Committee uses grades as the major means of evaluation, but also considers such other relevant factors as selected scores received on the Allied Health Professions Admission Test, prior experience in nursing, previous study at PLU, significant co-curricular activities (school, community, church, etc.) and other pertinent extenuating or extraordinary circumstances. Generic students are admitted to begin their nursing program in either the fall or spring semester, and selection for both terms is made the previous spring, generally by May 1. Insofar as possible, students are admitted for the term of their choice. When there are too many desiring a given term, determination of which students will be admitted for fall and which for spring is made by random selection. Time normally required to complete requirements for the Bachelor of Science in Nursing is six semesters from the time of enrolling in the first nursing course regardless of the number of college credits earned previously.

The School of Nursing reserves the right to request withdrawal of a nursing student who fails to demonstrate competency or who fails to maintain professional conduct.

Minimum criteria for admission to or continuation in the School of Nursing are as follows:

1. Admission to the university. Applicants must have been admitted to Pacific Lutheran University prior to March 1 of the year in which they wish to have their application processed. However, admission to the university does not guarantee admission to the School of Nursing.
2. Completion of or current enrollment in Psychology 101 (Introduction to Psychology) and three of the following: Biology 111 (Biology and the Modern World), Biology 201 (Introductory Microbiology), Chemistry 103 (Chemistry of Life), and Sociology 101 (Introduction to Sociology). (The remaining courses will be completed after enrolling in the nursing program.)
3. Completion of a minimum of 26 semester credit hours. Some of these may be in progress at time of application.
4. A minimum grade of 2.00 in all required nursing and prerequisite courses. A student receiving a grade of less than 2.00 in any course which is a prerequisite for a nursing course may not continue in that nursing course until the prerequisite course is repeated with a grade point of 2.00 or above.
5. A minimum cumulative g.p.a. of 2.00.
6. Physical health and stamina necessary to withstand the demands of nursing.
7. Emotional stability sufficient to cope with the stresses inherent in learning and practicing nursing.

Registered nurses are admitted to begin their nursing program in the fall semester, and are enrolled full time for a total of sixteen months. The registered nurse student must have completed all non-nursing course prerequisites and a minimum of 24 semester credits of the core requirements and electives for a total of 56 semester credits. Other minimum

criteria for admission to or continuation in the nursing program are as outlined above for the generic student. The registered nurse who is considering making application for admission to the nursing program is advised to contact the School of Nursing for advice about prerequisites to be completed, other requirements to be met, and the program to pursue after admission.

HEALTH

The nursing student is responsible for maintaining optimal health and is a teacher of health. Physical examination, x-rays, and immunizations are required before admission to the clinical areas and periodically thereafter and are the responsibility of the student. Each student must carry personal health insurance.

ADDITIONAL COSTS

In addition to regular university costs, students are to provide their own transportation between the university campus and the clinical laboratory areas beginning with the first nursing course. Available public transportation is limited, so provision for private transportation is essential. Students are required to carry professional liability insurance during all periods of clinical experience. This is available under a group plan at a nominal cost to the student. Health examination fees, student uniforms (approximately \$70.00), and equipment (wristwatch, scissors, stethoscope) are also the responsibility of the student.

CERTIFICATION FOR SCHOOL NURSING

Educational Staff Associate Certification for school nurses is individually designed through a consortium consisting of a school district, related professional association and Pacific Lutheran University. Additional information on this program can be obtained by contacting the Dean of the School of Education or the Director of the School of Nursing.

RESOURCES AND FACILITIES

Good Samaritan Hospital, Puyallup, WA (170 beds)

David K. Hamry, M.H.A., Executive Director

Mary Jane Troeh, R.N., Director of Nursing

Lakewood General Hospital, Tacoma, WA (100 beds)

James Helland, M.B.A., Administrator

Peggy Dawson, R.N., Director of Nursing

Madigan Army Medical Center, Tacoma, WA (536 beds)

Brigadier General William R. Dwyer, M.D., Commanding Officer

Colonel Essie Wilson, R.N., B.S.N., M.S., Chief, Department of Nursing

Mary Bridge Children's Health Center, Tacoma, WA (68 beds)

Frederick A. Pritchard, M.B.A., Administrator

Karen Lynch, R.N., B.S.N., Assistant Administrator for Patient Services

Puget Sound Hospital, Tacoma, WA (145 beds)

Cliff Gorak, M.H.A., Administrator

Syd Purdue, R.N., B.S.N., Director of Nursing

St. Joseph Hospital, Tacoma, WA (250 beds)

Daniel Russell, B.S., M.H.A., Administrator

Hazel Hurst, R.N., B.S., M.N., Assistant Administrator for Nursing Service

St. Peter Hospital, Olympia, WA (150 beds)

David L. Bjornson, M.H.A., Administrator

Ann Bertolin, R.N., B.S.N., Director of Nursing Service

Tacoma General Hospital, Tacoma, WA (299 beds)

Eugene K. Prentice, B.S., M.S.H.A., President

Betty Hoffman, R.N., B.S.N., Director of Nursing Service

Tacoma-Pierce County Health Department, Tacoma, WA

Walter R. Herron, M.D., M.P.H., Director, Tacoma-Pierce County Health Department

Nancy Cherry, R.N., M.P.H., Co-Director, Tacoma-Pierce County Health Department

Tacoma Public Schools, Tacoma, WA

Robert Meyer, M.D., M.P.H., Administrative Director, Division of Health

Donna G. Ferguson, R.N., M.N., Supervisor of Nursing Services, Division of Health

The Doctors Hospital, Tacoma, WA (70 beds)

Frederick A. Pritchard, M.B.A., Administrator

Harriet Huffman, R.N., Director of Nursing

Veterans Administration Hospital, Tacoma, WA (904 beds)

Robert B. Rynearson, B.S., Director

Joan Stout, R.N., B.S.N., M.N.A., Chief, Nursing Service

Western State Hospital, Steilacoom, WA (950 beds)

Giulio di Furia, M.D., Superintendent

Charles Ruell, R.N., B.S., M.S., Director of Nursing

BACHELOR OF SCIENCE IN NURSING

The curriculum plan and its implementation are designed to be growth-fostering and to encourage initiative and self-direction on the part of the student. In addition to the nursing requirements, the student is expected to meet university requirements. Nursing courses are sequential in nature and all have prerequisites. A student interested in the Bachelor of Science in Nursing degree should contact the School of Nursing and begin the course sequence upon entrance to the university.

For spring semester enrollment the curriculum generally follows the fall semester format with modifications as necessary to assure completion of all prerequisite courses by the time they are needed. A schedule of courses is developed individually with each student who begins the nursing courses in the spring semester. Nursing courses must be taken concurrently and in sequence as indicated in the sample curriculum, and normally extend over six semesters.

A sample curriculum for the student accepted for fall semester enrollment is as follows:

FIRST YEAR -- Pre-Nursing

Fall Semester

*Biology 111 Biology and the Modern World

**Religion elective

*Psychology 101 Introduction to Psychology

**P.E. 100 Personalized Fitness Programs

1

Interim

Elective

4

Spring Semester

Chemistry 103 Chemistry of Life

**English 101 College English

*Sociology 101 Introduction to Sociology

P.E. Activity

1

1:

SECOND YEAR

Fall Semester		
Biology 201	Introductory Microbiology	4
Biology 205	Human Anatomy and Physiology I	4
*Psychology 335	Development: Infancy to Maturity	4
or Education 321	Human Development	
Nursing 214	Nursing I: Socialization to Nursing	4
P.E. Activity		<u>1</u>
		17

Interim		
Elective		<u>4</u>
		4

Spring Semester		
Biology 206	Human Anatomy and Physiology II	4
**Elective		4
Nursing 228	Nursing II: Health Assessment	8
P.E. Activity		<u>1</u>
		17

THIRD YEAR

Fall Semester		
Nursing 334	Nursing Centrum I	4
Nursing 344	Health Problems	4
**Fine Arts elective		4
**Philosophy	Elective	<u>4</u>
		16

Interim		
Optional elective		<u>0-4</u>
		0-4

Spring Semester		
Nursing 354	Nursing Centrum II	4
Nursing 384	Clinical Problems I	4
Nursing 394	Nursing Practicum I	4
***Literature or History elective		<u>4</u>
		16

FOURTH YEAR

Fall Semester		
Nursing 424	Nursing Centrum III	4
Nursing 434	Clinical Problems III	4
Nursing 444	Nursing Practicum II	4
**Religion elective		<u>4</u>
		16

Interim		
Optional elective		<u>0-4</u>
		0-4

Spring Semester		
Nursing 464	Nursing Centrum IV	4
Nursing 478	Senior Practicum	<u>8</u>
		12

- *May be taken either semester
- **May be taken either freshman or sophomore year
- ***May be taken any time

COURSE OFFERINGS

214 NURSING I: SOCIALIZATION TO NURSING

Concepts regarding self and society, relations, communications, learning, and levels of wellness. Introduces historical milestones of nursing and trends in nursing education. Prerequisites: Psychology 101, and prior or concurrent enrollment in Sociology 101 and Biology 111. (4)

228 NURSING II: HEALTH ASSESSMENT

Assessment of health status of individuals, families, and communities. Attention is given to the utilization of health resources, the influence of the eco-system, and the role of the health team in maintaining wellness. Includes selected clinical experiences with the newborn, well child, adolescent, and elderly. Emphasis is on beginning techniques and assessment as part of the nursing process. Prerequisites: Biology 205, Chemistry 103 and Nursing 214, and prior or concurrent registration in Psychology 335 (or Education 321), Biology 201 and 206. (8)

334 NURSING CENTRUM I

An introduction to the less complex medical-surgical situations of children and adults, the pregnant family, and preventive aspects of psychiatric nursing. Drug and diet therapy and theories of physical and psychosocial development are included. Prerequisites: Biology 206 and Nursing 228, and concurrent registration in Nursing 344. (4)

344 HEALTH PROBLEMS

Medical-surgical problems of a less stressful nature and appropriate nursing actions to facilitate adaptation. Includes experience with a pregnant family through the perinatal period, and application of principles of crisis intervention in dealing with health problems in selected clinical experiences. Prerequisites: Biology 206 and Nursing 228, and concurrent registration in Nursing 334. (4)

354 NURSING CENTRUM II

The more complex medical-surgical and psychiatric situations. Emphasis is placed on the pathophysiological and psychopathological aspects and their application to the nursing process in the care of children and adults. Prerequisites: Nursing 334 and 344, and concurrent registration in Nursing 384 and 394. (4)

384 CLINICAL PROBLEMS I

Psychiatric and medical-surgical problems of a stressful nature with the appropriate nursing actions to facilitate adaptation or restoration to a higher level of wellness. Prerequisites: Concurrent registration in Nursing 354 and 394. (4)

394 NURSING PRACTICUM I

Clinical application of Nursing 354 and 384. The student is expected to apply theoretical principles based on pathophysiological and psychopathological concepts in the clinical setting, utilizing interpersonal and technical skills. Prerequisites: Concurrent registration in Nursing 354 and 384. (4)

424 NURSING CENTRUM III

Introduction to acute deviant behavior patterns and to life threatening medical-surgical problems of children and adults. Emphasis is placed on complex pathophysiological and psychopathological aspects and their implications for the nursing process. Prerequisites: Nursing 354, 384, and 394, and concurrent registration in Nursing 434 and 444. (4)

434 CLINICAL PROBLEMS II

Introduction to nursing actions appropriate to stressful medical, surgical and psychiatric problems and to the newer parameters of nursing. Issues in nursing and changes in health care systems are examined. Prerequisites: Nursing 354, 384, and 394, and concurrent registration in Nursing 424 and 444. (4)

444 NURSING PRACTICUM II

Clinical application of pathophysiological and psychopathological concepts in critical care nursing, including utilization of interpersonal and sophisticated technical skills. Prerequisites: Nursing 354, 384, and 394, and concurrent registration in Nursing 424 and 434. (4)

464 NURSING CENTRUM IV

Preparation for future professional roles of the nurse in the health delivery system. Emphasis is on leadership and management skills, professional judgment, decision making, and the nurse as a change agent. Students examine legislation, economic security, professional growth and the utilization of health and welfare resources. Prerequisites: Nursing 424, 434, and 444 and concurrent registration in Nursing 478. (4)

478 SENIOR PRACTICUM

Clinical application of professional and technical skills in primary or secondary nursing settings. Each student is expected to function in a staff nurse role and progress to a leadership role. Prerequisite: Nursing 424, 434, and 444, and concurrent registration in Nursing 464. (8)

491, 492 INDEPENDENT STUDY

Prerequisite: Permission of the Director. (1-4)

INTERIM COURSES OFFERED IN 1978

- 301 THE BODY BEAUTIFUL
- 305 HEALTH CARE IN THE CRIMINAL JUSTICE SYSTEM
- 309 CHILDREN AND HEALTH CARE EXPERIENCES
- 311 SURGICAL INTERVENTION
- 314 TRANSCULTURAL AWARENESS: AN EXPERIENTIAL WORKSHOP IN HAWAII

Philosophy



Philosophy is the parent academic discipline which gave birth to today's variety of arts and sciences. It analyzes basic issues in all fields and seeks to understand the interconnections among the various facets of human life and experience. Areas of concern include the scope and character of human knowledge; moral, aesthetic, and religious values; human nature and its place in the universe; and the ultimate nature of reality. A course of study in philosophy acquaints students with major rival world views and value systems, encourages them in the habit of analytic and systematic thought, and helps them to see life critically, appreciatively, and whole.

FACULTY

Arbaugh, *Chair*; Huber, P. Menzel, Myrbo, Nordby.

USES OF PHILOSOPHY

Courses in philosophy are designed to meet the needs of a variety of students: (1) those who desire some knowledge of philosophy as a basic element in a liberal education; (2) those who wish to pursue some special interest, for example, in ethics, science, religion, the history of thought, or the ideas of particular men or peoples; (3) those who wish to support their work in other fields, for example, literature, history, religion, the sciences, education, or business; (4) those who plan to use a major in philosophy as preparation for graduate or professional study in another field, for example, theology or law; and (5) those who plan to do graduate work in philosophy itself, usually with the intention of teaching in the field.

Undergraduate study in philosophy does not train one specifically for a first job. It does provide essential perspectives, as well as basic skills in analysis and interpretation, thought and problem solving, research and writing. These — usually coupled with specialized training in other disciplines — fit one for a great variety of positions of vocational responsibility. Persons with the greatest upward mobility in fields such as business management, law, education, engineering, operations research, data processing, or social work, are generally not those with the most specialized training, but those with broad perspectives, flexibility and depth, and skills in thought and communication.

SUPPORTING PROGRAMS IN PHILOSOPHY FOR OTHER FIELDS

Philosophy provides a solid foundation for a variety of studies and careers. Students using it to support primary work in other fields may elect a minor or major or some other combination of courses of interest. Those with double majors may request a modification or reduction of the requirements for the standard major.

Recommended programs of study in philosophy to support work in a variety of other disciplines and for a variety of careers are described in separate brochures available in the department office. These include business, education, health professions, law, parish ministry and theological studies, social work, fine arts, humanities, and social and natural sciences.

A QUALITY PROGRAM

PLU's department of philosophy offers a distinctive course of philosophical studies. The members of the department all hold the doctorate, have studied at leading institutions in this country and abroad, and have participated in professional programs in the United States and Europe. The excellence of the department is evidenced by grants received and by the success of its graduates at major graduate and professional schools throughout the country. The department strongly emphasizes and has received recognition for the quality of its teaching. All students, but especially those with major or minor programs, receive substantial individual attention and assistance in the pursuit of their studies.

INTERIM OFFERINGS

Special interim courses at PLU explore a variety of topics and cultural perspectives. Cultural studies have been conducted in foreign countries such as Greece, Italy, Spain, and Norway. On-campus studies have been concerned with themes of social and legal philosophy, game theory, war and morality, justice, love, capitalism and business, and bio-medical ethics.

The General University Requirement of one course in philosophy may be satisfied by any course offered except 121, *Critical Thinking and Writing*, 233, *Logic*, 328, *Philosophy of Law*, or 385, *Health Care Ethics*. The initial course in the subject is customarily 201 or 221, though neither of these courses is a prerequisite for any other course. 300-level courses are especially suited for students with particular interests. Departmental consent may be required for some courses.

MINOR: 16 semester hours. A minor in philosophy consists of four approved courses. Students considering a minor should discuss their personal goals with departmental faculty. If they elect a minor in the field, they should formally declare this with the registrar and the department chair. Minors may either choose for themselves or be assigned an adviser, in consultation with whom they should plan their program.

BACHELOR OF ARTS MAJOR: Minimum of 28 semester hours. Students intending to major in philosophy must formally declare this with the registrar and the department chair. They may either choose a departmental adviser or be assigned one and should plan their programs in consultation with this adviser.

A person majoring in the department will:

1. complete a minimum of six regular courses in philosophy, including one course in logic and any two of the four courses in the history of philosophy sequence (331, *Ancient Philosophy*, 332, *Medieval Philosophy*, 333, *Modern Philosophy*, 335, *Contemporary Philosophy*).
2. complete 493, *Senior Independent Study*, which involves writing a research paper under the supervision of one or more faculty members and taking a comprehensive senior examination. The examination is largely diagnostic in nature, and it is not

necessary for a student to achieve a specified level of performance to complete the major or to graduate. Performance on this examination will determine one third of the student's grade in the *Senior Independent Study*.

3. complete the departmental reading program.

Quality programs in the arts and sciences do not rely exclusively on lecturing and group study or on secondary works, but also on one-to-one tutorial instruction in primary sources. Majors in philosophy at Pacific Lutheran University are expected to read and discuss a number of classical works under the personal supervision of various members of the departmental faculty. Not all works will be additions to course materials; some will also be covered in regular courses, and these may be read and discussed simultaneously with class study. With departmental approval, the standard list may be modified in accordance with special needs or interests, or reduced for those with double majors. The list should be secured at an early date from the departmental office, and one's reading program should be developed in consultation with an adviser. It is best that the reading program not be concentrated into a single semester but pursued at a leisurely pace over an extended period.

It is recommended that students familiarize themselves with main themes of the history of western philosophy and with major schools of philosophical thought, for example, pragmatism, realism, linguistic analysis, positivism, dialectical materialism, and existentialism. For this purpose students should make use of major histories and other secondary sources such as the *Encyclopedia of Philosophy*. It is also expected that they will meet regularly but informally with both faculty and other advanced students to discuss and thereby facilitate and enrich their work in the field.

COURSE OFFERINGS

121 CRITICAL THINKING AND WRITING

This course is designed to develop the ability to evaluate explanations critically; to distinguish acceptable from defective explanations and to organize and write straightforward, clear, direct, simple English. The course will focus on a critical evaluation of the JFK assassination events in the Bermuda Triangle, U.F.O. phenomena, and other popular topics. The course will satisfy the general university requirement in writing but will not satisfy the general university requirement in philosophy. I II (4)

201 PHILOSOPHICAL ISSUES

Perennial philosophical issues, systems and thinkers; the nature of knowledge, the function of science, values, human nature and its social implications, religion and knowledge of God. Development of critical and systematic philosophical thinking about all issues. I II (4)

221 MORAL PHILOSOPHY

Major moral systems of Western civilization; intensive examination of some contemporary moral theories; critical application to selected moral problems. I II (4)

233 LOGIC

Principles of argument and proof; deductive, inductive and symbolic logic; the nature and functions of language, problems of semantics, the philosophy of logic. I (4)

324 PHILOSOPHICAL ANALYSIS OF SOCIAL PROBLEMS

An examination of fundamental concepts of social thought: human nature, society, authority, community, liberty, equality, justice. Application of these concepts in a discussion of contemporary social institutions and their problems: war, racism, poverty, crime. (4)

328 PHILOSOPHY OF LAW

The nature and justification of legal authority and legal obligations; "natural law" and "legal positivism"; theories of natural rights and social justice; the relation of those theories to court decisions relating, e.g., to affirmative action, sex discrimination, welfare, freedom of speech, and educational financing; the justification of disobedience of law; the rationale of legal punishment and of particular practices of capital punishment, legal liabilities for the innocent, and the insanity defense. Not for General University Requirement. (4)

331 ANCIENT PHILOSOPHY

The development of philosophic thought and method from the Presocratic period to the end of the fourth century A.D. Special emphasis is given to the philosophies of Plato and Aristotle. I a/y (4)

332 MEDIEVAL PHILOSOPHY

The development of philosophy from Augustine to Ockham. Scrutiny of the sources and nature of the Thomistic synthesis, and the reaction to it in the work of Duns Scotus and William Ockham. I a/y (4)

333 MODERN PHILOSOPHY

The development of philosophy from the seventeenth through the early nineteenth centuries; continental rationalism, British empiricism and German idealism; Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant, Fichte, Schopenhauer and Hegel. II a/y (4)

335 CONTEMPORARY PHILOSOPHY

The development of philosophy from the late nineteenth century to the present; may include pragmatism, empiricism, process philosophy, existentialism and analysis as developed by Mill, James, Dewey, Whitehead, Sartre, Russell, Ayer and Wittgenstein. II a/y (4)

365 KIERKEGAARD AND EXISTENTIALISM

Modern existentialism, its main themes and their relation to other philosophical traditions; its impact on such fields as literature and psychology; life and thought of two key figures: Soren Kierkegaard and Jean-Paul Sartre; related thinkers including Nietzsche, Heidegger, Jaspers, Berdyaev, Unamuno and Marcel. I a/y (4)

371 AESTHETICS

Analysis of the aesthetic experience and its relationship to the fine arts, literature, science and morality; the criteria and concepts employed in artistic expression and aesthetic evaluation. II a/y (4)

381 THEORY OF VALUE

The nature of human values; contemporary discussions concerning the subjective or objective, absolute or relative character of such values as the good and the right, the beautiful and the holy; the origin of values, their place in a world of fact, man's knowledge of them, the character and use of the language of evaluation. II a/y (4)

385 HEALTH CARE ETHICS

An analysis of selected moral problems in medical relationships, using basic distinctions and normative theories developed in philosophical ethics. General issues of the value of life and the disvalue of suffering, the necessary conditions of human rights, the distinction between wrongs of commission and wrongs of omission, exceptions to rules, and assessment of risks for others. Specific problems of informed consent, euthanasia, allocation of scarce medical resources, rights to health care, patient responsibility for health, truth-telling and confidentiality, genetic counseling and screening, etc. For the general student as well as students in the health sciences. Not for General University Requirement. Prerequisite: consent of the instructor. II a/y (4)

393 PHILOSOPHY OF RELIGION

Classical and contemporary views of traditional religious problems: the existence of God, religious experience, revelation, immortality and others. II (4)

395 PHILOSOPHY OF SCIENCE

The general character, fundamental concepts, methods and significance of modern science; some attention to specific areas of science; physical, biological, social; the implications of science and scientific methodology for ethical, aesthetic and religious values. I a/y (4)

427 PHILOSOPHY AND CURRENT PROBLEMS

A reading and discussion course conducted by one or more staff members. Students will read in topical areas of current interest in which philosophical literature has been developed for comparison and analysis. Topics envisioned are such as free enterprise, ecology and environment, affirmative action and discrimination, public and private education, democratic pluralism and the problem of authority. (4)

435 ADVANCED SEMINAR IN PHILOSOPHY

Topic to be announced at the time the course is offered, normally some aspect of contemporary philosophy. Prerequisite: consent. I a/y (4)

491, 492 INDEPENDENT READING AND RESEARCH

Prerequisite: departmental consent. I II (1-4)

493 SENIOR INDEPENDENT STUDY

Preparation for a comprehensive senior examination and the writing of a major research paper. Preparation of the research paper constitutes two-thirds of the course; reading for the comprehensive examination the remaining third. Paper due November 1 or March 15; examination to be taken by December 1 or April 20. For philosophy majors only. Prerequisite: at least 4 courses in philosophy. I II (4)

INTERIM COURSES OFFERED IN 1978

221 MORAL PHILOSOPHY

300 MORALITY AND THE PROFIT MOTIVE — THE DILEMMAS OF SOCIAL RESPONSIBILITY IN A BUSINESS-ORIENTED SOCIETY



SCHOOL OF Physical Education

The university's physical education program seeks to ingrain in each student a fundamental respect for the role of physical activity in living.

Professionally, it prepares prospective leaders for careers in physical education, health, recreation, athletics, and therapeutics.

Instruction is offered in approximately 30 different physical education activities. The activity program is uniquely characterized by a timely response to student interests in recreational opportunities available in the Pacific Northwest.

FACULTY

D. Olson, *Director*; **E. Anderson**, *Auping*, **Beckman**, **R. Carlson**, **Chase**, **Hoseth**, **Lundgaard**, **McGill**, **Officer**, **Westering**; assisted by **Asher**, **Benson**, **Dahl**, **Hemion**, **Iverson**, **Jarvis**, **Kittilsby**, **Loverin**, **Mazzoni**, **Nicholson**, **Phillips**, **Peterson**, **Steilberg**, **Thieman**, and **N. Tomsic**.

UNIVERSITY REQUIREMENT: Four one-hour courses, including PE 100, are required for graduation. Eight one-hour activity courses may be counted toward graduation. Students are encouraged to select a variety of activities at appropriate skill levels. All physical education activity courses are graded on the basis of "A," "Pass," or "Fail" and are taught on a coeducational basis.

BACHELOR OF ARTS (Recreation Concentration): 40 semester hours, including PE 277, 330, 483, 497, Psychology 335; 4 semester hours of PE 481, 482, 485, 284-288; 10 hours of: Art 230-330, 250 or 350, 326, 341, 365, 370, Music 341, PE 292, 322, 365; 8 hours of: BA 230, 281, 350, Political Science 356, 457, Psychology 243, 340, 410, Sociology 260, 336, 342, 344.

BACHELOR OF ARTS (Therapeutic Concentration): 48 semester hours including PE 277, 292, 360, 391, 392, 478, 481, 482, 484, 485, 497; Biology 205-206; Psychology 101, 221, plus two hours of a psychology elective.

HEALTH MINOR: (20 semester hours) The following courses are required: Biology 205-206, PE 292, 295, 324, 326.

COACHING MINOR (Men and Women): 18 semester hours including: PE 277, 281, 334, 485, participation in a varsity or club sport, and a minimum of 10 hours selected from among the following: PE 331, 361, 370, 371, 372, 373, 374, and 478. Interim and summer courses may be included as electives with the approval of the director.

DANCE MINOR: 20 hours required: PE 362, 282 or 491, four hours from the following: PE 240, 242, 243 (may be repeated), 244, and eight hours from the following: PE 308, 360, Music 131-132, Art 110, 280, and Biology 205-206. The dance minor is cross-referenced with Communication Arts.

B.A. IN EDUCATION — SECONDARY SCHOOL PHYSICAL EDUCATION TEACHING MAJOR (44 hours): Required: (24 hours): PE 277, 328, 478, 481, 482, and 485, Biology 205 and 206, and participation in a varsity or club sport. Electives: 20 hours from among the following: PE 275, 282, 284, 285, 287, 288, 332, 360, 362, 484, and 491. Students desiring K-12 Certification must complete PE 283, 322, 362, and 284 or 288 in addition to meeting requirements as set forth by the School of Education.

B.A. IN EDUCATION — ELEMENTARY SCHOOL PHYSICAL EDUCATION TEACHING MAJOR (24 hours): The following courses are required: PE 277, 283, 284 or 288, 322, 334, 362 and 4 hours of electives in physical education with the approval of the director.

SECONDARY SCHOOL TEACHING MINOR (18 hours): The following courses are required: PE 277, 334 and 485 and 12 hours of electives from among the following: PE 282, 283, 284, 285, 287, and 328.

ELEMENTARY SCHOOL TEACHING MINOR (12 hours): PE 322 and 8 hours from among the following: 284 or 288, 283 and 362.

K-6 PHYSICAL EDUCATION SPECIALIST AND K-6 CLASSROOM TEACHER (32 hours): The following courses are required: PE 277, 283, 284 or 288, 322, 481, 482, 485 and Biology 205-206.

ELEMENTARY SCHOOL PHYSICAL EDUCATION SPECIALIST: The following courses are required: PE 277, 283, 284 or 288, 322, 360, 481, 482, 484, 485; Biology 205-206; and 8 hours of electives (Ed. 457 and Music 341 are recommended).

COURSE OFFERINGS

Courses in the School of Physical Education are offered in the following areas:

HEALTH EDUCATION

- 281 INJURY PREVENTION AND THERAPEUTIC CARE
- 292 FIRST AID
- 295 SCHOOL HEALTH
- 324 PERSONAL HEALTH
- 326 COMMUNITY HEALTH

RECREATION

- 330 RECREATION PROGRAMMING
- 483 RECREATION ADMINISTRATION

PHYSICAL EDUCATION

- 275 WATER SAFETY INSTRUCTION
- 277 FOUNDATIONS OF PHYSICAL EDUCATION
- 282 PROFESSIONAL ACTIVITIES: DANCE
- 283 PROFESSIONAL ACTIVITIES: GYMNASTICS
- 284 PROFESSIONAL ACTIVITIES: TEAMSPORTS FOR MEN
- 285 PROFESSIONAL ACTIVITIES: INDIVIDUAL AND DUAL SPORTS
- 287 PROFESSIONAL ACTIVITIES: RECREATION ACTIVITIES
- 288 PROFESSIONAL ACTIVITIES: TEAM SPORTS FOR WOMEN
- 322 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL
- 328 CURRICULUM DEVELOPMENT AND ADMINISTRATION
- 331 THE WOMAN AS A COMPETITOR
- 332 OFFICIATING
- 334 SCIENTIFIC BASIS FOR TRAINING
- 360, 361 PROFESSIONAL PRACTICUM, COACHING PRACTICUM
- 362 RHYTHMS AND DANCE
- 370-375 COACHING THEORY
- 391, 392 THERAPEUTIC EXERCISE, AMBULATION TECHNIQUES
- 401 WORKSHOPS
- 478 PSYCHOLOGICAL CONCEPTS OF PHYSICAL EDUCATION AND ATHLETICS
- 481 EXERCISE PHYSIOLOGY
- 482 KINESIOLOGY
- 484 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION
- 485 BIOMECHANICS
- 491 INDEPENDENT STUDY
- 501 GRADUATE WORKSHOPS
- 597 GRADUATE RESEARCH

100 PERSONALIZED FITNESS PROGRAMS

To stimulate student interest in functional personally-designed programs of physical activity; assessment of physical condition and skills; recommendation of specific programs for maintaining and improving physical health. Should be taken as a freshman. I II (1)

200-229 INDIVIDUAL AND DUAL ACTIVITIES

201 (Beginning Golf), 202 (Intermediate and Advanced Golf), 203 (Archery), 204 (Bowling), 207 (Beginning Gymnastics), 208 (Skiing), 209 (Intermediate Gymnastics), 210W (Slimnastics), 211 (Beginning Badminton), 212 (Intermediate Badminton), 213 (Personal Defense), 214 (Beginning Tennis), 215 (Intermediate Tennis), 216 (Beginning Ice Skating), 218 (Backpacking), 219 (Canoeing), 222 (Handball, Squash, and Racketball), 223 (Squash and Racketball), 225 (Aerobics), 227 (Weight Training), 228 (Basic Mountaineering), 229 (Equitation). (1)

230-239 AQUATICS

230 (Beginning Swimming), 231 (Intermediate Swimming), 232 (Advanced Swimming), 234 (Advanced Life Saving), 236 (Synchronized Swimming), 237 (Skin and Scuba Diving). (1)

240-249 RHYTHMS

240 (Beginning Modern Dance), 242 (Intermediate Modern Dance), 243 (Advanced Modern Dance), 244 (Folk and Social Dance). (1)

250-259 TEAM ACTIVITIES

251W (Volleyball and Field Hockey), 252W (Basketball and Softball), 253M (Soccer and Volleyball), 254M (Basketball and Softball). (1)

275 WATER SAFETY INSTRUCTION

The American Red Cross Water Safety Instructor's Course. Prerequisite: 234. II (2)

277 FOUNDATIONS OF PHYSICAL EDUCATION

The relationship of physical education to education; the biological, sociological, psychological and mechanical principles underlying physical education and athletics. Should be the initial professional course taken in the School of Physical Education. II (2)

281 INJURY PREVENTION AND THERAPEUTIC CARE

Prevention, treatment and rehabilitation of all common injuries sustained in athletics; physical therapy by employment of electricity, massage, exercise, light, ice and mechanical devices. I (2)

282 PROFESSIONAL ACTIVITIES: DANCE

Planning, teaching and evaluating dance. Encompasses specific movement education activities, conditioning exercises, and the development of modern, social and folk dance skill for elementary school age and older. Prerequisite: Intermediate skill level or completion of a beginning activity course, PE 277. II a/y (4)

283 PROFESSIONAL ACTIVITIES: GYMNASTICS

Includes skill development, teaching expertise, course planning, and safety techniques in gymnastics. The course is designed for both elementary and high school ages. Prerequisite: Intermediate skill level or completion of a beginning activity course, PE 277. I (4)

284 PROFESSIONAL ACTIVITIES: TEAM SPORTS FOR MEN

Planning, teaching and evaluating team activities: basketball, volleyball, soccer, speedball, wrestling, touch football, softball. Prerequisite: PE 277. II (4)

**285 PROFESSIONAL ACTIVITIES:
INDIVIDUAL AND DUAL SPORTS**

Planning, teaching and evaluating these activities: tennis, badminton, track and field. Prerequisite: intermediate skill level or completion of a beginning activity course, PE 277. I (4)

**287 PROFESSIONAL ACTIVITIES:
RECREATION ACTIVITIES**

Planning, teaching and evaluating the following: archery, bowling, golf, outdoor education and various recreational sports. Prerequisite: PE 277. II (4)

**288 PROFESSIONAL ACTIVITIES:
TEAM SPORTS FOR WOMEN**

Planning, teaching and evaluating these activities: basketball, field hockey, soccer, speedball, volleyball, softball. Prerequisite: PE 277. II (4)

292 FIRST AID

This course meets requirements for the American Red Cross Standard First Aid and Personal Safety. II (2)

295 SCHOOL HEALTH

Health concepts which relate to the total school health program, including instruction, services and environment; the relationship between health and all levels of education. Not recommended for freshmen. I II (2)

**322 PHYSICAL EDUCATION IN
THE ELEMENTARY SCHOOL**

Organization and administration of a developmental program for grades K-6; sequential and progressive programming; large repertoire of activities. PE 277 is recommended. I (2 or 4)

324 PERSONAL HEALTH

Practical application of health knowledge to daily living; a foundation for understanding health behavior. Primarily designed for health minor students. II a/y (4)

326 COMMUNITY HEALTH

Organizations associated with public health and their implications to community health problems. Primarily designed for health minor students. II a/y (4)

**328 CURRICULUM DEVELOPMENT AND
ADMINISTRATION**

Organization and administration of physical education and athletics (7-12); curriculum development implementation. Prerequisite: 277. I (4)

330 RECREATION PROGRAMMING

Supervising and administering recreational programs for the school or community. I (4)

331 THE WOMAN AS A COMPETITOR

The psychology of coaching, coaching technique and methodology; training; sociological implications of athletic competition for women; designed for those interested in coaching women's competitive teams. Not recommended for freshmen. II a/y (2)

332 OFFICIATING

Rules and officiating techniques of volleyball, basketball; designed to train qualified officials. Recommended as an elective for majors and minors. I a/y (2)

334 SCIENTIFIC BASIS FOR TRAINING

Presents physiologic and kinesiology applications to physical training. Topics include the development of muscular strength and endurance, and the relationship of nutrition, environment, sex, age and ergogenic aids to athletic performance. Prerequisite: PE 277. I (2)

**360, 361 PROFESSIONAL PRACTICUM,
COACHING PRACTICUM**

Assistant coaching teaching experiences; planning and conducting intercollegiate athletics and physical education instruction; students work under supervision of the head coach or physical education instructors. Prerequisite: one course professional activities, departmental approval. III (2)

362 RHYTHMS AND DANCE

Historical background, establishment and conduct of dance program, teaching techniques and accompaniment, planning and presentation of dances; modern dance techniques. II a/y (4)

370-375 COACHING THEORY

Techniques, systems, training methods, strategy and psychology of coaching; 370 (Basketball), 371 (Football), 372 (Track and Field), 373 (Baseball), 374 (Wrestling). I II a/y (2)

**391, 392 THERAPEUTIC EXERCISE,
AMBULATION TECHNIQUES**

A corrective therapy, clinical-training program including lecture, laboratory experiences and clinical practices. Prerequisite: departmental approval (maximum enrollment 5). I II

401 WORKSHOPS

Workshops in special fields for varying periods. (1-4)

**478 PSYCHOLOGICAL CONCEPTS OF
PHYSICAL EDUCATION AND ATHLETICS**

A study of the important psychological factors (methods of communicating, use of teaching aids, learning strategies, motivations, etc.) in the learning and teaching of gross motor skills. Prerequisite: PE 277. I (4)

481 EXERCISE PHYSIOLOGY

Scientific basis for training and the physiological effect of exercise on the human body. Prerequisite: Biology 205-206. I (2 or 4)

482 KINESIOLOGY

Deals with the structural and mechanical function of the musculoskeletal system. The kinesiological applications of anatomical information is given prime consideration. Prerequisite: Biology 205-206. II (2)

483 RECREATION ADMINISTRATION

The organization, management and direction of recreational services: legal basis, administrative procedures, financial aspects, personnel management, facilities and internal organization. II (4)

484 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

The selection, construction and interpretation of evaluatory techniques related to the physical education program. II a/y (2)

485 BIOMECHANICS

An application of physical laws to sports activities. Principles of motion, force, and equilibrium are stressed. Analyses of various sports skills are made. II (2)

491 INDEPENDENT STUDY

Prerequisite: consent of the director. I II S (1-4)

501 WORKSHOPS

Graduate workshops in special fields for varying periods. (1-4)

597 GRADUATE RESEARCH

Open to graduate students whose minor is in the field of physical education. Prerequisite: consent of the instructor. I II S (1-4)

- 303 LEADERSHIP FOR OUTDOOR MINISTRIES
- 304 CARDIOVASCULAR FITNESS —
ASSESSMENT AND PRESCRIPTION
- 308 SPORTS MOTIVATION
- 309 ORIENTATION TO HOSPITAL
REHABILITATION
- 310 DANCE CHOREOGRAPHY
- 313 INTRO TO INTRA: WHY, WHAT, WHEN,
AND WHERE OF INTRAMURAL SPORTS
- 315 PROFESSIONAL RECREATION
OPPORTUNITIES
- 316 COACHING THEORY OF VOLLEYBALL
- 497 CORRECTIVE THERAPY INTERNSHIP

INTERIM COURSES OFFERED IN 1978

- 202 INTERMEDIATE AND ADVANCED GOLF
- 204 BOWLING
- 208 SKIING
- 210 SLIMNASTICS
- 212 ADVANCED BADMINTON
- 225 CO-ED VOLLEYBALL
- 237 SKIN AND SCUBA DIVING
- 245 SQUARE DANCING
- 301 THE KINGDOME, POWER, AND
THE GLORY

Physics and Engineering



Physics is a basic science holding two prominent positions in contemporary society.

First, physics is an important cornerstone of other disciplines such as chemistry, geology, and biology; and it is the foundation for our familiar technologies of communication, transportation, and energy conversion. Secondly, through its inquiring principles and through the revolutionary basic concepts of nature it introduces, physics dramatically affects the human vision of nature and critical philosophical thought.

In its engineering program the department is committed to provide an education of sufficiently fundamental nature to permit rapid adaptation to new technical problems and opportunities and of sufficiently liberal scope to provide awareness of the broad social responsibilities implicit in engineering. The department seeks to promote the interaction between human values and the technical works of humankind and the fundamental engineering sciences.

The department offers B.S. level degree work in engineering-physics and a 3-2 engineering dual degree program jointly with the Schools of Engineering and Applied Science of Columbia University and Stanford University. Admission to Columbia is automatic upon recommendation; admission to Stanford, however, is competitive. Concentrations in electrical and mechanical engineering sciences are available within each degree program.

FACULTY

Heeren, *Chair*; Adams, Clark, D. Haueisen, Nornes, Tang.

The B.S. physics major sequence offers a challenging program emphasizing a low student-teacher ratio with undergraduate research participation. Several student publications resulting from such research have appeared in professional journals of international reputation. Two introductory sequences are offered to majors: *College Physics* and *General Physics*. These sequences differ in the level of mathematics used, as stated in the course descriptions. They also differ somewhat in emphasis,

with *General Physics* involving more comprehensive analyses.

The department also offers a B.A. degree in physics for science-oriented liberal arts students, requiring only six courses in physics. A specially designed course for non-science majors, *The Physical Universe*, and one for music majors, *Musical Acoustics*, are also offered.

Students intending to major in the department are advised early to take note of the interrelationships between the career fields of science (physics), engineering, and technology (also called engineering-technology). Scientists are motivated by raw curiosity. They ask the "why" questions and strive to answer them; their concern is with the natural world. Pure science is dedicated to acquiring new knowledge, which may in itself have no immediate application. Engineering is basically concerned with using scientific knowledge for the benefit and comfort of people. While science, particularly physics, deals with the natural world, engineering focuses upon the world constructed by people. Mathematics is the language of communication in both physics and engineering. Without scientists, engineers would have no accumulated storehouse of scientific knowledge from which to draw in creating engineering designs, and without engineers scientific knowledge would seldom be applied to solve practical problems. Engineers take the insights, facts, and formulas discovered by scientists and use them in inventing designs to solve problems posed in the context of our socio-economic-technical society. PLU has degree programs in scientific fields as well as programs in engineering. However, PLU has no academic program in engineering-technology, a career field concerned with hands-on aspects of routine testing, construction, and maintenance of hardware designed by engineers.

PHYSICS PROGRAM

BACHELOR OF SCIENCE MAJOR: 32 semester hours: 147, 148, 153, 154, 223, 331, 332, 336, 356, 421, 422. 497-498 may be substituted for 421-422 with consent of the department. Eight additional semester hours may be desirable, depending on the student's professional objectives. For example, it is recommended that pre-Ph.D. students take 401 and 406. Consult the department for specific recommendations.

Required supporting courses: Math 151, 152, 253; Engineering 354; Chemistry 115; plus either Chemistry 341 or Engineering 351.

BACHELOR OF ARTS MAJOR: 24 semester hours: 147, 148, 153, 154, 223, plus ten semester hours. Under special circumstances 125-126 may be substituted for the 153-154 sequence. This requires the consent of the department. Additional courses may be desirable, depending on the student's professional objectives. Consult the department for specific recommendations.

Required supporting courses: Math 151, 152.

MINOR: 22 semester hours, including 147-148 (one-hour labs), 153, 154 (or 125, 126); three additional courses, of which at least two must be upper division.

ENGINEERING PROGRAM

3-2 DUAL DEGREE: Dual B.S. degrees from PLU and Columbia, Stanford or other ECPD accredited Engineering School. Three full-time years at PLU plus 2 additional full-time years at Columbia or Stanford. PLU B.S. in Engineering-Science is granted after first year at Columbia or Stanford; B.S. in Engineering Specialty (E.E., M.E., etc.) granted by Columbia or Stanford at end of fifth college year.

PHYS: 14 hours, 147, 148, 153, 154, 223.

EGR BASICS: 10 hours, 151, 182, 354.

EGR CONCENTRATION (3 selections*): 10 hours — Electrical: 271, 272, 352, 441; Mechanical: 231, 232 (or PHYS 336), 351, 442.

*Courses selected on basis of the student's career objectives.

Required supporting courses: Math 144, 151, 152, 253; Chemistry 115.

B.S. DEGREE IN ENGINEERING-PHYSICS: Similar to the 3-2 program with additional course work at PLU in engineering and physics; 4 years at PLU.

PHYS: 24 hours, 147, 148, 153, 154, 223, 331; 336 (optional); 356, 421, 422.

EGR BASICS: 10 hours, 151, 182, 354.

EGR CONCENTRATION (4 selections*): 12 hours — Electrical: 271, 272, 352, 441; Mechanical: 231, 232 (or PHYS 336), 351, 442.

*Courses selected on basis of the student's career objectives.

Required supporting courses: Math 144, 151, 152, 253; Chemistry 115.

Students wishing to major in physics or engineering are encouraged to contact the department early in their college career, preferably prior to entering as freshmen. Early consultation provides greater flexibility in designing one's program.

PHYSICS PROGRAM

OUTLINE: BACHELOR OF SCIENCE IN PHYSICS FRESHMAN

Fall:	153	General Physics
	147	Lab
	Math 151	Analytic Geometry and Calculus
Spring:	154	General Physics
	148	Lab
	Math 152	Analytic Geometry and Calculus

SOPHOMORE

Fall:	223	Elementary Modern Physics
	Math 253	Multivariable Calculus and Differential Equations
	Engineering	
	231	Statics
Spring:	336	Mechanics
	354	Engineering Analysis

UNIOR

Fall:	331	Electromagnetic Theory
	356	Mathematical Physics
	*351	Thermodynamics
		or
Spring:	Chem 341	Physical Chemistry
	332	Electromagnetic Waves and Physical Optics
	*272	Solid State Electronic Devices

JENIOR

Fall:	**401	Quantum Mechanics
	421	Advanced Laboratory
Spring:	**406	Advanced Modern Physics
	422	Advanced Laboratory

*Optional

**Optional, recommended for graduate school candidates

OUTLINE: BACHELOR OF ARTS IN PHYSICS

Fall:	153	General Physics
	147	Lab
	Math 151	Analytic Geometry and Calculus
Spring:	154	General Physics
	148	Lab
	Math 152	Analytic Geometry and Calculus
Fall:	223	Elementary Modern Physics

PLUS 10 additional semester hours**COURSE OFFERINGS — Physics****106 THE PHYSICAL UNIVERSE**

A non-mathematical introduction to the meaning and structure of physics through a discussion of the large-scale order of the universe. Intended primarily for the general liberal arts student. Selected topics include cosmology, relativity, nuclear energy, and stellar evolution. (4)

125, 126 COLLEGE PHYSICS

This course provides an introduction to the fundamental topics of physics. It is a non-calculus sequence, involving only the use of trigonometry and college algebra. Concurrent registration in 147, 148 is required. (4, 4)

147, 148 INTRODUCTORY PHYSICS LABORATORY

Basic laboratory experiments are performed in conjunction with the General and College Physics sequences. Concurrent registration in 125, 126 or 153, 154 is required.

(1)

153, 154 GENERAL PHYSICS

A calculus-level survey of the general fields of physics, including classical mechanics, thermodynamics, electricity and magnetism and optics. Concurrent registration in 147, 148 and prior or concurrent registration in Math 151, 152 is required. (4, 4)

205 MUSICAL ACOUSTICS

A study of musical sound using physics methods: vibrating systems; simple harmonic motion; wave motion; complex waves; wave generation in musical instruments; physiology of hearing; architectural acoustics; electronic recording and reproduction. Laboratory and group tours. No prerequisite courses in either mathematics or physics are assumed. (4)

223 ELEMENTARY MODERN PHYSICS

This course covers the various phenomena where classical methods of physics fail. Contemporary interpretations of these phenomena are developed at an elementary level. Prerequisite: 154 or 126 or consent of instructor. (4)

272 SOLID STATE ELECTRONIC DEVICES

See Engineering 272.

331 ELECTROMAGNETIC THEORY

Electrostatics, dipole fields, fields in dielectric materials, electromagnetic induction, magnetic properties of matter, generation and propagation of electromagnetic waves with an emphasis on the relationship with physical optics. Prerequisite: 153, 154; corequisite: 356 or consent. (4)

332 ELECTROMAGNETIC WAVES AND PHYSICAL OPTICS

A study of the generation and propagation of electromagnetic waves. The mathematical description and the physical understanding of electromagnetic radiation are discussed with an emphasis on its relationship with physical optics. Prerequisite: 331. (4)

336 MECHANICS

Fundamental mechanics; mathematical formulation of physical problems; motion of particles in one, two or three dimensions; motions of systems of particles; dynamics and statics of rigid bodies; moving coordinate systems; Lagrange's equations and Hamiltonian formulation of mechanics. Corequisite: 354 or consent. (4)

351 THERMODYNAMICS

See Engineering 351.

354 ENGINEERING ANALYSIS

See Engineering 354.

355 TEACHING OF PHYSICS

New developments in secondary curriculum, teaching techniques and teaching media in the physical sciences; counted toward a degree for only those students receiving certification. (4)

356 MATHEMATICAL PHYSICS

Boundary value problems, special functions, matrices and tensors, probability theory, eigenvalue problems, complex variables, contour integration and their applications to physics. Continuation of Engineering 354. (4)

401 INTRODUCTION TO QUANTUM MECHANICS

The ideas and techniques of quantum mechanics are developed. Various quantum mechanical systems and phenomena are studied in order to demonstrate these ideas and techniques. (4)

406 ADVANCED MODERN PHYSICS

Modern theories are used to describe topics of contemporary importance such as atomic and sub-atomic phenomena, plasmas, solids, and astrophysical events. The application of quantum mechanical techniques are emphasized when appropriate. Prerequisite: 401. (4)

421, 422 ADVANCED LABORATORY

(1)

491, 492 INDEPENDENT STUDY

(1-4)

497, 498 RESEARCH

(1-4)

ENGINEERING PROGRAM

A smaller university like PLU is uniquely suited to foster a student's personal development while making a firm but not premature commitment to professional and career goals. Such a setting also helps a student to clarify the social context in which engineers function. A major school of engineering like Columbia or Stanford emphasizes advanced studies, research, and interaction with industry. Thus, PLU's 3-2 program gives students the best of two settings — breadth at PLU and depth in an engineering speciality at Columbia or Stanford. Students have also been involved in 3-2 programs at the University of Washington or other state universities in the Pacific Northwest.

During the first three years of this program students must complete 1) all general university core requirements, 2) two interims, 3) all basic science and mathematics requirements, 4) and six courses in engineering. Once a clear sense of direction within an engineering speciality is gained, a recommendation to Columbia or Stanford may be granted. Admission to Columbia is automatic upon recommendation; admission to Stanford, however, is competitive. Details of transfer admission are made available in the fall of the third year. Normally two additional years are necessary to finish engineering speciality courses at Columbia or Stanford.

PLU also offers a four-year program in engineering-physics. Because the university does not offer a standard engineering degree, students electing to remain at PLU throughout their college career, or for whom the 3-2 engineering program is inappropriate though they are drawn to an engineering career, find this program attractive. It is more practical than a physics degree while at the same time more theoretical than the usual engineering degree. The B.S. degree in engineering-physics prepares students for employment in many diverse industries or directly for graduate study in nearly all fields of engineering. Strength may be built in electrical or mechanical engineering sciences by careful selection of upper division courses. Students are urged to develop a minor in either mathematics or computer science, particularly if aspiration to graduate study in engineering is part of their career plan. A minor in business

administration is particularly appropriate for working in industry immediately after graduation. For maximum flexibility in upper division courses, students aspiring to the engineering-physics degree should schedule their first two years identically to those for dual degree 3-2 engineering. Junior and senior year schedules are determined by upper division requirements and by students' objectives. A suggested schedule is shown below.

Regardless of eventual speciality, both EGR 231 *Statics* and EGR 271 *Electrical Circuits* should be taken. These should be followed by EGR 232 *Mechanics of Solids* for students in the mechanical engineering concentration or by EGR 272 *Solid State Electronic Devices* for those with interest in electrical engineering. The natural sciences core requirement is automatically satisfied by engineering students as is the second part of option II of the foreign language requirement in the College of Arts and Sciences. Unless they automatically qualify for fulfilling option I of the foreign language requirement on the basis of their high school work, students are encouraged to satisfy this requirement by means of option II. Hours freed by satisfaction of the foreign language requirement on the basis of high school work may profitably be used for taking another core requirement (e.g., history/literature or social sciences) or for taking mathematics beyond calculus (e.g., MTH 244 *Assembly Language*, MTH 331 *Linear Algebra*, MTH 345 *Introduction to Numerical Analysis*, or MTH 351 *Applied Mathematics*).

Particular attention should be given to the Integrated Studies Program, known as Core II, and to its applicability for engineers in our technological society.

Students with strong preparation (A's and B's) in high school mathematics at least through trigonometry/functions as well as in science through physics and with SAT math scores no lower than 550 should schedule their classes as indicated below. Those with less adequate preparation in mathematics and sciences, particularly mathematics, should consider strengthening their background with community college work in the summer before enrollment at PLU and should postpone the physics sequence until their second year. An appropriate first year schedule includes: FALL — EGR 151 *Visual Thinking*, MTH 151 *Calculus*, CHM 115 *Chemistry*, a general university core requirement, and PE 100 or a PE activity course; SPRING — EGR 182 *Materials*, MTH 152 *Calculus*, MTH 144 *Computer Science*, a core requirement, and a PE activity course (or PE 100).

OUTLINE: BACHELOR OF SCIENCE in Engineering-Science (3-2) and Engineering-Physics

FIRST YEAR

Fall:

EGR 151	Visual Thinking	2
PHYS 153	General Physics	4
PHYS 147	Laboratory	1
MATH 151	Calculus	4
CORE		4
PE		1
		<hr/>

16

Spring:		
EGR 182	Intro. Materials	4
PHYS 154	General Physics	4
PHYS 148	Laboratory	1
MATH 152	Calculus	4
CORE		4
PE		1
		<u>18</u>

SECOND YEAR

Electrical Engineering Concentration

Fall:		
EGR 271	Elec. Circuits	2
PHYS 223	Elem. Modern	4
MATH 253	Calculus	4
CORE		4
CORE		4
		<u>18</u>

Spring:		
EGR 272	Solid State	4
EGR 354	Eng. Analysis	4
MATH 144	Comp. Science	4
CORE		4
PE		1
		<u>17</u>

Mechanical Engineering Concentration

Fall:		
EGR 231	Statics	2
PHYS 223	Elem. Modern	4
MATH 253	Calculus	4
CORE		4
CORE		4
		<u>18</u>

Spring:		
EGR 232	Mech. of Solids	4
EGR 354	Eng. Analysis	4
MATH 144	Comp. Science	4
CORE		4
PE		1
		<u>17</u>

THIRD YEAR

3-2 Engineering

Electrical Engineering Concentration

Fall:		
EGR 231	Statics	2
CHM 115	Gen. Chem.	4
CORE		4
CORE		4
PE		1
		<u>15</u>

Spring:		
CORE		4
CORE		4
CORE		4
		<u>12</u>

Mechanical Engineering Concentration

Fall:		
EGR 271	Elec. Circuits	2
CHM 115	Gen. Chemistry	4
CORE		4
CORE		4
PE		1
		<u>15</u>

Spring:		
CORE		4
CORE		4
CORE		4
		<u>12</u>

Engineering-Physics

Fall:		
PHYS 331	EM I	4
PHYS 356	Math. Phys.	4
EGR 351 or	Thermo	
EGR 352	A/D Circuits	4
Spring:		
PHYS 336* or	Mechanics	
PHYS 332*	EM II	4
CORE		4
CORE		4

FOURTH COLLEGE YEAR

3-2 Engineering

Junior engineering standing at Columbia, Stanford, or a regional state university. Admission to Columbia is automatic upon recommendation by the department. Admission to Stanford is competitive.

28 additional semester hours in upper division engineering speciality courses at Columbia or Stanford (e.g., E.E., M.E., C.E., etc.) to qualify for a degree of B.S. in Engineering-Science from PLU. The degree is awarded after presentation of a signed gold book and a transcript from Columbia or Stanford.

Engineering-Physics

Fall:		
PHYS 421	Adv. Lab.	1
EGR 441* or	Networks	4
EGR 442*	Transport	
CORE		4

Spring:		
PHYS 422	Adv. Lab.	1
CORE		4
CORE		4

FIFTH COLLEGE YEAR

3-2 Engineering

Complete engineering speciality (E.E., M.E., C.E., etc.) at Columbia, Stanford, or a regional state university thereby earning that school's B.S. degree. At Stanford it is also possible to be admitted to a coterminal M.S. program and earn a master's degree in an engineering speciality simultaneously with the bachelor's degree.

*Optional

COURSE OFFERINGS — Engineering

Mathematical Systems

144 INTRODUCTION TO COMPUTER SCIENCE

See Mathematics 144

345 INTRODUCTION TO NUMERICAL ANALYSIS

See Mathematics 345.

346 NUMERICAL ANALYSIS

See Mathematics 346.

Engineering Basics

151 VISUAL THINKING

Three dimensional visualization, orthographic and isometric perspectives, relationship of visual graphic thinking to the creative process, preliminary design; of value to not only engineers but also the science major who must be able to think three dimensionally as demanded in mechanics or structural chemistry. Emphasis upon fluent and flexible idea production. (2)

182 INTRODUCTION TO MATERIALS SCIENCE

Fundamentals of synthetic materials (dielectrics, semiconductors, magnetics, alloys, polymers), their relationship to chemistry and physics, and implications for modern technological society. Discussion of what useful properties engineering materials have and how these properties can be altered by adjusting internal microstructure. A particularly useful entry point for the study of electrical and mechanical engineering. Background: one course in chemistry. (4)

354 ENGINEERING ANALYSIS

Introduction to vector and tensor calculus, functions of a complex variable, Laplace and Fourier transforms, and undetermined multipliers. Comprehensive and illustrative examples from the fields of electromagnetism, waves, transport, vibrations, and mechanics. May be taken as a package with PHYS 356. Requirements: Mathematics 253. (4)

Electrical Engineering Science

271 ELECTRICAL CIRCUITS

Fundamental concepts of electrical science and its utilization in circuits, components, and devices. Requirement: Current registration in Physics 154. (2)

272 SOLID STATE ELECTRONIC DEVICES

Useful properties of semiconductors as related to electronic devices; pn-junction diodes and transistors; FET and MOS structures; solid state lasers. Requirement: Engineering 271. (4)

352 ANALOG AND DIGITAL ELECTRONIC CIRCUITS

Active solid state circuits. Analog: AC-DC converters amplifiers, oscillators. Digital: Boolean algebra, sequential logic circuits, switching networks. Requirement: Engineering 271 or 272. (4)

441 NETWORK ANALYSIS

Analysis of electrical circuits in transient and steady-state modes; formulation of network equations and theorems, impedance matching and fundamentals of network topology, transfer functions, development of Laplace transforms and Fourier series; time- and frequency-domain analysis. Requirement: Engineering 271. a/y (4)

491 INDEPENDENT STUDY

Selected topics of mutual interest to student and instructor. Enrollment is limited and open only to students who have discussed a proposed topic or course of study in considerable depth with instructor. Requirement: mutual interest. (1-4)

Mechanical Engineering Science

231 STATICS

Fundamental engineering statics using vector algebra conditions for equilibrium, resultant force systems, centroid and center of gravity, methods of virtual work, friction. Requirement: Physics 153. (2)

232 MECHANICS OF SOLIDS

Mechanics of deformable solid bodies; deformation, stress, constitutive equations for elastic materials, thermoelasticity, tension, flexure, torsion, stability of equilibrium. Requirement: Engineering 231. (4)

351 THERMODYNAMICS

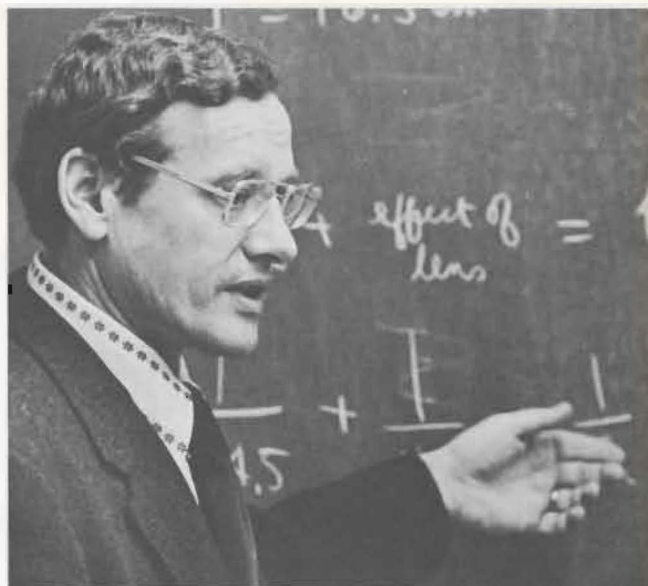
Concepts and equations of classical, macroscopic thermodynamics; thermodynamic cycles, flow and non flow systems, properties and mathematical relations of pure substances, mixtures and solutions, phase transition and chemical reactions; an elementary treatment of statistical thermodynamics. Requirement: Physics 154. (4)

**142 TRANSPORT: MOMENTUM,
ENERGY AND MASS**

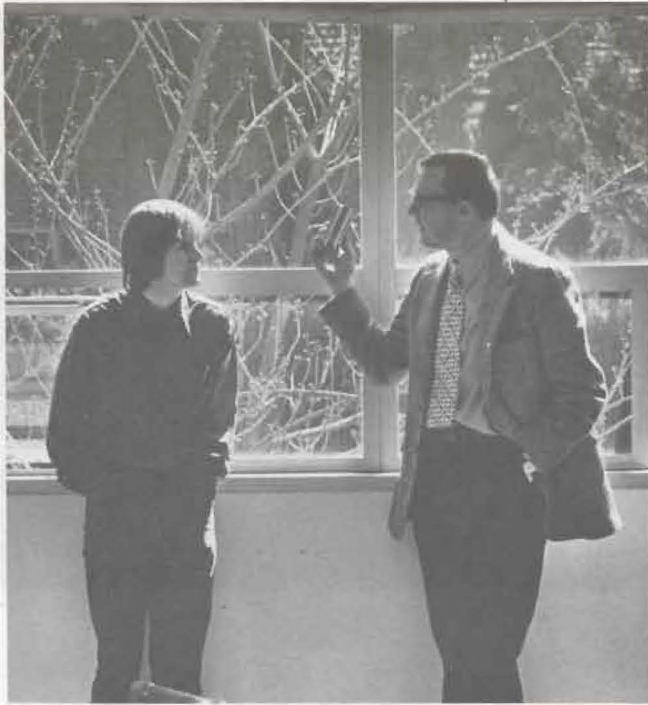
Unifying concepts of the transport of momentum, energy, and mass in planar, cylindrical, and spherical geometries; mathematical aspects of fluid mechanics; boundary layers; transport coefficients-viscosity, thermal conductivity, mass diffusivity; an elementary treatment of turbulent flow. Requirement: Engineering 351 or consent of instructor. (1-4)

492 INDEPENDENT STUDY

Selected topics of mutual interest to student and instructor. Enrollment is limited and open only to students who have discussed a proposed topic or course of study in considerable depth with instructor. Requirement: mutual interest. (1-4)



Political Science



Political science addresses one of the most difficult, yet fundamentally important human endeavors, the governance of people and of societies. The student of politics seeks to understand how governments are organized and structured, how political processes are employed, and the relationship of structures and processes to societal purposes. Recognizing that government and political activity may embody and reflect the full range of human values, the study of politics must endeavor to understand the realities of politics while at the same time asking how well political systems work, what purposes are and ought to be served, and what effects result from political phenomena. Political science encourages a critical understanding of government and politics in the belief that a knowledgeable, interested, and aware citizenry is the root strength and necessity of a democratic society.

FACULTY

Ulbricht, Chair; Atkinson, Farmer, Spencer; assisted by Bricker and Mork.

The study of political science helps to prepare students for the exercise of their rights, duties, and opportunities as citizens by giving them a better understanding of American political processes and of alternative systems. Courses in political science explore various topics in American government and politics, international relations and foreign policy, comparative government and area studies, political philosophy and theory, and public policy and law. The department provides pre-professional training leading to careers in teaching, law, government, and related fields.

For the non-major, political science courses provide useful study for any student generally interested in public affairs and the workings of government. Moreover, the study of politics is supportive of any discipline or professional program whose substance becomes a matter of public policy. As such, political science complements such fields as the natural sciences, sociology, business, education, and economics. The study of politics touches upon other disciplines which inquire into human behavior and development, ranging from history and philosophy to psychology, communication, and cross-cultural studies.

Students of political science have the opportunity to combine the academic study of government and politics with practical experience by participation in one of the internship programs sponsored by the department. At present these are available in public administration, public law, and the legislative process.

The department of political science is affiliated with several organizations providing for a variety of student involvement. These organizations include the Model United Nations, Center

for the Study of Public Policy, and Political Science Student Association. The department further sponsors or otherwise encourages active student participation in political life through class activities and through such campus organizations as the Young Republicans and Young Democrats.

The political science faculty at Pacific Lutheran University share a breadth of experience in teaching and research, in professional associations and conferences in the United States and abroad, and in governmental decision making from the local to the international level.

There are no prerequisites for political science courses, except as noted. Prior consultation with the instructor of any advanced course is invited. Students wishing to pursue a major or minor in political science are requested to declare the major or minor with the department chair as soon as possible.

BACHELOR OF ARTS MAJOR: Minimum of 32 semester hours, including 101, 151, and 325. Major programs are planned in consultation with a departmental adviser.

MINOR: Minimum of 20 semester hours including 101 or 151. Minor programs are planned in consultation with a departmental adviser.

MINOR in International Affairs (a thematic module within the Foreign Areas Studies Program): 20 to 24 semester hours from three different disciplines, including (required) 331 or 338 and (optional) 384, 386, History 335 or Spanish 322, History 340, Economics 331 or 381, and Independent Study.

For students wishing to prepare themselves specifically for career possibilities in public affairs and political life, the department designates three special programs: Urban Affairs, Public Affairs, and Pre-Law. For further information see the pre-professional and career programs sections of the catalog.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

COURSE OFFERINGS

101 INTRODUCTION TO POLITICAL SCIENCE

An introduction to the major concepts, theories, ideas and fields of study relating to politics and governmental systems. Explores governmental structures and processes, political power and authority, conflict, decision-making, policy, and stability and change. (4)

151 AMERICAN GOVERNMENT

A survey of the constitutional foundations of the American political system and of institutions, processes, and practices relating to participation, decision-making, and public policy in American national government. (4)

382 COMPARATIVE GOVERNMENT

Examination of political systems from a comparative perspective. Principal focus is on contemporary issues, the societal setting and policy formation in selected countries at various stages of political and economic development. (4)

321 SCOPE AND METHODS OF POLITICAL SCIENCE

An examination of analytic frameworks, research methods and techniques, and information sources in political science. (4)

325 POLITICAL THOUGHT

A survey of the origin and evolution of major political concepts in ancient, medieval, and early modern times. Such ideas as state, obligation, authority, community, law and freedom will be studied developmentally. (4)

326 RECENT POLITICAL THOUGHT

A critical examination of the major ideologies of the modern world: democracy, conservatism, capitalism, socialism, anarcho-syndicalism, communism, racial and political elitism, nationalism, liberalism, Christian political thought, and contemporary problems. (4)

331 INTERNATIONAL RELATIONS

Analysis of concepts and vocabulary of international relations; contemporary international problems and foreign policies. (4)

336 INTERNATIONAL ORGANIZATION AND LAW

Cooperation and conflict in international institutions. Issues before the United Nations and other international organizations. The role of international law in interstate relations. (4)

338 AMERICAN FOREIGN POLICY

The role of the United States in international affairs. An analysis of the major factors in the formulation and execution of United States foreign policy and its impact on other powers. (4)

345 GOVERNMENT AND PUBLIC POLICY

An integrated approach to the nature of public policy, with emphasis on substantive problems, the development of policy responses by political institutions, and the impacts of policies. Special attention to policy at the American national or subnational levels, in international politics, or from a comparative perspective, as announced by the department. (4)

352 AMERICAN STATE GOVERNMENT

Study of governmental structures, processes, problems, and public policy at the state level. Special topics and field study may be arranged as appropriate. Particular attention to the state of Washington. (4)

356 URBAN GOVERNMENT AND POLICY

Examination of American government at the community and metropolitan level, political structures and processes, urban problems and policies, and relationships with other levels of government. Special topics and field study as appropriate. (4)

361 AMERICAN POLITICAL PARTIES

An examination in theory and practice of American political parties and interest groups; special attention to party leadership and recruitment, individual political socialization and participation, electoral processes, and to the role of interest groups in American politics. (4)

363 POLITICAL COMMUNICATION AND OPINION

Inquiry into the relationship between public will and public policy in America. Examines democratic values in the contexts of opinion formation, expression, and effects. Particular attention to political culture, public opinion polls, the mass media, and governmental secrecy and information management. (4)

364 THE LEGISLATIVE PROCESS

A study of the theory, organization, and procedure of the Congress and other legislative bodies in the United States; special emphasis on the dynamics of conflict and compromise in the legislative arena including citizen and interest group participation and lobbying. (4)

368 THE AMERICAN PRESIDENCY

Study of the nation's highest political office in terms of the roles and expectations of the office, styles of leaderships, Presidential decision-making, the powers and limitations of the office, and the interaction of personality and institution. (4)

371 JUDICIAL PROCESS AND BEHAVIOR

An examination of the nature of law, judicial organization, and judicial roles. Particular emphasis is given to the political nature of the judiciary and the mutual impacts of law and the political system. (4)

372 CONSTITUTIONAL LAW

The constitutional basis of governmental powers in the United States with special emphasis given to judicial review, separation of powers, federalism, and interstate commerce. Includes an examination of the political and constitutional restrictions on governmental power. (4)

373 CIVIL LIBERTIES

Constitutional rights and liberties with special attention given to freedom of expression and association, religious freedom, rights in criminal procedure, due process and equal protection. (4)

383 THE WESTMINSTER MODEL

An examination of the evolution of the political system of the United Kingdom and its transplantation to the states of the British Commonwealth including Canada, Australia, and New Zealand. (4)

384 COMMUNIST POLITICAL SYSTEMS

Comparative examination of Marxist political systems, particularly the U.S.S.R., eastern Europe, China, and Cuba. Special attention will be given to ideology and to the role of the Communist Party. (4)

386 AFRICAN POLITICAL SYSTEMS

Comparative examination of the political systems of sub-Saharan Africa. Exposition of pre-colonial, colonial, and contemporary influences with special attention to problems of decolonization, nation-building, and development. (4)

401 SEMINAR IN POLITICS

Selected topics in the study of government and politics as announced by the department. (4)

457 PUBLIC ADMINISTRATION

Management as occurs in the affairs of state; the nature of human behavior in organizations; administrative law and quasi-judicial practices; civil service, budget and fiscal control, centralization, coordination in administrative areas. (4)

458 INTERNSHIP IN PUBLIC ADMINISTRATION

An internship with a department of local or state government; planned and supervised jointly by a supervising government official and a member of the political science faculty. (By consent of the department only.) (4-12)

464 INTERNSHIP IN THE LEGISLATIVE PROCESS

Direct involvement with the Washington State Legislature. An opportunity to study the process from the inside by working with legislative participants. (Open only to juniors and seniors with at least one year at PLU. By consent of the department only. Political Science 364 prerequisite or taken concurrently.) (4-12)

471 INTERNSHIP IN PUBLIC LAW

An internship with a state or local government unit engaged in public law enforcement and litigation. (By consent of the department only.) (4-12)

491, 492 INDEPENDENT READING AND RESEARCH

(By consent of the department only.) (1-4)

597, 598 GRADUATE RESEARCH

(Open to master's degree candidates only. Consent of the department required.) (1-4)

599 THESIS

(Open to master's degree candidates only. Consent of the department required.) (4)

INTERIM COURSES OFFERED IN 1978

304 THOREAU AND FIRST AMENDMENT FREEDOMS

307 SCIENCE AND POLITICS: THE CONTROL OF TECHNOLOGY

464 INTERNSHIP IN THE LEGISLATIVE PROCESS

Psychology



Through its curriculum, use of community resources, and research programs, the psychology department provides students with a comprehensive and balanced exposure to psychology as a discipline, a science, and a profession.

The major prepares students for graduate work in psychology or for immediate employment after graduation in a wide variety of settings. In addition the psychology major is pursued by some students who plan to do graduate work in fields outside of psychology such as social work, law, business administration, or theology. The minor in psychology is designed to be a supplement to another major in the liberal arts or to a degree program in a professional school. The psychology department also offers a broad range of courses which can be individually selected by a student once the Introduction to Psychology course has been completed.

As a supplement to academic learning, the department offers opportunities for students to have experiences of a field-work nature in a wide variety of settings in the greater Tacoma area, such as: American Lake Veterans Hospital, Western State Hospital (including the Child Study and Treatment Center), Cascadia Diagnostic Center (juvenile delinquents), Rainier State School (mentally retarded), mental health clinics, special services departments of local school districts, and so on.

The laboratory classes offered by the department are small in size with maximum importance attached to individualized instruction.

FACULTY

Severtson, *Chair*; Adachi, Fiedler, Larsgaard, Lejeune, Moritsugu, Nolph, Stoffer.

BACHELOR OF ARTS MAJOR: 32 semester hours, including 101, 243, 340, 460, 490. In addition, Statistics 231 is required.

MINOR: 20 semester hours.

110 and 221 may not be counted toward the major or minor. Courses at the 500 level are primarily for graduate students; however, they may be taken by advanced undergraduates who receive the instructor's consent.

COURSE OFFERINGS

101 INTRODUCTION TO PSYCHOLOGY

An introduction to the scientific study of behavior; scientific methods for studying the behavior of living organisms; topics such as motivation, learning, emotion, intelligence, personality, adjustment, and social behavior. I II (4)

110 STUDY SKILLS

To assist in the improvement of reading skills and other techniques for effective study; class work supplemented by individual counseling. (May not be counted in the major or minor.) I II (2)

221 THE PSYCHOLOGY OF ADJUSTMENT

Problems in personal adjustment in everyday living. Prerequisite: 101. (May not be counted in the major or minor.) I II (2)

243 SCIENTIFIC METHODS

Basic research design and theory construction; applications to both laboratory and field. Special emphasis is placed on perception and cognition. Lecture and laboratory. Majors must take four credit hour option. Prerequisite: 101. I II (2 or 4)

330 SOCIAL PSYCHOLOGY

Research and theory concerning the interaction between groups and the individual. Language, attitudes, aggression, leadership, person perception, and related topics are examined and their relationship to various types of social change and influence are discussed. Prerequisite: 101. II (4)

335 DEVELOPMENT: INFANCY TO MATURITY

Physical, intellectual, social, and emotional growth from infancy through adolescence to maturity. Prerequisite: 101. I II (4)

340 HUMAN NEUROPSYCHOLOGY

The study of brain-behavior relationships. Topics include neuroanatomical and neurophysiological mechanisms underlying human behavior; psychological effects of brain damage; physiological correlates of language, sensory and motor functions, and emotion; electrical stimulation of the brain. Prerequisite: 243. I (4)

401 WORKSHOP

Selected topics in psychology as announced.

403 THE PSYCHOLOGY OF INFANCY AND CHILDHOOD

Physical, intellectual, emotional and social development of the individual from the pre-natal period to adolescence; problems of behavior and adjustment. Prerequisite: 335. (2)

405 ADOLESCENT PSYCHOLOGY

Physical development, mental traits, social characteristics and interests of adolescents; adjustments in home, school and community. Prerequisite: 335. II (2)

410 EMOTION AND MOTIVATION

Characteristics of emotion and motivation; their role in determining behavior. Physiological, cognitive, and behavioral orientations are emphasized. Prerequisite: 243. (4)

420 PERSONALITY THEORIES

Strategies for the study of personality and for the formulation of personality theories. Techniques of measurement and implications for counseling and/or psychotherapy. Prerequisite: 101. I II (4)

421 ABNORMAL PSYCHOLOGY

Etiology and treatment of abnormal behavior; special emphasis on psychosocial factors. Prerequisite: 101. I II (4)

450 PSYCHOLOGICAL TESTING

Survey of standardized tests; methods of development, standardization; limitations and interpretations of tests. Prerequisite: 243 or a course in statistics. I (4)

460 LEARNING: RESEARCH AND THEORY

Experimental studies and theories of learning. Lecture and laboratory. Prerequisite: a minimum of 12 hours in psychology including 243. I (4)

490 SYSTEMATIC THOUGHT IN PSYCHOLOGY

Historical development, contemporary forms, and basic assumptions of the major psychological theories and traditions. Primarily for advanced majors and graduate students. I (4)

491, 492 INDEPENDENT STUDY

A supervised reading, field or research project of special interest for advanced undergraduate or graduate students. Prerequisite: departmental consent. I II (1-4)

493 SEMINAR

Selected topics in psychology as announced. Prerequisite: instructor's consent.

505 SOCIAL SCIENCE METHODS

Basic research concepts applied to laboratory, field, and bibliographical studies. Topics include formulating research questions, research designs, data-gathering techniques analysis of data and theory construction. Emphasis is placed on understanding and evaluating rather than conducting research. Admission by consent of the student's graduate committee. (4)

515 PSYCHOLOGICAL ASSESSMENT

Intellectual and personality assessment. For the former part, the study of such tests as the Stanford-Binet, the Wechsler Preschool and Primary Scale of Intelligence, and the Revised Wechsler Intelligence Scale for Children, and the Wechsler Adult Intelligence Scale; for the latter, interview techniques, self-report tests such as the MMPI and projective methods. Prerequisite: 450. II (4)

540 COUNSELING METHODS

Counseling process from initial contact through termination. Emphasis on case conceptualization, communication skills, and instruction in commonly used techniques. Prerequisite: 420. I II (4)

550 GROUP COUNSELING

Counseling theories and methods applied to the group context. Prerequisite: Psychology 540. (4)

570 PRACTICUM IN COUNSELING AND/OR ASSESSMENT

An opportunity to develop counseling and/or assessment skills in a setting in which these professional services are offered. Prerequisite: 515 and/or 540. I II (4)

577 ADVANCED PRACTICUM IN COUNSELING AND/OR ASSESSMENT

An opportunity for the more advanced student to work in the areas of counseling and/or assessment in a setting in which these professional services are provided. Prerequisite: 570. I II (4)

590 GRADUATE SEMINAR

Selected topics in psychology as announced. Prerequisite: instructor's consent. (1-4)

596 GRADUATE RESEARCH

Supervised independent research. Prerequisite: departmental consent. I II (1-4)

599 THESIS

Development of a thesis problem chosen from the candidate's major area of concentration. The thesis design may encompass original laboratory, field or bibliographic research with the specific format to be approved by the candidate's graduate committee. The thesis will be defended in a final oral examination conducted by the committee. (4)

INTERIM COURSES OFFERED IN 1978

309 PSYCHOLOGY AND THE LAW

313 SELF-REGULATION AND BIOFEEDBACK



Religion



The religious heritage of humanity, particularly the Judaeo-Christian tradition, is critically examined for the purposes of preserving and applying its accumulating wisdom. The department's program examines religious dimensions encountered in other disciplines and serves students who elect religion as their academic or vocational specialty. The PLU Religion Department shares academic courses and exchanges professors in a series of courses offered and shared by Pacific Lutheran University and St. Martin's College as part of its involvement in the ecumenical movement and the unity of the human family.

Lutheran Institute for Theological Education (LITE): The Religion Department also participates in a program of continuing theological education for clergy and laity in the Pacific Northwest. Dr. Walter Pilgrim of the Religion Department directs the LITE program. For further details contact Dr. Pilgrim.

FACULTY

Petersen, Chair; Christopherson, Eklund, Gehrke, Govig, Ingram, Knutson, Pilgrim, Stivers.

UNIVERSITY REQUIREMENTS: 8 semester hours for students entering as freshmen or sophomores. Four lower division hours shall be taken before the end of the sophomore year. The second 4 hours may be selected from most of the other offerings in the religion curriculum. Transfer students entering as juniors or seniors are required to take 4 semester hours of religion unless presenting eight transfer hours of religion from other accredited colleges or universities.

BACHELOR OF ARTS MAJOR: 28 semester hours, with 12 concentrated in one of five areas (Biblical Studies; History of Christianity; History of Religions; Theology and Ethics; and Religion, Culture, Society, and the Individual), and 16 distributed so that at least 4 hours are taken in each of two other areas. Transfer majors must take at least 12 hours in residence. Students may apply for the Contract Major, without previously specified requirements, designed to encourage student freedom, initiative, and responsibility. See department chair for details on the five areas or the contract major. Majors should plan their program early in consultation with departmental faculty. Closely related courses taught in other departments may be considered to apply toward the major in consultation with the staff.

MINOR: 16 semester hours, with no more than 8 hours in one of the five areas listed above.

COURSE OFFERINGS

131 JUDAEO-CHRISTIAN LIFE AND THOUGHT

Biblical, historical and theological foundations with reference to contemporary issues. (4)

241 BIBLICAL LITERATURE

Literary, historical and theological dimensions of the Bible, including perspective on contemporary problems. (4)

251 INTRODUCTION TO THEOLOGY

Basic questions of the Christian faith approached topically. Questions such as what does Christianity mean by "God" will be considered through Biblical, historical and contemporary resources. Some attention given to challenges to the Christian faith and its interaction with other perspectives. (4)

261 RELIGIONS OF THE WORLD

A critical introduction to the study of the religions of the world, emphasizing historical origins and cultural developments. Readings centered upon primary sources in translation. (4)

NOTE: Only one of the following courses may be taken to fulfill the General University Requirement: 261, 361, or 362.

262 MYTH, RITUAL AND SYMBOL

An examination of the nature of myth and its expression through symbol and ritual. Attention given to pre-literate mythology, Asian mythology, and Occidental mythology and the role these mythological traditions have played in the development of modern ethical, social, and religious values. (4)

341 OLD TESTAMENT STUDIES

Major areas of inquiry: the Prophets, Psalms and Wisdom Literature or Mythology and Theology. Prerequisite: 241 or consent of instructor. (4)

342 NEW TESTAMENT STUDIES

Major areas of inquiry: such as Intertestamental, Synoptic, Johannine or Pauline literature. Prerequisite: 241 or consent of instructor. (4)

343 THE LIFE OF JESUS

A study of the life and teachings of Jesus; a historical survey of "Life of Jesus" research, form and redaction criticism of the Gospel tradition; the religious dimensions of Jesus' life and thought. Prerequisite: one lower division course or consent of instructor. (4)

351 CHRISTIAN ETHICS

An introduction to the personal and social ethical dimensions of Christian life and thought with attention to primary theological positions and specific problem areas. Prerequisite: one lower division course or consent of instructor. (4)

361 PHILOSOPHICAL AND RELIGIOUS TRADITIONS OF INDIA

Emphasis on Vedic and Upanishadic traditions, BHAGAVAD-GITA, "six orthodox schools," Buddhism, and contemporary Indian philosophical and religious developments. Readings centered on primary sources in translation. Prerequisite: Religion 261 or consent of instructor. (4)

NOTE: Only one of the following courses may be taken to fulfill the General University Requirement: 261, 361, or 362.

362 PHILOSOPHICAL AND RELIGIOUS TRADITIONS OF CHINA

Classical and modern philosophical and religious traditions of China (the six "classical schools," the neo-Taoist, and neo-Confucian traditions), Chinese Buddhism, and how these schools relate to contemporary China's Marxist-communist ideology. Readings centered on primary sources in translation. Prerequisite: Religion 261 or consent of instructor. (4)

NOTE: Only one of the following courses may be taken to fulfill the General University Requirement: 261, 361, or 362.

367 JUDAISM

Faith and commitment, structure and dynamics, as expressed in this major Western religion; including studies of interpretation of the Hebrew Bible, theological emphases, religious observances, historical developments, modern groups, and Jewish-Christian dialogue. (4)

371 ANCIENT CHURCH HISTORY

The origins, thought and expansion of the Christian Church; rise of the Papacy, expansion in Europe and the growth of Christian involvement in culture; to the end of the Papacy of Gregory I (604). Prerequisite: one lower division course or consent of instructor. I only (4)

372 MODERN CHURCH HISTORY

Beginning with the Peace of Westphalia (1648), interaction of the Christian faith with modern politics, science and philosophy; expansion in the world, modern movements. Prerequisite: Religion 131 or consent of instructor. II (4)

373 AMERICAN CHURCHES

The development and trends of Christianity in the United States. Prerequisite: Religion 131 or consent of instructor. (4)

381 STUDIES IN CHURCH MINISTRY

Toward a functional viewpoint of the church's ministry: worship and education, programs for the youth and the elderly, counseling, and administration. First-hand observation of selected ministries. Prerequisite: one lower division course or consent of instructor. (4)

382 CHRISTIANITY AND THE SOCIAL CRISIS

An intensive, in-depth exploration from the perspective of Christian theology and ethics of one or two current social issues. Prerequisite: one lower division course or consent of instructor. (4)

383 RELIGIOUS EXPERIENCE AMONG AMERICAN MINORITIES

Concentrating on the religious experiences and contributions of those sectors in American society that have a minority identity and are often not included in the usual study of American churches, this course will in different semesters focus on different minorities such as Blacks, Indians, Chicanos. Prerequisite: one lower division course or consent of instructor. (4)

391 LUTHER

The man and his times, with major emphasis on his writings and creative theology, such as the radical centrality of the Gospel and faith, the Word and Scripture, the sacraments, Church and State. Prerequisite: one lower division course or consent of instructor. II a/y (4)

392 CHRISTIAN CLASSICS

Christian literature: devotion, biography, theology, poetry; Augustine, Thomas a Kempis, Dante, Luther, Calvin, Pascal, Wesley, Kierkegaard and others; group core plus seminar reports. Prerequisite: one lower division course or consent of instructor. II a/y (4)

451 CHRISTIAN THOUGHT AND MODERN CONSCIOUSNESS

Contemporary issues and problems in theology with reference to Biblical and historical resources and recent understandings of humanity and the world. Readings selected from Barth, Bonhoeffer, Buber, Bultmann, Cox, Moltmann, the Niebuhrs, Pannenberg, Teilhard de Chardin, and Tillich. Prerequisite: one lower division course or consent of instructor. (4)

485 CHRISTIANITY AND THE ARTS

Relationships of Christian thought to the forms and contents of various media of artistic creativity. II a/y (4)

490 SENIOR SEMINAR IN RELIGION

(Open only to seniors and graduate students.) (4)

a. *Human Sexuality*

The psychological, sociological, ethical and theological dimensions of sexuality.

b. *Religion and Psychology*

An investigation of psychological studies which converge on an understanding of human personality from the viewpoint of religion and the Christian view of humanity; the influence of psychology on human self-understanding.

c. *Religion and Politics*

An inquiry into how these disciplines relate to each other within the life of the church, the life of the state, and in church-state relationships.

d. *Death and Dying*

Human death examined from a variety of perspectives with special emphasis on theological dimensions and the meaning of death.

e. *Literature and Theology*

A study of significant literature from both a literary and a theological perspective. Basically directed toward 19th and 20th century American and European literature.

491, 492 INDEPENDENT STUDY

Intended for religion majors, advanced and graduate students; consent of the department is required.

493 MAJOR CHRISTIAN AND OTHER RELIGIOUS THINKERS

The in-depth and intensive study of one or two major figures in Christian theology or other religious thought, e.g., Augustine, Bonhoeffer, Buber, Bultmann, Niebuhr, Radhakrishnan, Tillich. Prerequisite: one lower division course or consent of instructor. (4)

INTERIM COURSES OFFERED IN 1978

131 JUDAEO-CHRISTIAN LIFE AND THOUGHT

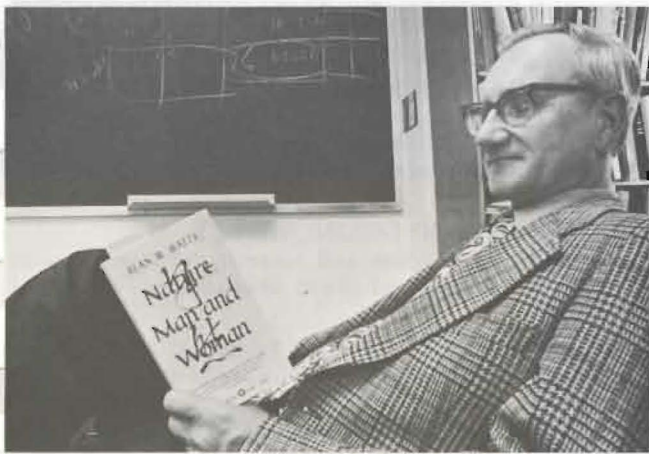
300 THE BOOK OF GENESIS

347 THE LAND OF THE BIBLE

375 THE UNFINISHED REFORMATION: 16th CENTURY DIVISION AND 20th CENTURY REUNION

493 MAJOR CHRISTIAN AND OTHER RELIGIOUS THINKERS: THE LIFE AND THOUGHT OF PAUL TILlich

Sociology, Anthropology & Social Welfare



The department of sociology, anthropology, and social welfare aims to provide students with knowledge about the structure, requirements, and purposes of the respective disciplines within its domain. Its overall goals are to produce students who can understand themselves, society, and the world, the relationship among them, and the moral context of that relationship.

By expanding their knowledge and developing their skills, students enhance their ability to make informed decisions, to exercise their capacity for self-criticism and self-evaluation, to function effectively as knowledgeable and responsible citizens, to know and accept themselves with their special strengths and limitations, to exhibit interpersonal and intercultural tolerance, and to display their acquisition of both basic and sophisticated academic skills.

The department's curriculum is flexible and responsive to individual, university, and societal needs and changes. It reflects liberal arts purposes, is planned to develop skills and achieve excellence, and seeks integration while sponsoring diversity. Through a distinguished faculty who are willing not only to inform others but also *to be* informed, the department aims for regional recognition of its efforts and strengths.

FACULTY

Jobst, *Chair*; **Biblarz**, **Blumhagen**, **Briar**, **Brown**, **W. Gilbertson**, **V. Hanson**, **Oberholtzer**, **Schiller**, **Walter**, **Willis**.

Sociology

BACHELOR OF ARTS:

General Major: 36 semester hours, including 101 or 331; 4 hours at the 200 level; 8 hours at the 300 level; 8 hours at the 400 level; 399 (2 hours); 410; 470; and Statistics 231.

Major with Specialization in Crime and Society: 36 semester hours, including 101 or 331; 336; 8 hours selected from 240, 340, 456, 331; 336; 8 hours selected from 240, 340, 456, 460, 493; 399 (2 hours); 410; and 470; plus 12 hours selected from Anthropology 440; History 451; Political Science 336, 371, 372, 373; Psychology 421 or Social Welfare 442.

Major with Specialization in Family and Gender Studies: 36 semester hours, including 101 or 331; 342; 8 hours selected from 260, 381, 406, 493; 399 (2 hours); 410; and 470; plus 12 hours selected from Anthropology 334, 430; Psychology 335, 403, 405, 420; or Social Welfare 442.

Major with Specialization in Social Organization: 36 semester hours, including 101 or 331; 8 hours selected from 343, 422, 430, 443, 456, 465, 493; 399 (2 hours); 410; and 470; plus 12 hours selected from Anthropology 415, 440; Economics 432, 434; Political Science 345, 361, or Social Welfare 442.

Major with Specialization in Ethnic and Minority Structures: 36 semester hours, including 101 or 331; 364; 8 hours selected from 280, 344, 390, 444, 493; 399 (2 hours); 410; and 470; plus 12 hours selected from Anthropology 321, 322, 323, 324, 326, 415, 420; Economics 290, 321, 331, 381; History 471; Political Science 386 or Social Welfare 442.

NOTE: 101 or 331 recommended prerequisite to all 300 and 400 level courses.

MINOR: 16 semester hours, including 101 or 331, one course at the 300 level, one course at the 400 level, and one additional course chosen in consultation with the department.

BACHELOR OF ARTS IN EDUCATION: See School of Education.

CRIMINAL JUSTICE COURSES: The department also offers graduate courses related specifically to the field of corrections and law enforcement. Supportive courses in sociology and other fields should be chosen in consultation with departmental faculty.

COURSE OFFERINGS

101 INTRODUCTION TO SOCIOLOGY

An introduction to the principles, concepts, and areas of sociology as well as the analysis tools used in studying social behavior. (4)

240 SOCIAL PROBLEMS

Analysis of various theories and social responses to several current social problems. Topics include: mental health, poverty, crime, family disorganization, and work alienation. (4)

260 INTERPERSONAL RELATIONSHIPS AND GROUP BEHAVIOR

An examination of processes of interaction that the person experiences in small group settings and the implications that has for interpersonal behavior and self-conceptions. (4)

280 INTRODUCTION TO RACE RELATIONS

The history of American race relations. Factors accounting for changes in relationships between whites and non-whites. Critical areas of conflict among the races. (4)

331 PRINCIPLES OF SOCIOLOGY

An advanced introductory course stressing the major concepts and fundamental processes operative in all areas of social relationships. Not open to students who have taken 101 or its equivalent. (4)

336 DEVIANT BEHAVIOR

An exploration of nonconforming behavior such as drug use, homosexuality, cultic religion with particular attention to the dialectical process of its gradual emergence and its social rejection. (4)

340 CRIME AND DELINQUENCY

Analysis of adult crime and juvenile delinquency with attention to their social roots, development, and social impact. (4)

342 SOCIOLOGY OF THE FAMILY

Analysis of the family as a system of social roles and a social institution. Topics include: courtship, marriage and parenthood, personality development, changing family role patterns, and alternate family forms. (4)

343 SOCIAL MOVEMENTS AND CHANGE

An examination of the theories of social change in the understanding of social movements; factors accounting for the emergence and persistence of social movements; emphasis on political processes and changes. (4)

344 CONFLICT RESOLUTION

Factors accounting for interpersonal and intergroup tensions. Interpersonal, intergroup, national, and international methods of resolution. (4)

345 SOCIOLOGY OF ORGANIZATIONS

Analysis of structures, processes, and change in bureaucratic organizations; their effects upon the individual and the organization; interrelationships between society and organizations. (4)

364 ETHNICITY IN PLURAL SOCIETIES

An examination of the nature of ethnic groups (racial, tribal, cultural, etc.); the structure of ethnic groups in plural societies, the manipulation of symbols by ethnic groups, ethnic division of labor, ethnic politics, and the effects of colonial and post-colonial international systems on ethnic relations. (cross-referenced with Anth. 364) (4)

381 SOCIALIZATION

An examination of how individuals learn social roles and role competency through the socialization and resocialization process. Emphasis on adolescent and adult socialization within the context of institutions, organizations, and society. (4)

390 SOCIOLOGY OF POVERTY

Sources of inequality; analysis of lifestyles and behavior of groups in society which experience inequality. (4)

399 INTERNSHIP

Demonstration of the implications of sociology, combining on site work with in class learning. The artful skill of using theory to solve problems and of handling the practicalities of working in agencies and bureaucracies. Placements: probation work, courts, planning agencies, social agencies, local and state governmental agencies, industries, and social action research. Prerequisite: departmental consent. NOTE: Majors are required to register concurrently for 399 (2 hours) and 410, preferably in their junior year. (1-4)

406 SEX ROLES AND SOCIETY

An examination of the roles performed by men and women in society. Treatment of both traditional and non-traditional roles and the cultural variables influencing this assignment. Particular attention to current changing sex roles for both men and women and how institutions such as the family, church, and schools are involved in these changes. (4)

410 APPLIED SOCIOLOGY

Introduction to the various methods of sociological analysis and research. Methods considered: social surveys, participant observation, interviewing, data presentation and interpretation. NOTE: Majors are required to register concurrently for 399 (2 hours) and 410, preferably in their junior year. (2)

422 SOCIOLOGY OF OCCUPATIONS AND PROFESSIONS

An examination of the nature of work in society as a social role and as part of the social structure. Analysis of job satisfaction, unemployment, use of leisure, and trends in labor force composition. (4)

430 SOCIOLOGY OF RELIGION

A multi-cultural investigation of religious experience, belief, and ritual in relation to their social settings with particular attention to new forms of religion in America. (4)

441 RACE, REVOLUTION AND THE DEVELOPING COUNTRIES

An investigation of racism and stratification processes within the developing countries and between the developed and developing countries; its consequences and applications; the significance of American non-white minorities. (4)

442 SOCIAL POLICY AND ORGANIZATION

Analysis of how societies have defined social and personal needs and developed and organized responses to those needs. Special emphasis will be given to the response of American society. (4)

443 SOCIOLOGY OF EDUCATION

The nature and functioning of the educational system will be examined from a sociological perspective. Topics will include: education, stratification, and social change; the school as a complex organization; the school as a social institution; and the sociology of learning. (4)

456 SOCIOLOGY OF LAW

An examination of the social control functions of law and legal institutions; the influence of culture and social organization on law, legal change, and the administration of justice. (4)

460 PENOLOGY AND CORRECTIONS

An examination of historical and contemporary systems of adjudication and institutionalization of offenders. Consideration of recent alternative non-institutional and diversionary programs. (4)

465 SOCIOLOGY OF MEDICINE

An examination of the social processes affecting conditions of health and disease and of the cluster of social relationships and organizations that comprise the institution of medicine. (4)

470 SOCIOLOGICAL THOUGHT

Basic sociological concepts and theories. Primary emphasis on contemporary conceptual approaches to social behavior and their historical antecedents. (4)

491 INDEPENDENT STUDY

Readings or fieldwork in specific areas or issues of sociology under supervision of a faculty member. Prerequisite: departmental consent. (1-4)

493 SEMINAR IN SOCIOLOGY

Student or faculty initiated seminar in one of four fundamental areas in sociology: (a) Contemporary Issues and Problems; (b) Social Process and Change; (c) Social Structure; and (d) Theory and Method. Prerequisite: departmental consent. (1-4)

501 PROGRAM SEMINAR

An analysis of social explanation and the social scientific frame of reference. Offered in the Human Relations Program. (4)

503 GROUP PROCESS

A human interaction laboratory to facilitate the exploration of the self concept through the mechanisms of interpersonal interactions and feedback. (4)

505 SOCIAL SCIENCE METHODS

Basic research concepts applied to laboratory, field and bibliographic studies. Topics include formulating research questions, research designs, data-gathering techniques, analysis of data and theory construction. Emphasis is placed on understanding and evaluating rather than conducting research. (4)

511 THE CRIMINAL JUSTICE SYSTEM

Sociological analysis of the segments of the criminal justice system, their interrelationships, and their relationships to crime prevention, social control, correction, and rehabilitation. (4)

512 REHABILITATION MODELS

Study of various models that strive to help offenders return to a productive role in society: institutionalization models, social action models, community based models, etc. (4)

513 SOCIOLOGY OF HUMAN SERVICE SYSTEMS, PLANNING AND CHANGE

Analysis of human service systems such as correctional institutions, probation and parole agencies and social service agencies to understand planning processes and change. (4)

521 SOCIAL SYSTEMS INTERVENTION

A survey of the processes of social change, including an examination of social conditions which create the need for intervention. Offered in the Human Relations Program. (4)

531 MINORITY-MAJORITY RELATIONS

The history and culture of minority groups in American Society, examined within the context of the interaction between minority-majority groups and population and composition and movement of these groups. Offered in the Human Relations Program. (4)

541 SOCIAL STRATIFICATION IN SOCIAL SYSTEMS

The economic, social, and political systems in America are explored to gain some basic understanding of how class, status, and power operate in society. Offered in the Human Relations Program. (4)

590 SEMINAR

Student or faculty initiated seminar in selected areas. (1-4)

595 GRADUATE READINGS

Independent study card required. (1-4)

597 THESIS

Independent Study card required. (4)

Anthropology

BACHELOR OF ARTS MAJOR: 32 semester hours, including 220, 221, 222, 470, and 16 additional hours in anthropology chosen in consultation with the department.

NOTE: 101 or 220 recommended prerequisite to all 300 and 400 level courses.

MINOR: 16 semester hours, including 101 or 220, one course at the 300 level, one course at the 400 level, and one additional course chosen in consultation with the department.

COURSE OFFERINGS

101 EVOLUTION AND CULTURE: A GENERAL INTRODUCTION TO ANTHROPOLOGY

Survey of the main sub-areas of anthropology (cultural anthropology, physical anthropology, archaeology, linguistics), using the concepts of physical and cultural evolution. Brief survey of genetics and primate evolution, including evolution of proto-humans into modern homo sapiens; early cultural beginnings in the Paleolithic Era; Neolithic developments; archaeological methods and major discoveries; the development and distribution of basic social and cultural institutions; the evolution of complex social forms from simpler ones. (4)

220 WORLD ETHNOLOGY

A survey of the major culture areas of the world, analysis and comparison of economic, social, political, and religious systems from a variety of societies, including our own. Not open to freshmen. (4)

221 PHYSICAL ANTHROPOLOGY

Human biology in evolutionary perspective; evolutionary theory, fossil evidence of human development, the living non-human primates, present-day human as a biological creature. Does not meet Social Science General University Requirement. (4)

222 ARCHAEOLOGY AND THE EVOLUTION OF CULTURE

The development of culture, emphasizing the adaptive role of culture in a variety of environmental settings. The rise of the state in Mesopotamia, Egypt, Asia, Middle and South America. The theory and methods of archaeology. (4)

321 CULTURES AND PEOPLES OF AFRICA

A comparative study of the Black African cultures south of the Sahara; the effects of the colonial era on traditional African culture and the position of these cultures in the modern world. (4)

322 CULTURES AND PEOPLES OF ASIA

Survey of South, Southeast, and East Asia, with emphasis on the social institutions of the regions — societal, economic, political, and religious — in light of contemporary social science theory. (4)

323 CULTURES AND PEOPLES OF THE PACIFIC

Survey of the peoples and cultures of Melanesia, Micronesia, and Polynesia including native Hawaii; comparison of social institutions through studies of ethnographies; an examination of theoretical issues which have arisen from field studies in Oceania. (4)

324 CULTURES AND PEOPLES OF SOUTH/CENTRAL AMERICA

Beginning with the ancient Maya, Aztec, and Inca empires, this course is a comparative study of the traditional folk cultures of Latin America and an examination of the position of these cultures in the modern world. (4)

326 CULTURES AND PEOPLES OF NATIVE NORTH AMERICA

A comparative study of American Indian cultures at the time of European contact; the effects of white contact upon traditional American Indian cultures; an examination of contemporary Native American issues, including tribal sovereignty, treaty-based fishing rights, and Indian law. (4)

334 KINSHIP AND MARRIAGE

Cross-cultural study of the family in its many forms; the elaborations of larger kinship units and the functions of such groups in society; the role of kinship and marriage as an underlying principle in structuring society; the analysis of kinship terminology. (4)

364 ETHNICITY IN PLURAL SOCIETIES

An examination of the nature of ethnic groups (racial, tribal, cultural, etc.); the structure of ethnic groups in plural societies, the manipulation of symbols by ethnic groups, ethnic division of labor, ethnic politics, and the effects of colonial and post-colonial international systems on ethnic relations. (cross-referenced with Sociology 364) (4)

415 THE DYNAMICS OF SOCIOCULTURAL CHANGE

Anthropological approaches to the study of social, economic, and cultural change, with particular emphasis on the impact of the western world on non-western societies. (4)

420 ECONOMIC ANTHROPOLOGY

Theoretical approaches within anthropology to the study of economic systems in pre-literate and peasant societies, and to the effect of colonialism on those systems. (4)

430 PSYCHOLOGICAL ANTHROPOLOGY

A review of the basic concepts and contributions of this sub-field of anthropology; the influence of culture on the development of personality; investigation of recent work in cognition, including taxonomic systems, componential analysis, and the relationship between culture, cognition, and behavior. (4)

440 POLITICAL ANTHROPOLOGY

The study of political structures and processes in traditional society; theories of the evolution of political forms; traditional concepts of power, authority, and law; political competition among ethnic groups in new states. (4)

470 ANTHROPOLOGICAL INQUIRY

A systematic study of the theoretical foundations of sociocultural anthropology; research methods; how theory and method are used to establish anthropological knowledge. (4)

491 INDEPENDENT STUDY: UNDERGRADUATE READINGS

Reading in specific areas or issues of anthropology under supervision of a faculty member. Prerequisite: departmental consent. (1-4)

492 INDEPENDENT STUDY: UNDERGRADUATE FIELDWORK

Study of specific areas or issues in anthropology through in-field methods of analysis and research supported by appropriate reading under supervision of a faculty member. Prerequisites: Anth. 470 and departmental consent. (1-4)

493 SEMINAR IN ANTHROPOLOGY

Student or faculty initiated seminar in one of four fundamental areas in anthropology: (a) Contemporary Issues and Problems; (b) Social Process and Change; (c) Social Structure; and (d) Theory and Method. Prerequisite: departmental consent. (1-4)

Social Welfare

BACHELOR OF ARTS MAJOR: 44 semester hours, including 271, 333, 365, 442, 472, 475, 476, and 484, and 12 additional hours chosen from each of the following three areas: (1) either Political Science 101 or 373; (2) either Economics 150 or 321 or 362; (3) either Psychology 335 or Sociology 381.

Unless otherwise stated, 271 or consent is a prerequisite for all courses in Social Welfare.

COURSE OFFERINGS

222 COMMUNITY SERVICES

Designed to provide an opportunity for freshman and sophomore level students to test their interest in the field of social welfare through a five to ten hour per week participant-observation experience in a local agency. The purposes are to provide opportunity for a self-evaluation of

one's aptitude for and interest in the field, and secondly, to introduce the idea of evaluating the effectiveness of the agency in terms of achieving its stated goals. No prerequisites. Will not meet General University Requirements. (2-4)

271 INTRODUCTION TO SOCIAL WORK

The history, philosophical roots, practice methods and "settings" (i.e., adoptions, public schools, public assistance, corrections, psychiatric hospitals and clinics) of professional social work; opportunities for observational experiences. No prerequisite. I II (4)

333 INTERVIEWING

Concepts, principles, and techniques intrinsic to interviewing: "helping," problem-solving, or "clinical" interviewing for persons in the helping professions: social work/social welfare, clergy, nursing, physicians, parish workers, personnel officers. No prerequisites. (4)

365 SOCIAL INTERVENTION

Processes of social change; social conditions which create the need for intervention, the dynamics of change in individuals and groups, function of social movements in affecting change; intervention methods, tactics, and strategies. Prerequisite: 271 or consent. I II (4)

442 SOCIAL POLICY AND ORGANIZATION

Analysis of how societies have defined social and personal needs and developed and organized responses to those needs. Special emphasis will be given to the response of American society. (4)

472 SOCIAL WORK PRACTICE

The profession of social work examined within the group of helping professions; the knowledge base, principles, methods and values generic to social work practice; observation of problem-solving structures and processes. Prerequisites: 271 and consent. II (4)

475, 476 FIELD EXPERIENCE

Supervised field work within an agency or institution; application/integration of knowledge, theory and understanding; development of techniques common to the social welfare field. Prerequisite: 271 and consent. I II (4, 4)

484 SOCIAL RESEARCH

Principles of research design and assessment of various research methods. Evaluation research will be given special attention. Primary emphasis will be placed upon understanding and critically examining actual research. (4)

490 SEMINAR

Prerequisite: departmental consent. (1-4)

491 INDEPENDENT STUDY

Prerequisite: departmental consent. (1-4)

501 SEMINAR IN FAMILY GROUP THERAPY

This seminar seeks to examine the current family orientation as it relates to behavioral science theory and practice with families through an analysis of the theoretical and practical considerations that shape delivery of services to families. The relation between the thinking and doing in family therapy will be clarified and expanded upon. (4)

502 FAMILY THERAPY PRACTICUM

This seminar seeks to provide students with a meaningful process and structure by which family therapy is learned at the practicum level. Theoretical concepts will also be examined in the terms of diagnosis and treatment implications in the delivery of services to family systems. (4)

INTERIM COURSES OFFERED IN 1978

300 THE CORPORATION AND SOCIAL RESPONSIBILITY

303 THE HUMAN SERVICES

306 DOES ETHNICITY HAVE A FUTURE?

309 LIBERATED LIFE STYLES

312 SOCIOLOGY OF ETHNIC HUMOR

475, 476 FIELD EXPERIENCE

Statistics Program



Statistics, a branch of applied mathematics, has become, and is expected to continue as an increasingly important area of inquiry. As society becomes more complex, the ability to gather, summarize, and evaluate data becomes more necessary for efficient and intelligent decision making.

FACULTY

Selected faculty from Departments of Economics, Mathematics, and Psychology.

STATISTICS MINOR: A minimum of 16 semester hours, consisting of Statistics 231, Math 341, either Math 140 or 144, plus electives selected from the remaining courses in statistics. Students interested in statistics should contact the respective heads of the Departments of Economics, Mathematics, or Psychology.

COURSE OFFERINGS

140 BASIC COMPUTER LANGUAGE (Math 140)

The BASIC computer language is applied to problems occurring in business, science, social science, and other fields in conversational mode. Topics include data, expression formation, input/output, transfer commands, arrays and subprograms. Prerequisite: high school algebra. I II (2)

144 INTRODUCTION TO COMPUTER SCIENCE (Math 144)

Computer science and a working knowledge of FORTRAN as applied to scientific problems; computer classification, organization, data structure, algorithms, flow charts and FORTRAN IV. Prerequisite: 127 or 133 or consent. I II (4)

231 INTRODUCTORY STATISTICS

Descriptive statistics: measures of central tendency and dispersion. Inferential statistics: generalizations about populations from samples by parametric and non-parametric techniques. Methods covered will include estimation, hypothesis-testing, simple correlation analysis, linear expression and chi square analysis. (Not applicable to mathematics credit.) I II (4)



**334 ANALYSIS OF VARIANCE AND
EXPERIMENTAL DESIGN (Math 334)**

Random sampling, factors which destroy experimental design, one-way analysis of variance, two-way analysis of variance, factored design, block and latin square design. Students will also critique published experiments and perform an experimental design project. Prerequisites: Statistics 231 or equivalent. II (2)

341 MATHEMATICAL STATISTICS (Math 341)

Probability theory, discrete and continuous distribution functions, moment generating functions, sampling distributions and hypothesis-testing; introduction to regression, correlation, and analysis of variance. Prerequisite: Math 152. II a/y 1978-79 (4)

343 OPERATIONS RESEARCH (Economics 343)

Quantitative methods for decision problems. Emphasis on linear programming and other deterministic models. Prerequisite: Statistics 231 or equivalent. (2)

**344 APPLIED REGRESSION
ANALYSIS (Economics 344)**

Simple and multiple regression analysis as investigative tools. Course stresses construction of elementary linear models and interpretation of regression results. Prerequisite: Statistics 231 or equivalent. (2)

**491 INDEPENDENT STUDY
(1-4)**

**500 APPLIED STATISTICAL
ANALYSIS (Economics 500)**

(Will not count for Statistics Minor) An intensive introduction to statistical methods for graduate students who have not previously taken Introductory Statistics. Emphasis will be on the application of inferential statistics to concrete situations. Topics covered will include: measures of location and variation, probability, estimation, hypothesis tests, and regression. (4)



Division of Graduate Studies

The Division of Graduate Studies is an all-university division which coordinates graduate level work. The university offers the following graduate level programs:*

MASTER OF ARTS

1. Education

a) Elementary or Secondary School Administration: A program intended for teachers who desire to enter the field of school administration. The student who wishes to qualify for the provisional or standard principal's credential (elementary or secondary or general) will take a major in this field and complete courses in a supporting academic area of the university.

Students may major in this field without qualifying for a principal's credential.

b) Counseling and Guidance: A program designed primarily for students who wish to qualify as public school counselors (elementary and secondary).

c) Student Personnel Administration: A program designed for students who wish to qualify as student personnel workers in higher education.

d) Elementary Classroom Teaching: A program for elementary teachers who desire advanced work in elementary classroom teaching or who wish to qualify as elementary school supervisors or consultants. Along with the major field, the student is required to complete courses in a supporting academic area.

e) Secondary Classroom Teaching: A program for junior high and high school teachers who wish to increase their preparation for teaching in an academic area taught in the secondary school.

f) Reading: A program for elementary or secondary teachers who wish to achieve a concentration in reading.

2. Humanities

A degree program designed for librarians, clergy, teachers and others who wish to extend and broaden their understanding and appreciation of the various fields of the humanities.

3. Social Sciences

A degree program designed for personnel workers in industry, welfare workers, workers in the broad area of corrections, librarians, clergy, teachers, and others who wish to extend and broaden their understanding and appreciation of the various fields of the social sciences. It includes the Human Relations Program offered at Ft. Lewis, McChord AFB, and Bremerton.

MASTER OF BUSINESS ADMINISTRATION

This degree program is designed to provide, through education, a foundation for responsible leadership in business.

MASTER OF PUBLIC ADMINISTRATION

This degree program is intended to provide, through education, a foundation for responsible leadership in the management of public agencies.

MASTER OF MUSIC

A degree program intended for qualified students who desire a concentration in music education.

*Details of these programs, including admission requirements, procedures, degree and research requirements, are contained in the *Graduate Catalog* which is available from the office of the Dean of Graduate Studies.

Affiliate Resources

CHOICE

Since 1969, CHOICE, Center for Human Organization in Changing Environments, has functioned as a community service and action-research arm of Pacific Lutheran University. The acronym, CHOICE, conveys its function and style: to initiate processes and programs both on and off campus which assist people to participate in making choices which may lead to improved quality of life.

CHOICE has assisted many communities caught up in the turmoil of urban change by providing linkages with community service agencies and offering channels for social involvement by faculty and students. Increasingly, CHOICE has been instrumental in catalyzing needed processes of change on campus in order to effect better use of the university's resources.

Through a network of skilled professionals from the faculty and the community, CHOICE provides organizational development services, communications and planning workshops, and training programs for those involved in social change, human relations, and conflict resolution, as well as curricular and program development and evaluation.

CHOICE is linked to similar resource centers at other ALC-related colleges: Augsburg, Augustana, California Lutheran, Capital, Concordia-Moorhead, Luther, and Texas Lutheran.

WASHINGTON STATE COUNCIL ON ECONOMIC EDUCATION

The Washington State Council on Economic Education is a state-wide organization headquartered at PLU, and is designed to raise the level of understanding concerning economic principles and procedures among teachers and students in the Pacific Northwest. The program includes a Center for Economic Education, and is recognized nationally by the Joint Council on Economic Education. Its functions are:

- 1) To offer special courses to non-economics majors at PLU, especially to future teachers and to current members of the teaching profession. These courses emphasize the role of economics among the social sciences and its importance in all areas of life.
- 2) To develop, in cooperation with the school systems of this state, teaching plans and aids that facilitate incorporation of economics into existing curricula.
- 3) To provide speaking and consulting services for community organizations interested in promoting public understanding of economic principles and issues.

The WSCEE is an educational organization supported by a coalition of community groups representing education, business, labor, agriculture, and government. It operates as an independent non-profit non-partisan educational organization dedicated to the principles that each citizen's ability to recognize and *objectively* analyze economic issues is essential to his or her welfare and the country's progress.

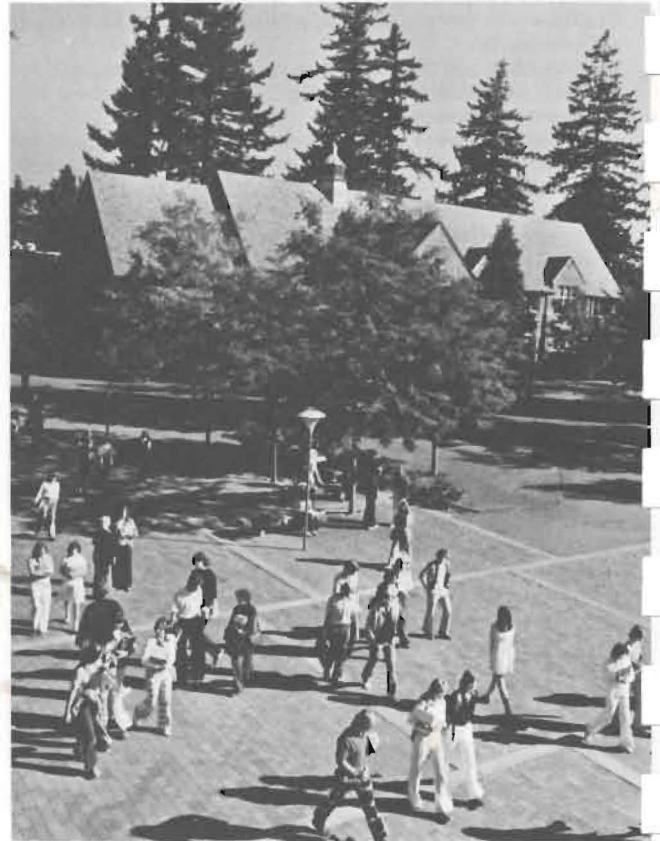
KPLU-FM, PUBLIC RADIO

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KPLU-FM presents to the audiences of the Puget Sound region a program service purposefully designed to enrich homes, to inform persons, to entertain, to educate, and to serve as an alternative broadcast system.

KPLU-FM, on the air seven days a week, 52 weeks a year, is managed by a professional staff and operated by university students. Student employees represent a variety of academic backgrounds ranging from art to zoology.

KPLU-FM programming consists of classical music, jazz, news, and public affairs. The Cleveland Orchestra, Boston Symphony, and New York Philharmonic are among the performing groups heard weekly in concert over the station. Program sources include Mutual Broadcasting System, Parkway Productions, Library of Congress, National Public Radio, and Radio Canada International.



Study Abroad

"Every man takes the limits of his own vision for the limits of the world."

— Schopenhauer

PLU encourages students to expand their vision of the world by making available various opportunities to study in other countries. The foreign studies program coordinator in the office of the provost has information on study, work, and travel in foreign countries to assist students in selecting appropriate programs. Many faculty members who have studied or worked abroad, for example, those in the department of modern and classical languages, are also available to discuss foreign study opportunities with students. The various options for such study fall into three main categories, as described below.

1) PLU-SPONSORED PROGRAMS

Students may choose to study under a program called "Independent Liberal Arts Colleges Abroad." The program is sponsored by PLU in consortium with five other schools in the Pacific Northwest — Gonzaga University, the University of Puget Sound, Whitman College, Whitworth College, and Willamette University. To date, programs have been held in London, with plans for programs in France and Germany and possibly other parts of the world.

The London Program: The London program, a one-semester program offered for the first time in 1975, is now well established. Offered in both the fall and spring, it provides students with experience in one of the most exciting cities in the world. Courses taught both by Northwest professors with experience in London and by native British professors make extensive use of the museums, cultural activities, and sites of London. Students live with British families and commute by subway to classes. Several excursions take students outside London for a look at other parts of England.

Course offerings for the London program in the 1978 fall semester are as follows:

Art 386 — Art and Architecture in London from the Tudors to the Twentieth Century

Comm. Arts/English 351 — Modern Drama

English 392 — Twentieth Century British Literature: London and the Modern Novel

English/History/Latin 338 — Aesop in England: The Rotocrotate as Seen in Contemporary Fables (This course may count toward partial fulfillment of the foreign languages requirement of the College of Arts and Sciences.)

History 321 — The Romans in Britain and their Legacy

History 332 — England: Topics in British History

Sociology 363 — Sociology of Modern Britain

Interim and Summer Programs: PLU also emphasizes travel courses during the January interim and the summer sessions. Ordinarily there are five or six offerings each year during the interim and one or two offerings during the summer.

(2) PLU-AFFILIATED PROGRAMS

In order to make more foreign study options available to students, PLU has affiliated with Central College and with the Council for International Educational Exchange. Central College has programs in Paris, Madrid, London, Wales, Vienna, and the Yucatan, and CIEE has study centers in Paris, Rennes, and Seville. Credit from these programs is easily transferred to PLU.

(3) PROGRAMS BY SPECIAL ARRANGEMENT

In addition, students may also pursue studies in locations throughout the world by special arrangement with a variety of other programs for which PLU may grant academic credit. However, in the case of such programs with which PLU is not directly affiliated, students should file a letter of intent with the chair of their respective major departments and with the foreign studies program coordinator in the office of the provost before leaving PLU. Such a letter should outline in broad terms what they propose to study, where and for what length of time, and how the foreign experience relates to their academic program. On the basis of this information, plus a record of lectures attended and examinations completed, academic credit may be allowed, but no grade point average will be computed. In other words, students should save all information (exams, notes, or other material) which pertains to classwork. The university also reserves the right to require examinations covering the subject(s) studied.

It is recommended that, before embarking, students acquire a solid foundation in the language of the country where they will be studying. Upon return, students will, with the assistance of the chair of the department of modern and classical languages, prepare a written request for academic credit. If studies have been pursued in several academic fields, approval will be required from each department concerned.

FINANCIAL AID

Financial aid is available to qualified students who are studying on PLU-sponsored programs. Government loans can apply toward the affiliated programs and programs by special arrangement.

GENERAL INFORMATION

In all cases, a student who is considering study in another country should first discuss plans with the foreign studies program coordinator in the office of the provost and, before departing, complete a Leave of Absence form from the office of the registrar. This will facilitate return to PLU at the conclusion of a foreign study program.

Attendance to a foreign university does *not* waive graduation requirements of PLU.

Students interested in foreign study should also consult the *Special Programs* section of this catalog for information about the Scandinavian Area Studies major and the Foreign Area Studies minor programs.

Special Programs

CLASSICS

At PLU the Classics Program is a cooperative effort among the departments of modern and classical languages, history, philosophy, religion, and art. Its goal is to unite the "heart of the liberal arts" with the mind, through history and philosophy, and the soul, through religion, and to embellish this trinity of themes with the visual experience of art.

This interdepartmental major requires the completion of 10 courses, including at least one year of one of the classical languages and two of the other (Greek and Latin). The remaining courses are selected from the list below in consultation with the program coordinator.

- Latin 101-102 — Elementary
- Latin 201-202 — Intermediate
- Greek 101-102 — Elementary
- Greek 201-202 — Intermediate
- Greek 421-422 — Masterpieces of Greek Literature
- Art 280 — Twentieth Century Art
- Art 382 — Ancient Art
- Art 383 — Medieval Art
- Art 384 — Renaissance Art
- Art 385 — Baroque Art
- Art 487 — Nineteenth Century Art
- Art 490 — Seminar
- History 321 — Classical Civilization
- Philosophy 331 — Ancient Philosophy
- Religion 241 — Biblical Literature
- Religion 341 — Old Testament Studies
- Religion 342 — New Testament Studies
- Religion 371 — Ancient Church History
- Independent Study Courses
- Selected Interim Courses

Students are expected to become familiar with the reading list for that part of the program (art, literature, history, philosophy, or religion) in which their interest lies.

The program is designed to be flexible. In consultation with the Classics Committee, a student may elect a course or courses not on the classics course list.

SCANDINAVIAN AREA STUDIES

The Scandinavian Area Studies major requires the completion of ten courses (40 semester hours), including two years of either Danish, Norwegian, or Swedish language courses, one course in Scandinavian literature, and one course in Scandinavian history. The remaining four courses are selected from the list below in consultation with the program coordinator.

- Economics 331 — S-International Economics
- Economics 381 — S-Comparative Economic Systems
- English 231 — S-Masterpieces of European Literature
- English 351 — S-Modern Drama
- History 323 — S-The Middle Ages
- History 351 — S-Reformation
- History 495 — S-Seminar: European History
- Mod & Classical Lang/History 370 — Scandinavia in the Twentieth Century

Mod & Classical Lang/History 470 — Scandinavian Immigration to America

- Music 434 — Scandinavian Music
- Norwegian 101/102 — Elementary Norwegian
- Norwegian 201/202 — Intermediate Norwegian
- Norwegian 351 — Conversation and Composition: Folktales
- Norwegian 352 — Advanced Conversation and Composition: Ballads and Poetry
- Philosophy 365 — Kierkegaard and Existentialism
- Political Sci 282 — S-Comparative Government
- Religion 372 — S-Modern Church History
- Scandinavian 321 — Vikings and Emigrants
- Scandinavian 322 — Modern Scandinavian Civilization
- Scandinavian 421 — Ibsen, Strindberg, and their Contemporaries
- Scandinavian 422 — Contemporary Scandinavian Literature
- Scandinavian 491-2 — Independent Study (1-4)
- Sociology 342 — S-Sociology of the Family

Interim courses approved by the Scandinavian Study Committee may also be included as electives. Courses indicated by the prefix S in the title are regular departmental offerings in which readings and work assignments to a significant extent are focused on Scandinavia for those students enrolled in the Scandinavian Area Studies major.

Students are encouraged to spend one year in Scandinavia, though this is not required to fulfill major requirements.

FOREIGN AREA STUDIES

Students interested in diverse cultures and regions (such as Africa, Asia, Latin America, and other similar foreign areas), may undertake a cross-disciplinary minor program designed to reflect their geographic, thematic, or disciplinary interests. An example of one such program designed around a thematic module is the minor in International Affairs, listed below. The minor program consists of a minimum of 20 and a maximum of 24 semester hours (5 to 6 courses) chosen from at least three different disciplines among those listed below. Students are encouraged to take an independent study course as their sixth course. Supervised by their chosen program adviser, this course will be a "special project" integrating their particular program.

Students desiring to undertake this program must first meet with the program coordinator, who will assist them in selecting an adviser and approve their program.

Courses credited toward a minor cannot be credited toward a major. Interim and new courses may be credited to this program if approved by the student's adviser and the program coordinator. Courses approved for the Foreign Area Studies minor include:

- Anthropology 220 — World Ethnology
- Anthropology 222 — Archaeology and the Evolution of Culture
- Anthropology 321 — Cultures and Peoples of Africa
- Anthropology 322 — Cultures and Peoples of Asia
- Anthropology 323 — Cultures and Peoples of the Pacific
- Anthropology 324 — Cultures and Peoples of South/Central America
- Anthropology 326 — Cultures and Peoples of Native North America

Anthropology 415 — The Dynamics of Sociocultural Change
 Anthropology 420 — Economic Anthropology
 Anthropology 430 — Psychological Anthropology
 Economics 331 — International Economics
 Economics 381 — Comparative Economic Systems
 History 109, 110 — History of Eastern Civilizations
 History 333 — Revolutionary Russia
 History 335 — Latin American History
 History 340 — Modern China and Japan
 History 356 — History of American Foreign Policy
 Integrated Studies 222 — The Burden of Human Responsibility:
 20th Century Asia
 Integrated Studies 231 — Symbol, Language and Myth
 Integrated Studies 232 — Model and Metaphor: Inventing the
 World
 Integrated Studies 242 — The Technological Society and the
 Limits to Growth
 Political Science 282 — Comparative Government
 Political Science 331 — International Relations
 Political Science 336 — International Organization and Law
 Political Science 338 — American Foreign Policy
 Political Science 383 — The Westminster Model
 Political Science 384 — Communist Political Systems
 Political Science 386 — African Political Systems
 Religion 261 — Religions of the World
 Religion 262 — Myth, Ritual and Symbol
 Religion 361 — Philosophical and Religious Traditions of India
 Religion 362 — Philosophical and Religious Traditions of China
 Sociology 344 — Conflict Resolution
 Sociology 430 — Sociology of Religion
 Sociology 441 — Race, Revolution, and the Developing
 Countries
 Spanish 322 — Latin American Civilization and Culture

International Affairs: Thematic Module Within Foreign Area Studies Minor

With the approval of the coordinator of this module, a student may select from among the following to form an International Affairs thematic minor consisting of a minimum of 20 and a maximum of 24 semester hours chosen from at least three different disciplines.

Required:

either Political Science 331 — International Relations,
 or Political Science 338 — American Foreign Policy

Optional:

Political Science 384 — Communist Political Systems
 Political Science 386 — African Political Systems
 Either History 335 — Latin American History,
 or Spanish 322 — Latin American Civilization and Culture
 History 340 — Modern China and Japan
 either Economics 331 — International Economics,
 or Economics 381 — Comparative Economic Systems
 Independent Studies

CENTER FOR THE STUDY OF PUBLIC POLICY

The Center for the Study of Public Policy is a university-wide organization devoted to a better understanding by students and faculty of the public policy issues that confront contemporary society. The center is housed in the Division of Social Sciences and operates under the direction of the center committee. A student advisory committee works in conjunction with the center and is open to all students who have an interest in the study and discussion of public policy questions.

The center sponsors activity directed at a wide variety of topics within the field of public policy. Specifically, the center underwrites student/faculty research projects, student fellowship awards, workshops, public forums, and symposia activity. In the past, these activities have been directed at topics ranging from the world food crisis to the problem of aging; from issues associated with urban development to the problems faced by women entering traditionally male-dominated professions.

In addition to its own activity, the center has fostered the development of a number of study groups. The study groups are cross-disciplinary teams that undertake activities directed at specific fields within the area of public policy. Currently, study groups are addressing the public policy issues involved in the fields of foreign area studies, family policy studies, women's studies, experiential education studies, and human rights.

JAZZ

The Music Department provides both academic course work and performance opportunities for students interested in jazz fields. Regular jazz-related department course offerings include Music 339, *History of Jazz Styles*; 343, *Vocal Jazz Techniques*; 344, *Jazz Laboratory Ensemble*; 372, *University Jazz Ensemble*; and 491-2, *Independent Study*.

In addition, private instruction is available in jazz improvisation. In support of any student's study of jazz, the remainder of the music curriculum provides substantial background work in theory, composition, orchestration, history, ear training, and private instruction.

Students at PLU benefit from extensive exposure to and participation in a very active Northwest jazz scene. Many current students are members of jazz ensembles with active performance schedules. Any students interested in jazz can capitalize on unlimited opportunities to affiliate with Northwest organizations supporting jazz musicians (Victory Music, Puget Sound Traditional Jazz Society, No. 117 Local Musician's Union).

Pre-professional Programs

HEALTH SCIENCES

A health sciences committee advises students aspiring to careers in the health sciences. During their first semester of attendance at PLU, students should complete a Health Science Interest Form. (This form is available in Ramstad Hall Room 102.) An appropriate adviser will then be appointed. This adviser will provide the requirements and procedures for the various careers. In addition to the brief requirements for each area listed below, more detailed information is available in the reserve section of Mortvedt Library (under "Health Sciences Resources").

Dentistry, Medicine and Veterinary Medicine

The overwhelming majority of students entering the professional schools of these careers have devoted four years of study to secure the broad educational background required. This background includes a thorough preparation in the sciences in addition to study in the social sciences and the humanities. There are no pre-professional majors but rather students should select the major which is of interest and which best prepares them for an alternative career. In addition to the General University Requirements and the requirements of the student's major, the following are required: Biology: 155, 156, 253; Chemistry: 115-116, 331-332 plus laboratories; Mathematics: at least one semester, 133 or higher; Physics: one year course with laboratory, 125-126 or 153-154. In addition to these minimum required science courses, most professional schools have their own specific requirements. (Check with your adviser.)

Optometry

Although two years of preoptometric study is the minimum required, most students accepted by a school or college of optometry have completed three years in an undergraduate college. A large percentage of students accepted by the schools and colleges of optometry have earned a bachelor's degree.

The requirements for admission to the schools and colleges of optometry vary. However, all optometry schools and colleges require at least two years of preoptometric study which should include: Biology: 155, 156, 253; Chemistry: 115, 116; Physics: 125-126 or 153; English $\frac{1}{2}$ to 1 year; College Mathematics (including calculus): 1 year.

In addition, each optometry school has its own set of requirements. (Check with your adviser.)

Medical Technology

The minimum academic requirements for entry into clinical training as published by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) are: A minimum of 16 semester units of chemistry to include organic chemistry or biological chemistry, 16 semester units of biology to include microbiology, one course in mathematics. The content of chemistry and biology courses must be acceptable towards a major in those fields of study or the equivalent; the mathematics requirement is met by courses recognized as prerequisites for admission to physics courses. In addition to these specific requirements, the student must have acquired a minimum of 90 semester units of academic credit before admission to the clinical program.

Although the minimum requirements for medical technology are as outlined above, many of the clinical internship programs require or strongly recommend a bachelor's degree in biology or chemistry prior to admission to clinical training. Therefore, a student should consider first earning a bachelor's degree in either of these majors.

The student must complete a twelve-month medical technology internship in an American Medical Association accredited clinical laboratory. Upon completion of this internship, the student is eligible to take the medical technology certification examination given by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists and to receive the degree of Bachelor of Science in Medical Technology.

The minimum required courses for the B.S.M.T. at PLU are: Chemistry 115, 116, 321, 331, 332, 333, 334; Biology 155, 156, 322; Mathematics 133. Very strongly recommended: Physics 125, 126, 147, 148. Also recommended: Biology 253, 331, 346, 441; Chemistry 404. The remainder of the requirements for a major in biology or chemistry must also be fulfilled.

Pharmacy

Although the pre-pharmacy requirements for individual schools of pharmacy vary (check with your adviser), the following courses are usually required: General chemistry, 1 year; organic chemistry with laboratory, 1 year; college level mathematics (may include calculus); English composition and literature, 1 year. Often required are microbiology, quantitative analysis, and introductory courses in communication arts, economics, political science.

An example: The University of Washington School of Pharmacy has approved the following schedule as being equivalent to the first two years of their 5-year course leading to the Bachelor of Science Degree in Pharmacy: *Freshman year*: (first semester) Chemistry 115, Mathematics 133 (may be omitted if trigonometry was taken in high school), English 101, P.E.; (second semester) Chemistry 116, Mathematics 151, Communication Arts 123, elective. *Sophomore year*: (first semester) Chemistry 331, 333, Biology 155, Physics 125, 147, elective, P.E.; (second semester) Chemistry 332, 334, Biology 156, Physics 126, 148, P.E.

Physical Therapy

Acceptance to schools of physical therapy has become increasingly competitive in recent years and students are strongly encouraged to contact their adviser as early as possible and together determine the specific prerequisites for the schools they may be planning to attend.

The minimum requirement is two years of pre-professional work.

An example: Minimum prerequisites for the physical therapy program at the University of Washington: Biology 201, 205, 206; Chemistry 103, 104; Mathematics 133; Physics 125-126; Psychology 101, plus one additional course; English 101, plus one additional course; electives in the humanities and social sciences.

Students who have questions regarding health science careers other than those listed above should contact their health sciences adviser or check in the library reserve materials on "health sciences resources."

LAW

Most law schools require at least three years of liberal arts studies; however, they regard four years of liberal arts studies and a Bachelor of Arts degree as better preparation for the study of law. In addition to meeting degree requirements, prospective law students are advised to complete four semester hours each of economics, history, philosophy, political science, psychology, sociology and speech. Pre-law students are advised also to complete substantial work in accounting. Students should plan their course sequence according to requirements of the law school in which they are interested.

Students interested in law are urged to register at the Pre-law Center in the Department of Political Science. Information on the Law School Admission Test (LSAT), a circulating library of law school bulletins, and a newsletter, *The Pre-law Advocate*, and other resource materials are available. In addition, students may wish to discuss their program with the pre-law adviser in the Department of Political Science.

THEOLOGICAL STUDIES

Pre-theological students should complete the requirements for the Bachelor of Arts degree. Besides the general degree requirements, the Association of Theological schools recommends the following:

English — literature, composition, speech and related studies. At least six semesters.

History — ancient, modern European and American. At least three semesters.

Philosophy — orientation in history, content and methods. At least three semesters.

Natural Sciences — preferably physics, chemistry, and biology. At least two semesters.

Social Sciences — psychology, sociology, economics, political science, and education. At least six semesters, including at least one semester of psychology.

Foreign Languages — one or more of the following: Latin, Greek, Hebrew, German, French. Students who anticipate post-graduate studies are urged to undertake these disciplines as early as possible (at least four semesters).

Religion — a thorough knowledge of Biblical content together with an introduction to major religious traditions and theological problems in the context of the principal aspects of human culture as outlined above. At least three semesters. Students may well seek counsel from the seminary of their choice.

Of the possible majors, English, philosophy, religion, and the social sciences are regarded as the most desirable. Other areas are, however, accepted.

A faculty adviser will assist students in the selection of courses necessary to meet the requirements of the theological school of their choice. At the present time, increasing numbers of women are enrolling at selected Protestant seminaries in pursuit of the Master of Divinity degree. Consult the Religion Department chair for further information.

AIR FORCE ROTC (AEROSPACE STUDIES)

Rapidly advancing technology is daily transforming the human environment. Innovations amplify humanity's abilities to comprehend and cope with scientific and technological developments. Revolutionary advancements in weapon systems, in space technology, and in management techniques are some of the most remarkable results.

These advances are changing the officer requirements in today's Air Force. The Air Force professional officer corps must have special abilities in a wide range of skills. But whatever the specialty of individual officers, they must also be imaginative leaders and resourceful managers to succeed in their profession.

The objectives of Air Force ROTC are to motivate, educate, and commission highly qualified students for active duty as officers in the United States Air Force.

Air Force ROTC is offered to PLU students through an agreement with the University of Puget Sound. The lower division courses are open to all students and do not require a military commitment for non-AFROTC scholarship cadets. The upper division courses are open to qualified upper division and graduate students on a competitive basis.

Financial assistance, in the form of scholarships and \$100 per month subsistence, is available to qualified applicants in the Air Force ROTC program. Two and three-year scholarships are available to qualified students. The scholarships cover full tuition, books, and laboratory fees. There are also scholarship opportunities for students in nursing, pre-medicine, pre-optometry, and pre-veterinary medicine studies.

Students who successfully complete the Air Force ROTC program and receive an academic degree from the university will be offered commissions as second lieutenants in the U.S. Air Force Reserve.

Additional information on the Air Force ROTC program may be obtained by writing the Professor of Aerospace Studies, University of Puget Sound, Tacoma, WA 98416, or by calling (206) 756-3264.

Faculty: Maj. Taylor, Capt. Guasco, Capt. Church.

The curriculum offered by this program is divided into three courses: a General Military course and a Professional Officer course taught on the University of Puget Sound campus, and a Field Training course conducted at selected Air Force bases.

The General Military Course (GMC) consists of one hour of academic instruction and one hour of military training per week each term of the freshman and sophomore years. Students are eligible to enroll in this course in their freshman year. There is no military commitment for nonscholarship cadets in the GMC.

The Professional Officers Course (POC) consists of three hours of academic instruction and one hour of military training per week each term of the junior and senior years. Graduate students are also eligible to compete for entry into the Professional Officers Course.

The Field Training Course is either four or six weeks in duration, depending upon whether the student is participating in the four or two year program. Satisfactory completion of this course is a prerequisite for entry into the Professional Officers Course for students who have not completed the General Military Course.

A 25-hour flight instruction program is offered to senior cadets in the Professional Officers Course who are qualified for Air Force pilot training.

All Air Force ROTC students are furnished Air Force uniforms and necessary textbooks for Aerospace Studies courses.

General Military Courses

110, 115 *The Developmental Growth of Airpower*

Development of airpower from the beginnings of flight into post-Vietnam era; a variety of events, elements in history of airpower stressed, especially where these provide significant examples of the impact of airpower on strategic thought. (2)

210, 215 *The United States Air Force Today*

The mission, organization, weaponry of Air Force units. Strategic offensive, strategic defensive, some general purpose, aerospace support forces. (2)

325 *Field Training*

Field training during the summer months at selected Air Force Bases for students selected for the Air Force ROTC Professional Officer Course. The areas of study include academics, junior officer training, aircraft and aircrew orientation, career orientation, survival training, base functions and environment, and physical training.(4)

Professional Officers Courses

330, 335 *National Security Forces in Contemporary American Society*

Armed Forces as an integral element of society; broad range of American civil-military relations, environmental context in which defense policy is formulated. (4)

410, 415 *Concepts of Air Force Management*

Management fundamentals, through managerial strategy and tactics and their application to decision-making, both in a civilian and military context. Leadership research, including styles of great leaders, application of leadership concepts to Air Force situations. Review of military justice system. (4)

421 *Flight Instruction Program*

Flight instruction in light, single engine, land aircraft, requires 8 hours solo and 17 hours dual instruction plus a final check ride. Approval of instructor required. (4)



Cross-Disciplinary Career Programs

ENVIRONMENTAL STUDIES PROGRAM

Students concerned about or wishing to enter graduate study and career programs in such fields as environmental science, environmental law, or resource management, may enroll in the Environmental Studies Program. A certificate will be awarded students completing requirements listed below, together with a departmental or school major program. A committee consisting of representatives from each of the three major subject matter groupings will approve each student's course program and integrative experiences.

Natural Sciences and Mathematics — 18 semester hours: Earth Science 222; Statistics 231 or Math 144; three additional approved courses, such as: Biology 111, Chemistry 103, 104, Earth Sciences 101, 131, 202.

Social Sciences — 16 semester hours: Economics 150; Political Science 101 or Sociology 101, 240, or 260; Business Administration 230; and one approved upper division course, such as Economics 362 or 432; History 460; Physical Education 326; Political Science 352 or 356; Psychology 330; or Sociology 343, 345, or 430.

Humanities — 16 semester hours: Art 294; Philosophy: two approved courses, such as: 324, 328, 385, 395, 427; Religion: one approved course, such as: 351, 382, 451. Integrated Studies 241-242 may apply as part of the Humanities component with adviser's approval.

Integrative Experience — 8 semester hours: During the interim and final semester of the senior year or at another approved time, all students would participate in a study-research-action program designed to draw upon the broad background of the above courses and the expertise of their own major fields. Appropriate courses may be identified in the *Interim Catalog*. Semester courses may include, but are not limited to, appropriate departmental or interdisciplinary seminars; independent study or research courses; field experience and internship programs; employment or volunteer service within community action agencies.

URBAN AFFAIRS

(Career possibilities in state and local government service.)

For certification, successful completion of the following courses is required: Political Science 101, 151, 325, 326, 352 or 457, and 458; Economics 150 and 362; and Sociology 101 and 344.

PUBLIC AFFAIRS

(Administration and policy-planning careers in public agencies.)

Required: 32 semester hours of political science; 20 semester hours of economics; plus 12 semester hours of electives on advisement.

LAY CHURCH WORKER PROGRAM

A student who seeks to fulfill a Christian vocation of service to the church and community as an unordained professional may prepare for certification by the appropriate church judicatory as a church staff worker. Positions currently filled by such workers include:

- Church Business Administrator
- Church Musician
- Christian Education Director
- Christian Day School Teacher
- Parish Worker
- Youth Work Director

A major in religion is normally required for this program with supporting work selected in the fields of business administration, education, music, social sciences, and physical education.

Students enrolled in this program will be advised as to those institutions, boards, and agencies within the church that may assist them in planning educational programs and obtaining placement after graduation.

The department designates one of its members as director of the program. This person is assisted by one faculty member from a supporting area and by a member of the administration.

The Study Program

Required courses in Religion: 241, 381. Recommended courses: 131 or 251; 261; 373; plus two courses selected from "Religion, Culture, Society, and the Individual" area.

Recommended supporting areas:

- Business Administration (Accounting, Management)
- Communication Arts
- Education
- Music
- Psychology
- Physical Education (Recreation)
- Sociology

The Board of Regents

OWNERSHIP, SUPPORT, GOVERNMENT

The university is owned and operated by Pacific Lutheran University, Inc., a Washington corporation whose purpose is to maintain a Christian institution of higher learning. Membership of this corporation coincides with membership of the North Pacific District of The American Lutheran Church and the membership of that portion of the ALC's Rocky Mountain District which is located in Idaho and Montana, west of the Continental Divide. The annual meeting of the corporation is held in conjunction with the annual convention of the North Pacific District.

Voting members include the members of the Board of Regents, and the pastors and lay delegates of congregations in the constituent area. The university receives regular financial support from The American Lutheran Church, the Pacific Northwest Synod of the Lutheran Church in America and from the Pacific Lutheran University Alumni Association. In addition to church assistance, the university receives considerable support from individuals, organizations, and businesses throughout the nation and world.

The policy-making and governing body of the university is the Board of Regents. On the basis of recommendations made by the president, it charts a course for the development of the total program of the university and strives to provide essential funds.

The university corporation's constitution provides for not more than 30 regents elected for three-year terms. Fifteen regents represent the North Pacific and Rocky Mountain Districts of The American Lutheran Church, six are chosen by the Pacific Northwest Synod of the Lutheran Church in America, three represent the PLU Alumni Association, and not more than 6 regents-at-large are chosen by the Board of Regents. The president of the university, the president of the North Pacific District (ALC), and the president of the Pacific Northwest Synod (LCA), are regents by virtue of their position. The student body and the faculty have non-voting representatives who meet with the board.

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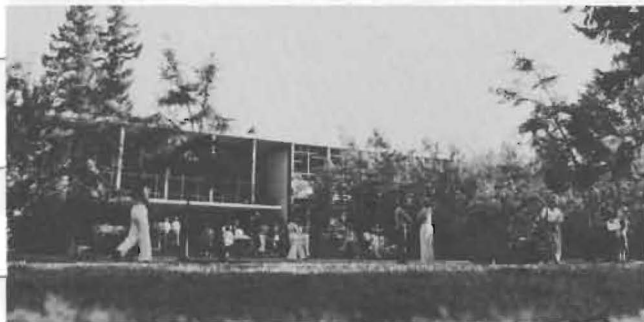
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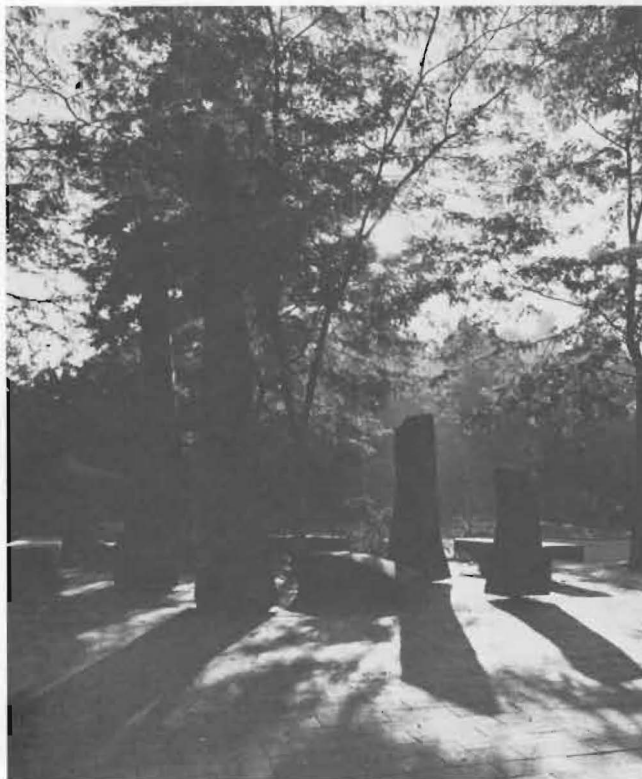
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NILS-ERIK AABY, 1977-. *Assistant Professor of Business Administration*; B.B.A., M.B.A., University of Wyoming, 1973, 1974; Ph.D., University of Nebraska, 1976.

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HARRY S. ADAMS, 1947-51, 1962-. *Professor of Physics*; B.S., M.S., Kansas State University, 1945, 1947; Ph.D., University of Minnesota, 1962.

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***WALTER E. PILGRIM**, 1971-. *Associate Professor of Religion. Director of Lutheran Institute of Theological Education*: B.A., Wartburg College, 1956; B.D., Wartburg Theological Seminary, 1960; Th.M., Ph.D., Princeton Theological Seminary, 1966, 1971.

BARBARA POULSHOCK, 1976-. *Instructor of Music*: B.M., Pacific Lutheran University, 1977.

JAMES R. PREDMORE, 1977-. *Assistant Professor of Modern and Classical Languages (Spanish)*: B.A., Swarthmore College, 1967; M.A., Middlebury College, 1969; Ph.D., University of Washington, 1977.

JANET E. RASMUSSEN, 1977-. *Assistant Professor of Modern and Classical Languages (Norwegian)*: B.A., University of Illinois, Urbana, 1970; A.M., Ph.D., Harvard University, 1972, 1975.

PAUL M. REIGSTAD, 1947-48, 1958-. *Professor of English. Regency Professor*. 1977-78; B.A., St. Olaf College, 1943; M.A., Ph.D., University of New Mexico, 1956, 1958.

KARL R. RICKABAUGH, 1975-. *Assistant Professor of Education*: B.S., Montana State University, 1963; M.S., Ph.D., University of Utah, 1970, 1975.

DAVID P. ROBBINS, 1969-. *Associate Professor of Music*: B.M., M.M., University of Michigan, 1968, 1969.

JEANETTE ROEDIGER, 1975-. *Assistant Professor of Nursing*: B.S.N., Seattle University, 1965; M.N., University of Washington, 1971.

GEORGE ROSKOS, 1950-. *Associate Professor of Art*: B.S. Art Ed., Youngstown University, 1949; M.A., University of Iowa, 1950.

MORDECHAI ROZANSKI, 1976-. *Assistant Professor of History*: B.A., McGill University, 1968; Ph.D., University of Pennsylvania, 1974.

ELDON L. SCHAFER, 1974-. *Professor of Business Administration*: B.S., M.A., Ph.D., University of Nebraska, 1953, 1957, 1963; C.P.A., State of Nebraska.

JOHANNES A. SCHILLER, 1958-. *Professor of Sociology and Social Welfare. Regency Professor*, 1976-77; B.A., Capital University, 1945; Cand. Theol., Evangelical Lutheran Theological Seminary, 1947; M.A., University of Missouri, Kansas City, 1959; Ph.D., University of Washington, 1967.

CAROLYN W. SCHULTZ, 1974-. *Assistant Professor of Nursing*: B.S.N., University of Illinois, 1968; M.A., Pacific Lutheran University, 1974.

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DAVID O. SEAL, 1977-, *Assistant Professor of English*; B.A., St. Olaf College, 1968; A.M., Ph.D., University of Chicago, 1969, 1977.

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S. ERVING SEVERTSON, 1966-, *Professor of Psychology*; B.A., Pacific Lutheran University, 1955; B.D., Luther Theological Seminary, 1959; M.A., University of Wyoming, 1960; Ph.D., University of Utah, 1966; Diplomat in Clinical Psychology, American Board of Professional Psychology, 1977.

MAURICE H. SKONES, 1964-, *Professor of Music, Director of Choral Music*; B.A., Concordia College, Moorhead, 1948; M.M.Ed., Montana State University, 1957; D.M.A., University of Arizona, Tucson, 1976.

JUDY SMITH, 1971-, *Instructor of Education*; B.A., Pacific Lutheran University, 1964.

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LYNN S. STEIN, 1961-, *Professor of Education*; B.A., Dickinson State College, 1937; M.A., University of Montana, 1952; Ed.D., Montana State University, 1961.

JOAN D. STIGGELBOUT, 1973-, *Assistant Professor of Nursing*; B.S.N., Wagner College, 1954; M.N., University of Washington, 1972.

ROBERT L. STIVERS, 1973-, *Associate Professor of Religion*; B.A., Yale University, 1962; M.Div., Union Theological Seminary, New York, 1969; Ph.D., Columbia University, 1973.

GERALD R. STOFFER, 1973-, *Assistant Professor of Psychology*; B.S., Washington State University, 1969; M.A., Ph.D., University of Montana, 1971, 1973.

FRANCES J. STORLIE, 1977-, *Associate Professor of Nursing*; B.S.N., M.S.N., University of Oregon, 1964, 1967; Ph.D., Portland State University, 1976.

JEREMY STRINGER, 1973-, *Associate Dean for Student Life and Director for Residential Life*; B.A., Southern Methodist University, 1966; M.S., Ph.D., University of Wisconsin, Madison, 1968, 1973.

MILES E. STRUXNESS, 1977-78, *Instructor of Art*; B.A., University of Redlands, 1973; M.F.A., University of Puget Sound, 1975.

DORIS G. STUCKE, 1967-, *Professor of Nursing, Director of the School of Nursing*; B.S., American University, 1949; M.Ed., University of Minnesota, 1956; Ed.D., Teachers College, Columbia University, 1967.

DAVID P. SUDERMANN, 1973-, *Assistant Professor of Modern and Classical Languages (German)*; A.B., Indiana University, 1965; A.M., Ph.D., University of Chicago, 1967, 1973.

ROGER SUNDBERG, 1975-78, *Assistant Professor of Modern and Classical Languages (Norwegian)*; B.A., St. Olaf College, 1964; M.A., University of Washington, 1973.

***DUANE D. SWANK**, 1970-, *Associate Professor of Chemistry*; B.S., Washington State University, 1964; Ph.D., Montana State University, 1969.

MARVIN SWENSON, 1969-, *Director of the University Center and Campus Activities*; B.S., Montana State University, 1950; M.S., University of Minnesota, 1954; Ed.D., Washington State University, 1972.

RODNEY N. SWENSON, 1968-, *Associate Professor of Modern and Classical Languages (German)*; B.A., Bemidji State College, 1952; M.A., Ph.D., University of Minnesota, 1956, 1967.

KWONG-TIN TANG, 1967-, *Professor of Physics*; B.S., M.A., University of Washington, 1958, 1959; Ph.D., Columbia University, 1965.

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FREDERICK L. TOBIASON, 1966-, *Professor of Chemistry, Regency Professor, 1975-76*; B.A., Pacific Lutheran University, 1958; Ph.D., Michigan State University, 1963.

WALTER L. TOMSIC, 1970-, *Associate Professor of Art*; B.S.E., Arkansas State University, 1965; M.F.A., University of Colorado, 1967.

THOMAS N. TORRENS, 1974-, *Artist in Residence*; B.S., Indiana State University, 1971; M.F.A., Washington University, 1974.

AUDUN T. TOVEN, 1967-, *Associate Professor of Modern and Classical Languages (Norwegian)*; B.A., University of Oslo, 1964; M.A., University of Washington, 1967.

ANN K. TREMAINE, 1972-, *Assistant Professor of Music*; B.M., University of Oregon, 1951; M.M., University of Washington, 1974.

ANDREW L. TURNER, 1976-, *Assistant Professor of Business Administration*; B.B.A., Pacific Lutheran University, 1973.

PAUL W. ULBRICHT, 1967-, *Associate Professor of Political Science*; B.A., M.A., Ph.D., University of Washington, 1959, 1960, 1965.

M. JAMES VAN BEEK, 1963-, *Director of Admissions*; B.A.E., M.A., Pacific Lutheran University, 1960, 1969.

DANIEL E. VAN TASSEL, 1970-, *Associate Professor of English*; B.A., St. Olaf College, 1962; M.A., Ph.D., University of Iowa, 1964, 1970.

***DAVID L. VINJE**, 1970-, *Associate Professor of Economics*; B.S., North Dakota State University, 1962; M.S., Ph.D., University of Wisconsin, 1964, 1970.

GEORGE F. WALTER, 1970-, *Assistant Professor of Anthropology*; B.A., M.A., Ohio State University, 1967, 1970.

+ANN H. WALTON, 1977-, *Assistant Professor of Business Administration*; B.A., M.B.A., Pacific Lutheran University, 1969, 1973.

PAUL M. WEBSTER, 1969-, *Assistant Professor of Modern and Classical Languages (German)*; B.A., M.A., University of California, Los Angeles, 1964, 1967.

LENORA B. WEIRICK, 1973-, *Assistant Professor of Nursing*; B.S.N., University of San Francisco, 1958; M.S.N., Washington University, St. Louis, 1962.

JUDEE ANN WELLS, 1978-, *Visiting Assistant Professor of Business Administration*; B.S., Southwest Missouri State University, 1972; J.D., University of Texas, 1977.

RICHARD K. WELLS, 1975-, *Instructor of Communication Arts*; B.A.E., Central Washington State College, 1970; M.A., University of Wisconsin, Madison, 1974.

DONALD R. WENTWORTH, 1972-, *Associate Professor of Economics and Education*; B.S., M.A., Ph.D., University of Minnesota, 1965, 1970, 1972; M.A., University of Illinois, 1971.

FORREST WESTERING, 1972-, *Associate Professor of Physical Education*; B.S., University of Nebraska, Omaha, 1952; A.M., Ed.D., University of Northern Colorado, 1960, 1966.

JANE WILLIAMSON, 1964-, *Professor of Education*; B.S.Ed., University of Maryland, 1943; M.A., New York University, 1947; Ed.D., Northwestern Colorado University, 1959.

MARGARET WILLIS, 1973-, *Assistant Professor of Sociology*; B.A., M.A., Ph.D., University of Washington, 1967, 1971, 1976.

GARY B. WILSON, 1975-, *Associate Professor of Communication Arts*; B.S., Central Michigan University, 1960; M.A., California State University, Long Beach, 1966; Ph.D., Michigan State University, 1971.

KENNETH WOOLLEY, 1974-, *Assistant Professor of Business Administration*; B.S., University of Colorado, 1942; M.B.A., Pacific Lutheran University, 1974.

CHANG-LI YIU, 1973-, *Assistant Professor of Mathematics*; B.S., Tunghai University, 1962; M.S., Tsinghua University, 1965; Ph.D., Columbia University, 1972.

WALTER L. YOUNGQUIST, 1976-78, *Visiting Professor of Earth Sciences*; B.A., Gustavus Adolphus College, 1942; M.S., Ph.D., University of Iowa, 1943, 1948.

MARILYN J. ZIERATH, 1977-, *Instructor of Nursing*; B.S., University of Puget Sound, 1965; M.S.N., California State University, Fresno, 1975.

DWIGHT J. ZULAUF, 1949-53, 1959-, *Professor of Business Administration, Regency Professor*, 1972-73; B.S., University of Oregon, 1948; M.S., Columbia University, 1949; Ph.D., University of Minnesota, 1965; C.P.A., State of Washington.

LIBRARY

RICHARD WARREN GREFRATH, 1973-, *Reference Librarian*; B.A., New York University, 1968; M.A., Temple University, 1972; M.L.S., University of Maryland, 1972.

JOHN W. HEUSSMAN, 1976-, *Director of the Library*; B.S. in Ed., Concordia Teachers College, Seward, 1950; M.A.L.S., University of Denver, 1953; Ph.D., University of Illinois, Urbana, 1970.

SUSAN J. MCDONALD, 1975-, *Assistant to the Director of the Library*; B.A., M.L.S., University of Washington, 1969, 1970.

* **Sabbatical Leave, 1978-79**

+ **Leave of Absence, 1978-79**

PROFESSORS EMERITI

Elvin Martin Akre, 1937; 1970, *History*

Miriam Ruth Beckman, 1964; 1973, *Reference Librarian*

W. Harold Bexton, 1965; 1976, *Psychology*

Grace Blomquist, 1939; 1976, *English*

Irene O. Creso, 1955; 1971, *Biology*

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Theodore O.H. Karl, 1940-42, 1948; 1978, *Communication Arts*

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Harold J. Leraas, 1947; 1974, *Biology*

Ottilie Elise Little, 1946; 1966, *German*

Gunnar Johannes Malmin, 1937; 1969, *Music, Latin and Norwegian*

Katharine Monroe, 1967; 1975, *French*

Robert A.L. Mortvedt, 1962; 1969, *President*

Alice J. Napjus, 1963; 1975, *Education*

Frederick Laurence Newnham, 1950; 1969, *Music*

Robert C. Olsen, 1947; 1973, *Chemistry*

Burton T. Ostenson, 1947; 1977, *Earth Sciences*

Anders William Ramstad, 1925; 1961, *Chemistry*

Kelmer Nelson Roe, 1947; 1967, *Religion and Greek*

Josef Emil Running, 1948; 1961, *Mathematics*

Vernon Alfred Utzinger, 1950; 1969, *Speech*

Paul G. Vigness, 1956; 1965, *Religion and History*

Margaret Wickstrom, 1951; 1978, *Religion, Director, Foreign Students and Special Programs*

Rhoda Hokenstad Young, 1939; 1968, *Physical Education*

FACULTY STANDING COMMITTEES AND OTHER UNIVERSITY COMMISSIONS AND BOARDS

The President is an advisory member of all committees.

Artist Series: 3 faculty, 3 advisory members.

Athletic: 3 faculty, 3 advisory members.

Committee on Admission and Retention of Students: 4 faculty, 5 advisory members.

Committee on Committees: 3 faculty members.

Committee on Student Standards: 3 faculty, 1 advisory members.

Computer Committee: 4 faculty, 3 advisory, 2 student advisory members.

Educational Policies: 8 faculty, 1 advisory, 2 student advisory members.

Faculty Affairs: 6 faculty, 4 advisory, 3 faculty representatives to Board of Regents.

Interim: 6 faculty, 2 students, Interim Coordinator (non-voting) members.

Judiciary: 3 faculty members.

Lecture and Convocation: 3 faculty, 3 students, 3 advisory members.

Publications: 3 faculty, 3 advisory members.

Rank and Tenure: 7 faculty (4 tenured, 3 non-tenured), 1 advisory, 2 student advisory members.

Religious Life: 3 faculty, 2 advisory, 1 student advisory members.

Student Activities and Welfare: 3 faculty, 3 students, 3 ex-officio members.

University Committee on Admission and Retention of Students: 4 faculty, 3 students, 5 advisory members.

University Religious Life Council: 3 faculty, 6 students, 2 administrators.

University Student Publications: 3 faculty, 4 students, 6 advisory members.

University Center Board: University Center Director, 4 students, 2 faculty, 1 advisory members.

FACULTY ASSOCIATES

SUE K. CLARKE, 1966-. *Administrative Assistant to the Provost*; B.A., University of Puget Sound, 1962; M.A., Pacific Lutheran University, 1971.

RICHARD C. FRENCH, 1974-. *Director of Career Planning and Placement*; B.A., Washington State University, 1954; Dip. Theol., University of Oxford, 1957; M.Div., Church Divinity School of the Pacific, 1959; M.Ed., Gonzaga University, 1969.

HAROLD M. GAMBLE, 1972-. *Director of Minority Affairs*; B.A., University of Washington, 1972.

ROBERT K. MENZEL, 1969-. *Director of the Center for Human Organization in Changing Environments (CHOICE)*; B.A., M.Div., Concordia Seminary, St. Louis, 1941, 1944; M.S.T., Pacific Lutheran Theological Seminary, 1963; Ph.D., The Fielding Institute, 1978.

NAN NOKLEBERG, 1969-. *Director of Teacher Placement and Fifth Year Studies*; B.A., M.A., Pacific Lutheran University, 1953, 1977; Fifth Year Program — Standard Certification, University of Washington, 1957.

EDRICE A. REYNOLDS, 1972-. *Director of Computer Center*; B.A., Agnes Scott College, 1949; B.A., Georgia State University, 1964; M.Ed., University of Georgia, 1969; Ed.D., East Texas State University, 1972.

DAVID C. YAGOW, 1976-. *Executive Assistant to the Provost*; B.A., Concordia Senior College, Fort Wayne, 1965; M.Div., Concordia Seminary, St. Louis, 1969.

YAT YAN YUNG, 1977-. *Faculty Associate in Department of Physics and Engineering*; B.S., The Chinese University of Hong Kong, 1969; Ph.D., Southern Illinois University, Carbondale, 1976.

PART-TIME INSTRUCTORS 1977-78

DIVISION OF HUMANITIES

English

Grace Blomquist
Leonard Harris
Sharon Jansen-Jaech
Joungsook Kim
Gloria Martin
Susan Mitchell
Katharine Monroe
Richard Seeger
Kim Stafford

Modern and Classical Languages

Norman Bross
David Yagow

Philosophy

David Lovell

Religion

David Ard
William Braswell
Vernon Elgin
Ronald Hurst

DIVISION OF NATURAL SCIENCES

Chemistry

Robert Olsen

Mathematics

Margaret Herzog

DIVISION OF SOCIAL SCIENCES

Economics

Randall Bartlett
Bernard Frerichs
Ronald Hofer

Political Science

J. Arnold Bricker
Erling Mork

Psychology

David Kanofsky
Herbert Marra
Bill Nakashima
Michael Quirk
Marianne Peterson

Sociology, Anthropology, and Social Welfare

Nathan Bender
Thomas Egnew
Richard French
William Hershey
M. Barbara Hoggart
Daniel Lanier, Jr.
Joseph Lehman
Jerry McKain
Robert Menzel
Lyle Quasim
Mary Ellen Walsh
Layne Winklebleck

SCHOOL OF BUSINESS ADMINISTRATION

William Dickson
John Dobbie
John Dodson
Michael Hawkins
Donald Lorenzo
George McPheeters
Athyleen Nicholson
Erik Prestegaard
Kent Wentworth
William Wilkerson

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Barbara Eliason
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Harold Gray
Janet Harrington
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E. Janet McDonald
Athyleen Nicholson
Darrell Smith
Sharon Diddy Smith

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Art

Sande Percival
Stanley Price

Communication Arts

Annette Macomber
Clifford Rowe

Music

Stephen Anderson
Robert Bergeson
Richard Byrnes
Russell Crockett
Paul Edwards
Mira Frohnmayer
Donald Knuth
Jorgen Kruse
Jon Lackey
Randall McCarty
Jane Moore
Morris Pedersen
Susan Rae Peterson
Normand Poulshock
Peter Schindler
Hendrick Sikkenga
Sharon Smith
Sam Smith
Sylvia Storaasli
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SCHOOL OF NURSING

Esther Bradford

SCHOOL OF PHYSICAL EDUCATION

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Katharine Hemion
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Carolyn Phillips
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The Collegium

THE COLLEGIUM

In 1974 the Board of Regents established The Collegium, consisting of eight Advisory Councils related to the university's major academic units. Included among the Colleagues are community and national leaders, alumni/ae, faculty, parents, and other distinguished persons.

Colleagues participate in the development of the university in several ways. Principally through meetings and contacts with faculty members, they acquire an understanding of the philosophy, plans, and objectives of the university and particularly of the academic unit with which they are associated. They, in turn, share this understanding with others, serving as representatives of the university in cities where they reside and in their respective business and professional communities. In addition, the Colleagues help to identify institutional problems and appropriate solutions and to chart the university's growth. They also assist in generating financial resources for future development.

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MR. DANIEL B. WARD, Seattle — *Management Consultant*

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 MR. MARV HARSHMAN, Seattle — *Basketball coach, University of Washington*
 DR. RALPH MARX, Tacoma — *Physician*
 MR. JOHN MORGAN, Tacoma — *Executive Director, Tacoma YMCA*
 DR. PAUL TEMPLIN, Tacoma — *Director of Health Promotion, Department of Social and Health Services, State of Washington*
 DR. ROGER WILEY, Pullman — *Chairman, Department of Physical Education for Men, Washington State University*

General

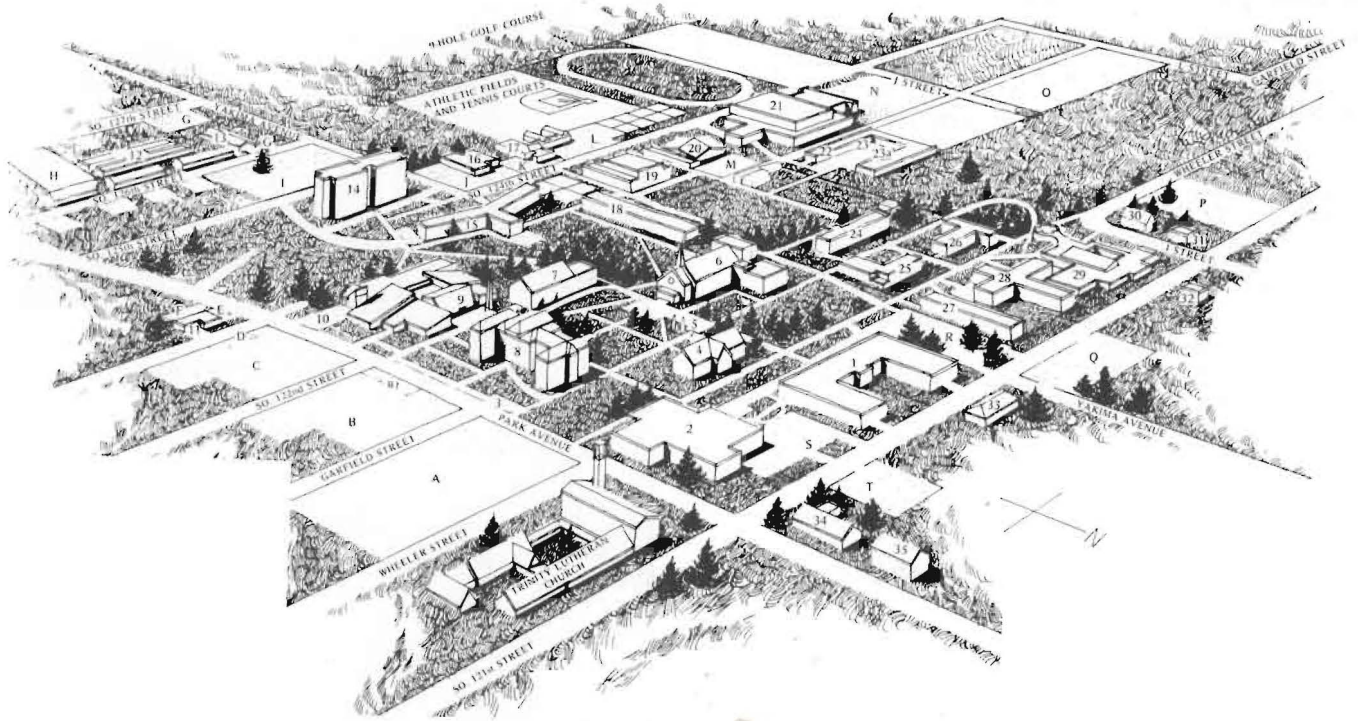
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 MR. GEORGE GALLAWAY, San Francisco — *Retired President, Crown Zellerbach, International*

Honorary

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 MR. KRZYSZTOF PENDERECKI, Krakow, Poland — *Internationally known composer, conductor and teacher*
 MR. HANS SKOLD, Columbia — *Swedish Ambassador to Columbia*
 MR. SØREN SOMMERFELT, Washington, D.C. — *Norwegian Ambassador to the United States*



Campus Guide



PACIFIC LUTHERAN UNIVERSITY

Buildings

- 1) **Philip E. Hauge Administration Building:**
Administration offices, faculty offices, classrooms.
- 2) **Robert A.L. Mortvedt Library:** *University stacks, archives, study carrels, photo lab, computer center and offices.*
- 3) **Main Entrance and Bus Stop**
- 4) **Xavier Hall:** *Classrooms, faculty offices, central services, campus post office.*
- 5) **Rune Stones Sculpture:** *dedicated to honor visit of Norway's King Olav in 1975.*
- 6) **Eastvold Auditorium:** *Auditorium seating 1,238 persons for cultural programs, concerts and plays; classrooms, studios for speech and music departments, Tower Chapel.*
- 7) **Ramstad Hall:** *Science laboratories, classrooms, offices, technical library and museum.*
- 8) **Harstad Hall:** *Residence unit for 254 women.*
- 9) **University Center:** *Houses University information booth, ticket office, commons; private dining rooms; Chris Knutzen Fellowship Hall; coffee shop; bookstore; student government offices; recreational facilities: bowling and billiards.*
- 10) **U.C. Loading Dock**
- 11) **Alumni House:** *Religious Life Office, Alumni offices.*
- 12) **Evergreen Court:** *Married student housing.*
- 13) **Delta Hall:** *Co-ed residence unit for 40 men and women.*
- 14) **Tingelstad Hall:** *Co-ed residence unit for 396 men and women.*
- 15) **Pflueger Hall:** *Residence unit for 200 women.*
- 16) **Columbia Center:** *Cafeteria, coffee shop, bakery, golf pro shop for the university's nine-hole golf course.*
- 17) **Ivy Hall:** *Faculty offices.*
- 18) **Foss Hall:** *Co-ed residence unit for 188 men and women.*
- 19) **Memorial Gymnasium:** *Sports arena, sauna and women's locker rooms.*
- 20) **Swimming Pool:** *Indoor swimming pool, locker and shower rooms.*
- 21) **Clifford Olson Auditorium:** *Seating for 3,500 in auditorium and for athletic contests: 185-foot stage; squash and handball courts; weight training room; Astro-turf fieldhouse; wrestling gymnasium; classrooms and offices for the School of Physical Education.*

- 22) **Security**
- 23) **Maintenance Building**
- 23a) **Warehouse**
- 24) **Hinderlie Hall:** *Residence unit for 130 men.*
- 25) **Hong Hall:** *Co-ed residence unit for 115 men and women.*
- 26) **Kreidler Hall:** *Residence unit for 122 women.*
- 27) **Stuen Hall:** *Co-ed residence unit for 110 men and women.*
- 28) **Ordal Hall:** *Co-ed residence unit for 185 men and women.*
- 29) **Aida Ingram Hall:** *Lecture hall, classrooms and offices for School of Nursing and Department of Art.*
- 30) **Ramsey House:**
- 31) **Haavik House**
- 32) **Music Annex**
- 33) **University Scholars Association** *(faculty owned)*
- 34) **Student Health Center**
- 35) **Park Avenue House**

Parking Lots

- A **Library Lot**
- B **Harstad Lot**
- B1 **Visitors Only**
- C **University Center Lot**
- D **Alumni House Parking**
- E **Religious Life Office Parking**
- F **Visitors and University Center Parking**
- G **Delta Lot**
- H **Married Student Housing Lot**
- I **Tingelstad Lot**
- J **Columbia Center Lot**
- K **Ivy (2) Lot**
- L **Ivy Lot**
- M **Swimming Pool Lot**
- N **Olson Lot**
- O **Olson Annex Lot**
- P **Wheeler Lot**
- Q **Northwest Administration Lot**
- R **West Administration Lot**
- S **East Administration Lot**
- T **Health Center Lot**

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**Uniform Undergraduate Application for Admission to
Four Year Colleges and Universities in the State of Washington**

(Please remit
\$15.00 non-refundable application fee
with application).

Section I Beginning Freshman
Transfer

Please type or print

1a. Application to (Name of College or University) Pacific Lutheran University Tacoma, Washington 98447				1b. For admission to (term and year) Fall <input type="checkbox"/> Spring <input type="checkbox"/> Summer-Fall <input type="checkbox"/> Winter <input type="checkbox"/> Summer only <input type="checkbox"/> January Interim <input type="checkbox"/> 19__									
2. Name Mr. Miss Ms. Mrs.			Last		First		Middle		3. Former Name		4. Social Security Number ____/____/____		
5a. Mailing Address						Number and Street		City		State		Zip	
5b. Phone (Include area code)						____ () _____							
6a. Permanent Address if different						Number and Street		City		State		Zip	
6b. Phone (Include area code)						____ () _____							
7a. Date of Birth		7b. Washington resident? Yes <input type="checkbox"/> No <input type="checkbox"/>		7c. Length of latest residence in Washington From ____/____/____ to ____/____/____ month yr. month yr.				8a. Country of Citizenship if not U.S.A.		8b. Type of Visa			
9. Child of deceased veteran? Yes <input type="checkbox"/> No <input type="checkbox"/>		10a. Military veteran? Yes <input type="checkbox"/> No <input type="checkbox"/>		10b. Months active duty		10c. Separation date		11. Religious preference (optional)					
12. Ethnic origin: (optional)						13. Height		14a. Number of brothers		14b. Number of sisters			
<input type="checkbox"/> American Indian		<input type="checkbox"/> Chicano, Mexican American or other Spanish surname		____		____		Older Younger		Older Younger		Older Younger	
<input type="checkbox"/> Asian American		<input type="checkbox"/> White American		____		Weight							
<input type="checkbox"/> Black Afro-American		<input type="checkbox"/> Other											
15a. Have you ever applied for admission to the institution to which you are now applying? Yes <input type="checkbox"/> No <input type="checkbox"/> Year ____/term ____				15b. Have you previously attended this institution? Yes <input type="checkbox"/> No <input type="checkbox"/> Year ____				16a. High school attending or last attended					
18b. Location of high school City State		16c. Date of Graduation		16d. If you do not intend to graduate from high school, indicate highest grade completed and last year attended Grade ____ Year ____ /G.E.D. tests taken? ____ When ____									
17. List all universities, colleges, community colleges attended in order of attendance (no exceptions).													
Institution			City		State		Dates attended mo. yr. mo. yr.				Degrees or diplomas		
1. _____			_____		_____		From ____ To ____				_____		
2. _____			_____		_____		From ____ To ____				_____		
3. _____			_____		_____		From ____ To ____				_____		
4. _____			_____		_____		From ____ To ____				_____		
*If you are still enrolled in a college, indicate when you plan to leave ____ month ____ year													
18. If now enrolled in high school, list senior courses. If enrolled in college, list courses and credits to be completed before transfer.										19. Indicate your educational objective at the school to which you are applying. <input type="checkbox"/> First Bachelor's degree <input type="checkbox"/> Courses for personal enrichment <input type="checkbox"/> Other (specify) _____			
20a. Intended major area of study						20b. If undecided, what subject area or career interests you?							
21a. Name of father or legal guardian: Living? Yes <input type="checkbox"/> No <input type="checkbox"/>						22a. Name of mother or legal guardian: Living? Yes <input type="checkbox"/> No <input type="checkbox"/>				22b. Maiden name			
21b. Address (Number and Street) (City) (State) (Zip)						22c. Address if different from father's (Number and Street) (City) (State) (Zip)							
21c. Colleges attended by father Degrees						22d. Colleges attended by mother Degrees							
21d. Father's employer and occupation						22e. Mother's employer and occupation							

23. List your significant school and community activities and awards

24. Describe any special circumstances which you believe should be considered in connection with this application (attach an additional page if needed)

25. Do you plan to apply for college residence hall accommodations? Yes No If yes, you should contact the Housing Office of the specified college or university.

26. Do you plan to apply for financial aid from this institution? Yes No If yes, you should contact the Office of Financial Aid for appropriate forms and procedures. A financial aid information request card can be obtained from Washington high school counselors or college financial aid officers.

I understand failure to submit complete official transcripts from all schools, colleges, or universities attended may result in the denial of this application or my subsequent dismissal from this institution. I certify that to the best of my knowledge, all statements I have made in this application are complete and true.

Name of applicant (print)

Signature of applicant

Date

Beginning freshmen must complete section one and leave this application with your high school counselor or principal, who will complete section two and forward it to the Office of Admissions of the institution you have named.

Transfer applicants need not complete section two, but should forward the application to the appropriate Office of Admissions and have the registrar of each college or university previously attended send an official transcript to the Office of Admissions. Some Washington colleges and universities require transfer applicants to submit a high school transcript. Check the admissions information section of undergraduate catalogs for this requirement.

Section Two
(Beginning freshmen only)

To be completed by high school official

Please complete the following, enclose an official transcript and forward to the institution to which the candidate is applying. Washington high schools may substitute the Washington Pre College Test Data Sheet if the student has not completed the seventh semester. In case the applicant will need special consideration, a transcript should be included with the WPCT Data Sheet.

This will certify that the student named above will be was graduated _____ month _____ year
was not

He/she has a grade point average of _____ and ranks _____ in a class of _____ class average _____

Class rank and grade average above are based on grades 9 _____ 10 _____ 11 _____ 12 (Fall) _____ 12 (Winter) _____ 12 (Spring) _____

Grading system _____ lowest passing grade _____ this school is accredited not accredited

College Aptitude Testing Data

1. WPCT taken? Yes No WPC I.D. number _____ Date taken _____

2. CEEB PSAT-NMSQT V _____ M _____ Sel. _____ Date taken _____

3. CEEB SAT V _____ M _____ Date taken _____

4. ACT Engl _____ Math _____ Soc. St _____ Nat. Sc. _____ Comp. _____ Date taken _____

Comments:

Signature of high school official

Title

Date

Name of high school

Address of high school

() _____
High school phone if out of state

As required by Title IX of the Education Amendments of 1972 and the regulations adopted pursuant thereto, by Title VII of the Civil Rights Act of 1974, and by Section 504 of the Rehabilitation Act of 1973, Pacific Lutheran University does not discriminate on the basis of sex, race, creed, color, national origin, age, or handicapped condition in the education programs or activities which it operates, including employment and admission.

