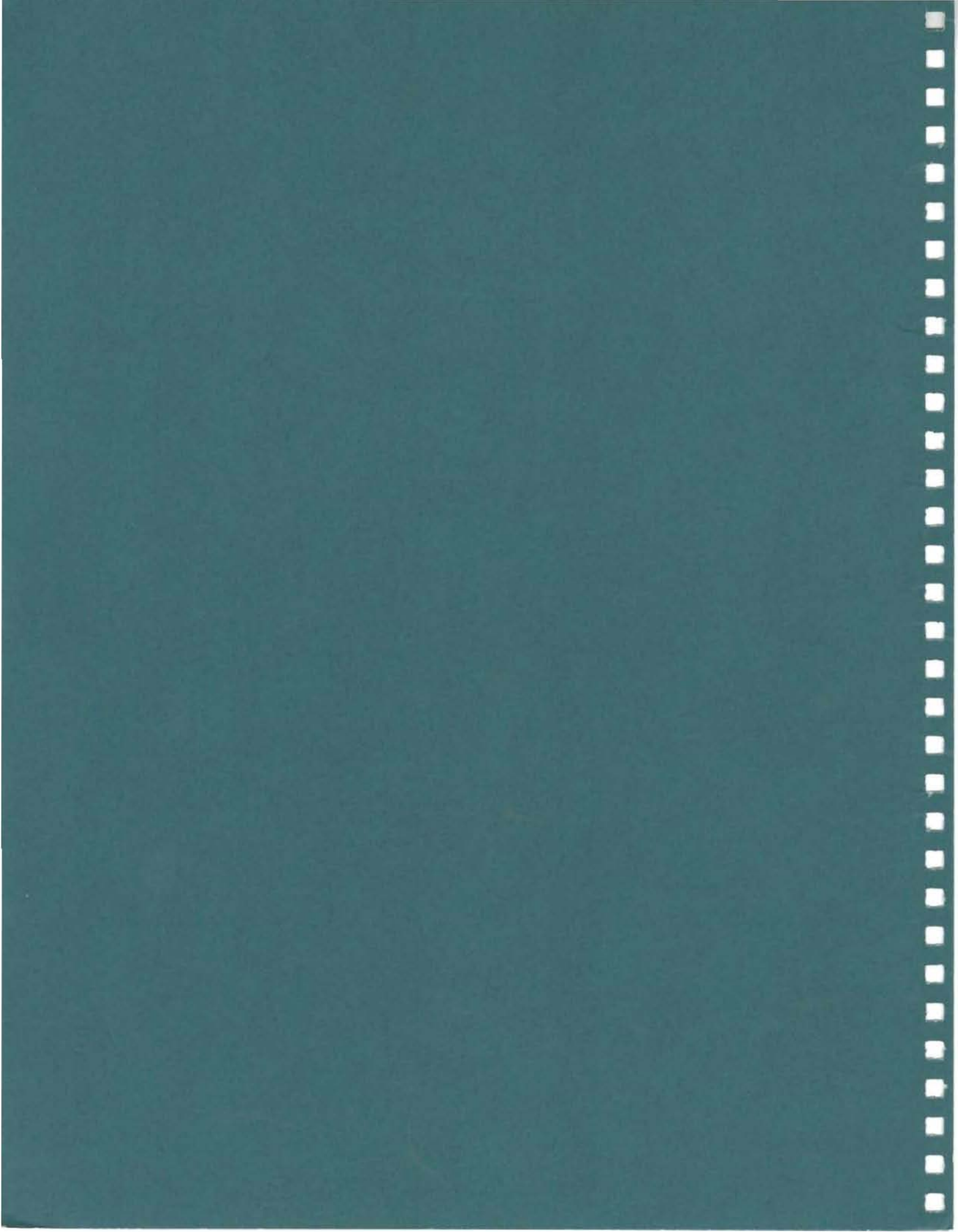


Pacific Lutheran University

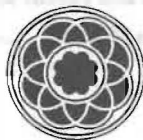
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Undergraduate and Graduate Catalog



1 9 9 4 - 1 9 9 5

Undergraduate and Graduate Catalog



PACIFIC LUTHERAN
UNIVERSITY

Tacoma, Washington

For Further Information

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 or the University Relations Office.

FOR FURTHER INFORMATION ABOUT:

CONTACT THE OFFICE OF:

Area code (206)

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

The President 535-7101

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

The Provost 535-7126

General information, admission of students, publications for prospective students, freshman student registration, transfer, and advanced placement

Admissions 535-7151

Transcripts of records, schedules, and registration

The Registrar 535-7131

Financial assistance, scholarships, and loans

Financial Aid and Scholarships 535-7161

Financial management and administrative services

The Vice President for Finance and Operations 535-7121

Fees and payment plans

Student Accounts 535-7107

Campus parking, safety, and information

Campus Safety and Information 535-7441

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

The Vice President for Student Life 535-7191

Gifts, bequests, grants, and the annual fund

The Vice President for Development and University Relations 535-7177

Work-study opportunities, student employment, and career options

Career Services 535-7459

Summer sessions

Summer Sessions 535-7129

Alumni activities

Alumni and Parent Relations ... 535-7415

Worship services and religious life at the university

Campus Ministry 535-7464



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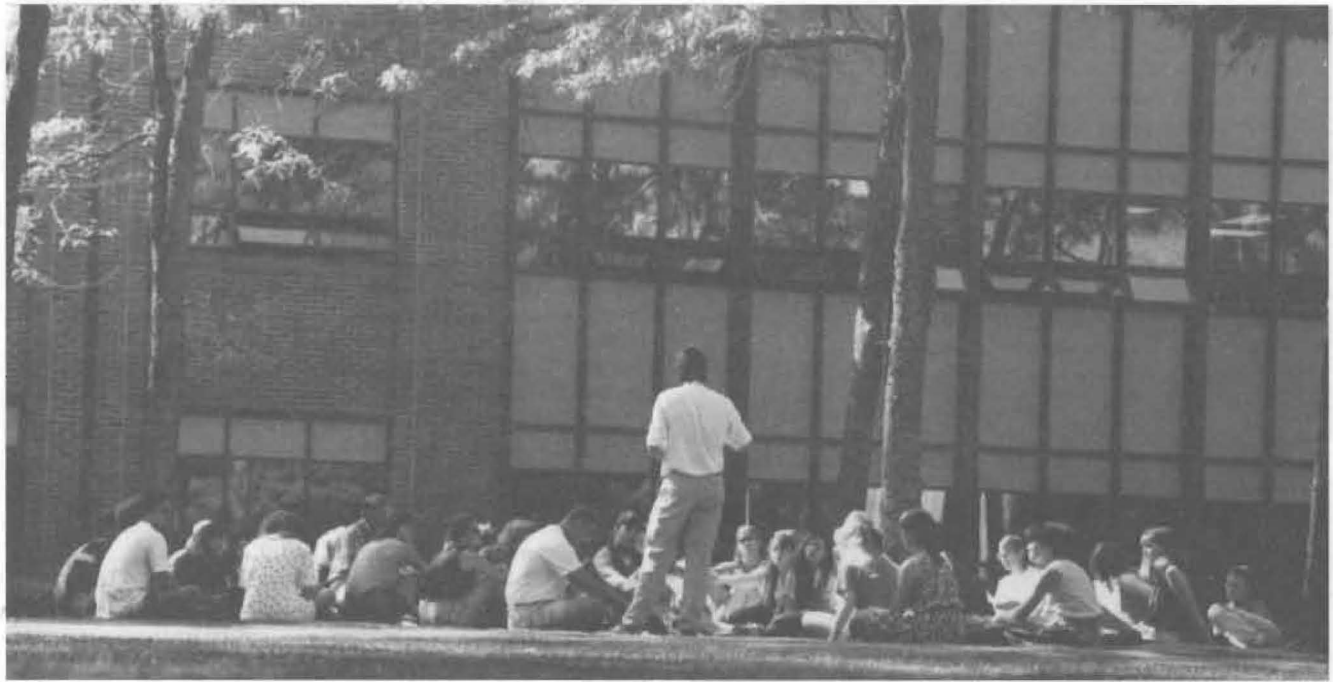
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The information contained herein reflects an accurate picture of Pacific Lutheran University at the time of publication. However, the university reserves the right to make necessary changes in procedures, policies, calendar, curriculum, and costs.

Listed in this catalog are course descriptions and summaries of degree requirements for majors, minors, and other programs in the College of Arts and Sciences and the Schools of the Arts, Business, Education, Nursing, and Physical Education. Detailed degree requirements, often including supplementary sample programs, are available in the offices of the individual schools and departments. Advising by university personnel inconsistent with published statements is not binding.



Academic Calendar 1994-95

SUMMER 1994

| | |
|---------------------|-----------------------------------|
| Term I | Monday, May 23–Friday, June 17 |
| Term II | Monday, June 20–Friday, July 15 |
| Workshop Week | Monday, July 18–Friday, July 22 |
| Term III | Monday, July 25–Friday, August 19 |
| Commencement | 10:30 a.m., Saturday, August 20 |

FALL SEMESTER 1994

| | |
|---------------------------------------|--|
| Orientation and Registration | Saturday, September 3, to Monday, September 5 |
| Classes Begin | 8:00 a.m., Tuesday, September 6 |
| Opening Convocation | 10:30 a.m., Tuesday, September 6 <i>Classes resume at 1:45 p.m.</i> |
| Mid-semester Break | Friday, October 21 |
| Thanksgiving Recess Begins | 1:35 p.m., Wednesday, November 23 |
| Thanksgiving Recess Ends | 8:00 a.m., Monday, November 28 |
| Classes End | 6:00 p.m., Friday, December 9 |
| Mid-year Commencement | 10:30 a.m., Saturday, December 10 |
| Final Examinations | Monday, December 12, to Friday, December 16 |
| Semester Ends (after last exam) | Friday, December 16 |

JANUARY TERM 1995

| | |
|---|--------------------|
| Classes Begin | Tuesday, January 3 |
| Martin Luther King, Jr., Birthday Holiday | Monday, January 16 |
| Classes End | Friday, January 27 |

SPRING SEMESTER 1995

| | |
|---------------------------------------|---|
| Registration | Tuesday, January 31 |
| Classes Begin | 8:00 a.m., Wednesday, February 1 |
| Presidents' Day Holiday | Monday, February 20 |
| Spring Break Begins | 6:00 p.m., Friday, March 17 |
| Spring Break Ends | 8:00 a.m., Monday, March 27 |
| Easter Recess Begins | 8:00 a.m., Friday, April 14 |
| Easter Recess Ends | 3:40 p.m., Monday, April 17 |
| Classes End | 6:00 p.m., Friday, May 12 |
| Final Examinations | Monday, May 15, to Friday, May 19 |
| Semester Ends (after last exam) | Friday, May 19 |
| Commencement | 2:30 p.m., Sunday, May 21 <i>Worship Service begins at 9:30 a.m.</i> |

Academic Calendar 1995-96

SUMMER SESSION 1995

| | |
|---------------------|-----------------------------------|
| Term I | Monday, May 22–Friday, June 16 |
| Term II | Monday, June 19–Friday, July 14 |
| Workshop Week | Monday, July 17–Friday, July 21 |
| Term II | Monday, July 24–Friday, August 18 |
| Commencement | 10:30 a.m., Saturday, August 19 |

FALL SEMESTER 1995

| | |
|---------------------------------------|--|
| Orientation and Registration | Saturday, September 2, to Monday, September 4 |
| Classes Begin | 8:00 a.m., Tuesday, September 5 |
| Opening Convocation | 10:30 a.m., Tuesday, September 5 <i>Classes resume at 1:45 p.m.</i> |
| Mid-semester Break | Friday, October 20 |
| Thanksgiving Recess Begins | 1:35 p.m., Wednesday, November 22 |
| Thanksgiving Recess Ends | 8:00 a.m., Monday, November 27 |
| Classes End | 6:00 p.m., Friday, December 8 |
| Mid-year Commencement | 10:30 a.m., Saturday, December 9 |
| Final Examinations | Monday, December 11, to Friday, December 15 |
| Semester Ends (after last exam) | Friday, December 15 |

JANUARY TERM 1996

| | |
|---|--------------------|
| Classes Begin | Tuesday, January 2 |
| Martin Luther King, Jr., Birthday Holiday | Monday, January 15 |
| Classes End | Friday, January 26 |

SPRING SEMESTER 1996

| | |
|---------------------------------------|---|
| Registration | Tuesday, January 30 |
| Classes Begin | 8:00 a.m., Wednesday, January 31 |
| Presidents' Day Holiday | Monday, February 19 |
| Spring Break Begins | 6:00 p.m., Friday, March 15 |
| Spring Break Ends | 8:00 a.m., Monday, March 25 |
| Easter Recess Begins | 8:00 a.m., Friday, April 5 |
| Easter Recess Ends | 3:40 p.m., Monday, April 8 |
| Classes End | 6:00 p.m., Friday, May 10 |
| Final Examinations | Monday, May 13, to Friday, May 17 |
| Semester Ends (after last exam) | Friday, May 17 |
| Commencement | 2:30 p.m., Sunday, May 19 <i>Worship Service begins at 9:30 a.m.</i> |

The University

Mission Statement

Long committed to providing an education distinguished for quality, in the context of a heritage that is Lutheran and an environment that is ecumenically Christian, PLU continues to embrace its primary mission: the development of knowledgeable persons equipped with an understanding of the human condition, a critical awareness of humane and spiritual values, and a capacity for clear and effective self-expression.

For all who choose to seek a PLU degree, the University offers opportunity to pursue a variety of programs of academic worth and excellence. Its standards of performance demand a finely trained faculty as well as highly skilled administrative and support staff. In its institutional emphasis on scholarship, the University views the liberal arts as providing the necessary and essential foundation for the technical training and education in the professions which modern society requires.

The University aims to cultivate the intellect, not for its own sake merely, but as a tool of conscience and an instrument for service. The diversity and variety of cultural programs and personal services offered by the University are intended to facilitate this positive development of the student as a whole person in order that our students might function as members of society.

In other words, PLU affirms that realization of one's highest potential as well as fulfillment of life's purpose arises in the joy of service to others. To aid its students in sharing this understanding, the University seeks to be a community in which there is a continuing and fruitful interaction between what is best in education and what is noblest in Christian edification.

This deliberate and simultaneous attention to the religious dimension of the total human experience and to the standards of scholarly objectivity, coupled with clear recognition of the integrative impulse in each, is the essence of PLU.

General Information

HISTORY

Pacific Lutheran University was founded in 1890 by men and women of the Lutheran Church in the Northwest. 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.

In addition the following programs hold specialized accreditations and approvals:

Business – American Assembly of Collegiate Schools of Business
Chemistry – American Chemical Society

Computer Science (B.S.) – Computing Sciences Accreditation Board, Inc.

Education – National Council for the Accreditation of Teacher Education

Marriage and Family Therapy – Commission on Accreditation for Marriage and Family Therapy Education of the American Association for Marriage and Family Therapy

Music – National Association of Schools of Music

Nursing – National League for Nursing

Social Work – Council on Social Work Education

Any current or prospective student may, upon request directed to the president's office, review a copy of the documents pertaining to the university's various accreditations and approvals.

GROUNDS

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

ENROLLMENT

2,750 full-time students; 599 part-time students

FACULTY

237 full-time faculty; 79 part-time faculty

STUDENT/FACULTY RATIO

15.3:1

ACADEMIC PROGRAM

Pacific Lutheran University uses a 4-1-4 calendar which consists of two fourteen-week semesters bridged by a four-week January term.

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. Departments or schools may set higher grade point requirements.

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

LIBRARY SERVICES

The Robert A.L. Mortvedt Library is the central multi-media learning resource center serving the entire university community. Its collections are housed and services provided in a modern functional building which has study spaces for 850 students and shelving for 500,000 books, periodicals, microfilm, and audio-visual materials. The library receives over 2,000 current magazines, journals, and newspapers.

In addition to its general collection of books and other materials, the library has a special collection devoted to the Scandinavian Immigrant Experience and contains the university and regional Lutheran church archives. Other resources include the Curriculum Collection of the School of Education, the microfiche collection of college catalogs, maps, pamphlets, national and trade bibliographies, and CD-ROM indexes.

The library is open for service 107 hours during a typical week in a regular term. A staff of 28 full and part-time librarians and assistants offer expert reference, information, and media services. The reference staff provides beginning and advanced library instruction for all students. In addition to standard reference service, the library staff also offers computerized bibliographic information service. As the result of the library's

extensive collection of bibliographic tools, computer access to other collections, and electronic mail service, students and faculty have rapid access to materials which can be borrowed from other libraries.

Direct loan service is available to PLU students and faculty at Northwest College, St. Martin's College, Seattle University, Seattle Pacific University, and the University of Puget Sound.

COMPUTING AND TELECOMMUNICATIONS

Computing and Telecommunications Services provides campus wide communications and computing needs. The main offices are located in the southeast corner of the lower floor of the Mortvedt Library building. The facility houses a VAX 4700 super mini-computer and DEC Alpha 3400 computer. The Alpha is used primarily for academic purposes including Internet use. A large computer lab, located in the University Center, provides access to the Alpha, IBM-PCs, and Macintosh computers. This lab is open seven days a week during each term. Additionally, each residence hall room is equipped with a special data jack. This allows students with their own computers to connect to the campus data network without a modem. Through the campus network, students have access to the PLU library's on-line public access catalog (as well as others throughout the world), electronic mail, and other Internet research tools. Each residence hall room is also equipped with a digital telephone and voice mail service.

A variety of software programs and programming languages are available for the systems. The university has adopted standard software including word processing and spread sheets for PCs and Macintosh computers, and data bases and statistical software for PCs.

Information regarding telephone services, computer software standards and policies, and University Center Lab hours may be obtained by contacting Computing and Telecommunications Services main office at 535-7525.

The intentional, unauthorized entry into a computer system is a crime under the laws of the State of Washington. Computer security programs and devices are used to manage and control access to programs and data. In the event of computer trespass, university officials are authorized access to all data and messages associated with the incident for use in its resolution.

Voice messaging systems fall under the Telecommunications Act which makes tampering with another person's voice mail or making prank and obscene calls illegal. The university vigorously prosecutes these violations both criminally and via the student conduct system.

WRITING CENTER

The Writing Center, located in Ramstad Hall, provides a place for students to meet with trained student readers to discuss their academic, creative, and professional writing. Student staff members help writers generate topics, develop focus, organize material, and clarify ideas. In an atmosphere that is comfortable and removed from the classroom setting, student readers and writers talk seriously about ideas and writing strategies. Most sessions are one-hour meetings, but drop-in students with brief essays or questions are welcome.

The Writing Center is open Monday through Friday from the beginning of period two (MWF 9:15; TR 9:55) until 4:30 during the day and Sunday through Friday from 7:00 until 9:00 in the evening.

ACADEMIC ASSISTANCE CENTER

A guiding principle of academic assistance activities is facilitating student learning. The center assists students to learn about themselves as learners. Trained and certified peer tutors are available to:

- work with students individually on course content,
- facilitate small study groups,
- conduct review sessions,
- demonstrate active learning methods, and
- initiate special projects in conjunction with faculty.

Academic consultation with the director assures responsive and personal assistance with academic concerns. Approximately one in four students regularly uses the service of the Academic Assistance Center.

All services are free to PLU students. The office, located in Ramstad 112, is open Monday through Thursday from 9:00a.m. until 9:00 p.m., Friday from 9:00a.m. until 5:00p.m., and Sunday from 2:00 p.m. until 9:00 p.m.

THE COALITION FOR THE ADVANCEMENT OF ACTIVE LEARNING

The Coalition for the Advancement of Active Learning (CAAL) is a student, faculty, and alumni organization dedicated to the promotion of active learning in all aspects of academic life at PLU. Active learning is a process in which learners are inspired to become more directly involved in the educational experience. The coalition emphasizes collaborative learning, where students teach each other in a mutually supportive atmosphere, thereby enhancing their own educational experiences. The coalition has four main objectives:

1. To promote regular communication and the exchange of materials between individuals involved in currently scattered active learning activities, and develop a cohesive academic culture.
2. To assess frequently and document systematically all active learning endeavors.
3. To establish regular training activities and other infrastructure supports that will insure sustained institution-wide change and coherence.
4. To include students as full partners in the skill-building and institutionalization associated with a dynamic learning community.

Students and faculty interested in the coalition should call 535-4925 or the Academic Assistance Center.

AFFILIATE RESOURCES

Center for Public Service

The Center for Public Service connects the PLU campus to the surrounding community by providing opportunities for faculty, staff, and students to serve community needs in a variety of ways as part of their university experience.

There are many ways students can become involved in service at PLU. The Family and Children's Center programs, located on the PLU campus, offer experiences working with children, adults, and senior citizens through University Child Care, Adult Literacy, and Second Wind. The Volunteer Center has listings of over 100 service opportunities on and near the PLU campus. These opportunities range from one-time "Go 'n Do" projects to longer-term involvement.

To find out more about service learning at PLU, call the Center for Public Service at 535-7173.

KPLU-FM, National Public Radio

KPLU at 88.5 FM is licensed by the Federal Communications Commission to the University Board of Regents.

A member station of National Public Radio, KPLU provides music and news seven days a week, 24 hours a day, with a professional staff augmented by qualified students.

PLU is the only independent university in the Northwest operating a full power NPR station.

The KPLU main transmitter from West Tiger Mountain covers the Puget Sound area and translators cover the major population centers of western Washington from Bellingham to Vancouver.

Center for Social Research

The Center for Social Research is an organized research unit within the Division of Social Sciences. Established in 1976 to study public policy issues, the Center continues to offer expertise and support in community research, contract research, faculty/student research projects, occasional papers, and symposia related to social issues.

The purpose of the Center is to strengthen the connection between university resources and the community by providing high quality research services and by sponsoring a variety of public symposia.

The expertise of faculty who specialize in demographics, survey research, and research methods has been combined with staff expertise in document retrieval, data input, and report writing to create a valuable community resource. Graduate and undergraduate students also participate in faculty/student research projects through the Center.

The Elliott Press

The Elliott Press is PLU's studio-laboratory for the publishing arts. With the Press' large collection of letterpress type and equipment, students design and produce printed texts using the hand-controlled techniques that flourish today in the lively art form known as "fine printing." In addition to its own publishing program, the Press houses a growing collection of innovative book works and is a working museum, where visitors may watch and try their hands at the technology pioneered by Gutenberg.

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.

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 offer innovative, experimental courses which cover a broad range of contemporary issues and perspectives in many fields. The summer session consists of three discrete four-week terms, and a one-week workshop session, and begins the last week of May. Many courses are taught in the evening, two nights per week for nine weeks, and Master of Business Administration courses are taught during two six-week terms, two nights per week. Designed for undergraduates and graduate students alike, the program serves teachers and administrators seeking credentials and special courses, first-year students desiring to initiate college study, and others seeking special studies offered by the schools and departments. Non-matriculated students who enroll for the summer session need only submit a letter of academic standing or give other evidence of being prepared for college work.

A complete *Summer Session Catalog*, outlining the curriculum as well as special institutes, workshops and seminars, is printed each spring and is available by calling 535-7129.

SUMMER SCHOLARS

For the last three weeks of July each summer, PLU presents a special program, called the Summer Scholars Program, for academically gifted high school sophomores and juniors. Admission is competitive, and students earn four credits for their successful completion of an intensive course in either the natural sciences or writing. For information and applications contact the Office of Special Academic Programs, 535-7129.

MIDDLE COLLEGE

PLU offers a special six-week summer program for high school juniors and seniors and for first-year college students. Called Middle College, the program is designed to ease the transition from high school to college by sharpening learning skills that are essential to successful completion of a college or university program.

Middle College has both an academic program and a counseling and testing component. All students are thoroughly tested and evaluated in private sessions with regard to their reading, writing, verbal, and mathematical skills. In addition, career counseling is provided. The aim of Middle College counseling is to assess each student's talents and interests in order to provide direction and goals for the college experience.

The academic program offers a chance to improve specific learning skills essential to college success. The classes, offered at several levels in several disciplines, are for Middle College students only, thereby allowing small class size and close contact between students and faculty. All students take a study skills course, which serves as a core of the program. In addition, students may select two or three courses from among those offered each year. Each student's program is individualized to promote maximum growth.

PROJECT ADVANCE

Each semester PLU offers Project Advance, a special enrichment program for high school juniors and seniors. Designed to complement high school studies, Project Advance allows students to earn one hour of university credit and to experience college life and study. The topic of the course is different each semester, and fall topics are usually chosen to coincide with the high school National Debate Topic. Project Advance classes meet once a week for six weeks in the late afternoon.

RETENTION OF FIRST-YEAR STUDENTS

The retention of students entering as freshman students has been monitored since 1972. Those data for the past decade are presented in the following table:

Retention of Entering First-Year Students

| Fall | To Sophomore Year | To Junior Year | To Senior Year |
|------|-------------------|----------------|----------------|
| 1982 | 77.6% | 60.1% | 54.6% |
| 1983 | 75.7% | 59.8% | 58.2% |
| 1984 | 78.5% | 65.9% | 58.8% |
| 1985 | 81.5% | 68.8% | 67.3% |
| 1986 | 80.6% | 71.1% | 66.2% |
| 1987 | 81.7% | 65.3% | 64.0% |
| 1988 | 75.7% | 65.4% | 62.7% |
| 1989 | 80.9% | 70.1% | 66.0% |
| 1990 | 77.4% | 66.0% | 63.5% |
| 1991 | 81.3% | 71.1% | |
| 1992 | 79.9% | | |

Admission

Pacific Lutheran University welcomes applications from students who have demonstrated capacities for success at the baccalaureate level. Applicants who present academic records and personal qualities which our experience indicates will enable them to succeed at the university and benefit from the environment will be offered admission. Applicants for admission are evaluated without regard to sex, race, creed, color, age, national origin, or disabling condition. Selection criteria include grade point average, class rank, transcript pattern, test scores, and recommendations.

ENTRANCE REQUIREMENTS (Freshman Students/Transfers)

In evaluating applications the dean of admissions interprets grade point averages and class rank in relation to the quality of the curriculum which the applicant has pursued in high school and at the baccalaureate level. For example, a standard high school program in preparation for college should include the following:

English: 4 years

***Mathematics:** 3 years (algebra, 2 years, and geometry, 1 year)

***Foreign Language:** 2 years

Social Studies: 2 years

Laboratory Sciences: 2 years

Fine, Visual, or Performing Arts: 1 year

Electives: 3 years (selected from the areas listed above, as well as courses in computer science, speech, and debate.)

* *Minimum Entrance Requirements:*

1. Two years of college preparatory mathematics (exclusive of computer science) with grades of C or higher, an approved course at the baccalaureate level, or demonstrated equivalent proficiency.
2. Two years of one foreign language in high school with grades of C or higher, one year at the baccalaureate level, or demonstrated equivalent proficiency.

Students who have not satisfied one or both of these requirements may still be admitted but must make up the deficiency as an additional degree requirement.

Additional study of both mathematics and foreign language is advisable for certain areas in the arts and sciences and in some professional programs. Those who follow the above preparatory program will find most curricular offerings of the university open to them and may also qualify for advanced placement in some areas.

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 term. The following application deadlines are suggested: *Fall Semester-May 1; Spring Semester-December 15.*

ENTERING FRESHMAN STUDENTS

Application Procedure

Students planning to enter as freshman 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 Action 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 Office of Admissions.
2. **\$35.00 Application/Records Fee:** A \$35 fee must accompany the application or be mailed separately. This non-refundable

service fee does not apply to the student's account. Make checks or money orders payable to PLU Office of Admissions.

3. **Transcript:** The transcript submitted must include all credits completed through the 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 be presented.
4. **Recommendations:** Two recommendations must be prepared by principals, counselors, pastors, or other qualified persons. The PLU Office of Admissions will supply the forms.
5. **Test Requirement:** All entering freshman students must submit scores from either the College Board, Scholastic Aptitude Test (SAT), or the American College Test Assessment (ACT). Registration procedures and forms are available at high school counseling offices.
6. **Personal Essay:** Using no more than two pages, write an essay on one of these two topics:
 - a. Discuss a significant influence on your personal and intellectual development. This might be an interaction with another person, a personal experience or achievement, an educational experience, or involvement with an issue of local, national, or global concern.
 - b. What do you consider to be your personal/academic/professional goals and objectives? How do you expect your experience at Pacific Lutheran University to help you achieve them?

EARLY ACTION

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 Action applications must be made by November 15 of the senior year. SAT or ACT scores from the previous May or July are acceptable. Early Action students are given first consideration in campus housing and financial aid. An Early Action form is available from the Office of Admissions. Students not accepted under the Early Action program 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.

Washington State Running Start Program – Accepted students who have completed courses under the Washington State Running Start Program will be awarded transfer credit. Such courses must be described in the catalog of an accredited Washington State community college and must be posted on an official transcript.

ADVANCED PLACEMENT OPPORTUNITIES

1. **College Board Examinations:** Students interested in seeking advanced placement or credit toward graduation through the examination program of the College Board should direct inquiries for specific information to the department or school which offers the academic subject of their choice. General inquiries about the College Board 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.

TRANSFER STUDENTS

Application Procedure

Students who began their higher education at other regionally accredited colleges or universities are encouraged to apply for admission with advanced standing. Over 400 students transfer to the university each year with an average grade point in excess of 3.00 (B). Candidates must have good academic and personal standing at the institution last attended full-time. Although it does not guarantee admission, a grade point average of 2.50 in all college work attempted is usually required for admission. For applicants with less than sophomore standing (30 semester hours or 45 quarter hours), secondary school records and standardized test scores will also be considered. Credentials required are:

1. **Formal Application:** Submit a Uniform Undergraduate Application with \$35.00 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 Office of Admissions. Official high school transcripts of credits are necessary if they are not listed on college transcripts.
3. **Recommendations:** Two recommendations must be prepared by instructors, counselors, pastors, or other qualified persons. The PLU Office of Admissions provides the forms.
4. **Personal Essay:** Using no more than two pages, write an essay on one of these two topics:
 - a. Discuss a significant influence on your personal and intellectual development. This might be an interaction with another person, a personal experience or achievement, an educational experience, or involvement with an issue of local, national, or global concern.
 - b. What do you consider to be your personal/academic/professional goals and objectives? How do you expect your experience at Pacific Lutheran University to help you achieve them?

EVALUATION OF CREDITS

1. The registrar evaluates all transfer records and creates an advising booklet 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 the grade of "C" or above apply toward graduation.
3. A community college student may transfer a maximum of 64 semester (96 quarter) hours of credit from the two-year institution.
4. Students completing the direct transfer associate degree from an accredited Washington State community college before matriculation at PLU will be admitted with junior standing and will have satisfied all general university requirements except for one course in religion, lines 1 or 2 (4 semester hours) and one interim course (4 semester hours). (The interim course requirement will no longer pertain to students completing degrees after December 1994.)
5. All students must satisfy the entrance requirements in mathematics and foreign language.
6. To qualify as a degree candidate, a student must take the final 32 semester hours in residence.

UNACCREDITED EDUCATIONAL EXPERIENCES

1. Credits earned in unaccredited schools are not transferable. Students who have matriculated at Pacific Lutheran University may petition a department or school to waive a particular requirement on the basis of previous unaccredited course

work or may petition a department or school to receive credit by examination.

2. The university allows up to 20 semester hours of USAFI/Dante 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 under Academic Procedures.

ACCELERATED UNDERGRADUATE REENTRY FOR ADULTS (AURA)

Qualified adults, 30 years of age or older, who have not been enrolled in a baccalaureate degree program within the last five years, may seek advanced placement up to the junior level through the AURA Program. Those accepted into AURA are granted one year's provisional admission, during which time they must complete 12 credits at PLU (including Psychology 401) with a grade point average of 2.5 or higher. Credit awards for prior learning are based upon systematic assessment by a faculty panel of the adequacy and appropriateness of knowledge and skills demonstrated in a portfolio prepared by the student with staff assistance. Credit awards may not exceed 48 semester credits less acceptable college transfer credits.

For details of the AURA Program, contact the director, AURA Program, 535-7518.

FORMER STUDENTS

Application Procedure

Full-time students who have not been in attendance for over six years may seek re-admission by obtaining an application for re-entrance from the Office of Admissions. Students who have not been in attendance for fewer than six years may re-apply directly to the Registrar's Office.

1. Students who have not attended the university for a period of up to six years may re-enter PLU by notifying the Registrar's Office of their intention to return. Re-entering students must provide current address and degree information and official transcripts from any other college attended during their absence from PLU. Previous financial obligations to the university must be cleared, and students must have current health clearance with the University Health Services before they may register.
2. Students seeking to return to PLU more than six years after their last date of attendance must be re-admitted to the university. An application for re-admission should be submitted to the Office of Admissions, along with official transcripts from any other college attended during the period of absence from PLU.

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.

INTERNATIONAL STUDENTS

Application Procedure

International students who are qualified academically, financially, and in English proficiency are encouraged to join the university community. Information and application procedures may be obtained from the dean of admissions.

FINALIZING AN OFFER OF ADMISSION

1. **Medical Requirement:** Before actual enrollment each new student must submit a Health History Form complete with an accurate immunization record. This information must be acceptable to the PLU Health Services Office.
2. **Advance Payment:** A \$200.00 advance payment is necessary in order to confirm an offer of admission. This payment guarantees a place in the student body, reserves housing on campus if requested, holds financial assistance which may

have been awarded, and is required before class registration. 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 dean of admissions is notified in writing before May 15, the \$200.00 will be refunded. The refund date for the January term is December 15, and for spring semester, January 15.

3. *New Student Information Form:* This form includes the application for housing and 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 70% 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 Free Application for Federal Student Aid (FAFSA), which is a statement of financial condition. Analysis of the FAFSA determines an expected contribution for college expenses from the student and parent(s) or guardian(s). "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 disability.

APPLICATION PROCEDURE:

Freshman Students and Transfers

1. Complete a Free Application for Federal Student Aid (FAFSA) by January 31.
2. Submit application materials for admission by February 15 so as to be offered admission no later than March 1.
3. Submit a PLU Financial Aid Application (applies only to transfer students and is available upon request).
4. Submit a Financial Aid Transcript from all prior institutions attended (transfers only).

Continuing Students

1. Complete a Free Application for Federal Student Aid (FAFSA) by March 1.
2. Submit a PLU Financial Aid Application.

An application for financial aid can be completed at any time, but failure to meet the priority date may result in a denial of aid even though need is demonstrated. The Financial Aid and Scholarships 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 February 1 completion date will be made in March, and actual notification will be mailed the first week in April.
2. Financial aid decisions for continuing PLU students are made during April and May. Notifications are sent out beginning in May.

VALIDATING THE AID OFFER

Aid offers must be validated by returning the signed Offer of Financial Aid. Freshman and transfer students must also submit the \$200 advance payment required by the Office of Admissions. This should be done as soon as possible, but must be received by May 1. No payment is required from continuing students. All students must complete a satisfactory payment arrangement with the Student Accounts Office by August 1 for fall semester and by January 15 for spring semester to hold their award. Applicants who do not return their acceptance of an award by the reply date specified and who do not complete satisfactory payment arrangements 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 and Washington State N ed Grants, 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 Office of Financial Aid and Scholarships 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 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 Office of Financial Aid and Scholarships in case of a change in credit hours attempted; a change in marital status; a change in residence (off-campus or at home); or receipt of additional outside scholarships.
4. Providing a copy of their parents' income tax return (Form 1040) and/or a copy of their own individual income tax return if requested.

ACADEMIC REQUIREMENTS/SATISFACTORY PROGRESS

The policy of the university is to allow students to continue receiving financial assistance as long as they are in good standing. To do otherwise could 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. *Adjustments in an award may be made during the year if an aid recipient has not enrolled for a sufficient number of credit hours. However, each financial aid recipient must maintain satisfactory academic progress in the course of study he or she is pursuing in order to continue to receive financial assistance awarded by the PLU Office of Financial Aid and Scholarships. The following minimum requirements are expected of each financial aid recipient:* To make satisfactory progress toward a degree, an undergraduate student must complete a minimum of 24 semester hours of credit each academic year. An academic year is defined as the fall semester, the January term, and the spring semester. As part of their undergraduate program, students are required to complete two interim terms (8 hours from courses numbered 300-320); junior and senior transfer students need to complete only one interim term (4 hours from the courses numbered 300-320). (The interim requirement will no longer pertain to students completing degrees after December 1994.) Graduate students are required to complete 16 semester hours of credit each academic year.

For full-time undergraduate students receiving financial aid, the maximum number of credit hours that may be attempted is 175 and the maximum time-frame for completing a baccalaureate degree is five years. Even if a student changes his or her major or academic program, only 175 credit hours may be taken qualifying for financial aid, and the maximum time-frame of five years for receiving a degree is enforced. Some financial aid programs (e.g., most university gift aid programs and Washington State Need Grants) allow aid to be awarded a maximum of four academic years. The maximum number of full-time graduate credit hours that may be attempted is 48, and the maximum time-frame to complete a graduate degree is three years.

Provisions to accommodate non-traditional, part-time students have also been established. Undergraduate students who qualify for these provisions must complete a minimum of 12 credit hours each academic year and achieve a degree within a maximum time-frame of ten years (the maximum number of credits allowable is 350). Graduate students who qualify for these provisions must complete a minimum of 8 credit hours each academic year and achieve a degree within a maximum time-frame of seven years (the maximum number of credits allowable is 56).

The Registrar's Office evaluates the transcripts of credits submitted by transfer students and determines which credits are acceptable toward a degree at Pacific Lutheran University. Notification of the number of credits yet to be earned and of the time-frame in which financial aid may be awarded is communicated to students during their first term of enrollment. The same procedure applies to all continuing students who have never previously received financial assistance.

The following grades do not indicate successful completion of academic credit applicable toward a degree: E grades, I (Incomplete), W (Withdrawal), EW (Unofficial Withdrawal, recorded by the registrar), F (Failure). Any courses in which such grades are received are, however, included in the maximum number of credits that may be attempted (175) and are considered to be within the maximum time-frame allowable for achieving a degree (five years).

All credits earned by examination, which are accepted as applicable toward a degree, will be included in the limitation on credits which can be attempted while eligible for financial aid.

Courses that are repeated are also counted in the limitation on credits which can be attempted. Once a course has been completed successfully, the credit hours earned are counted toward the minimum number of hours which can be taken under financial aid eligibility. If a course is successfully completed more than once, it is counted only once toward a student's degree requirements and toward the minimum number of hours which can be taken under financial aid eligibility.

The university's curriculum includes very few non-credit courses or courses whose credit hours are not applicable to a degree, but if any such courses are taken by financial aid recipients, the hours will be included in the limitation on credits which may be attempted and will be considered with the time-frame allowable for achieving a degree.

In the event that a student fails to meet the criteria for satisfactory progress during a particular semester, he or she will be placed on academic and financial aid probation. Failure to regain satisfactory academic status will result in the cancellation of financial aid.

Once "unsatisfactory progress" has been determined, students receive official notification. Terminated students 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.

Students who are placed on financial aid probation may petition for reinstatement of their financial aid in one of two ways: (1) They may complete one semester of full-time enrollment using their own financial resources, or (2) they may submit an appeal to the Faculty Committee on Admission and Retention of Students documenting the unusual circumstances which have made it impossible to make satisfactory progress during the semester in question. Summer sessions may also be used as terms during which a student on financial aid probation may regain satisfactory academic status; however, students enrolling in summer sessions for this purpose must use their own financial resources and are ineligible for financial aid.

Types of Aid

UNIVERSITY GIFT ASSISTANCE

Regents' and President's Scholarships are awarded to freshmen in recognition of outstanding academic achievement and service in high school and in anticipation of continued excellence at PLU. Students who meet the following basic requirements are invited to apply: admitted by February 4; 3.7 or higher grade point average; 1100+ SAT or 26+ ACT scores; top 10% of high school class; and U.S. citizen or obtaining citizenship. The regents' scholarship is a full tuition award and the president's scholarship is a \$5,000 award. Both are renewable for three years with a 3.3 university grade point average.

Academic Achievement Awards ranging between \$2,100 and \$4,000 each are annually 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 strong high school grade point average, usually 3.25 or higher, and receive an offer of admission by March 1. Financial need is not a requisite and no other application is required. Renewal for a total of six semesters is automatic provided a 3.3 grade point average is maintained.

Alumni Merit Awards* of \$1,500 are given to full-time exceptional students who are sons and daughters of PLU alumni/ae. To be considered, students must be entering freshman students and have a cumulative high school grade point average of 3.5 or higher. Renewal candidates must have a minimum collegiate grade point average of 3.3 to be eligible. Financial need is not a determining factor and completion of a special application is recommended. Applicants must also be offered admission by April 1 to be considered.

Faculty Merit Awards* of \$1,500 annually are granted to twenty-four (24) students who have completed 45 semester hours or more at PLU and are not receiving any other merit award. No separate application is required. Faculty will recommend students to a selection committee who will select recipients on the basis of scholastic achievement, special talents, and unusual service to the university.

Provost's Merit Awards* of \$1,750 are granted to outstanding transfer students each year. To be considered, a student must have a 3.6 grade point average in at least 45 semester hours of college level courses and receive an offer of admission by March 1. A 3.3 grade point average earned at PLU is required for renewal. No application is necessary.

Q Club Scholarships* are awarded to new freshmen and transfer students on the basis of academic achievement and financial need. Freshmen must have a 3.3 grade point average and test results reflecting high scholastic aptitude. Transfer students are required to have an entering grade point average of 3.0. Renewal requires good academic standing, a 3.0 grade point average, timely reapplication through the FAFSA, and evidence of financial need.

Need-Based Talent Awards are granted to full-time students with financial need who have exceptional ability in forensics, drama, art, music, or athletics. The candidate must make arrangements with the school or department concerned for an audition and/or personal interview. In some cases a tape or film is satisfactory. A recommendation from a faculty member should be on file before the application priority date (see application procedure) for a student to be considered for a Talent Award. Financial need is a requisite for initial receipt and renewal.

University Grants are awarded in combination with loans and employment to students with financial need who do not qualify for scholarship assistance. International Student Grants are restricted to those international 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.

Alumni Dependent Grants* of \$500 are given to full-time students whose parent(s) attended PLU (PLC) for two semesters or more. To be eligible the alumni dependent must be a full-time student (12 credit hours per semester) and complete an application in the Office of Financial Aid and Scholarships. June 1 is the deadline for requesting this grant. Requests received thereafter will be honored only as budgeted funds permit.

** NOTE: In the event that the full cost of attendance is covered by outside scholarship assistance, university merit OR non-need based awards will be extended in name only and will not carry a monetary value. The same will apply to Tuition Exchange recipients.*

NAMED ENDOWED/RESTRICTED SCHOLARSHIPS:

The following scholarships have been provided by alumni and friends of the university to honor and/or memorialize loved ones and to assist worthy students. Also listed are scholarships made possible by corporations, foundations, and trusts. Eligibility for many of these awards requires completion of the regular financial aid application, attainment of sophomore standing, and declaration of a major. Further information on eligibility is available on request.

The Ackerley Communications Merit Award
Aid Association for Lutherans Scholarships
Allentown Registered Nursing Scholarship
Alumni Scholarship Fund
American Lutheran Church-North Pacific District Scholarship
American Lutheran Church-Scholarship and Grant Program for
Minority Students
Florence Spinner Anderson Memorial Scholarship
William and Jeanie Anderson Scholarship
Ruth Anenson Scholarship
Anthropology Alumni Award
Mary Jane Aram Scholarship Fund
Hedvig Arthur Memorial
Award of Excellence (Pacific Coca-Cola Bottling Co.)
Marguerite and Wilmer Baer Scholarship
Don F. Bayer Memorial Scholarship
B.E.R.G. Minority Scholarship
Paul M. Bellamy Music Scholarship
Binder Memorial Scholarship
Alfred and Alice Bishop/Lutheran Brotherhood Endowed Scholarship

Richard J. and Olive Lewellen Blandau Scholarship and Loan Fund
Luther & Dillie Quale Boe Education Scholarship
Havana Bradner Memorial Scholarship
Jorunn Breiland Scholarship Fund
Agnes Brodahl Music Scholarship
Betty Brown Scholarship
Donald A. Brunner Memorial
Buchanan Family Endowed Scholarship
Chester Buhl Memorial Vocal Music Scholarship
Dr. and Mrs. W.B. Burns Fund
Burzlaff Memorial Scholarship
Cheney Foundation Educational Scholarships
Chevron Merit Awards
Kenneth Christopherson/Walter Pilgrim Endowed Scholarship in
Religion
Roger Claridge/Bethlehem Lutheran Church/Lutheran Brotherhood
Endowed Scholarship
Dorothy Cone Memorial/Lutheran Brotherhood Endowed Nursing
Scholarship
Irene O. Creso Merit Award
E. John and Lorene E. Dahlberg Jr. Endowed Scholarship
Carl Dalk Memorial Scholarship Fund
Harold and Frances S. Dawson/Lutheran Brotherhood Endowed Nursing
Scholarship
Deal Family Endowed Scholarship in the Liberal Arts
Ida A. Davis Fund
Doolittle Memorial Scholarship
Capt. W. Larry and Mrs. Janice D. Eichler Scholarship Fund
Carl and Ethel Erickson/Lutheran Brotherhood Endowed Scholarship
Leif Erikson Scholarship
Gerry and Linda Evanson Endowed Scholarship
Anthony L. Eyring Liberal Arts Scholarship
Faculty Memorial Scholarship Fund
Faith Lutheran Church of Portland Scholarship Fund
First Interstate Bank Scholarship
Phylaine V. and Kenneth L. Folsom Endowed Scholarship
Henry Foss Scholarship (for Norwegian students)
L.C. Foss Memorial Scholarship
Fuchs Foundation Scholarship
Henrietta Button Gaetz Nursing Scholarship Fund
Bertha Gilbertson Scholarship
John M. Gilbertson Foundation Scholarship
Edna M. Gorder/Lutheran Brotherhood Endowed Education Scholarship
James M. Gribbon Scholarship
Fern R. Grimm/Lutheran Brotherhood Endowed Scholarship
Gulrsrud Family Scholarship
Haas Foundation
Arnold Hagen Education Scholarship
Barbara Perry Haley Memorial Scholarship
Frank and Nellie Haley Endowed Scholarship
Olaf Halvorsen Scholarship
Johanne Marie Hansen Endowed Memorial Scholarship
Nels Marcus Hansen Endowed Memorial Scholarship
W.H. Hardtke Seminary Student Scholarship Fund
Brian Harshman Memorial Scholarship
Erling and Clara Haug Scholarship
Walter A. Heath Charitable Trust
Hopper Memorial
Edward W. Huber Memorial Scholarship
Irene Hultgren Nursing Scholarship
S.E. Idaho Incentive Scholarship Fund
Terry Irwin Scholarship
Lyle and Iris Jacobson Endowed Scholarship
Ole M. Jennestad Memorial Scholarship
Judge Bertil E. Johnson Scholarship
Johnson/Larson Scholarship
Agnes Solem Johnson/Lutheran Brotherhood Nursing Endowment
Pearl N. Johnson/Lutheran Brotherhood Endowed Nursing Scholarship
T.L. Johnson Sr./Lutheran Brotherhood Endowed Scholarship
Linda B. Karlsen Music Scholarship
Philip G. and Alice L. Kayser Scholarship Fund
Elizabeth B. Kelly Endowed Scholarship
Anne Kensrud Memorial Scholarship
Key Bank of Washington Endowed School of Business Scholarship
Rev. Karl Kilian Memorial Fund
William Kilworth Foundation Scholarship Fund
Melvin Kleweno Memorial Scholarship

Kluth Endowment for High Achievers in Athletics and Physical Education
 Jimmy Knudsen Memorial Scholarship
 Gladys M. Knutzen Endowed Scholarship
 Hilda S. Kramer Musical Appreciation Scholarship
 Louis and Leona Lamp Scholarship
 George Lanning Memorial/Lutheran Brotherhood Endowed Scholarship
 Ebba and E. Arthur Larson Nursing Scholarship
 Ludvig and Clara Larson Scholarship
 Orlando and Myrtle Lee/Lutheran Brotherhood Endowed Scholarship
 Guy J. and Louise Leesman Scholarship
 I.H.C./Lutheran Brotherhood Endowed Scholarship
 Mr. and Mrs. W. Hilding Lindberg Endowed Scholarship
 Richard E. and Anita Hillesland Londgren/Lutheran Brotherhood Endowed Scholarship
 Lutheran Brotherhood Legal Reserve Life Insurance Co. Scholarship
 Lutheran Brotherhood Scholarship
 Constance B. Lyon Scholarship
 James B. Malyon Scholarship
 Joe Marchinek Memorial Scholarship Fund
 Mathematics Scholarship
 Military Order of the Purple Heart Award
 Fred and Carolyn Mills Memorial Scholarship
 Lila Moe Scholarship
 Dr. Richard D. Moe Endowment for the Arts
 Katharine E. Monroe Scholarship
 Forestine Wise Monsen Memorial Piano Scholarship
 Lillian C. Morris Memorial Scholarship
 Murray-Danielson Management Award
 Gladys Mortvedt Voluntary Service Award
 Richard P. Neils Memorial Fund
 George and Alma Nelson Endowed Scholarship Fund
 Harold and Sylvia Nelson Endowed Scholarship
 Lars Nerland Norwegian Scholarship
 Milton and Hazel Nesvig International Student Scholarship
 Mr. and Mrs. Gus H. Nieman Memorial Scholarship
 Margaret Nistad Memorial Scholarship
 Nan Nokleberg Memorial/Lutheran Brotherhood Endowed Scholarship
 Orville Nupen Nursing Scholarship
 Clifford O. and Ella L. Olson Endowed Athletic/Music Scholarship
 Linda Nelson Olson/Lutheran Brotherhood Endowed Nursing Scholarship
 Robert E. Olson Memorial
 Roger Paetel Memorial Scholarship
 Katherine R. Parrish Memorial Nursing Scholarship
 Gordon Pearson Memorial
 Marvin J. and Ruby L. Pennington Scholarship
 Pepsi-Cola Company Merit Scholarship
 Mr. and Mrs. Lester Peter Scholarship (Oregon students)
 Blanche Pflaum Scholarship
 PLU Women's Club Scholarship
 PLUS Business Scholarship
 Nora J. Ponder Scholarship Fund
 Portland Area Alumni Scholarship
 Presser Foundation Scholarship
 Puget Sound Bank Scholarship
 Lyle Quasim Scholarship
 Anders and Emma Ramstad Award
 Recreational Equipment, Inc. (REI)
 Kathryn Reese Memorial Scholarship
 Dr. Walter and Joan Redman Schwindt Scholarship
 Simon and Marvel Reinbold Scholarship Endowment
 Charlotte & Lucian Rice Endowed Scholarship
 William O. Rieke Endowed Scholarship (Students from Cashmere, Leavenworth, and Wenatchee)
 Frank Russell Company Endowed Scholarship
 Mark Saltzman Memorial
 Marie Scheele General Endowed Scholarship
 Johannes and Aleen Schiller Endowment Fund
 SEA-FIRST Bank Minority Scholarship
 Margaret Shipley Endowed Scholarship in Accounting
 Siqueland Youth Scholarship (North Pacific District Luther League)
 Skinner Foundation Scholarship
 James R. Slater Endowed Scholarship
 James Slater Biology - ROTC Scholarship
 Frances Norton Smith Endowed Scholarship
 Smith Endowment Scholarship Fund

Haldor P. Sponheim Scholarship Fund
 Ethel Squires Scholarships
 William and Astrid Stancer Endowed Scholarship in Engineering Science
 Dora Stangland Memorial Scholarship
 Steele - Reese Scholarship Endowment
 Genevieve Stelberg Endowed Scholarship
 Emma Storaasli Award
 Tacoma Tigers Community Fund Scholarship
 Harvey & Helen Tengesdal Endowed Scholarship
 Edvin and Ida Tingelstad Memorial Scholarship
 Evelyn Törven Memorial Education Scholarship
 Tyler Memorial Nursing Scholarship
 Karl Ufer Memorial Scholarship
 David Ulleland Memorial Scholarship
 Ellen Valle Memorial Scholarship
 Wade/Hinderlie Scholarship Fund
 Ina H. Wake Memorial Scholarship
 Washington State Automobile Dealers Association Scholarship
 Western Washington Fair Association Scholarship
 Wick Family/Lutheran Brotherhood Endowed Scholarship
 Randall Yoakum Endowed Scholarship
 Ralph and Celestene Yoder Memorial Scholarship

Scholarship Partners Endowments

Ernest M. Ankrim/Lutheran Brotherhood Endowed Scholarship (Economics)
 Class of 1967 Scholarship (Descendants of Class)
 Marv and Dorothy Harshman Scholarship (Church Leadership/Athletics)
 Douglas Herland Memorial Scholarship (Crew)
 Paul Liebelt Scholarship (Mathematics)
 Gene and Marian Lundgaard/Lutheran Brotherhood Endowed Scholarship (Athletics)
 Dr. Maurice and Patricia Skones Scholarship (Vocal Music)
 Shirley Zurfluh/Lutheran Brotherhood Endowed Scholarship (Business)

GOVERNMENTAL GRANTS

The Federal Pell Grant Program is a Federal program designed to provide the "foundation" for a financial aid package. It is intended for students with high financial need. If the Student Aid Report (SAR) you receive indicates eligibility, all copies should be sent to the Office of Financial Aid and Scholarships.

Federal Supplemental Educational Opportunity Grants (SEOG) are available to students who have exceptional financial need. Grants range from \$100 to \$4,000 per year. 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.

Washington State Need Grants are available to eligible residents of the State of Washington who attend PLU. These grants are intended for students with high need. On the basis of guidelines established by the Higher Education Coordinating Board, students with specified need as computer from the FAFSA are submitted to the State for consideration. Present procedure does not require a separate application.

Army ROTC Scholarships are available for students in all disciplines and are not based on need. Scholarships pay up to 80% of tuition. Books, fees, and supplies are also covered. Recipients also receive a \$100/month stipend (up to \$1,000 per school year). As of fall 1991 new advanced designee scholarship recipients also receive additional scholarship aid from Pacific Lutheran University. ROTC scholarship recipients applying for the institutional match must also file the Free Application for Federal Students Aid (FAFSA). Contact the Office of Admissions or Financial Aid for details.

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 900 students work on campus each year. The university's annual student payroll exceeds \$1,800,000. The

average on-campus job approximates eleven hours per week, and produces around \$1,528 during an academic year.

All student placements for on-campus and off-campus jobs are handled by the Career Services Office. Actual hiring of students is done at the beginning of the school year and at other times as vacancies occur.

The Federal College Work-Study Program offers only on-campus employment. 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.

Federal Perkins Loan (formerly National Direct Student Loan-NDSL) – Eligibility is determined by the PLU Office of Financial Aid and Scholarships from the FAFSA and is based on need. Most loans range between \$1,000 and \$1,500 annually, and cannot exceed \$6,000 for the first two years of school, nor an aggregate of \$15,000 for an undergraduate degree. No interest accrues and no payments on principal are necessary until six months after a recipient ceases to be a half-time student enrolled in an eligible institution. Simple interest is 5% during the repayment period. Up to 100% cancellation is available for teaching the disabled 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 Perkins Loan. Up to \$4,000 is available, dependent on federal funding. Loans average \$2,500. Repayment begins one year after graduation. Partial or full cancellation is possible under certain conditions.

FEDERAL FAMILY EDUCATION LOANS

Federal loans are obtained through a bank, credit union, or savings and loan association on an application that is certified by the Office of Financial aid and Scholarships. Loan funds are sent to the university by the lenders. Student borrowers must attend an entrance counseling session before receiving the first disbursement at PLU.

Federal Stafford Student Loan – This program provides two types of loans: subsidized Stafford Loans and unsubsidized Stafford Loans. Subsidized loans are based on financial eligibility, and the Federal government pays the interest while the student is in school. Unsubsidized loans are not based on financial eligibility, and the student is responsible for the interest while in school. The student may receive a combination of both loans, up to the annual maximum:

| | |
|---------------------|-----------------|
| Undergraduate | \$2,625–\$5,500 |
| Graduate | \$8,500 |

The aggregate maximum is \$23,000 for undergraduates, \$65,500 for graduates.

Repayment of principal is deferred until the student ceases to be enrolled at least half-time. The interest rate is variable (based on the 91-day Treasury Bill plus 3.1%) with a cap of 9%.

Federal Plus Loan – This loan is for parents of a dependent student. The loan has a variable interest rate (based on the 52 week Treasury Bill, plus 3.1%) with a cap of 10%. Repayment begins sixty (60) days after the first disbursement, although a few lenders will allow interest only payments to be made while the student is attending school at least half-time. Either parent may borrow this loan for a student. Maximum eligibility is limited to the student's cost of attendance less financial aid received.

Alternative Loan Programs – Many reputable private lending organizations provide families with a means to finance a student's education. Most private programs offer low interest, no collateral loans that are based on individual need, credit capacity, and school costs. Many allow deferment of principal until after the student ceases full-time enrollment. The Office of Financial Aid and Scholarships has available a sample list of private lenders.

VETERANS AFFAIRS AND VOCATIONAL REHABILITATION

Pacific Lutheran University's academic programs of study are approved by the Washington State Higher Education Coordinating Board's State Approving Agency (HECB/SAA) for enrollment of persons eligible to receive educational benefits under Title 38 and Title 10 USC.

Veterans, widows, and children of deceased veterans who wish to inquire about their eligibility for benefits should contact the Regional Office of the Veterans Administration, Federal Building, 915 Second Avenue, Seattle, Washington 98174. Persons within the State of Washington may telephone 1-800-827-1000.

Students should gain admission to the university before making application for benefits. Students are required to register at the university's Veterans Affairs Office before each term to insure continuous receipt of benefits.

Tuition and Fees

The following charts list tuition by credit hour for 1994-95 (\$416 undergraduate and graduate).

Tuition rate for hours above 16 in fall or spring semester is one-half the regular rate or \$208.00 per credit hour.

| | |
|-----------------------------------|--------------------|
| FALL | |
| 16 hours x \$416 per hour | = \$6656.00 |
| <i>or</i> | |
| (16 hours x \$416 per hour) | = \$6656.00 |
| + 4 hours @ half-price | = \$832.00 |
| total of 20 hours | = \$7488.00 |

| | |
|--------------------------------|--------------------|
| JANUARY TERM | |
| 4 hours x \$416 per hour | = \$1664.00 |
| <i>or</i> | |
| 4 hours x \$416 per hour | = \$1664.00 |
| + 4 hours @ half price | = \$832.00 |
| total of 8 hours | = \$2496.00 |

| | |
|-----------------------------------|--------------------|
| SPRING | |
| 16 hours x \$416 per hour | = \$6656.00 |
| <i>or</i> | |
| (16 hours x \$416 per hour) | = \$6656.00 |
| + 4 hours @ half-price | = \$832.00 |
| total of 20 hours | = \$7488.00 |

TUITION BY CREDIT HOUR

| CREDIT HR. | TUITION |
|------------|----------|
| 1 | \$416 |
| 2 | \$832 |
| 3 | \$1,248 |
| 4 | \$1,664 |
| 5 | \$2,080 |
| 6 | \$2,496 |
| 7 | \$2,912 |
| 8 | \$3,328 |
| 9 | \$3,744 |
| 10 | \$4,160 |
| 11 | \$4,576 |
| 12 | \$4,992 |
| 13 | \$5,408 |
| 14 | \$5,824 |
| 15 | \$6,240 |
| 16 | \$6,656 |
| 17 | \$7,072 |
| 18 | \$7,488 |
| 19 | \$7,904 |
| 20 | \$8,320 |
| 21 | \$8,736 |
| 22 | \$9,152 |
| 23 | \$9,568 |
| 24 | \$9,984 |
| 25 | \$10,400 |
| 26 | \$10,816 |
| 27 | \$11,232 |
| 28 | \$11,648 |
| 29 | \$12,064 |
| 30 | \$12,480 |
| 31 | \$12,896 |
| 32 | \$13,312 |

NOTE: Off Campus Program students pay a program fee (not PLU tuition) specific to the individual program sites. Contact the Center for International Programs for complete details.

CREDIT BY EXAMINATION

Students who test out of a class (Credit by Examination) will be charged 25 percent of regular tuition for that class (\$104 per credit hour).

REGISTERING AFTER ADD/DROP

Students who register after the last day of Add/Drop will be assessed an administrative handling fee of \$50 for each course added. Students who drop a class after the Add/Drop deadline waive their right to a refund.

COURSE FEES

Some courses require additional fees; they will be added to the tuition total. The class schedule available from the Registrar's Office provides information about any fees that may affect an individual schedule. Music and education students should note:

The *Private Music Lesson Fee* is \$125 for one credit or \$200 for two or more credits per medium.

A one-time *Education Placement Fee* of \$40 is charged in the last semester of the B.A.E. program.

MISCELLANEOUS FEES

Health Services will charge a student's account, or a student may

pay directly, for immunizations, lab work, and prescriptions that are required.

Unpaid Fines such as parking violations and overdue library books will appear on the monthly statement. Students are encouraged to pay these fines as incurred to avoid late fees and handling charges.

A one-time *Graduation Fee* of \$30 is charged to baccalaureate and master's degree candidates.

A fee of \$5 is charged to replace *lost, damaged, or stolen student ID's*. This must be paid at Registrar's Office.

The fee for *official transcripts* is \$5 for each transcript.

SPECIAL INFORMATION

Optional student health and accident insurance is available through an independent carrier. A brochure is available from the Student Life Office.

Parking permits are free and required for all student vehicles. Failure to register may result in a fine.

ROOM AND MEALS

Students who are under 21 and are taking 12 or more credit hours must live and eat meals on campus. There are exceptions:

1. If one lives at home with a parent, legal guardian, or spouse
2. If one turns 21 before October 15 (fall semester) or March 15 (spring semester)
3. If one has attained senior status (90 credit hours) before the beginning of the semester

Appeals may be addressed to the Residential Life Office.

Room – Each semester, the room charge (double occupancy) is \$1,120. If a student resides on campus either fall or spring semester, then the room fee is waived during the January term. The rates for single occupancy of a double room are as follows: \$400 per semester for a student who has fewer than 90 credit hours (senior standing), or who is under the age of 21 by October 15 for fall semester, March 15 for spring semester. The cost is \$200 per semester for students who meet these criteria.

Special Housing Needs – Special housing requests may be addressed to the Residential Life Office.

A limited number of single rooms are available at variable rates.

Limited housing is available during winter and spring breaks at a cost of \$9 per day.

A limited number of two- and three-bedroom family housing units are available. Rent ranges from \$160 to \$400 per month. A \$100 damage deposit is required with the application and a \$100 cleaning deposit is required upon occupancy.

Meal Plans – Residential (on campus) students may select from the first three meal plans listed below. Commuter (off campus) students may select from any of the five meal plans. The costs of the plans vary; see below for details.

Meal Plan 1 includes 20 meals per week (breakfast, lunch, and dinner six days, and brunch and dinner on Sunday).

| | |
|---------------|-------------------|
| Fall | \$1,018.00 |
| January | \$212.00 |
| Spring | \$1,018.00 |
| TOTAL: | \$2,248.00 |

Meal Plan 2 allows the choice of any 15 meals per week.

| | |
|---------------|-------------------|
| Fall | \$974.00 |
| January | \$212.00 |
| Spring | \$974.00 |
| TOTAL: | \$2,160.00 |

Meal Plan 3 lets one select any 10 meals per week.

| | |
|---------------|-------------------|
| Fall | \$813.00 |
| January | \$212.00 |
| Spring | \$813.00 |
| TOTAL: | \$1,838.00 |

Commuter students may choose from the plans above or select one below. Commuter students must contact Food Services each semester to begin their meal plan of choice.

Meal Plan 4 consists of weekday lunches only.

| | |
|-----------------|----------|
| Fall | \$341.00 |
| January | \$78.00 |
| Spring | \$341.00 |
| TOTAL: \$760.00 | |

Meal Plan 5 lets one select any five meals per week.

| | |
|-----------------|----------|
| Fall | \$394.00 |
| January | \$90.00 |
| Spring | \$394.00 |
| TOTAL: \$878.00 | |

January Term Only Room and Meals

If a student lives on campus during the January term only, the room charge will be \$250 and meals will cost \$212, totaling \$462.

ADVANCE PAYMENT

New students need to make a \$200 advance payment to confirm their offer of admission. The payment is refundable until May 15 for fall, December 15 for the January term, and January 15 for spring. Requests for a refund must be made in writing to the Admissions Office.

Returning students wanting to reserve a room for the following year must make a \$200 advance payment. The payment will be credited to the following year's account upon occupancy. The advance payment is 100% refundable by making a written request to the Residential Life Office by July 1. A 50% refund will be granted if the written request is received after July 1, but by August 1. No refund will be granted after August 1.

FINANCIAL AID

Scholarships, grants, talent awards, and loans awarded by PLU's Office of Financial Aid and Scholarships, and outside aid (from fraternal organizations, high schools, churches, etc.) sent directly to PLU are credited to the student's account. Awards over \$100 will be equally divided between fall and January term/spring semesters. Awards under \$100 will be applied to one semester only.

Outside aid will not be applied to the account until the funds are received by PLU.

NOTE: Because financial aid is equally divided between fall and January term/spring semesters, the cost is generally higher for the January term/spring semester if one registers for a January term course and eats on campus.

Perkins and Nursing Student Loan recipients are required to sign for their loans in the Student Accounts and Loan Department at the beginning of each semester.

Federal Family Educational Loan Programs (FFELP) (these are Federal Stafford, Unsubsidized Federal Stafford and Federal Parent Plus), obtained through banks and other lending institutions, will be applied after the proper endorsement by the student or parent. Funds not endorsed within 45 days of receipt will be returned to the lending institution as defined by federal regulations. A 4 percent processing fee is subtracted from the loan by the lending institution.

State of Alaska Loans must be endorsed in the Financial Aid Office before the funds can be deposited in the student's account.

Recipients of the following funds must go to the Financial Aid Office to pick up their check. The check is made payable to the student. Those funds are: Washington State Need Grant, Washington Scholars, Nursing Conditional, Paul Douglas Scholarship, Educational Opportunity Grant, and Future Teachers.

Students who secure part-time employment as part of their financial aid (work study) receive monthly paychecks based on work performed. Paychecks may be picked up at the cashier's window at the Business Office on payday and may be applied to unpaid student account balances.

It is the student's responsibility to inform the Office of Financial Aid and Scholarships of any changes in financial status. Additional funds or benefits from any source (such as free or partial room and meals) received or promised, before or after a student is awarded aid from PLU, must be reported. Actual class registration that produces a lower tuition rate than anticipated may reduce a financial aid award. By law, the Office of Financial Aid and Scholarships is required to make adjustments to prevent over awards.

Refund and Repayment Policy According to Federal Disclosure Requirement

Detailed information on the refund and/or repayment calculations may be obtained through the Office of Financial Aid and Scholarships. See below for guidelines.

TITLE IV Refund— If any portion of an account was paid with TITLE-IV Federal Financial Aid, a refund will be prorated to each of the financial aid programs in the following order: Federal Family Educational Loan Programs (FFELP), (Federal Stafford, Unsubsidized Federal Stafford), Federal Perkins Loan, Federal Pell Grant, Federal SEOG, other TITLE IV funds, non-federal aid (institutional aid, state aid, and other).

TITLE IV Repayment— Repayment of funds received from TITLE IV Financial Aid programs may be necessary in instances where funds were received from an account after all charges were satisfied. A federal formula will be used to determine the appropriate payment. Funds that need to be repaid will be returned to their source in the following order: SEOG, Federal Perkins, Pell, other TITLE IV, non-federal TITLE IV funds (institutional aid, state aid, and other).

PAYMENT PLANS

Students must pay at the time of registration or be enrolled in an approved payment plan at the time of registration.

Option 1— Those who pay early may qualify for Lutebucks, coupons redeemable at the PLU Bookstore. To receive Lutebucks, payment is due in full by July 29 for fall semester and December 22 for the January term/spring. Otherwise, payment for Option 1 is due in full by August 15 for fall and January 15 for January term/spring.

Any new student or currently enrolled student at PLU whose prior owing balance is paid in full and who has an acceptable credit history with PLU can apply for the following plan:

Option 2— PLU Budget Plan allows a student to pay for a full year of study over ten months, interest free. There is a \$50 set-up fee. To estimate payments, add together tuition, room, board, and fees for the year. Deduct financial aid (excluding work study and Parent Plus Loans) and divide by 10. A payment schedule will be prepared once the payment request form is completed and returned with the \$50 set-up fee.

An eight month Budget Plan is available for payments from September to April. A \$75 set-up fee is required.

Budget Plans are also available for summer only, with a set-up fee of \$25 and for fall or January term/spring only, with a set-up fee of \$50. Contact the Student Accounts Office for information, or complete the Budget Plan form.

If financial aid, credit hours, or room and meal charges change, the Student Accounts Office should be contacted for a revision of the monthly payment schedule. Revisions due to financial aid changes can be made at any time; all other revisions can be made at the student's request or after the add/drop period.

HOW TO MAKE PAYMENTS

Mail payments with statement remittance stub to PLU, Box 21167, Seattle, WA 98111-3167, or deliver payments to the PLU Business Office in the Administration Building, Room 110.

Checks should be made payable to Pacific Lutheran University. The student's name and account number (social security number) should be included with all payments. A \$15 fee is charged on all returned checks.

VISA and MasterCard are accepted. An automatic monthly payment may be arranged with the Student Accounts Office. An automatic payment form will be mailed out at the student's request; this will eliminate calling each month to charge payments. No fee is charged for this service.

Please **DO NOT** mail cash. A periodically adjusted discount rate will be charged against Canadian currency.

Interest and Late Fees

Payment Option 1 – A 1.5% monthly default interest is charged on balances 30 days past due.

Payment Option 2, Budget Plan – Payments received after the 20th of the month will be assessed a \$25 per month late fee.

Missed Payments

Failure to make minimum monthly payments as agreed will result in removal from a payment plan and the account will be placed on financial hold.

Student accounts 60 days delinquent may be turned over to an outside collection agency. A 40% charge will be added to such an account to cover collection cost.

Financial Hold

If a student account is past due, it will be placed on "financial hold." Basic university privileges will be denied until the account is settled, including the ability to register, receive copies of a transcript or diploma, or cash checks.

Academic Hold

The Registrar, Student Life Office, or Residential Life Office can place an account on "academic hold." Registration for classes is precluded until any pending matter with those offices is settled.

Medical Hold

A "medical hold" prevents a student from registering because Health Services has not received the Medical History Form or because the student does not have the necessary immunizations.

Rights and Responsibilities

Upon registration, the student and his or her parents or legal guardian, as the case may be, agree to accept their responsibility and legal obligation to pay all tuition costs, room and meal fees, and other special fees incurred or to be incurred for the student's education. The university, in turn, agrees to make available to the student certain educational programs and the use of certain facilities as applicable and as described in this catalog. A failure to pay all university bills shall release the university of any obligation to continue to provide the applicable educational benefits and services, to include statements of honorable dismissal, grade reports, transcript of records, diplomas, or preregistrations. The student shall also be denied admittance to classes and the use of university facilities.

Refunds

If a student officially drops a single class or completely withdraws from the semester during the first two weeks of fall or spring semester, a full tuition refund will be given. The Advance Payment is not refunded. A ten percent per day charge will be assessed for complete withdrawals during the third and fourth week. No refunds are available after the fourth week for complete withdrawals or after the second week for dropping individual classes.

In the event of a withdrawal from the January term during the first week, a full tuition refund will be given. No refund is available after the first week.

Residence hall and meal refunds will adhere to the terms of the Residential Life contract.

Students who completely withdraw from the university will be refunded the semester room charge as follows:

- First two weeks of semester: 80% refund
- Third week of semester: 70% refund
- Fourth week of semester: 60% refund
- Fifth week of semester: 50% refund
- After the fifth week of semester: no refund

A pro-rated meal refund will be made for necessary withdrawal from the university. Meal plan refunds may be considered for meals missed due to working but will not be made for any university trips, such as music tours or athletic events.

Student requests for a tuition refund related to a withdrawal for medical reasons are considered on an individual basis by the vice president for student life. Such requests require documentation from a physician or the director of Health Services.

Refund of overpayments or excess financial aid funds cannot begin to be processed until after the last day of the add/drop period. Refunds may be requested by filling out a Refund Request Form, which is available in the Student Accounts Office, or upon a student's written request. At least two weeks must be allowed for processing.

Before the beginning of each semester, students anticipating a refund may see Student Accounts for information about book advances.

Notice of withdrawal must be made in writing to the Registrar of PLU, and received before the deadlines given above. Oral requests will not be considered. Charges will remain on the student's account until such notice is received.



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 co-curricular experiences are all available and total components of education at PLU. In a time when there is a need for meaningful community, the 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. The services provided reflect changing student needs, and the opportunities for student participation include virtually all aspects of the university. Individual attention is given to students' concerns, including a variety of specific services outlined below.

CAMPUS MINISTRY

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 each semester for all who wish to participate. The University Congregation meets in regular worship and 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 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.

RESPONSIBILITIES OF COMMUNITY LIFE

Within any community certain regulations are necessary. Pacific Lutheran University adopts only those standards believed to be reasonably necessary and admits students with the expectation that they will comply with those standards. All members of the university community are expected to respect the rights and integrity of others. Conduct which is detrimental to students, faculty, staff, or the university, or which violates local, state, or federal laws, may be grounds for sanctions or for dismissal. The university prohibits the possession or consumption of alcoholic beverages on campus and limits the hours when students may have visitors of the opposite sex in their residence hall rooms. The *Student Handbook* contains the *Code of Conduct* for all students.

NEW STUDENT ORIENTATION

New student orientation endeavors to assist students and their families with the transition to PLU. The three-day fall program introduces students to many dimensions of PLU life. Fall orientation includes meeting with a faculty adviser, working in small groups with other new students, becoming acquainted with campus services, and having some relaxed time with other students before classes begin. Special activities are also planned which respond to concerns of families of new students. While January and spring orientations are more condensed, they also provide new students with an introduction to academic life and co-curricular activities.

ACCESSIBILITY

The university complies with Section 504 of the Rehabilitation Act and provides reasonable accommodations to students with handicaps and/or disabilities. Coordination of services is handled by the Counseling and Testing Services. The Student Needs Advocacy Panel provides an avenue for student concerns.

RESIDENTIAL LIFE

Residential living is an integral part of the educational process at PLU. The university requires that all single full-time (12 or more semester hours) students room and board on campus unless the student is living at home with parent(s) or legal guardian(s), is 21 years of age or older on or before October 15 for the academic year and March 15 for spring semester, or has senior status (90 semester hours). All exceptions to this policy must be requested from the Residential Life Office regarding room and the Food Service regarding meals.

As a residential campus, Pacific Lutheran University offers students a valuable experience in community living. The university recognizes the importance of non-classroom activities in providing an education. The aim of residential living is to help students grow personally, socially, culturally, and spiritually.

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 experience, formal and informal programs, and peer associations. The student governing bodies are strong and actively participate in campus life.

A selection of modern, attractive halls, each with its own traditions and unique advantages, offers 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. One all-women's hall is available for those women 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 a limited number of apartments on campus for family student housing. Two and three-bedroom units are available. Application for these apartments can be made through the Residential Life Office.

STUDENT ACTIVITIES

Student activities are regarded as essential factors in higher education. Some are related to courses of instruction such as drama, music, and physical education; others are connected more closely to recreational and social life. Involvement in student activities provides practical experience and at the same time develops an understanding of self in relation to others. Co-curricular programs include student government (Associated Students and Residence Hall Council), sports activities (varsity, intramural, and club sports), student media (newspaper, yearbook, artistic magazine, radio, and television), student clubs and organizations, and community service programs offered through the Volunteer Center. With over 100 student activities in which to become involved, there is sure to be at least one which will enrich a person's college experience.

VOLUNTEER CENTER

PLU's Volunteer Center, run by students and housed in the Campus Ministry Office (UC, lower level), seeks to give students the opportunity to put to work their dreams for a better world. Community organizations request student volunteers, or students dream up their own ways of serving; the Volunteer Center helps with the coordination. Class projects, residence hall group activities, one day or several, the Volunteer Center can help you help! Drop by or phone (x8318) and discover how easy it is to make a big difference in life!

WOMEN'S CENTER

The Women's Center provides services, referrals, and support to all students, faculty, and staff of the university. The climate of the center is such that all persons are valued and empowered to pursue their individual and collective goals. The Center offers peer-support groups, educational resources, and programs

which celebrate the talents and creative expressions of women. The Women's Center also is the main sponsor of Women's History Month activities held every March. The Women's Center is located at 754 S. 120th.

ADULT STUDENT PROGRAMS

The student-run Adult Student Organization seeks to identify the special needs of students over the age of 25 and create the support networks that will help adult students succeed. The University Center and Multi-Ethnic Resource Center provide administrative support to assist adult students with orientation and guidance. The Commuter Lounge, on the lower level of the University Center, serves as a campus headquarters for many adult students.



MULTI-ETHNIC RESOURCE CENTER

The Multi-Ethnic Resource Center (MRC) serves students, faculty, and staff of color. For students, special activities, peer mentoring and advising, leadership opportunity, and other support services are available. MRC offers a place for students to gather for socializing and seeking information and assistance. For faculty and staff, the MRC is a location for teaching and learning material on the subject of racial and ethnic diversity. Clerical assistance, small travel grants, and other services are also available to support special projects and research focusing on national race-related issues. The Multi-Ethnic Resource Center is located on the lower level of the University Center.

CENTER FOR INTERNATIONAL PROGRAMS

The Center for International Programs/International Student Services provides assistance to international students in adjusting to the university and in meeting both education (career) and personal needs. Services include airport pick-up, orientation, registration, and on-campus liaison with other university offices. Assistance with immigration and government regulations as well as immigration procedures regarding temporary travel, work applications, and extensions of stay is available.

COMMUTER STUDENT SERVICES

Many students commute to the PLU campus. In addition to the university services and programs available to all students, the University Center supports commuter students with a lounge area, message/emergency locator service, and lockers. Programs designed to address the special needs of commuters are sponsored through student activities and commuter groups like the Adult Student Organization. Students desiring more information should contact the University Center Office.

ENVIRONS

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

Recreationally, the grandeur of the Pacific Northwest 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 arts and provide dozens of galleries and museums as well as unique shopping and dining experiences.

STUDENT SERVICES

Health Services are staffed with one nurse practitioner and one physician's assistant. A physician is available for consultation and referral. Services available include outpatient health care, alcohol/drug referral, laboratory tests, contraception/pregnancy counseling, and health education. All students may use the Health Services.

Sickness and Accident Insurance is available to all students on a voluntary basis. The Health Service strongly urges all students to have medical insurance. The Group Accident and Sickness Plan offers coverage 24 hours a day, 12 months a year, anywhere in the world. This plan is available throughout the year. A brochure outlining the program is available from the Business Office and the Health Services.

Counseling and Testing Services assist students in coping with developmental issues. Trained and experienced psychologists, counselors, and a consulting psychiatrist offer individual counseling. Periodically, group counseling is also provided. A variety of interest inventories and psychological tests are available to assist students with career planning, educational adjustment, and personal problems. Coordination of services to students with disabilities is also available.

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 the cafeteria. Dinner options are also available in the pizza restaurant and coffee shops. "Grab and Go" items are available during peak lunch hours. No deductions are made for students eating fewer meals than previously contracted for unless a conflict exists due to work. In case of conflict, a student must contact the Food Service Office in the University Center to obtain approval for a deduction.

Residential students are offered 3 meal options: Any 20, 15, or 10 meals per week.

Students living off-campus are encouraged to select one of the meal plans offered. Students may sign up for a plan at the Food Service Office.

Students with special dietary requirements, specifically approved in writing by a physician, can in most cases be accommodated by contacting the Food Service Registered Dietitians. This service is provided at no extra cost.

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

Visitors may eat in any of the facilities.

Scheduling Services for meeting rooms are maintained in the University Center. All university activities must be scheduled through this office. Scheduling student activities is a joint responsibility of the requesting group, scheduling coordinator, and director of the University Center.

PLU Bookstore is owned and operated by Pacific Lutheran University for the benefit of students, faculty, and staff. The bookstore sells textbooks and supplies that are required or suggested by faculty members for their courses. Computer hardware

and software are available at educational pricing. General reading material, supplies, gift items, greeting cards, and imprinted clothing are also sold. Special book orders are welcome.

Career Services' goal is to provide a program of career development and life planning. Students are assisted in integrating their personal values and aptitudes with career choices through individual counseling, workshops, residence hall presentations, and a computerized career guidance program. The office staff assist students and first-year alumni in developing job-search techniques by providing instructional videos, company literature, an extensive career library of opportunities in specific majors, industry directories, and employment forecasts. Additionally, the office coordinates a schedule of recruiters from industry, business, government, and graduate schools.

Career Services coordinates and promotes all part-time and full-time employment opportunities for students. This consists of financial assistance programs such as work study, campus and community opportunities, updated listings of local jobs, and nation-wide internships and summer employment opportunities. Specially selected forums throughout the year also bring students and employers together, in order to help students to find work that is both financially and personally rewarding.

GRIEVANCE PROCEDURES

Policies and procedures at the university are intended to maintain an orderly educational environment conducive to student learning and development. In order to fulfill institutional responsibility and at the same follow procedures that are fair, consistent, and protective of each person's rights, appropriate grievance procedures have been established. If a student has reason to believe that an academic or administrative action is unjust, capricious, or discriminatory, these procedures are available for the student to seek redress.

The university has a team of grievance officers to facilitate the grievance process. The grievance officers are Cristina del Rosario (University Center Multi-Ethnic Resource Center) and Mary Pieper (Director of Personnel). Either of the grievance officers may be contacted to receive assistance. If an officer cannot be reached, messages may be left by calling 535-7186.

Copies of grievance procedures are available for review at the office of each grievance officer.

Academic Procedures

ADVISING

The university expects that all students, at one time or another, will need assistance in planning academic programs consistent with their needs and goals. Both to help students make their initial adjustment to the academic load at PLU and to provide occasional counsel throughout their academic careers, the university has established a network of faculty advisers and an Academic Advising Office.

Faculty Advisers – All students enrolled in degree programs have faculty advisers whose overall responsibility is to guide academic progress. In their work with individual students, advisers have the assistance of personnel in a number of student services offices: the Academic Advising Office, the Academic Assistance Center, the Career Services Office, Counseling and Testing Services, the Multi-Ethnic Resource Center, the Campus Ministry, the international student adviser, and residence hall directors and resident assistants.

General Advisers: At the time of entry, each student is assigned a general adviser, usually by matching student and adviser interests. Students who wish to explore the general curriculum before deciding on an interest area are assigned to exploratory advisers.

During the first semester, an advising file for each student is sent to the adviser, and an official record of academic progress is issued to the student.

Major Advisers: Upon formal declaration of a major, students are assigned major advisers to replace their general advisers. Major advisers guide students' progress toward their chosen degree goals.

Students are allowed to change advisers as may be appropriate or necessary, using a simple adviser change form. Students and advisers are expected to meet regularly, though the actual number of meetings will vary according to individual needs.

Minimally, three meetings are required during the freshman year and one each year thereafter, though all students are encouraged to meet with their advisers as often as seems necessary or useful.

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 January term is four hours with a maximum of five hours. The minimum semester load for a full-time student is twelve hours.

Students registering full-time (12 hours or more) must be formally admitted to the university by the Admissions Office. Refer to the *Admission* section of this catalog for application procedures.

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 are encouraged to pre-register. Students must register for each new semester on the designated days and are not officially enrolled until their registration has been cleared by the Student Accounts Office.

EARLY REGISTRATION PROGRAM FOR FIRST-YEAR STUDENTS

Well in advance of arrival on campus for the first semester, all accepted first-year students 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 first-year students occurs during June or January, depending on whether students begin in the fall or spring semester. Early registration is coordinated by the Admissions Office.

COURSE SELECTIONS FOR FRESHMAN STUDENTS

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.

The Freshman Year Program

The Examined Life: Into Uncertainty and Beyond

The freshman year core provides a supportively challenging context in which to begin the quest for, and adventure of, a larger vision for life. University education is about more than skills, though these should be developed through active, guided use. University education is about liberating students for critical and committed living. Particularly at PLU, the purpose of education is to combine well-developed critical capacities with compassion and vision for service. An education at PLU develops persons capable of sustained, reasoned, and creative conversation and commitment in a multicultural, ideologically plural world.

In addition to orientation and advising programs, the unique components of the freshman year comprise three courses. One must be taken in the student's first semester. Freshman year core requirements must be completed during the student's freshman year.

1A. *Inquiry Seminar: Writing for Discovery* (4 hours)

These seminars focus on writing, thinking, speaking, and reading. They involve writing as a way of thinking, of learning, and of discovering and ordering ideas. Taught by faculty in any department or school, these seminars are organized around topics that engage students and faculty in dialogue and provide the opportunity to examine issues from a variety of perspectives.

1B. *Inquiry Seminar: Critical Conversation* (2 hours)

These seminars involve learning how to participate in the exchange of ideas through the experience of articulating questions, listening for meaning and nuance in what others write and say, seeing ideas and positions in context, arguing, moving to consensus, and living with conflict. Like the 1A writing seminars, these seminars are taught by faculty from various departments and schools. When taught in January, these seminars are 4 hours.

1C. *Freshman January Term* (4 hours)

A course that fulfills one of the other core requirements (lines 1-4 and 6 below), designed both for freshman students and to take advantage of the single-course format of the January term.

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

1. Students are responsible for selecting their courses. Counselors and faculty advisers are always available to assist with planning and to make suggestions.
2. 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.
3. 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 general university or core requirements while selecting several others for exploration of special interests.

CHANGES IN REGISTRATION

The following terms are used for registration purposes at PLU:

Add/Drop: A student may add or drop a course at any time during the first two weeks of class with full tuition refund. In most cases, adding and dropping can be done through Tele-Registration.

Withdrawal: A student who wishes to drop a course after the first two weeks of class must officially withdraw from the course. To withdraw from a course the student must obtain the instructor's signature on the withdrawal form and return it to the Registrar's Office before the final examination week. If a course ends before the normal ending date of the term, no student may withdraw after the final examination has been administered. The grade of "W" will appear on the student's grade report and transcript, and no tuition will be refunded.

Unofficial Withdrawal: A student who fails to withdraw officially from a course will receive an unofficial withdrawal. The grade of "UW" will appear on the student's grade report and transcript.

Medical Withdrawal: Students may also completely withdraw from a term for medical reasons. The student must provide written evidence from a physician to the vice president and dean for student life. The grade of "WM" will appear on the student's grade report and transcript.

CREDIT RESTRICTIONS

Credit is not allowed for a mathematics or a foreign language course listed as a prerequisite when taken after the higher-level course. For example, a student who has completed Spanish 201 cannot later receive credit for Spanish 102.

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 are entitled to honorable dismissal from the university if their record of conduct is satisfactory and if all financial obligations have been satisfied.

RE-ENTERING THE UNIVERSITY

1. Students who have not attended the university for a period of up to six years may re-enter PLU by notifying the Registrar's Office of their intention to return. Re-entering students must provide current address and degree information and official transcripts from any other college attended during their absence from PLU. Previous financial obligations to the university must be cleared, and students must have current health clearance with the University Health Services before they may register.
2. Students seeking to return to PLU more than six years after their last date of attendance must be re-admitted to the university. An application for readmission should be submitted to the Office of Admissions, along with official transcripts from any other college attended during the absence from PLU.

THE GRADING SYSTEM

Students are graded according to the following designations:

| | |
|----|---|
| A+ | = 4.00 grade points per hour, credit given |
| A | = 4.00 grade points per hour, credit given |
| A- | = 3.67 grade points per hour, credit given |
| B+ | = 3.33 grade points per hour, credit given |
| B | = 3.00 grade points per hour, credit given |
| B- | = 2.67 grade points per hour, credit given |
| C+ | = 2.33 grade points per hour, credit given |
| C | = 2.00 grade points per hour, credit given |
| C- | = 1.67 grade points per hour, credit given |
| D+ | = 1.33 grade points per hour, credit given |
| D | = 1.00 grade point per hour, credit given |
| D- | = 0.67 grade point per hour, credit given |
| E- | = 0.00 grade points per hour, no credit given |

Registrar's notations:

NG = *No grade submitted by instructor*

UW = *Unofficial withdrawal, recorded by the registrar*

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

H = *Credit given (honors); used for courses open to high school students.*

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. The Incomplete is not intended to be a permanent grade. An Incomplete does not entitle a student to sit in class again without re-registering.

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 8 credit hours (regardless of repeats, pass or fail).
2. Not more than one course (4 credit hours) may be taken pass-fail in fulfillment of general university or core requirements, or of the option requirement of the College of Arts and Sciences and of the School of Physical Education.
3. The pass-fail option may not be applied to a course taken in fulfillment of a student's major or minor program, except for a first course in the major or minor field that is taken before the student's declaration of a major or minor program.
4. To exercise the pass-fail option, students must file their intention with the Registrar's Office no later than the last day of the eighth week. In courses that meet less than the full length of the semester, the pass-fail agreement must be filed by the mid-point of the course.
5. In the pass-fail option, only grades of A+ through C- will be regarded as "pass"; grades of D+ through E will be regarded as "fail." Pass-fail grades do not affect the grade point average.

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.

CLASS ATTENDANCE

The university assumes that all registered students have freely accepted personal responsibility for regular class attendance. Course grades reflect the quality of students' academic performance as a whole, which normally includes regular participation in the total class experience and is evaluated accordingly. Absences may lead to a reduction of a student's final grade. In the event of unavoidable absence, students are encouraged as a matter of courtesy, as well as in their own best interest, to inform the instructor. Assignment of make-up work, if any, is at the discretion of the instructor.

ACADEMIC HONESTY

Both the value and the success of any academic activity, as well as of the entire academic enterprise, have depended for centuries on the fundamental principle of absolute honesty. The university, therefore, expects all its faculty and students to honor this principle scrupulously.

Since academic dishonesty is a serious breach of the universally recognized code of academic ethics, it is every faculty member's obligation to impose appropriate sanctions for any demonstrable instance of such misconduct on the part of a student.

ACADEMIC STATUS

Most students make normal academic progress; however, some may from time to time be notified that they must improve their grades. The following terms are used at PLU to describe such students. Advisers make regular contact with academically marginal students, and monitor their progress closely.

Conditional Admission: Each year PLU admits a few students conditionally. These students, who do not meet all or part of the admission requirements, are screened carefully and notified of their special status. They must limit their first-semester loads to 14 credit hours, including Psychology 110 (Study Skills), and are given special advising.

Midterm Advisory Letters: Warning grade letters are sent to students doing "C-" or lower work at mid-semester. Advisers are sent copies of the letters and will contact advisees who receive them. No transcript notation is made of this action.

Academic Warning: Students whose last semester grade point average is below 2.0, but whose cumulative grade point average is above 2.0, are sent notices of academic warning. No transcript notation is made.

Probation: Students are placed on academic probation with transcript notation if their cumulative grade point average falls below 2.0 or if they receive two consecutive semester grade point averages below 2.0. Such students must meet with the director of advising in the first 10 days of their probationary semester to draw up an agreement specifying actions they will take to improve their academic performance. In the case of first-semester freshman students with no previous college credits, the probation notation will be removed from the transcript if the subsequent semester's cumulative grade point average is above 2.0.

Continued Probation: Probationary students whose probationary semester grade point average is above 2.0, but whose cumulative grade point average remains below 2.0, may be granted an additional semester of probation at the discretion of the Committee on Admission and Retention of Students. Students on continued probation must participate in the probationary semester plan described above under *Probation*.

Academic Dismissal: The enrollment of a probationary student who fails to earn a cumulative grade point average of 2.0 at the end of a probationary semester is terminated. A terminated student may apply for reinstatement by submitting a letter of petition to the registrar. The petition is acted on by the Committee on Admission and Retention of Students. A student whose petition is approved will be readmitted on probation and must participate in the probationary semester plan described above

under *Probation*. A student whose petition is denied may apply again for readmission after one semester has elapsed unless informed otherwise.

Second Academic Dismissal: The enrollment of a student who fails to earn a 2.0 cumulative grade point average after reinstatement is terminated. A dismissed student may be reinstated after one semester if the student presents new evidence of potential academic success.

PROBATIONARY ADVISERS

Probationary advisers are assigned by the director of advising with the consent of both student and adviser. They work with students in a probationary semester, helping them to identify the problems which contribute to their poor scholarship. They are encouraged to refer students to other offices (Academic Assistance Center, Counseling and Testing, etc.) for help in making necessary adjustments. Frequent meetings with students are an essential part of the probationary adviser's role. They should be familiar with policies regarding withdrawal from and repetition of courses, the pass-fail option, and incompletes. They should inquire frequently about progress, compare intentions with performance, assist with study techniques and use of time, and solicit information from instructors about the students' attendance, participation, promptness in submitting work, and exam performance.

ELIGIBILITY FOR STUDENT ACTIVITIES

Any regularly enrolled, full-time student (twelve hours) is eligible for participation in university activities. Limitations on 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 certification in intercollegiate competitions and may also be advised to curtail participation in extra-curricular activities.

CLASSIFICATIONS OF STUDENTS

Freshmen: students who have met entrance requirements.

Sophomores: students who have satisfactorily completed 30 hours.

Juniors: students who have fulfilled lower division requirements and have satisfactorily completed 60 hours.

Seniors: students who have satisfactorily completed 90 hours.

Graduates: students who have met entrance requirements and have been accepted into the Division of Graduate Studies.

Non-Degree Undergraduates: undergraduate students who are attending part-time for a maximum of 8 semester hours but are not officially admitted to a degree program.

Non-Degree Graduates: graduate students who are attending part-time but are not officially admitted to a degree program.

HONORS

Honors Program: PLU offers its university Honors Program to students seeking an academic challenge in classes with equally capable peers. Incoming new students and continuing students in advance of their junior year may apply for a course of study that includes a minimum of twenty credits of honors-level courses. Most of these courses fulfill other general university or major/minor requirements. The emphasis in PLU's Honors Program is not only on academic competence and challenge, but also on such personal qualities as commitment, caring, creativity, and engagement in community. See the *Honors Program* section of this catalog for further details.

Honors at Entrance: These honors are conferred at Opening Convocation on the most highly qualified entering freshmen. Certificates are mailed in early May to high schools for presentation to recipients. 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.

Graduation Honors: Degrees with honors of *cum laude*, *magna cum laude*, and *summa cum laude* are granted. A student must earn an average of 3.40 for *cum laude*, 3.70 for *magna cum laude*, and 3.90 for *summa cum laude*. Physical education activities are not included in the determining of honors.

Honor Societies: Election to the **Arete Society** is a special recognition of a student's commitment to the liberal arts together with a record of high achievement in relevant course work. This academic honors society was organized in 1969 by Phi Beta Kappa members of the faculty. The society's fundamental purpose is to encourage and recognize excellent scholarship in the liberal arts. Elections for the society take place each spring. Both juniors and seniors are eligible for election, although the qualifications for election as a junior are more stringent. The faculty fellows of the society conduct the election after careful review of academic transcripts according to the following criteria. Students must:

- attain a high grade point average (for seniors, normally above 3.70; for juniors, normally above 3.90);
- complete 110 credit hours in liberal studies;
- demonstrate the equivalent of two years of college work in foreign language; and
- complete one year of college mathematics (including statistics or computer science) or have taken an equivalent amount of high school math and college science.

To be eligible for election, students must have completed a minimum of three semesters in residence at the university.

The university has chapters of a number of national honor societies on campus, including the following:

- Alpha Psi Omega (Drama)
- Beta Gamma Sigma (Business)
- Mu Phi Epsilon (Music)
- Pi Kappa Delta (Forensics)
- Omicron Delta Epsilon (Economics)
- Sigma Theta Tau (Nursing)

Undergraduate Fellowships: A limited number of Undergraduate Fellowships are awarded annually to outstanding senior students with a view to encouraging recipients to consider college teaching as a career. An undergraduate fellow is given a variety of opportunities to sample the professional life and work of a faculty member in his or her major discipline. A tuition credit accompanies the appointment.

CREDIT BY EXAMINATION (CHALLENGE)

Students are permitted, within limits, to obtain credit by examination in lieu of regular enrollment and class attendance. No more than 30 semester hours may be counted toward graduation, whether from the 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 and does not count toward the residency requirement for graduation.

To receive credit by examination, students must complete a Credit By Examination Registration Form available in the Registrar's Office, obtain the signature of the respective department chair or dean, and arrange for the examination with the appropriate instructor. The completed form must be returned to the Registrar's Office before the examination is taken. Grades for credit by examination will be submitted by the instructor along with all other grades at the end of the term.

CLEP general examinations are given elective credit only. The various schools, divisions, and departments determine the specific CLEP subject examinations which may fulfill requirements for majors, programs, or general university requirements in their respective academic areas. These examinations are subject to recommendations by the Educational Policies Committee and approval by the faculty.

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

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

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

NON-CREDIT 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. Audit fees are the same as credit fees.

Visiting Classes: Members of the academic community are encouraged to visit classes which interest them. No fee is charge 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.

GRADUATION

Students expecting to fulfill degree requirements WITHIN THE ACADEMIC YEAR (including August) are required to file an application for graduation with the Office of the Registrar according to the following:

| DEGREE COMPLETION | BACHELOR'S DEADLINE | MASTER'S DEADLINE |
|-------------------|---------------------|-------------------|
| August 19, 1994 | May 6, 1994 | June 24, 1994 |
| December 16, 1994 | September 23, 1994 | October 14, 1994 |
| January 27, 1995 | September 23, 1994 | October 14, 1994 |
| May 19, 1995 | December 1, 1994 | February 15, 1995 |

There are four degree-completion dates (third summer session, end of fall semester, January, and spring semester). Degrees are formally conferred at August, December, and May commencements. Students with January degree dates are expected to take part in the December commencement. The actual date of graduation will be recorded on the permanent records.

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 AND SCIENCES REQUIREMENTS

In addition to meeting the entrance requirement in foreign language (two years of high school language, one year of college language, or demonstrated equivalent proficiency), candidates in the College of Arts and Sciences (all B.A., B.S., B.A.Rec., B.A.P.E., and B.S.P.E. degrees) must meet option I, II, or III below:

- I. Completion of one foreign language through the second year of college level. This requirement may also be satisfied by completion of four years of high school study in one foreign language or by satisfactory scores on a proficiency examination administered by the PLU Department of Languages.
- II. Completion through the first year of college level of a foreign language other than that used to satisfy the foreign language entrance requirement. This option may also be met by satisfactory scores on a proficiency examination administered by the PLU Department of Languages.
- III. Four semester hours in history, literature, or language (at the 201 level, or at any level in a language other than that used to satisfy the foreign language entrance requirement) in addition to courses applied to the general university requirements, **and** four semester hours in logic, mathematics (college algebra or above), computer science, or statistics in addition to courses applied to the general university requirements.

High school languages used to satisfy any of the above options must have been completed with grades of C or higher.

Courses used to satisfy either category of Option III of the College of Arts and Sciences requirement may not be used to satisfy general university requirements. Any college-level foreign language course numbered 201 or above used to satisfy Option I and any completion of college-level language through 102 used to satisfy Option II may also be used to satisfy the Perspectives on Diversity requirement in Cross-Cultural Perspectives.

Candidates for the B.A. in English, for the B.A. in Education with concentration in English, for the B.A. in Global Studies, for the B.B.A. in International Business, and for election to the Arete Society must meet Option I above.

INTERDISCIPLINARY READING AND WRITING AT PLU

Pacific Lutheran University is a community of scholars, a community of readers and writers. Reading informs the intellect and liberates the imagination. Writing pervades our academic lives as teachers and students, both as a way of communicating what we learn and as a means of shaping thought and ideas. Our emphasis on literacy begins with courses designed to fulfill the university writing requirement, courses in which students learn to use various kinds of academic and personal writing, to read different kinds of texts more effectively, and to organize the powers of clear thought and expression.

The university's commitment to excellent writing is reflected in the Writing Center, where trained student consultants from a variety of disciplines help students of varying abilities by reading and responding to papers still in draft.

All faculty members share the responsibility for improving the literacy of their students. Faculty in every department and school make writing an essential part of their courses and show students how to ask questions appropriate to the kinds of reading done in their fields. Students write both formal papers and reports and informal notes and essays in order to master the content and methods of the various disciplines. They are encouraged to prepare important papers in multiple drafts.

Because errors are a distraction and a symptom of carelessness in all disciplines, students in all courses are expected to observe the conventions of formal English in their finished work. But literacy is more than correctness. At Pacific Lutheran University reading and writing are part of the process of liberal education.

General University Requirements

The university is committed, in principle as well as historically, to providing a strong liberal arts base for all its baccalaureate degree programs. Accordingly, in addition to fulfilling certain minimum requirements, all undergraduate students must satisfactorily complete a core curriculum.

SPECIFIC CORE REQUIREMENTS – ALL BACCALAUREATE DEGREES

1. The Freshman Year Program

The Examined Life: Into Uncertainty and Beyond

The freshman year core provides a supportively challenging context in which to begin the quest for, and adventure of, a larger vision for life. University education is about more than skills, though these should be developed through active, guided use. University education is about liberating students for critical and committed living. Particularly at PLU, the purpose of education is to combine well-developed critical capacities with compassion and vision for service. An education at PLU develops persons capable of sustained, reasoned, and creative conversation and commitment in a multicultural, ideologically plural world.

In addition to orientation and advising programs, the freshman year is composed of three courses. One of the two seminars must be taken in the student's first semester. Freshman year core requirements must be completed during the student's freshman year.

1A. *Inquiry Seminar: Writing for Discovery* (4 hours)

These seminars focus on writing, thinking, speaking, and reading. They involve writing as a way of thinking, of learning, and of discovering and ordering ideas. Taught by faculty in any department or school, these seminars are organized around topics that engage students and faculty in dialogue and provide the opportunity to examine issues from a variety of perspectives.

1B. *Inquiry Seminar: Critical Conversation* (2 hours)

These seminars involve learning how to participate in the exchange of ideas through the experience of articulating questions, listening for meaning and nuance in what others write and say, seeing ideas and positions in context, arguing, moving to consensus, and living with conflict. Like the 1A writing seminars, these seminars are taught by faculty from various departments and schools. When taught in January, these seminars are 4 hours.

1C. *Freshman January Term* (4 hours)

A course that fulfills one of the other core requirements (lines 1–4 and 6), designed both for freshman students and to take advantage of the format of the January term.

2. One of Two Alternative Cores: Core I or Core II

Core I: The Distributive Core (32 hours)

- a. Arts/Literature (8 hours, 4 from each line)
 1. Art, Music, or Theatre
 2. Literature (English or Languages)
- b. Philosophy (4 hours)
- c. Religious Studies (8 hours, 4 from each of 2 lines)
 1. Biblical Studies
 2. Christian Thought, History, and Experience
 3. Integrative and Comparative Religious Studies
- d. Social Sciences (8 hours, 4 from each line)
 1. Anthropology, History, and Political Science
 2. Economics, Psychology, Sociology, and Social Work
- e. Natural Sciences, Computer Science, Mathematics (4 hours)

Core II: The Integrated Studies Program (28 hours)

- a. INTG 111, 112 The Idea of Progress (8 hours)
 - b. Four 200-level ISP courses (16 hours). Normally taken in the second and third years. May include approved program of study abroad. Students select four courses subject to approval of the ISP Committee.
 - c. INTG 351: The Concluding Seminar (4 hours)
3. **Mathematical Reasoning** (4 hours)
A course in mathematics or applications of mathematics, with emphasis on numerical and logical reasoning and on using appropriate methods to formulate and solve problems. This requirement may also be satisfied by the completion (with at least a B average) of the equivalent of 4 years of college preparatory mathematics (through mathematical analysis or calculus or equivalent).
 4. **Science and the Scientific Method** (4 hours)
A science course that teaches the methods of science, illustrates its applications and limitations, and includes a laboratory component. At least one of the courses taken to meet line 4 or 2 (Core I, e) must be a course in which the subject is natural sciences, i.e., physical or biological science.
 5. **Writing Requirement** (4 hours)
All students must complete an approved, 4-credit-hour writing course. Freshmen satisfy this requirement through the Inquiry Seminar: Writing for Discovery.
 6. **Perspectives On Diversity** (6-8 hours)
A course in each of the following two lines. The only 2-hour courses that can satisfy either of the following lines completely are the freshman Critical Conversation seminars (1B).
 - a. *Alternative Perspectives* (2-4 hours): A course which creates an awareness and understanding of diversity in the United States, directly addressing issues such as ethnicity, gender, disability, racism, or poverty.
 - b. *Cross-Cultural Perspectives* (2-4 hours): A course that enhances cross-cultural understandings through examination of other cultures. This requirement may be satisfied in one of three ways: (i) a course focusing on the culture of non-Euro-American societies; (ii) a 201 or higher-level course in a language used to satisfy the admission requirement, or 8 credits in a language not previously studied; or (iii) participation in an approved semester-long study abroad program.

NOTE: 2-4 hours may be used to fulfill another core requirement. The remaining 4 hours must be a course that does not simultaneously fulfill any other core requirement. These 4 hours may, however, satisfy a requirement in the major.

All junior and senior transfer students shall take one perspectives on diversity course (4 hours) that does not simultaneously fulfill another core requirement. All other transfer students must meet the full perspectives on diversity requirement.
 7. **Physical Education** (4 hours)
Four different PE activity courses, including PE 100. One hour of credit may be earned through approved sports participation. All activities are graded on the basis of A, Pass, or Fail.
 8. **Senior Seminar/Project** (2-4 hours as designated by the academic unit of the student's major)
A substantial project, paper, practicum, or internship that culminates and advances the program of an academic major. The end product must be presented to an open audience and critically evaluated by faculty in the student's field. For certain students, interdisciplinary courses such as the Integrated Studies Concluding Seminar, the Global Studies Seminar, or the Honors Program Challenge Seminar may fulfill this requirement.

Understanding Regarding All Requirements. For those lines of the core which refer to academic disciplines or units, selected courses outside those units may count for the requirement when approved both by the units and by the committee overseeing the core requirements.

IMPLEMENTATION SCHEDULE

The freshman writing seminar requirement shall be implemented for all freshman students who enter beginning fall 1994.

The freshman January term requirement shall be implemented for all freshman students who enter beginning fall 1994.

The freshman critical conversations requirement shall be implemented for all freshman students who enter beginning fall 1995.

The Natural Sciences, Computer Science, and Math (4 hours); Mathematical Reasoning (4 hours); and Science and the Scientific Method (4 hours) requirements shall be implemented for all freshmen who enter beginning fall 1995, and for all transfer students who enter beginning fall 1996.

The perspectives on diversity requirement shall be implemented for all freshman students who enter beginning fall 1994, all junior and senior transfer students who enter beginning fall 1996, and all other transfer students beginning fall 1995.

The Senior Seminar/Project requirement shall be implemented for all freshman students who enter beginning fall 1994, for all junior and senior transfer students who enter beginning fall 1996, and for all other transfer students who enter beginning fall 1995.

GENERAL REQUIREMENTS AND LIMITATIONS – ALL

BACCALAUREATE DEGREES: (All credit hours referred to in listings of requirements are semester hours.)

- Total Hours and Cumulative GPA:** A minimum of 128 semester hours must be completed with a grade point average of 2.0 (2.50 in the Schools of Business and Education).
- Upper Division Courses:** A minimum of 40 semester hours must be completed from courses numbered 321 or above. Courses from two-year institutions are not considered upper division regardless of subject matter parallels. At least 20 of the minimum 40 semester hours of upper division work must be taken at PLU.
- Final Year in Residence:** The final 32 semester hours of a student's program must be completed in residence at PLU. No transfer credit may be applied during a student's final 32 hours in a degree program. (Special programs such as 3-1, 3-2 and interim exchange study are excluded from this limitation.)
- Academic Major:** A major must be completed as detailed by each school or department. At least 8 semester hours must be taken in residence.
- Grades for Major Courses:** All courses counted toward a major or minor must be completed with grades of C- or higher and with a cumulative grade point average of 2.0 or higher in those courses. Departments, divisions, or schools may set higher grade requirements.
- 44 Hour Limit:** Not more than 44 hours earned in one department may be applied to the B.A., B.S., B.A.P.E., B.A.Rec., or B.S.P.E. degrees.
- Music Ensembles:** Non-music majors may count toward graduation requirements not more than 8 semester hours in music ensembles.
- Correspondence/Extension Courses:** A maximum of 24 hours in accredited correspondence or extension studies may be credited toward degree requirements, contingent on approval by the registrar.
- Community College Courses:** A maximum of 64 hours will be accepted by transfer from an accredited community college. All community college courses are transferred as lower division credit.
- Physical Education Courses:** No more than eight 1-hour physical education activity courses may be counted toward graduation.
- Foreign Language Requirement:** All candidates for B.A., B.S., B.A.P.E., B.A.Rec., or B.S.P.E. degrees must complete one of three options involving a foreign language or specified alternative. See under *College of Arts and Sciences*.

Degree & Course Offerings

**Academic Structure****College of Arts and Sciences***Division of Humanities*

English
Languages
Philosophy
Religion

Division of Natural Sciences

Biology
Chemistry
Computer Science
Earth Sciences
Engineering
Mathematics
Physics

Division of Social Sciences

Anthropology
Economics
History
Political Science
Psychology
Social Work and
Marriage & Family Therapy
Sociology

School of the Arts

Art
Communication and Theatre
Music

School of Business**School of Education****School of Nursing****School of Physical Education****Degrees Offered****Bachelor's Degrees**

Bachelor of Arts
Bachelor of Science
Bachelor of Arts in Education
Bachelor of Arts in Physical Education
Bachelor of Arts in Recreation
Bachelor of Business Administration
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Music Education
Bachelor of Musical Arts
Bachelor of Science in Nursing
Bachelor of Science in Physical Education

Master's Degrees

Master of Arts in Computer Applications
Master of Arts in Education
Master of Arts in Education with Initial Certification
Master of Arts in Social Sciences
Master of Business Administration
Master of Physical Education
Master of Science in Computer Science
Master of Science in Nursing

Majors

Bachelor of Arts (B.A.)

| | | |
|-------------------------|------------------|-------------------|
| Anthropology | Computer Science | Norwegian |
| Art | Earth Sciences | Philosophy |
| Biology | Economics | Physics |
| Chemistry | English | Political Science |
| Chinese Studies | French | Psychology |
| Classics | German | Religion |
| Communication | History | Scandinavian Area |
| <i>Broadcasting</i> | Honors | Studies |
| <i>Interpersonal</i> | Legal Studies | Social Work |
| <i>Communication</i> | Mathematics | Sociology |
| <i>Journalism</i> | Music | Spanish |
| <i>Public Relations</i> | | |
| <i>Theatre</i> | | |

Bachelor of Science (B.S.)

| | |
|------------------------------------|---------------------------|
| Applied Physics | Electrical Engineering |
| Biology | Engineering Science (3-2) |
| Chemistry | Mathematics |
| Computer Engineering | Physics |
| Computer Science | Psychology |
| Earth Sciences (Geology Specialty) | |

Bachelor of Arts in Education (B.A.E.)

Concentrations in:

| | | |
|-----------------------|--------------------|-------------------|
| Anthropology | French | Physics |
| Art | German | Political Science |
| Biology | History | Psychology |
| Chemistry | Journalism | Science |
| Drama | Latin | Social Studies |
| Earth Sciences | Mathematics | Sociology |
| Economics | Music | Spanish |
| English | Norwegian | Special Education |
| English/Language Arts | Physical Education | Speech |

Bachelor of Arts in Physical Education (B.A.P.E.)

Physical Education

Bachelor of Arts in Recreation (B.A.Rec.)

Concentrations in:

| | |
|-------------------------------|-------------|
| Administration | Programming |
| Health and Fitness Management | |

Bachelor of Business Administration (B.B.A.)

Concentrations in:

| | |
|---------------------------|------------------------|
| Accounting | Management Information |
| Finance | Systems |
| Human Resource Management | Marketing |
| International Business | Operations Management |

Bachelor of Fine Arts (B.F.A.)

Art
Communication (Broadcasting, Theatre)

Bachelor of Music (B.M.)

| | |
|-------------------|--------------------------|
| Piano Performance | Instrumental Performance |
| Organ Performance | Theory and Composition |
| Vocal Performance | Church Music |

Bachelor of Music Education (B.M.E.)

K-12 Choral
K-12 Instrumental (Band Emphasis)
K-12 Instrumental (Orchestra Emphasis)

Bachelor of Musical Arts (B.M.A.)

Music

Bachelor of Science in Nursing (B.S.N.)

Nursing

Bachelor of Science in Physical Education (B.S.P.E.)

Concentrations in:

| | |
|-------------------------------|-------------|
| Exercise Science | Pre-therapy |
| Health and Fitness Management | |

Complementary Major

Global Studies

Minors

| | | |
|---------------------------|-----------------------|--------------------------|
| Anthropology | English | Physical Education |
| Art | <i>Literature</i> | <i>Aquatics</i> |
| Biology | <i>Publishing and</i> | <i>Coaching</i> |
| Business | <i>Printing Arts</i> | <i>Dance</i> |
| Chemistry | <i>Writing</i> | <i>Exercise Science</i> |
| Chinese Studies | Environmental Studies | <i>Health</i> |
| Communication | French | <i>Recreation</i> |
| Computer Science | German | <i>Physics</i> |
| Earth Sciences | Global Studies | <i>Political Science</i> |
| Economics | Greek | <i>Psychology</i> |
| Education | History | <i>Public Affairs</i> |
| <i>Cross Disciplinary</i> | Information Science | <i>Religion</i> |
| <i>Studies</i> | Latin | <i>Sociological Data</i> |
| <i>Reading</i> | Legal Studies | <i>Analysis</i> |
| <i>Special Education</i> | Mathematics | <i>Sociology</i> |
| Electrical | Norwegian | <i>Spanish</i> |
| Engineering | Philosophy | <i>Statistics</i> |
| | | <i>Theatre</i> |
| | | <i>Women's Studies</i> |

COURSE NUMBERINGS

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

300–499 *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. If, during the last semester of the senior year, a candidate for a baccalaureate degree finds it possible to complete all degree requirements with a registration of fewer than 16 semester hours of undergraduate credit, registration for graduate credit is permissible. However, the total registration for undergraduate requirements and elective graduate credit shall not exceed 16 semester hours during the semester. A memorandum stating that all baccalaureate requirements are being met during the current semester must be signed by the appropriate department chair or school dean and presented to the dean of graduate studies at the time of such registration. This registration does not apply toward a higher degree unless it is later approved by the student's adviser and/or advisory committee.

*NOTE: 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 in graduate programs

Anthropology

Anthropology as a discipline tries to bring all of the world's people into human focus. Though anthropology does look at "stones and bones," it also examines the politics, medicines, families, arts, and religions of peoples and cultures in various places and times. This makes the study of anthropology a complex task, for it involves aspects of many disciplines, from geology and biology to art and psychology.

Regardless of the specific area that is studied, the essence of anthropology is the observation of different peoples and cultures—studying them as they really are instead of how people think they are or should be. It is through this detailed study of all people that we gain the full picture of what it really means to be human.

Anthropology is composed of four fields. Cultural or social anthropology studies living human cultures in order to create a cross-cultural understanding of human behavior. Archaeology has the same goal, but uses data from the physical remains of the past cultures to reach it. Linguistic anthropology studies human language to discover what it can tell about the human past and behaviors in the present. Physical anthropology studies the emergence and subsequent biological adaptations of humanity as a species.

FACULTY: Huelsbeck, *Chair*; Brusco, Gargano-Ray, Guldin, Klein.

BACHELOR OF ARTS MAJOR: 34 semester hours, including 102, 103, 101 or 104, 480, 490, four hours chosen from 330 to 345 (peoples courses), four hours chosen from 350 to 465 (topical courses), and eight additional hours in anthropology, at least four of which must be above 321.

MINOR: 20 semester hours, including 102, 101 or 103 or 104, four hours from courses numbered 330 to 345, four hours from courses numbered 350 to 490, and four additional hours in anthropology.

DEPARTMENTAL HONORS: In recognition of outstanding work, the designation *with Departmental Honors* may be granted by vote of the anthropology faculty based on the student's performance in the following areas:

1. Anthropology course work: 3.5 minimum g.p.a.
2. Demonstration of active interest in anthropological projects and activities outside of class work.
3. Completion of a senior thesis. A paper describing independent research must be conducted under the supervision of departmental faculty. A proposal must be approved by the faculty by the third week of class of the fall semester for May and summer graduates, and the third week of class of the spring semester for December graduates.

Course Offerings

101 Exploring Anthropology: Monkeys, Apes, & Humans

Introduction to biological anthropology with a special focus on human evolution, the fossil evidence for human development, the role of culture in human evolution, and a comparison with the development and social life of the non-human primates. (4)

102 Exploring Anthropology: Culture and Society

Introduction to social-cultural anthropology and cultural linguistics, concentrating on the exploration of the infinite variety of human endeavor in all aspects of culture and all types of societies; from tool-making to language, religion, politics, law, warfare, family, kinship and art; from hunters and gatherers to industrialists. (4)

103 Exploring Anthropology: Archaeology and Prehistory

Introduction to the ideas and practice of archaeology, used to examine the sweep of human prehistory from the earliest stone tools to the development of agriculture and metallurgy and to enrich our understanding of extinct societies. Local archaeological sites will be examined. (4)

104 Exploring Anthropology: Language and Symbols

Introduction to anthropological linguistics and symbolism. An overview of the nature of human languages, including the origin of language; sound systems, structure and meaning; language acquisition; the social context of speaking; language change; nonverbal communication; and sex differences in language use. Exploration of the wider issues of symbolic communication: how symbols order the world and how transactions in meaning can be seen as forms of social action. (4)

210 Global Perspectives: The World in Change

A survey of global issues affecting the human condition in a rapidly changing and increasingly interdependent world: modernization and development; economic change and international trade; diminishing resources; war and revolution; peace and justice; and cultural diversity. These issues are examined in a multidisciplinary light using case studies drawn from non-Western and Western nations. Emphasis on the development of a global perspective which recognizes human commonalities as well as diversity in perceptions, values, and priorities. (Cross-referenced with HIST 210 and POLS 210) (4)

220 Peoples of the World

An exploration of the world's cultures through anthropological films, novels, and eyewitness accounts. Case studies chosen from Africa, Native America, Asia, the Pacific, and Euro-America provide an insider's view of ways of life different from our own. (2)

225 Past Cultures of Washington State

Native Americans have lived in Washington State for at least the last 12,000 years. This course explores the cultures of the people in coastal and interior Washington beginning with the first northwesterners. An examination of the ways that cultures change through time until the emergence of the distinctive cultures observed by the earliest European visitors to the area. (2)

230 Peoples of the Northwest Coast

A survey of the ways of life of the native peoples of coastal Washington, British Columbia, and Southeastern Alaska from European contact to contemporary times. Of special interest are the traditional methods of fishing, arts, potlaches, status systems, and wealth and their impact on the modern life of the region. (2)

330 Cultures and Peoples of Native North America

A comparative study of Native North American cultures from their arrival on the continent through today. Stress on traditional societies, their history under colonization and their emergence as vital contemporary societies. Examination of U.S. and Canadian laws, policies, and conflicts, including land and fishing claims, issues of sovereignty, and religious rights. (4)

332 Prehistory of North America

An archaeological reconstruction of economic, social, political, and religious life in North America from the time the first settlers entered the continent during the Ice Ages to the Mound Builders of later times and ultimately to the first contact with European settlers. (4)

334 The Anthropology of Contemporary America

An investigation of American social patterns and problems designed to give insights from a cross-cultural perspective; exploration of American solutions to common human problems; education, religion, politics, family and concepts of justice; a determination of what is unique about the "American Way." (4)

336 Peoples of Latin America

Millions of Americans have never been north of the equator. Who are these "other" Americans? This survey course familiarizes the student with a broad range of Latin American peoples and problems. What remains of the great Inca empire? What is life like in the Amazonian rain forests and in the high Andes? Case studies and films as a basis for discussion of themes ranging from visions of the supernatural to problems of economic development. (4)

338 Jewish Culture

An exploration of American Jewish culture through its roots in the lifeways of Eastern European Ashkenazic Jews and its transformation in the United States. Jewish ethnicity and identity are related to questions of assimilation, Jewish-Gentile relations, and cultural persistence. Emphasis on Jewish history, religion, literature, music, and humor as reflections of basic Jewish cultural themes. (4)

343 East Asian Cultures

A survey of the cultures and peoples of Eastern Asia, concentrating on China but with comparative reference to Japan, Korea, and Vietnam. Cultural similarities as well as differences between these nations are stressed. Topics include religion, art, politics, history, kinship, and economics. (4)

345 Contemporary China

An immersion into the culture and society of the People's Republic of China—geared to exposing the student to the ways of life of one-quarter of humanity; contemporary politics, kinship, folk religion, human relations; problems and prospects of development and rapid social change; relations with Hong Kong, Taiwan, and other societies. (4)

350 Women and Men in World Cultures

An overview of the variation of sex roles and behaviors throughout the world; evolution of sex roles; theories of matriarchy, patriarchy, mother goddesses, innate inequalities; impact of European patterns in the world; marriage patterns from polygyny to polyandry; egalitarianism to feminism. (4)

354 Geography and World Cultures:**People, Places and Prospects**

Explorations of how societies in North America and around the world have adapted to their varied human and physical environments. Cases drawn from widely difference environments—from the desert to temperate woodlands to the arctic to urban neighborhoods. Global patterns of variation in life styles and social opportunities will be stressed and used for projections of future world patterns. Knowledge of locations and map reading will be emphasized. Prerequisite: 102 or consent of instructor. (4)

357 Primatology

A survey of the diverse order of mammals, the primate, which includes humans. Focus on a wide range of non-human primates and their evolutionary trends, social behavior, social organization, ecology, and anatomy. The important light that they can shine on human physical and social characteristics is investigated as well as their place in an increasingly hostile environment. Extensive observation of primate behavior at the zoo is an integral part of the course. (2)

360 Ethnic Groups

An examination of the nature of ethnic groups in America and abroad; the varying bases of ethnicity (culture, religion, tribe, "race," etc.); problems of group identity and boundary maintenance; ethnic symbols; ethnic politics; ethnic neighborhoods; and ethnic humor. (4)

365 Artifacts, Ecofacts, and Archaeology

Laboratory interpretation of archaeological materials. Techniques used in interpreting past human ecology, technology, and economy. Analytical procedures for bone, stone, ceramic, and

metal artifacts; analysis of debris from food processing activities. The class will work on the analysis of materials from archaeological sites. (4)

370 The First Civilizations

The origins of agriculture, writing, cities, and the state in many parts of the world, comparing and contrasting the great civilizations of antiquity, including Mesopotamia, Egypt, India, Asia, Mesoamerica, and South America. (4)

375 Law, Politics, and Revolution

A study of politics and law through the political structures and processes of traditional and contemporary societies; concepts of leadership, factionalism and feuds, power, authority, revolution, and other reactions to colonization; law and conflict resolution; conflicts of national and local-level legal systems. Examples from around the world: Burma, Pakistan, the Pacific, Africa, Latin America, and Native America. (4)

380 Sickness, Madness, and Health

A cross-cultural examination of systems of curing practices and cultural views of physical and mental illness and health; prevention and healing; the role of religious views; nature and skills of curers; definitions of disease; variation in diseases between classes and ethnic groups; impact of modern medical and psychological practitioners. (4)

385 Marriage, Family, and Kinship

The idea of family has a wide range of meanings and expressions cross-culturally, but everywhere it serves as a fundamental organizing principle and rationale for the allocation of valued resources, including power and status within domestic groups, and personal and social identities. Special attention to the expression of individual strategies and interests in various domestic contexts. Other topics include: the ways in which religion, myth, magic and folklore serve to articulate and control domestic life; how changing systems of production affect marriage and domestic forms; how class and gender systems intertwine with kinship, domestic forms, and the meaning of "family." (4)

392 Gods, Magic, and Morals

Anthropology of religion; humanity's concepts of and relationships to the supernatural; examination of personal and group functions that religions fulfill; exploration of rituals, beliefs, and systems of morality in religions both "primitive" and historical; origins of religion; science "versus" religion; the nature of reality. (Cross-referenced with RELI 392) (4)

465 Archaeology: The Field Experience

A field class involving the excavation of a historic or prehistoric archaeological site, with emphasis on basic excavation skills and record keeping, field mapping, drafting, and photography. The laboratory covers artifact processing and preliminary analysis. Prerequisite: 101, 102, or 103, or consent of instructor. (4)

480 Anthropological Inquiry

An historic and thematic study of the theoretical foundations of sociocultural anthropology; research methods; how theory and methods are used to establish anthropological knowledge. Required of majors in their junior or senior year. a/y (4)

490 Seminar in Anthropology

Selected topic in contemporary anthropology to be investigated through student research and consultation. Required of majors in their junior or senior year. Prerequisite for other students: departmental consent. a/y (2)

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. Prerequisite: 490 and departmental consent. (1-4)

501 Graduate Workshops

Graduate workshops in special fields or areas for varying periods of time. (1-4)

590 Graduate Seminar

Selected topics as announced. Prerequisite: consent of the instructor. (1-4)

591 Directed Study (1-4)

595 Graduate Readings

Independent study card required. (4)

598 Research Project (4)

599 Thesis (4)

Art

In this 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 for the artist and the designer. Students with professional concerns must be prepared to meet the modern world with both technical skills and the capacity for innovation. The department's program therefore stresses individualized development in the use of mind and hand. A highly professional faculty, well-equipped studios, and a comprehensive curriculum offer diverse opportunities for study in the visual arts.

Students may choose among a generalized program leading to a Bachelor of Arts degree; a more specialized program for the Bachelor of Fine Arts, in which each candidate develops some area of competence; or a degree program in art education for teaching on several levels.

Recent graduates are employed in a variety of fields. Several have become established as painters, printmakers, or sculptors; some are successful studio potters; others have gone into commercial photography or film animation—even the production of feature films. The television industry employs still others. A number are working in the design field as graphic designers, illustrators, package designers, or art directors in firms around the country, in New York, Chicago, Los Angeles, and Seattle. Alumni have been involved in museum work and serve on the faculties of various educational institutions, including elementary, secondary, community college, and university levels.

Some students go directly from the university into their field of interest. Others find it desirable and appropriate to attend a graduate school. Many alumni have been accepted into prestigious graduate programs, both in this country and abroad.

The various fields of art are competitive and demanding in terms of commitment and effort. Nonetheless, there is always a place for those who are extremely skillful or highly imaginative or, ideally, both. The department's program stresses both, attempting to help each student reach that ideal. Instructional resources, when coupled with dedicated and energetic students, have resulted in an unusually high percentage of graduates being able to satisfy their vocational objectives.

FACULTY: Hallam, *Chair*; Cox, Geller, Gold, Keyes, Tomsic. Artists-in-Residence: Berg, Doyle, Wold.

The department has sought to minimize prerequisites, enabling students to elect courses relating to their interests as early as possible, but majors are urged to follow course sequences closely. 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, including the B.F.A. candidacy exhibition. A use or materials fee is required in certain courses.

BACHELOR OF ARTS MAJOR: Minimum of 34 semester hours, including 160, 250, 230 or 350, 365, 370, 499, and the art history sequence (180, 181, 380); 116 or courses in teaching methods may not be applied to the major. A maximum of 40 hours may be applied toward the degree. Candidates are registered in the College of Arts and Sciences and must satisfy general university requirements, including a core curriculum (Core I or Core II), and the option requirement.

BACHELOR OF FINE ARTS MAJOR: Minimum of 60 semester hours, including 160; 226; either 230 or 250; the art history sequence (180, 181, 380); 8 additional hours in 2-dimensional media, 8 additional hours in 3-dimensional media, and 4 hours in art history or theory (390, or as approved by the department faculty); requirements and electives in area of emphasis; and 499 (candidacy seminar). 116 or courses in teaching methods may not be included. Candidates are registered in the School of the Arts and must satisfy general university requirements, including a core curriculum (Core I or Core II).

B.F.A. in 2-Dimensional Media

Areas of emphasis: a minimum of three courses required in one area.

Drawing/Painting:

| | |
|--------------------------|---------------------|
| 160 Drawing | 365 Painting I |
| 260 Intermediate Drawing | 465 Painting II (R) |
| 360 Life Drawing (R) | |

Printmaking:

| |
|------------------------|
| 370 Printmaking I |
| 470 Printmaking II (R) |

Film Arts:

| |
|---------------------------------|
| 226 Black and White Photography |
| 326 Color Photography |
| 426 Electronic Imaging |

Independent Study (may be applied to any area):

| |
|--------------------------|
| 490 Special Projects (R) |
| 492 Studio Projects (R) |

(R)-may be repeated for credit

B.F.A. in 3-Dimensional Media

Areas of emphasis: a minimum of three courses required in one area.

Ceramics:

| |
|----------------------|
| 230 Ceramics I |
| 330 Ceramics II |
| 430 Ceramics III (R) |

Sculpture:

| |
|----------------------|
| 250 Sculpture I |
| 350 Sculpture II (R) |

Crafts:

| | |
|---------------------|--------------------------|
| 238 Stained Glass I | 338 Stained Glass II (R) |
| 255 Jewelry I | 355 Jewelry II (R) |

Independent Study (may be applied to any area):

| |
|--------------------------|
| 490 Special Projects (R) |
| 492 Studio Projects (R) |

(R)-may be repeated for credit

B.F.A. in Design*Required basic sequence:*

- | | |
|----------------------------|------------------------|
| 196 Design I: Fundamentals | 396 Design: Graphics I |
| 296 Design II: Concepts | 491 Design: Workshop |

Elective courses:

- 398 Drawing: Illustration (R)
- 491 Design: Workshop
- 496 Design: Graphics II

(R)-may be repeated for credit

BACHELOR OF ARTS IN EDUCATION:See *School of Education*.

MINOR IN STUDIO ART: 20 semester hours, including 380, 4 hours in 2-dimensional media, 4 hours in 3-dimensional media, and 8 hours of studio art electives drawn from upper division courses. Courses in teaching methods (341, 440) may not be applied to the minor.

MINOR IN ART HISTORY: 24 semester hours, including 180 and 181, 12 hours in art history/theory electives, and 4 hours in studio electives. Non-concentration courses (116), practical design courses (196, 296, 396, 398, 491, 496), and courses in teaching methods (341, 440) may not be applied to the minor.

PUBLISHING AND PRINTING ARTS MINOR: The Publishing and Printing Arts minor is cross-referenced with the Department of English. See the description of that minor under *English*.

Course Offerings**STUDIO**

- 160 Drawing
- 196 Design I: Fundamentals
- 226 Black and White Photography
- 230 Ceramics I
- 250 Sculpture I
- 260 Intermediate Drawing
- 296 Design II: Concepts
- 326 Color Photography
- 330 Ceramics II
- 341 Elementary Art Education
- 350 Sculpture II
- 360 Life Drawing
- 365 Painting I
- 370 Printmaking I
- 396 Design: Graphics I
- 398 Drawing: Illustration
- 426 Electronic Imaging
- 430 Ceramics III
- 465 Painting II
- 470 Printmaking II
- 490 Special Projects/Independent Study
- 491 Design: Workshop
- 492 Studio Projects/Independent Study
- 496 Design: Graphics II
- 499 Senior Exhibition

HISTORY AND THEORY

- 110 Introduction to Art
- 116 Design in the Contemporary World
- 180 History of Western Art I
- 181 History of Western Art II
- 380 Modern Art
- 390 Studies in Art History
- 440 Seminar in Art Education
- 497 Research in Art History—Theory

116 Design in the Contemporary World

An examination of contemporary design with a focus on trends in advertising, fashion, automotive, product and interior design. Includes a section on color theory and perception and the basic elements of design. Requires no artistic/design background. (4)

160 Drawing

A course dealing with the basic techniques and media of drawing. (4)

180 History of Western Art I

A survey tracing the development of Western art and architecture from prehistory to the end of the Middle Ages. (4)

181 History of Western Art II

A survey of Western art and architecture from the Renaissance to the 20th century. (4)

196 Design I: Fundamentals

An introduction to design through the study of basic techniques, color theory, and composition. (4)

226 Black and White Photography

A studio class in photography as an art form. Primary concentration in basic camera and darkroom techniques. Students produce a portfolio of prints with an emphasis on creative expression and experimentation. (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. (4)

250, 350 Sculpture I, II

Concentration on a particular medium of sculpture including metals, wood, or synthetics; special sections emphasizing work from the human form as well as opportunity for mold making and casting. 250 must be taken before 350; 350 may be taken twice. (4,4)

260 Intermediate Drawing

Drawing taken beyond the basics of 160. Expansion of media forms, and solutions to compositional problems. Possibility of pursuing special individual interests, with permission. Prerequisite: 160 or consent of instructor. (4)

296 Design II: Concepts

An investigation of the process of creative problem solving in a methodical and organized manner. Includes projects in a variety of design areas. Prerequisite: 196 or consent of instructor. (4)

326 Color Photography

Exploration of the issues of both painters and photographers. Students learn to make color prints and process color negatives. Includes a historical survey of color photography as well as perspectives of contemporary artists. (4)

330, 430 Ceramics II, III

Techniques in ceramic construction and experiments in glaze formation. 330 must be taken before 430; 430 may be taken twice. Prerequisite: 230. (4,4)

331 The Art of the Book I

See English 331. (4)

341 Elementary Art Education

A study of creative growth and development; art as studio projects; history and therapy in the classroom. (2)

350 Sculpture II

(See 250)

360 Life Drawing

An exploration of human form in drawing media. May be repeated for credit. Prerequisite: 160 or consent of instructor. (2)

365, 465 Painting I, II

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

370, 470 Printmaking I, II

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

380 Modern Art

The development of art from 1900 to the present, with a brief look at European and American antecedents as they apply to contemporary directions. (4)

390 Studies in Art History

A selected area of inquiry, such as a history of American art, Asian art, the work of Picasso, or similar topics. May be repeated for credit. (4)

396, 496 Design: Graphics I, II

Design and execution of printed materials; emphasis on technical procedures and problems in mass communication. 496 explores advanced techniques with multiple color, typography, and other complex problems. 396 must be taken before 496. Prerequisite: 160 and 296 or consent of instructor. (4,4)

398 Drawing: Illustration

Advanced projects in drawing/illustration. Exposure to new concepts and techniques adaptable to fine art and commercial applications. Prerequisites: 160 and 196. May be repeated once. (4)

426 Electronic Imaging

An introduction to computer-assisted photography in which students learn applications, develop aesthetic strategies, and engage the ethical issues of this new technology. Emphasis on creative exploration and problem solving within the Macintosh environment. Prerequisites: 226 and 326 or consent of instructor. (4)

430 Ceramics III

(See 330)

440 Seminar in Art Education

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

465 Painting II

(See 365)

470 Printmaking II

(See 370)

490 Special Projects/Independent Study

Exploration of the possibilities of selected studio areas, including experimental techniques. Emphasis on development of individual styles, media approaches, and problem solutions. May be repeated for credit. Prerequisites: junior status, minimum of two courses at 200 level or above in affected medium with minimum 2.5 GPA, consent of instructor and department chair. (2 or 4)

491 Design: Workshop

A tutorial course which may deal with any of several aspects of the design field with particular emphasis on practical experience and building a portfolio. (2)

492 Studio Projects/Independent Study

A tutorial program for students of exceptional talent. In-depth individual investigation of a particular medium or set of technical problems. Only one project per semester may be undertaken. May be repeated for credit. Prerequisites: declared major in art, senior status, consent of instructor, written proposal, program approval by department faculty. Students meeting the above requirements but with less than a 3.0 GPA in the major may be required to present additional evidence of eligibility. (1-4)

496 Design: Graphics II

(See 396)

497 Research in Art History-Theory

A tutorial course for major students with research into a particular aspect of art history or theory. May be repeated for credit. Prerequisites: senior status, consent of instructor, and program approval by department faculty. (1-4)

499 Senior Exhibition

Required of all art majors. Students work closely with their advisers in all phases of the preparation of the exhibition. Must be taken in the student's final semester. Prerequisites: declared major in art (B.F.A. or B.A.), senior status, reasonable expectation of completion of all department and university requirements for graduation. (2)

School of the Arts

The School of the 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 devaluating 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: Bartanen, *Acting Dean*; Faculty members of the Departments of Art, Communication and Theatre, and Music.

DEGREES OFFERED by the School of the Arts include the B.F.A. (Bachelor of Fine Arts) in art and communication and theatre; the B.M. (Bachelor of Music), the B.M.A. (Bachelor of Musical Arts); the B.M.E. (Bachelor of Music Education). Students may also earn the B.A. (Bachelor of Arts), but this degree is awarded through the College of Arts and Sciences. Candidates for all degrees must meet general university requirements and the specific requirements of the Departments of Art, Communication and Theatre, or Music.

For details about the B.A.E. (Bachelor of Arts in Education) in art, communication and theatre, or music, see the *School of Education*.

For course offerings, degree requirements, and programs in the School of the Arts, see *Art, Communication and Theatre, and Music*.

Course Offering

341 Integrating Arts in the Classroom

Methods and procedures for integrating the arts (music, visual, drama, dance) in the classroom and across the curriculum. Offered for students preparing for elementary classroom teaching. Meets state certification requirements in both music and art. II (2)

Biology

The Department of Biology is dedicated to the teaching process, not merely to delivery of facts. Facts form the foundation of science, but to be a science student requires more than accumulating facts. The biology faculty stresses gathering information, processing new information in the context of that already available, retrieving appropriate information, and interpreting observations.

To learn science is more than to learn about science: it is to learn how to ask questions, how to develop strategies which might be employed to obtain answers, and how to recognize and evaluate answers which emerge. The department is therefore dedicated to encouraging 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.

Members of the department faculty are trained across the total spectrum of modern biology, from population biology through molecular biology, and have professional teaching and research expertise with a full range of organisms: viruses, bacteria, fungi, plants, and animals. The diversity of courses in the curriculum provides broad coverage of contemporary biology and allows flexible planning. Each biology major completes a three-course sequence in the principles of biology. Planning with a faculty adviser, the student chooses upper division biology courses to meet individual needs and career objectives. Extensive facilities are available, including: herbarium, invertebrate and vertebrate museums, greenhouse, research microscopy room, growth chambers, containment facilities for recombinant DNA research, darkroom, walk-in cold room for low-temperature experiments, electronic instrument room, various research laboratories, a field station located in Manchester State Park, and a boat equipped for studies of Puget Sound. Students are invited to use these facilities for independent study and are encouraged to participate in ongoing faculty research.

Career avenues for biology majors are numerous. Faculty members are committed to helping students investigate career opportunities and pursue careers which most clearly match their interests and abilities. The department maintains a comprehensive career information file, as well as a file devoted to graduate training in the biological sciences.

FACULTY: Alexander, *Chair*; Carlson, Crayton, Dolan, Gee, Hansen, Lerum, Lindbo, Main, D.J. Martin, Matthias, McGinnis.

BACHELOR OF ARTS or BACHELOR OF SCIENCE MAJOR:

The major in biology is designed to be flexible in meeting the needs and special interests of students. Several options for major programs are available. In each plan the student must take the principles of biology sequence (161, 161A, 162, 323). Completion of this sequence (or an equivalent general biology sequence at another institution) is required before upper division biology courses can be taken. Courses not designed for biology majors (111, 112, 201, 205, 206) cannot be used to satisfy major requirements unless those courses are taken before completion of Biology 161; under no circumstances can more than 8 hours from courses designed for non-majors be counted toward completion of major requirements. Independent study (491, 492, 495) and cooperative education may be used for no more than six of the upper division biology hours required for the B.S. degree, and for no more than four of the upper division biology

hours required for the B.A. degree. At least 12 hours in biology must be earned in residence at PLU. Each student must consult with a biology adviser to discuss selection of electives appropriate for educational and career goals. Basic requirements under each plan for the major are listed below.

Plan I—Bachelor of Arts: 32 semester hours in biology, including 161, 161A, 162, and 323, plus 19 additional hours. Required supporting courses: Chemistry 105 or Chemistry 115 and Math 140. Recommended supporting courses: Physics 125 (with laboratory 135) and Physics 126 (with laboratory 136).

Plan II—Bachelor of Arts—Comprehensive: 36 semester hours in biology, including 161, 161A, 162, and 323, plus 23 additional hours. Required supporting courses: Chemistry 115, Chemistry 116, and Math 140. Recommended supporting courses: Chemistry 331 (with laboratory 333); Physics 125 (with laboratory 135) and Physics 126 (with laboratory 136).

Plan III—Bachelor of Arts—Chemistry Emphasis: 28 semester hours in biology, including 161, 161A, 162, and 323, plus 15 additional hours. Required supporting courses: Chemistry 115, Chemistry 116, Chemistry 331 (with laboratory 333), Chemistry 332 (with laboratory 334), and either Chemistry 321 or Chemistry 403; Math 140. Recommended supporting courses: Physics 125 (with laboratory 135) and Physics 126 (with laboratory 136).

Plan IV—Bachelor of Science: 40 semester hours in biology, including 161, 161A, 162, and 323, plus 27 additional hours. Required supporting courses: Chemistry 115, Chemistry 116, and Chemistry 331 (with laboratory 333); Math 151; Physics 125 (with laboratory 135) and Physics 126 (with laboratory 136), or Physics 153 (with laboratory 163) and Physics 154 (with laboratory 164).

Plan V—Bachelor of Science—Research Emphasis: 40 semester hours in biology, including 161, 161A, 162, 323, and 495, plus 25 additional hours. Required supporting courses: Chemistry 115, Chemistry 116, Chemistry 331 (with laboratory 333), and Chemistry 332 (with laboratory 334); Math 151; Physics 125 (with laboratory 135) and Physics 126 (with laboratory 136), or Physics 153 (with laboratory 163) and Physics 154 (with laboratory 164).

BACHELOR OF ARTS IN EDUCATION: Students interested in this degree develop their biology program through the Biology Department in conjunction with the School of Education. Such students should have a biology adviser. See the School of Education section of the catalog for recommended biology courses and other pertinent information.

MINOR: At least 20 semester hours selected from any biology courses. A grade of C or higher must be earned in each course. Prerequisites must be met unless written permission is granted in advance by the instructor. Applicability of non-PLU biology credits will be determined by the department chair. At least eight credit hours in biology must be earned in residence at PLU. Consult the department chair for assignment of a minor adviser.

Course Offerings

111 Biology and the Modern World

An introduction to biology, designed primarily for non-biology majors. Fundamental concepts chosen from all areas of modern biology including the environment, population, human anatomy and physiology, genetics, evolution and biological controls. Lectures, laboratories, and discussion. I II (4)

112 Humanistic Botany

An introduction to the basic principles of biology with an emphasis on plants and their impact on people. Topics included are: basic plant structure and function; poisonous plants; medicinal plants; food plants; propagation of house plants; home care of plants; plant identification. Includes laboratory. (4)

161 Principles of Biology I: Cell Biology

Cellular and molecular levels of biological organization; cell ultra-structure and physiology, Mendelian and molecular genetics, energy transduction. Includes laboratory. Co-registration in Biology 161A required, and co-registration in Chemistry (104 or 115) recommended. I (4)

161A Perspectives in Biology

A series of one-hour seminars presented by the biology faculty to introduce beginning students to the broad range of contemporary biology, to the research and professional interests of the faculty, and to the biology program at PLU. Required of all biology majors in conjunction with 161. I (1)

162 Principles of Biology II: Organismal Biology

An introduction to animal and plant tissues, anatomy, and physiology, with special emphasis on flowering plants and vertebrates as model systems, plus an introduction to animal and plant development. Includes laboratory. Prerequisite: 161. II (4)

201 Introductory Microbiology

The growth, control, physiology, isolation, and identification of microorganisms, especially those which affect human beings. Includes laboratory. Prerequisite: CHEM 105 or consent of instructor. 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. 205 (I) prerequisite to 206 (II). (4,4)

323 Principles of Biology III: Ecology, Evolution and Diversity

Evolution, ecology, behavior, and a systematic survey of life on earth. Includes laboratory. Prerequisite: 162 or consent of department chair. I (4)

324 Natural History of Vertebrates

Classification, natural history, and economic importance of vertebrates with the exception of birds. Field trips and laboratory. Prerequisite: 323. a/y I (4)

326 Animal Behavior

Description, classification, cause, function, and development of the behavior of animals. Lectures emphasize an ethological approach to the study of behavior focusing on 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: 323 or consent of instructor. II (4)

327 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: 323 or consent of instructor. II (2)

328 Microbiology

The structure, physiology, genetics, metabolism, and ecology of microorganisms. Includes laboratory. Prerequisite: 323 or consent of instructor; one semester organic chemistry recommended. 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: 323 II (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: 323. II (4)

346 Cellular Physiology

Deals with how cells are functionally organized; enzyme kinetics and regulatory mechanisms, biochemistry of macromolecules, energy metabolism, membrane structure and function, ultra-structure, cancer cells as model systems. Prerequisites: 323 and one semester of organic chemistry or consent of instructor. II (4)

347 Cellular Physiology Laboratory

A laboratory experience in techniques and types of instrumentation often encountered in biochemical and cellular research including animal cell culture, cell fractionation, use of radiotracers, biochemical assays, membrane phenomena, spectrophotometry, respirometry. May be elected only by students with a serious interest for this type of training; not required with 346. Corequisite/prerequisite: 346 or CHEM 403 and consent of instructor. II (1)

359 Plant Anatomy and Physiology

Higher plant structure and function from germination to senescence, including basic anatomy, seed germination, water relations, respiration, mineral nutrition, photosynthesis, growth regulators, and reproduction. Includes laboratory. Prerequisites: 323 and one semester of organic chemistry. I (4)

361 Comparative Anatomy of the Vertebrates

After a history of the vertebrate body (the evolutionary story of the vertebrates is better known than any other animal group) and an introduction to embryology, the structural and functional anatomy of the vertebrates is presented. Includes laboratory dissections following a systems approach. Mammals are featured plus some observational and comparative study with a human cadaver is included. Knowledge of vertebrate structure is of practical value to workers in many fields of biology. Prerequisite: 323. II (4)

385 Immunology

Immunology is the study of the biological properties which enable an organism to respond to changes within itself when the changes represent the presence of foreign substances, either from the external environment or self-induced. Consideration of the biology and chemistry of immune response: the specificity of the organism's immune reactions, the types and roles of lymphatic cells, chemical and functional characteristics of immunoglobulins and complement, genetic control of the immune response, hyper-sensitivity reactions, and immunodeficiency diseases. Practical ramifications include methods of immunochemical analysis and clinical applications. Prerequisites: 328, either 346 or CHEM 403. I (2)

403 Developmental Biology

The development of multicellular organisms, emphasizing cellular and molecular bases for development. Major topics include fertilization, early embryonic development, the origin of cell differences during early development, genetic control of development, cellular differentiation, morphogenetic processes, and the specification of pattern in developing systems. Laboratory addresses biochemical and molecular aspects of development. Prerequisite: 323. I (4)

407 Molecular Biology

An introduction to molecular biology, emphasizing the central role of DNA in eukaryotic cells. Topics include: foundations (DNA structure as genetic storehouse, central dogma of molecular biology, recombinant DNA technology); function (regulation of gene expression, genome organization and rearrangement); frontiers (cancer, development, evolution, genetic engineering – methodology, applications, trends, implications). Laboratory features an introduction to basic recombinant DNA techniques. Prerequisite: 323. I (4)

411 Histology

Microscopic study of normal cells, tissues, organs, and organ systems of vertebrates. The emphasis is mammalian. This study is both structurally and physiologically oriented. Prerequisite: 323. I (4)

424 Ecology

Organisms in relation to their environment, including organismal adaptations, population growth and interactions, and ecosystem structure and function. Prerequisite: 323. I (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: 323. II (4)

426 Field Methods in Ecology

Sampling techniques and analysis of natural ecosystems. Independent project required. Prerequisites: 323 and 424 or consent of instructor. II (2)

441 Mammalian Physiology

Functions of principal mammalian organ systems, emphasizing control mechanisms and homeostatic relationships. Human-oriented laboratory includes work in circulation, cardiography, psychophysiology, and other areas. Prerequisites: 323 and CHEM 331. Anatomy and biochemistry recommended. I (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: 323. I a/y 1994-95 (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 that investigation. It is suggested that the student spend one semester searching pertinent literature and writing a proposal (for one credit hour) and a second semester actually carrying out the project (for one more credit hour). Prerequisite: written proposal for the project approved by a faculty sponsor and the department chair. I II (1-4)

495 Directed Study

Original experimental or theoretical research open to upper division students intending to graduate with a Bachelor of Science-Research Emphasis. Requires a written proposal approved by a faculty sponsor and the department chair. (2)

School of Business

A new business curriculum will be implemented beginning fall 1995. The requirements and courses listed in this catalog will be replaced by new requirements and courses listed later in this section. Students who enter the university as freshmen or sophomores beginning fall 1995, and as juniors or seniors fall 1996, will follow the requirements under the new curriculum. Please refer to the section on the new curriculum for information about changes.

The mission of the School of Business is to stimulate the development and ongoing improvement of the whole person and communities we serve by providing relevant, innovative, and quality business education in the liberal arts spirit.

Through competency-based degree programs, students in the School of Business develop the essential skills to help business meet the demands of an ever-changing environment. Students master the fundamentals of teamwork, communication, technology, problem-solving, leadership, multi-cultural management, and change management to help them become successful leaders in business organizations and in the community.

FACULTY: McCann, *Dean*; Polcyn, *Associate Dean*; Ahna, Bancroft, Barndt, Barnowe, Berniker, Finnie, Gibson, Hegstad, Kibbey, MacDonald, McNabb, C. Miller, Myers, Ramaglia, Sepic, Sumner, Thrasher, Van Wyhe, Yager, 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.

To be admitted to the School of Business, a student must:

1. Be officially admitted to the university, and
2. Have successfully completed 24 semester hours, and
3. Have a minimum cumulative grade point average of 2.50, and
4. Have completed and/or be currently enrolled in: MATH 128, CSCI 220, ECON 151-152, STAT 231 and BUSA 281; and
5. Declare a major or minor in business.

Access to upper division business courses is limited to students with a cumulative grade point average of 2.50 or above who have met the required prerequisites.

AFFILIATIONS: The School of Business of Pacific Lutheran University is a member of the American Assembly of Collegiate Schools of Business. The B.B.A., M.B.A., and accounting programs are nationally accredited by the Accreditation Council of the AACSB. The School is privileged to have a student chapter of Beta Gamma Sigma, the national business honorary society recognized by the AACSB. Pacific Lutheran University is accredited regionally by the Northwest Association of Schools and Colleges.

DEGREE REQUIREMENTS: The Bachelor of Business Administration degree program consists of a minimum of 128 semester hours completed with an over-all grade point average of 2.50 or above as well as a 2.50 grade point average separately in business courses. C- is the minimal acceptable grade for business courses.

At least one-half of the minimum total degree requirements are taken in fields outside the School of Business. At least 40 semester hours are taken in required and elective business subjects. A minimum of 20 semester hours in business must be taken in residence at PLU.

Business degree and concentration requirements are established at the time of major declaration. Students with a declared major in business who have not attended the university for a period of three years or more will be held to the business degree requirements in effect at the time of re-entry to the university.

BACHELOR OF BUSINESS ADMINISTRATION:*Required supporting courses:*

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|--|-----|
| MATH 128 or (151 and 230) or (151, 152, and 331) | 4 |
| ECON 151-152 (formerly ECON 150)* | 3/3 |
| CSCI 220 or (CSCI 144, 270, and 367) | 4 |
| STAT 231 | 4 |
| ECON elective (upper division) | 4 |

Minimum semester hours in supporting courses: 22

Required business courses:

| | |
|------------------------------------|---|
| BUSA 230 Law and Society | 4 |
| BUSA 281 Financial Accounting | 4 |
| BUSA 282 Management Accounting | 4 |
| BUSA 350 Management | 4 |
| BUSA 354 Human Resource Management | 4 |
| BUSA 364 Managerial Finance | 4 |
| BUSA 370 Marketing Systems | 4 |
| BUSA 455 Business Policy | 4 |
| BUSA electives (upper division) | 8 |

Minimum semester hours in business courses: 40

*ECON 130 may be substituted for ECON 152 with approval from the School of Business.

CONCENTRATIONS: A student may elect to complete one or more concentrations within the Bachelor of Business Administration program. (Courses taken to fulfill concentration requirements will also meet general B.B.A. requirements.) The concentration, which is noted on the student's transcript, must be completed with at least a 3.00 grade point average. C- is the minimal acceptable grade for concentration courses. A minimum of eight semester hours of the total required for a concentration must be taken in residence at PLU.

Accounting

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| BUSA 281 Financial Accounting |
| BUSA 282 Management Accounting |
| BUSA 380 Accounting Systems |
| BUSA 381 Intermediate Financial Accounting |
| BUSA 382 Advanced Financial Accounting |
| BUSA 385 Cost Accounting |
| BUSA 483 Income Taxation |
| BUSA 484 Auditing |

Finance

| |
|--|
| BUSA 364 Managerial Finance |
| BUSA 462 Investments |
| BUSA 463 Portfolio Analysis and Management |
| BUSA 464 Financial Analysis and Strategy |
| BUSA 381 Intermediate Accounting or 465 International Financial Management |
| ECON 352 Intermediate Micro Economic Analysis or |
| ECON 361 Money and Banking |

Human Resource Management

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| BUSA 354 Human Resource Management |
| BUSA 454 Organizational Change and Development |
| BUSA 457 Productivity and the Quality of Work Life |
| BUSA 458 Advanced Human Resource Administration |
| ECON 321 Labor Economics |

International Business

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|----------------------------------|
| BUSA 340 International Business |
| BUSA 465 International Finance |
| BUSA 474 International Marketing |
| ECON 331 International Economics |

Two years of one college level foreign language (or equivalent) Travel and study abroad, additional courses in other cultures, and international experiences are recommended.

Management Information Systems

(Completion of this concentration also fulfills the requirements for an Information Science minor within the Department of Computer Science.)

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| CSCI 144 Introduction to Computer Science |
| CSCI 270 Data Structures |
| CSCI 367 Data Base Management |
| BUSA 325 Information Systems in Organizations |
| BUSA 380 Accounting Systems |
| BUSA 421 Systems Design and Analysis |
| BUSA 428 Seminar in Management Information Systems |

Marketing

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|-------------------------------|
| BUSA 370 Marketing Systems |
| BUSA 471 Marketing Research |
| BUSA 475 Marketing Management |

Two of the following:

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| BUSA 472 Advertising and Sales Management |
| BUSA 473 Industrial Marketing and Purchasing |
| BUSA 474 International Marketing |
| PSYC 462 Consumer Psychology |

Operations Management

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|---|
| BUSA 350 Management |
| BUSA 385 Cost Accounting |
| BUSA 450 Production and Operations Management |
| BUSA 473 Industrial Marketing and Purchasing |

MINOR IN BUSINESS ADMINISTRATION:*Required supporting courses:*

| | |
|--|-----|
| MATH 128 or (151 and 230) or (151, 152, and 331) | 4 |
| ECON 151-152 (formerly ECON 150)* | 3/3 |
| CSCI 220 or (CSCI 144, 270, and 367) | 4 |
| STAT 231 | 4 |

Minimum semester hours in supporting courses: 16

Required business courses:

| | |
|-------------------------------|---|
| BUSA 281 Financial Accounting | 4 |
| BUSA 350 Management | 4 |
| BUSA 364 Managerial Finance | 4 |
| BUSA 370 Marketing Systems | 4 |

Minimum semester hours in business courses: 16

*ECON 130 may be substituted for ECON 152 with approval from the School of Business.

A minimum grade point average of 2.50 in business courses is required for the minor.

ACCOUNTING CERTIFICATE PROGRAM: The accounting certificate program is available for students who hold a baccalaureate degree (any field) and wish to complete the educational requirements to sit for the C.P.A. examination. Contact the School of Business for further information.

MASTER OF BUSINESS ADMINISTRATION:

See *Graduate Studies*.

Course Offerings

Courses numbered 100-299 are available to all students. Courses numbered 321-499 are open to students with junior standing, the required prerequisites, and a 2.50 cumulative g.p.a.

Courses numbered 500-599 are reserved for students in the M.B.A. program and students in other PLU graduate programs who have an approved field in business.

230 Law and Society

A study of the American legal system and the legal relationships among the natural environment, individuals, groups, business organizations, governmental agencies, and the judicial system. Current business and social problems are addressed from a

global perspective with an emphasis on business ethics and social responsibility. Prerequisite: Sophomore standing. (4)

281 Financial Accounting

An introduction to accounting concepts and principles. Valuation theories in the U.S. compared to those in other nations. Preparation (manual and computer) and analysis of financial reports. Prerequisite: Sophomore standing. (4)

282 Management Accounting

Introduction to the use of accounting data in planning, control, and decision making. Topics include cost-volume-profit relationships, cost accounting methods, management accounting systems, and budgeting; spreadsheet applications; international applications of performance evaluation systems. Prerequisites: 281; MATH 128, CSCI 220 (or equivalents). Sophomore standing. (4)

325 Information Systems in Organizations

Introduction to the fundamental concepts of systems and information as they apply to decision-making in organizations. A focus on complex systems and the assumptions, models, and thinking processes used in their design and management. Ethical and decision-making implications of information systems will be explored. Prerequisites: MATH 128, CSCI 220 (or 144) (or equivalents); Junior standing. (4)

340 International Business

Integrated study of international business functions, and related concepts, practices, and policies, using project and case analyses. This is the principal business administration course for students in the Global Studies International Trade minor. Prerequisites: 281, 350; ECON 151-152, STAT 231; ECON 331. (4)

350 Management

A critical examination of the principles and processes of administration in an increasingly international context. Management techniques and the functions of planning, organizing, leading and directing, and controlling are discussed from the classical, behavioral, and more recent integrative points of view. Included is the study of concepts and characteristics related specifically to the operations function. Introduction to case analysis and problem solving techniques. Prerequisites: 281, ECON 151-152, STAT 231 (may be concurrent). Junior standing. (4)

354 Human Resource Management

Detailed examination of the behavior of individuals and groups in business organizations, with emphasis on policies and practices for solving problems. Fundamentals of personnel/human resource procedures in the U.S. and other countries. International aspects of human resource management will provide insight into the problems of managing foreign operations. Prerequisites: 281, 350; ECON 151-152; STAT 231. (4)

364 Managerial Finance

Introduction to the principal problems, theories and procedures of financial management: valuation, financial planning, financial statement analysis, capital asset acquisition, cost of capital, financing strategies (including capital structure theory and dividend policy), management of working capital accounts, and financial dimensions of international trade (including foreign exchange risk, country risk, translation gains and losses). Prerequisites: 281; MATH 128, CSCI 220 (or equivalents); ECON 151-152; STAT 231. Junior standing. (4)

370 Marketing Systems

The flows of goods and services in the U.S. and global economies; economic and behavioral approaches to the analysis of domestic and international demand; the role of marketing functions in business and not-for-profit organizations. Determination of a marketing mix: product policy, pricing, channels and physical distribution, and marketing communications. Prerequisites: 281; MATH 128 (or equivalent); ECON 151-152; STAT 231. Junior standing. (4)

380 Accounting Systems

Study of the design, implementation, and operation of manual and computerized accounting information systems. Prerequisites: 281, 282; MATH 128, CSCI 220, (or equivalents). (4)

381 Intermediate Financial Accounting

Concentrated study of the conceptual framework of accounting, valuation theories in the U.S. and abroad, asset and income measurement, financial statement disclosures, and foreign currency translation for multinationals. Prerequisites: 281, 282, 380; MATH 128, CSCI 220, (or equivalents). (4)

382 Advanced Financial Accounting

Concentrated study of equity measurement including the accounting aspects of partnerships, corporations, and consolidations. Also includes accounting for multinational corporations and not-for-profit organizations. Prerequisites: 281, 282, 380, 381; MATH 128, CSCI 220, (or equivalents). (4)

385 Cost Accounting

Development and analysis of cost information for management use in decision making, income determination, and performance evaluation, using a variety of computer and quantitative techniques. International implications arising from the use of traditional inventory models. Prerequisites: 281, 282; MATH 128, CSCI 220, (or equivalents); STAT 231. (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, and the School will provide 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 must be taken for a grade if used to meet one of the required upper division business elective courses. Prerequisites: 281, 282, 350; MATH 128, CSCI 220, (or equivalents); ECON 151-152; STAT 231; one additional course in the student's area of concentration. (2 or 4)

393 Study Abroad

Credit is offered for PIU-sponsored academic or experiential study in other countries. Students may spend a summer, semester, January term, or full academic year abroad.

421 Systems Design and Analysis

Information systems analysis and design for management decision making. Emphasis is on the organization of the systems analysis and development process. Exercises and case studies deal with information analysis and with the logical specification of a project. Prerequisites: 281, 325 (may be concurrent); MATH 128, CSCI 220, (or equivalents). (4)

428 Seminar in Management Information Systems

Exploration of current topics in the development and use of management information systems and decision support systems. Emphasis on information systems projects which are applicable to functional areas of business or government. Prerequisites: 281, 282, 325, 380, 421; MATH 128 (or equivalent); CSCI 220 (or CSCI 144, 270, 367). (4)

435 Business Law

An in-depth study of the legal principles governing business entities and commercial transactions. Study includes transactions governed by the Uniform Commercial Code including sales, secured transactions, negotiable instruments and letters of credit, both in the U.S. and in international transactions. Among federal statutes studied are those dealing with securities, employment and antitrust as well as state laws on real estate, estates, trusts and wills. Prerequisite: Junior standing. (4)

450 Production and Operations Management

Study of key concepts, quantitative techniques, and practices applied by domestic and foreign management to the production of goods and services. Includes examination of facility design; work design and measurement; quality assurance techniques; and production planning, control, and scheduling methods. Prerequisites: 281, 350; MATH 128; CSCI 220 (or equivalents); ECON 151-152; STAT 231. (4)

454 Organizational Change and Development

Examination of the need for change in organizations, using a diagnostic approach and employing appropriate strategies to develop human resources vital to every organization's economic viability. Emphasis on developing the skills of an internal change agent with knowledge of evaluation methods and interventions that facilitate planned change. Prerequisites: 281, 350, 354; ECON 151-152; STAT 231. (4)

455 Business Policy

Study of organizational administration from top management perspective. Formulation and execution of strategies and policies to integrate all management and business functions in support of organizational objectives. Implications of resource availability, technology, and the economy; education, religion, ethics, and personal values; social responsibility; public policy; and international relations for top management decisions. Includes comprehensive case analyses. Required for business administration majors. Prerequisites: 281, 282, 350, 354, 364, 370; MATH 128, CSCI 220, (or equivalents); ECON 151-152, STAT 231. Senior standing. (4)

456 Honors Seminar

Integrative capstone experience for senior students in business administration. Comprehensive case analysis and field study drawing on the student's knowledge of all business functions. Formulation of plans and policies reviewing relevant social, ethical, religious, economic, legal, and international issues. This course can substitute for business policy, BUSA 455, but requires a higher grade point average. Prerequisites: 281, 282, 350, 354, 364, 370; MATH 128, CSCI 220, (or equivalents); ECON 151-152; STAT 231. Senior standing. (4)

457 Productivity and the Quality of Work Life

Examination of the sociotechnical determinants of organizational and individual productivity, with subsequent exploration of issues that affect quality of work life in service and manufacturing industries. Comparison of U.S. and foreign firms and cultures will provide reasons for differences in productivity and QWL. Prerequisites: 281, 350, 354, 454; ECON 151-152; STAT 231. (4)

458 Advanced Human Resource Administration

Detailed coverage of modern human resource procedures: job analysis, employee selection, training and career development, compensation, safety and health, labor relations. Review of the U.S. legal context of employment practices in other countries. Prerequisites: 281, 350, 354; ECON 151-152; STAT 231. (4)

462 Investments

Emphasis on concepts, principles, and issues relating to individual securities: risk, return, and valuation of bonds, preferred stock, common stock, options, warrants, convertibles, and futures; determination and term structure of market interest rates; market transactions structure; capital market efficiency. Prerequisites: 281, 364; MATH 128, CSCI 220, (or equivalents); ECON 151-152; STAT 231. (4)

463 Portfolio Analysis and Management

The implications of modern investment theory for bond portfolio management. Emphasis on management of interest rate risk and clientele effects in the bond markets and on modern portfolio theory and its implication for individual investment decisions. Methods for evaluating portfolio perfor-

mance. Description of existing equilibrium asset pricing models in finance. Prerequisites: 281, 364, 462; MATH 128, CSCI 220, (or equivalents); ECON 151-152; STAT 231. (4)

464 Financial Analysis and Strategy

An extension of the conceptual and analytical principles and procedures of managerial finance (valuation, capital budgeting, planning and control, growth strategies, financing strategies, leverage and capital structure theory), as well as treatment of selected special topics. Context is both multinational and domestic. Extensive use of computerized financial models and cases. Prerequisites: 281, 364; MATH 128, CSCI 220, (or equivalents); ECON 151-152; STAT 231. (4)

465 International Financial Management

Analysis of direct and indirect international investments; international regulatory environment; international money flows and capital markets; international risk. Prerequisites: 281, 364; MATH 128; CSCI 220 (or equivalents); ECON 151-152; STAT 231; ECON 331 (may be concurrent). (4)

471 Marketing Research and Consumer Behavior

Techniques and uses of marketing research in the business decision-making process. Emphasis on research design, various survey methods, research instruments, and sampling plans as they relate to marketing consumer products and services in domestic and international environments. Contemporary behavioral science concepts to be examined and incorporated in selected marketing projects. Prerequisites: 281, 370; MATH 128, CSCI 220, (or equivalents); ECON 151-152; STAT 231. (4)

472 Advertising and Sales Management

The role of promotion activities (advertising, personal selling, sales promotion and publicity) in the domestic and international marketing of goods and services; analysis of target markets; developing market potentials; media selection; designing the promotional message; evaluation and control of the promotional mix. Prerequisites: 281, 370; MATH 128 (or equivalent); ECON 151-152; STAT 231. (4)

473 Industrial Marketing and Purchasing

Analysis of the industrial buying and selling process in domestic and international business exchanges; purchasing policies and procedures; selection of sources of supply, including international sourcing; ethical standards; marketing problems of manufacturers and suppliers of industrial goods and services; developing and implementing domestic and global industrial marketing strategies. Prerequisites: 281, 370; MATH 128 (or equivalent); ECON 151-152; STAT 231. (4)

474 International Marketing

Introduction to marketing problems and opportunities facing U.S. firms in an international marketing context. Covered are the changes necessary in marketing programs whenever business transactions cross international boundaries; the economic and cultural forces that make these changes necessary. Prerequisites: 281, 370; MATH 128 (or equivalent); ECON 151-152, 331; STAT 231. (4)

475 Marketing Management

Analytical approaches to the solution of domestic, international, and multinational marketing problems. Developing strategies, planning, and administering comprehensive marketing programs; use of computer models; evaluation and control of marketing operations. Prerequisites: 281, 370, one 400 level marketing course; MATH 128; CSCI 220 (or equivalents); ECON 151-152; STAT 231. (4)

483 Income Taxation

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

484 Auditing

Comprehensive study of auditing concepts and procedures; analysis of risk through the study and evaluation of internal controls, and through the study and evaluation of account balances; reporting of risk; review of the development and meaning of professional responsibility and ethics; review of operational auditing. Prerequisites: 281, 282, 380, 381, 382 (may be concurrent); MATH 128, CSCI 220, (or equivalents). (4)

487 Accounting Information Systems Seminar

Contemporary development in accounting systems. Topics may include analysis and design, controls, audit of computerized systems, and systems for large concerns. Prerequisites: 281, 282, 380; MATH 128, CSCI 220, (or equivalents). (4)

490 Seminar

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

491 Directed Study

Individual studies; readings on selected topics approved and supervised by the instructor. Prerequisite: consent of 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 accounting implications of basic international transactions. 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, long-term financing, and multinational financing and investing. (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. An examination of the cultural and economic implications of international business transactions on the management and marketing functions of U.S. firms. (4)

505 Management Use of Computers

An introduction to computer systems and their uses by managers in industry. Topics include hardware components of micro and mainframe systems; concurrent issues surrounding computer usage; use of application software to aid in managerial decision-making (wordprocessing, spreadsheets, data base packages, statistical packages); and elementary programming techniques. (4)

520 Programming for Managers

Computer programming including branching, looping, subscripts, input/output, character manipulation, subroutines, file manipulations, data storage and retrieval. Advanced work with software packages. Prerequisite: 505. (4)

521 Information Systems Design

Information systems development processes. Emphasis placed on the analysis and design of information systems for support of management decision making. Case studies and systems design projects focus on solutions to problems of systems design. Prerequisites: 501, 505. (4)

535 Legal Aspects of the Management Process

A survey of federal and state law affecting business decision-making. Areas covered include employment relations, consumer protection, investor protection, worker protection, environmental protection, and organizational and managerial liability.

The purpose is to help prepare the student for imaginative and ethically responsible citizenship and leadership roles in business and society, domestic and worldwide. (4)

550 Organizational Behavior and Environment

The study of open sociotechnical systems within which a manager must operate. Three major perspectives are encompassed: the external organization environment, including legal, ethical, social, economic, political, and international influences; the organization itself as an entity; and the internal organization environment. Comparisons with administrative practices in other countries and cultures. Prerequisite: 502. (4)

551 Operations Management Seminar

Intensive study of key concepts, practices, and techniques applicable to management of production of goods and services including work-facility-design, planning, scheduling, quality control, and materials management and advanced internationally competitive manufacturing practices. Organizational impacts of production systems. Case analyses used to address complex situations. Prerequisites: 502, 505, 550; ECON 500, 543. (4)

553 Contemporary Issues in Management

Investigation of the roles of managers in modern society. The exploration may include, but is not limited to, the topics of corporate responsibility, ethical issues in management, the impact of technological change on organizations and society, and the challenges posed by international competition and management innovations in other countries. The workshop approach to these topics combines the use of cases, readings, discussions, and simulations. Prerequisite: 550. (4)

554 Planned Organizational Change

Detailed examination of techniques for diagnosing administrative problems requiring change, and for planning, implementing, and evaluating changes undertaken through systematic programs of individual, group, and organizational development. Emphasis on the problem assessment skills of internal change agents and on interventions aimed at structural changes, management training, and career development. Comparative organization development practices in other countries. Prerequisite: 550. (4)

555 Business Strategy and Policy

An integrated management approach based on decision-making analysis in complex cases and comprehensive field situations. Advanced readings and library research integrate concepts of management and business functions including consideration of legal, social, and international aspects of the business environment. Prerequisites: 551, 564, and 570, any one of which may be taken concurrently with 555. (4)

561 Investment Analysis and Management

Analysis of the general problem of portfolio management. Emphasis is placed on the application of investment theory in portfolio construction and risk management. Issues discussed include fundamental valuation, managing interest rate risk, option pricing, modern portfolio theory, and current equilibrium asset pricing models in finance. Prerequisites: 501; ECON 500, 543. (4)

564 Financial Management Seminar

Analysis of optimal financial policies. Intensive investigation of the valuation process and its resulting impact on firm investment, financing, and dividend policies. Discussion of the implications of international financing and investing activities. Extensive use of the case method. Prerequisites: 501, 505, ECON 504, 543. (4)

570 Marketing Management Seminar

Introduction to marketing strategy decisions in both domestic and international contexts; marketing resource allocation decisions in a competitive selling environment; marketing alternatives for both consumer and industrial goods and services. Prerequisites: 502, 505; ECON 504, 543. (4)

582 Accounting Information and Control

Applications of accounting information, services, and systems to management problems. Impact on decision making by international accounting practices. Prerequisites: 501, 505. (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 of instructor. (1-4)

593 Thesis

Research study to meet Thesis Option requirement for elective in the M.B.A. degree program. (4)

New Bachelor of Business Administration Curriculum:

A new business curriculum will be implemented beginning fall 1995. The courses listed in the 1994-95 catalog will be replaced entirely by those in this new curriculum. Students who enter the university as freshmen or sophomores beginning fall 1995 will follow the requirements under the new curriculum.

Students who enter the university prior to fall 1995, and junior and senior transfer students who enter the university prior to fall 1996, will have the option to follow the requirements listed in the 1994-95 catalog. However, since the current business courses will be replaced by the new curriculum, these students must complete their degree program in consultation with the School of Business to determine appropriate course substitutions. Specific requirements for degree completion will be determined by formal contract between the student and the School of Business. These contracts will be completed beginning spring 1995.

BACHELOR OF BUSINESS ADMINISTRATION:*Required foundation courses:*

| | |
|--|-----|
| MATH 128 Linear Models and Calculus, an Introduction (or 151 and 230) | 4 |
| CSCI 220 Computerized Information Systems | 4 |
| ECON 151-152 Macro/Micro Economics | 3/3 |
| STAT 231 Introductory Statistics | 4 |
| PHIL 325 Business Ethics (Prerequisite: PHIL 101, 125, or 225/226) | 2 |
| COMA 336 Effective Business Presentations | 4 |
| ANTH/HIST/POLS 210 Global Perspectives | 4 |

Minimum semester hours in foundation courses: 28

Required business courses:

| | |
|--|----------|
| BUSA 201 The Business Enterprise in Global Perspective | 4 |
| BUSA 204 The Foundations of Business Law | 2 |
| BUSA 301 Managing Careers and Self-Assessment | 2 |
| BUSA 303 Assessing and Managing Financial Performance (6) or BUSA 202 Financial Accounting (4) and BUSA 302 Managerial Finance (4) | 6 (or 8) |
| BUSA 305 Creating and Leading Effective Organizations | 6 |
| BUSA 306/307 Managing the Value Chain I/II | 9 |
| BUSA 405 Legal Aspects of Financial Transactions or BUSA 406 Legal Aspects of Human Resource Management or BUSA 407 Legal Aspects of Marketing or BUSA 408 International Business Law | 2 |
| BUSA 409 Strategic Management | 3 |
| Upper division business or economics electives | 6 (or 4) |

Minimum semester hours in business courses: 40

CONCENTRATIONS: Students may elect to complete one or more concentrations within the Bachelor of Business Administration program. Concentrations will be available in the following areas:

- Financial Resources Management
- Professional Accounting
- Human Resource Management
- International Business
- Marketing Resource Management
- Entrepreneurship and New Venture Management
- Operations and Information Technology

Financial Resources Management 20 sem. hrs.

| | |
|--|---|
| BUSA 405 Legal Aspects of Financial Transactions | 2 |
| BUSA 321 Intermediate Accounting I | 2 |

One of the following:

| | |
|---|--|
| ECON 331 International Economics (4) | |
| ECON 351 Intermediate Macro-Economic Analysis (4) | |
| ECON 352 Intermediate Micro-Economic Analysis (4) | |
| ECON 361 Money and Banking (4) | |

Twelve semester hours from the following:

| | |
|--|--|
| BUSA 320 Financial Information Systems (4) | |
| BUSA 322 Intermediate Accounting II (2) | |
| BUSA 422 Consolidations and Equity Issues (2) | |
| BUSA 423 Accounting for Not-for-Profit and Governmental Entities (2) | |
| BUSA 424 Auditing (4) | |
| BUSA 323 Cost Accounting and Control Systems (4) | |
| BUSA 327 Tax Accounting I (2) | |
| BUSA 427 Tax Accounting II (2) | |
| BUSA 335 Financial Investments (4) | |
| BUSA 430 Entrepreneurial Finance (4) | |
| BUSA 437 Financial Analysis and Strategy (4) | |
| BUSA 438 Financial Research and Analysis (4) | |

Professional Accounting 26 sem. hrs.

| | |
|--|---|
| BUSA 405 Legal Aspects of Financial Transactions | 2 |
| BUSA 320 Financial Information Systems | 4 |
| BUSA 321 Intermediate Accounting | 2 |
| BUSA 322 Intermediate Accounting II | 2 |
| BUSA 422 Consolidations and Equity Issues | 2 |
| BUSA 423 Accounting for Not-for-Profit and Governmental Entities | 2 |
| BUSA 323 Cost Accounting and Control Systems | 4 |
| BUSA 327 Tax Accounting I | 2 |
| BUSA 427 Tax Accounting II | 2 |
| BUSA 424 Auditing | 4 |

Human Resource Management 22 sem. hrs.

| | |
|---|---|
| BUSA 406 Legal Aspects of Human Resource Management | 2 |
| BUSA 342 Managing Human Resources | 4 |
| ECON 321 Labor Economics | 4 |

Three of the following (at least two from BUSA):

| | |
|--|--|
| BUSA 343 Managing Reward Systems (4) | |
| BUSA 442 Leadership and Organizational Development (4) | |
| BUSA 445 Quality Improvement Strategies (4) | |
| BUSA 449 Current Issues in Human Resource Management (4) | |
| BUSA 492 Internship (4) | |
| COMA 435 Organizational Communication (4) | |
| COMA 437 Advanced Interpersonal Communication (4) | |
| PSYC 461 Psychology of Work (4) | |
| PSYC 450 Psychological Testing (4) | |

International Business 18-34 sem. hrs.

- BUSA 408 International Business Law 2
- ECON 331 International Economics 4
- BUSA 352 Managing in the Multinational Environment 4
- One of the following: 4
 - BUSA 353 Comparative Management (4)
 - An approved area course from POLS, ANTH, or HIST (4)
- One of the following: 4
 - BUSA 460 International Marketing (4)
 - BUSA 355 Global Operations (4)
- Option I of the College of Arts and Sciences foreign language requirement or one semester of study abroad 0-16

Marketing Resource Management 22 sem. hrs.

- BUSA 407 Legal Aspects of Marketing 2
- BUSA 468 Marketing Management 4
- One of the following: 4
 - ECON 331 International Economics (4)
 - ECON 244 Econometrics (4)
- Three of the following (at least two from BUSA): 12
 - BUSA 363 Consumer Behavior and Promotional Strategy (4)
 - BUSA 365 Sales and Sales Management (4)
 - BUSA 367 Business to Business Marketing (4)
 - BUSA 460 International Marketing (4)
 - BUSA 467 Marketing Research (4)
 - COMA 271 Mass Media (4)
 - SOCI 362 Applied Demography (4)

Entrepreneurship and New Venture Management 22 sem. hrs.

- BUSA 405 Legal Aspects of Financial Transactions 2
- BUSA 358 Entrepreneurship 4
- BUSA 430 Entrepreneurial Finance 4
- BUSA 492 Internship 4
- Two of the following (one must be BUSA): 8
 - BUSA 323 Cost Accounting (4)
 - BUSA 438 Financial Research and Analysis (4)
 - BUSA 365 Sales and Sales Management (4)
 - BUSA 371 Operations and Information Technology (4)
 - BUSA 442 Leadership and Organizational Development (4)
 - BUSA 467 Marketing Research (4)
 - ECON 371 Industrial Organization and Public Policy (4)
 - ECON 361 Money and Banking (4)

Operations and Information Technology 22 sem. hrs.

- BUSA 405 or 406 Legal Aspects (Financial Transactions or Human Resource Management) 2
- BUSA 371 Operations and Information Technology 4
- BUSA 374 Designing and Managing Operations and Information Systems 4
- BUSA 479 Implementing Advanced Systems 4
- BUSA 323 Cost Accounting and Control Systems 4
- One of the following: 4
 - BUSA 320 Financial Information Systems (4)
 - BUSA 445 Quality Improvement Processes (4)
 - CSCI 367 Data Base Management (4)*
- *(prerequisite: CSCI 144)

MINOR IN BUSINESS ADMINISTRATION: A minimum of 20 semester hours in business courses, including BUSA 201 – The Business Enterprise in Global Perspective. All courses must be completed with a grade of C- or higher. A cumulative grade point average of 2.50 for all courses in the minor is required. At least 12 semester hours must be upper division, and at least 8 semester hours must be completed in residence.

Course Offerings for Program Beginning Fall 1995

105 Personal Financial Planning and Consumer Law

Basic financial and legal decision making. Includes an introduction to elementary concepts in finance, economics, law, and consumer psychology. Topics include career planning, budgeting, the use and misuse of credit, major purchase decisions, taxes, insurance, and investments. (4)

201 The Business Enterprise in Global Perspective

Integrated historical and social systems perspective on the evolution and change of business enterprises since the Industrial Revolution. Topics include work force diversity, environmental management, globalization of work, the impact of new technologies, and the expansion of the regulatory environment. Concepts and frameworks needed to understand the complex relationships between business, governments, and the larger society are introduced. (4)

202 Financial Accounting

Introduction to accounting concepts and principles. Valuation theories in the U.S. compared to those in other nations. Preparation and analysis of financial reports. (4)

204 The Foundations of Business Law

Designed to provide for all business school students a shared foundation in the legal environment of business, the course covers sources of American law, the structure of the U.S. court system, alternatives to litigation, and Constitutional guarantees applicable in a business context. Also, introduction to basic legal principles of contracts, torts, intellectual property, agency, and business organizations. (2)

301 Managing Careers and Self-Assessment

Using competency-based assessment, learning contracts, and learning teams, students collect feedback on their knowledge levels and abilities in critical performance areas. Each student interprets this information, integrates it into a set of learning goals, and forms a 5-year individualized learning plan which includes plans for a portfolio of work from the business degree program to showcase student competencies at graduation. New career development paradigms and critical competencies needed for the 21st century are introduced. Emphasis is on bridging the gap between education and business, easing organizational entry, and providing methods for future career management. (2)

302 Managerial Finance

Introduction to the principal problems, theories and procedures of financial management; valuation, financial planning, financial statement analysis, capital asset acquisition, cost of capital, financing strategies (including capital structure theory and dividend policy), management of working capital accounts, and financial dimensions of international trade. Prerequisite: CSCI 220. (4)

303 Assessing and Managing Financial Performance

Study of the origins and uses of financial information. Logic, content, and format of principal financial statements; nature of market values and their relationship to values derived from accounting processes; principles and procedures pertaining to business investment activity and financing strategies, viewed from the standpoint of financial decision-making, investing, and accounting theory and practice. Prerequisites: sophomore standing; CSCI 220. (6)

305 Creating and Leading Effective Organizations

Study of organizations in the context of changing internal and external demands and expectations. Explores how tasks, processes, individuals, groups, and structure relate to one another and to effective organizational performance. Topics include individual and group behavior, motivation and reward systems, work design, communication and performance management, decision making, leadership, managing human

resources, culture, managing diversity, and organizational climate. Emphasis is on developing knowledge and skills essential for managing continuous change at the individual, team, and organizational levels. (6)

306 Managing the Value Chain I

Integrates marketing, operations, management, management accounting, and MIS concepts and methods from the perspective of the entire value creation process within a business entity. The human, organizational, and information technology linkages between marketing and production in manufacturing, service, and not-for-profit enterprises are examined. Contemporary issues in manufacturing such as just-in-time production and total quality management are included. Product costing, activity based costing, and activity based management tools are developed and used. Prerequisites: Sophomore standing; MATH 128 (or MATH 151 & 230), ECON 151/152; computer spreadsheet competency. Co-requisites: STAT 231, BUSA 303. (4.5)

307 Managing the Value Chain II

Continuation of BUSA 306, Managing the Value Chain I. Prerequisites: Sophomore standing; MATH 128 (or MATH 151 and 230), ECON 151/152; computer spreadsheet competency, STAT 231; BUSA 303, 306. (4.5)

320 Financial Information Systems

Study of the flow of information through an enterprise, the sources and nature of documents, and the controls necessary to insure the accuracy and reliability of information. Prerequisites: CSCI 220, BUSA 303 (or BUSA 202). (4)

321 Intermediate Accounting I

Concentrated study of the conceptual framework of accounting, valuation theories, asset and income measurement, and financial statement disclosures in the U.S. and abroad. Prerequisites: CSCI 220; BUSA 303 (or BUSA 202). (2)

322 Intermediate Accounting II

Additional study of valuation theory. Advanced issues in asset and income measurement and financial statement disclosure. Includes evaluation of U.S. positions relative to those of other nations and international agencies. Prerequisites: CSCI 220; BUSA 303 (or 202), 321. (2)

323 Cost Accounting and Control Systems

A critical examination of systems for product costing and managerial control. Case analyses deal with the ability of a variety of traditional and non-traditional product and service costing systems to achieve basic objectives of inventory valuation, planning and operational control. Emphasis on developing the skills to critique cost systems and to understand the relationship between cost systems and production/service operations, organizational strategy, and performance evaluation and control systems. Prerequisites: MATH 128 (or MATH 151 and 230); CSCI 220; STAT 231; ECON 151/152; BUSA 303, 306, 307. (4)

327 Tax Accounting I

Study of income tax concepts, regulations and tax planning principles. Emphasis on individual income taxation. (2)

335 Financial Investments

In-depth exploration of fundamental principles governing the valuation of particular securities, and knowledgeable construction, management, and evaluation of portfolios. Risk, return, bond and stock valuation, interest rate determination and capital market efficiency are among the topics accorded particular emphasis. Prerequisites: ECON 151/152, CSCI 220, BUSA 303 (or BUSA 302). (4)

342 Managing Human Resources

Detailed coverage of personnel/human resource procedures in the U.S. and other countries. Examination of standard human resource functions: human resource planning, recruitment/

deruitment, selection and placement, training and career development, performance appraisal, compensation and benefits, and safety/wellness. Review of changing strategies for full use of employees in light of ongoing legal and global developments. Prerequisite: BUSA 305. (4)

343 Managing Reward Systems

Detailed examination of reward system development and practices, including job analysis and evaluation, design of pay structures, performance measurement, the use of individual, group and organization-wide incentives, and the design and administration of employee benefits. Review of legal requirements and of innovations which integrate reward systems with other human resource practices. Prerequisites: CSCI 220, ECON 151/152, BUSA 305. (4)

352 Managing in the Multinational Environment

An integrated study of global business functions applying the theoretical base of international economics to real case situations. The role of international business in economic development and the balancing of multiple complex and dynamic forces in the global environment. The significance of emerging market and manufacturing opportunities as the international political context continues to change. Building global competitive advantage for all sizes of multinational companies and small businesses. Prerequisites: ECON 151/152, ECON 331. (4)

353 Comparative Management

With the new opportunities inherent in worldwide operations, come the challenges of managing strategy, organization, and human resources in a significantly expanded, complex, and dynamic environment. Cross cultural management, communication methods, and workforce diversity issues are examined at all levels. Managing host government policies and political risk. Prerequisites: ECON 151/152; ECON 331; BUSA 352. (4)

355 Global Operations

Global sourcing and the dynamics of the manufacturing and logistical processes in the international arena have resulted from recent transportation, technology, and communications developments. Issues in technology transfer and the control of proprietary knowledge. Overseas investment incentives, training, and cross cultural issues. Environmental and other host and home government policy implications are explored. Prerequisites: ECON 151/152; ECON 331; BUSA 352. (4)

358 Entrepreneurship

Intensive study of issues and challenges associated with start-up, growth, and maturation of a new enterprise. Issues covered include topics such as characteristics of successful entrepreneurs, securing capital, managing rapid growth, leadership succession, and realizing value through the sale or merger of the business. Includes exploration of types of small businesses such as family owned and closely held companies. (4)

363 Consumer Behavior and Promotional Strategy

Concepts of consumer behavior to help explain how buyers gain awareness, establish purchasing criteria, selectively screen information and decide. Topics in promotion include target audience definition, message design, media selection within a budget and evaluation/control of the promotional mix. (4)

365 Sales and Sales Management

Fundamentals of selling—prospecting, active listening, benefit presentation, objective handling, closing and territory management. Issues surrounding management of sales personnel, including sales budgets, forecasting, territory design, employment of representatives, training, motivation, and evaluation techniques. (4)

367 Business to Business Marketing

The business marketer and business purchaser relationship is explored. This relationship is multi-stage and often protracted. Students encouraged to gain in-field knowledge of how local businesses apply course concepts in marketing to industrial accounts, resellers, and governmental agencies. Prerequisites: MATH 128 (or MATH 151 and 230); CSCI 220; ECON 151/152; STAT 231; BUSA 303, 306, 307. (4)

371 Operations and Information Technology:**Concepts and Applications**

The study of operational business decisions and the information systems and models required to support such decisions. The examination of decision support systems, computerized planning and control systems and transaction systems as they function in productive organizations. The implications for operations management and information systems design.

Prerequisites: MATH 128 (or MATH 151 and 230); CSCI 220; ECON 151/152; STAT 231; BUSA 303, 306, 307. (4)

374 Designing and Managing Operations and Information Systems

Advanced service delivery systems, manufacturing systems, and information systems as impacted by high capital intensity, time-based competition, and the competitive effects of the global economy. Study of operations and information technology as a competitive strategy, and measurement and performance of costs in operations. Case studies used to critique operations and information systems in terms of their support of business objectives. Case studies and real systems through class projects provide the basis for exploration of the impact of information technology on business processes. Projects involve the skills of systems development, with a focus on teamwork, change management, and systems usability in the context of service and manufacturing operations. Prerequisites: MATH 128 (or MATH 151 and 230); CSCI 144; ECON 151/152; STAT 231; BUSA 303, 306, 307, 371. (4)

405 Legal Aspects of Financial Transactions

Analysis of statutes, regulations, and common law doctrines applicable to the financial management of the corporation, bank-customer relations, and debtor-creditor relations. Examination of the law pertaining to commercial paper, failed contracts, investment securities, and secured transactions, as set forth in the Uniform Commercial Code. Topics include federal and state securities law; bankruptcy; insurance and letters of credit; and changes in corporate structure such as mergers and acquisitions. Prerequisite: BUSA 204. (2)

406 Legal Aspects of Human Resource Management

Analysis of statutes, regulations, and common law doctrines applicable to human resources management. Examination of legal issues encountered in the employment relationship. Topics include federal labor law, collective bargaining, workplace safety, workers' compensation, retirement and income security, discrimination statutes such as Title VII of the Civil Rights Act of 1964, sexual harassment, the Americans with Disabilities Act of 1990, and employee privacy rights (regarding drug testing, lie detector tests, and monitoring performance). Prerequisite: BUSA 204. (2)

407 Legal Aspects of Marketing

Analysis of statutes, regulations, and common law doctrines applicable to marketing practices. Examination of legal issues encountered by marketers in dealing with consumers, competitors, and other marketplace participants. Topics include regulation of competition and protection of creative endeavor, regulation of advertising and deceptive or unfair practices, and basic sales law concepts as set forth in the Uniform Commercial Code. Prerequisite: BUSA 204. (2)

408 International Business Law

An overview of the legal aspects of activities involved in conducting a world business. Topics include selecting a legal form of business organization; the international sales contract; exporting and importing of goods and related activities such as shipping and insurance; direct investment; use of natural resources; the licensing of processes, patents or trademarks; exporting personal services such as marketing, financial, technological, transportation or managerial expertise; and resolving international disputes. Prerequisite: BUSA 204. (2)

409 Strategic Management

Study of organizational administration from the perspective of strategic decision makers. Formulation and implementation of strategies and policies to integrate all management and business functions in support of organizational objectives. Implications of resource availability, technology, and the economy; personal values, ethics, and social responsibility; public policy; international relations; and competitive conditions in selecting courses of action. Includes comprehensive case analysis. Prerequisites: MATH 128 (or MATH 151 and 230); CSCI 220; ECON 151/152; STAT 231; BUSA 303, 305, 306, 307. (3)

422 Consolidations and Equity Issues

Concentrated study of equity measurement including the accounting aspects of partnerships, corporations, and consolidations. Also includes accounting for multinational corporations. Prerequisites: MATH 128 (or MATH 151 and 230); CSCI 220; BUSA 303 (or BUSA 202), 320, 321, 322. (2)

423 Accounting for Not-for-Profit and Governmental Entities

Study of fund accounting, including its conceptual basis, its institutional standard setting framework and current principles and practices. Prerequisites: CSCI 220; BUSA 303 (or 202). (2)

424 Auditing

Comprehensive study of auditing concepts and procedures; analysis of risk through the study and evaluation of internal controls, and through the study and evaluation of account balances; reporting of risk; review of the development and meaning of professional responsibility and ethics; review of operational auditing. Prerequisites: CSCI 220; BUSA 303 (or BUSA 202), 320, 321, 322. (4)

427 Tax Accounting II

Concentrated study of income tax concepts, regulations, and tax planning principles. Emphasis on business taxation. Prerequisites: CSCI 220; BUSA 303 (or BUSA 202), 327. (2)

430 Entrepreneurial Finance

Financial strategies unique to the creation and/or expansion of small, closely-held businesses. Topics include the determination of capital requirements and mix, searching for capital from sources such as venture capitalists, financing rapid growth, and acquiring companies. Prerequisites: CSCI 220; BUSA 303 (or BUSA 302). (4)

437 Financial Analysis and Strategy

Intermediate treatment of managerial finance topics, including risk, global markets, capital investment, financial planning, and financing strategies. Emphasis on development of decision-making capability through exercises that build research and teamwork skills. Prerequisites: ECON 151/152, CSCI 220, BUSA 303 (or BUSA 302). (4)

438 Financial Research and Analysis

Seminar course directed at current issues and developments. In consultation with the instructor, advanced undergraduate students select appropriate, contemporary topics for research, discussion, and presentation. Prerequisites: ECON 151/152; CSCI 220; BUSA 303 (or BUSA 302), and at least one upper division BUSA prefix elective from the list of Financial Resources Management concentration courses. (4)

442 Leadership and Organizational Development

Experiential course designed to explore the principles of organizational development. Preparation of students to be leaders in effective, systematic planned change programs. Emphasis on new organizational forms, cultural change, and the intervention process. Prerequisite: BUSA 305. (4)

445 Quality Improvement Strategies

Examination of historical developments in quality process improvements in American businesses. Emphasis on recent applications of Total Quality Management and Continuous Quality Improvement necessitate a customer focus and use of process improvement techniques. Extensive application of the quality tools, including statistical process control, that support continuous improvement in manufacturing and service settings. Prerequisite: BUSA 305. (4)

449 Current Issues in Human Resource Management

Seminar course focused on current issues and developments in managing human resources. Topic areas may include HRM's growing role in developing organizational strategy, international human resource management, managing the diverse work force, new paradigms in career development, managing the downside of downsizing, stress management in the 90s, and training strategies for preparing workers for the 21st century. Advanced business students, in consultation with the instructor, will select appropriate topics for research and discussion. Prerequisite: BUSA 305. (4)

460 International Marketing

Introduction to marketing problems and opportunities in an international context. Topics include changes in marketing programs when business is conducted across international borders and the economic and cultural forces that require these changes. Prerequisite: junior standing. (4)

467 Marketing Research

Techniques and uses of marketing research in the business decision-making process. Emphasis on research design, various survey methods, research instruments, and sampling plans as they relate to marketing consumer products in domestic and international environments. Prerequisites: STAT 231, CSCI 220. (4)

468 Marketing Management

An integrated application of marketing mix concepts in a competitive business simulation. Student teams apply marketing strategies to test their group's skills, develop a business plan, and construct an annual report. Prerequisites: MATH 128 (or MATH 151 and 230); CSCI 220; ECON 151/152; STAT 231; BUSA 303, 306, 307, and one upper division marketing course. (4)

479 Implementing Advanced Systems

Implementation of advanced manufacturing, information and service delivery systems. Examination of project management techniques, organizational and technical challenges and appropriate designs for implementing organizations. Prerequisites: MATH 128 (or MATH 151 and 230); CSCI 220; ECON 151/152; STAT 231; BUSA 303, 306, 307; BUSA 371. (4)

489 Study Abroad

PLU-sponsored academic or experiential study in other countries. Prerequisite: junior standing. (1-32)

490 Special Seminar

Seminar on specifically selected topics in business.

491 Directed Study

Individualized studies in consultation with an instructor. Prerequisites: junior standing and instructor approval. (1-4)

492 Internship

Application of business knowledge in field setting. Credit granted determined by hours spent in working environment and depth of project associated with the course of study.

503 Understanding and Managing Financial Resources

Integrated study of financial decision-making variables (both book and market), the relationships among them, and relevant decision theories/models. Primary perspective is that of the financial manager, rather than the accountant or the external investor. (4)

504 Legal and Ethical Environment of Business

Background for understanding and acting upon the legal and ethical issues decision makers in the business world face today. The first part of the course provides an overview of the main elements of the American legal system, especially as they relate to the business world. Topics include judicial process and its relationship to the operation of business, avenues of dispute resolution, the interaction of business with government regulatory agencies, and Constitutional guarantees applicable in a business context. The second part of the course sets forth the basic legal principles in areas of substantive law of special interest to business, such as contract law, tort and product liability, intellectual property and computer law, agency, and business organizations. Students as potential managers and employees relate issues to real-life situations and develop a conceptual basis for understanding the complex relationships between business, government, and global society. (4)

505 Managing Effective Organizations

Examines how leaders manage four sets of factors to achieve organizational effectiveness: the organization's internal environment, by developing competencies in setting direction, communicating, motivating, resolving conflicts, clarifying goals and work roles, and developing teams; the organization's environmental context, through analyzing organization design contingencies and creating appropriate responses; cultural differences associated with international operations, as well as home country diversity; and change, through continuous diagnosis, transition planning, and action implementation and evaluation. (4)

506 Managing the Value Creation Process I

Integration of marketing, research and development, engineering and design, operations management, management accounting, and MIS concepts and methods from the perspective of the entire value creation process within a business. Advanced models and analytical methods are introduced to demonstrate how to integrate multiple functions from a value-creation perspective. Prerequisites: ECON 500, ECON 501, BUSA 503. (4)

507 Managing the Value Creation Process II

Continuation of BUSA 506, Managing the Value Creation Process. Prerequisites: ECON 500, 501; BUSA 503, 506. (4)

509 Business Strategy in a Global Context

An integrated study of business strategy formulation and implementation under conditions of continuing economic, technological, and competitive change. Emphasizes the differences, similarities, opportunities, and threats across the global business environment. Explores industry, competitive, and company analysis and important considerations in developing and sustaining a competitive advantage. Includes advanced readings, seminar discussions, comprehensive case studies, and a field consulting project. Prerequisites: BUSA 503, 504, 505, 506, 507. (4)

530 Financing New Ventures

Project oriented class covering market research, pro forma cash flow projections, financial feasibility simulation with hands on project financing applications. Development of a specific business plan which can be taken to a financial institution. Prerequisites: ECON 500; BUSA 503. (2)

535 Financial Investments

Emphasis on concepts, principles, and issues relating to individual securities: risk, return, and valuation of bonds, preferred stock, common stock, options, warrants, convertibles, and futures; determination and term structure of market interest rates; market transactions structure, capital market efficiency. Prerequisites: ECON 500; BUSA 503. (4)

537 Decision Models and Strategies for Financial Managers

In-depth examination of risk-return relationships in the construction/revision of real asset portfolios and associated financing strategies. Focus is long-term. Primary perspective is that of the financial manager, rather than the accountant or the external investor. Prerequisite: ECON 500; BUSA 503. (4)

542 Management of Change

Detailed examination of techniques for diagnosing opportunities requiring change. Planning, implementing, intervening, and evaluating changes. Emphasis on the problem assessment skills of internal change agents. Prerequisite: BUSA 505. (2)

543 Designing Reward Systems

Exploration of reward system philosophies and strategies including consideration of internal consistency, external competitiveness, and alternatives to traditional reward systems. Understanding of compensation practices. The role of motivation in developing compensation systems. Prerequisite: BUSA 505. (2)

545 Continuous Improvement Strategies

A study of continuous improvement strategies for organizations. Focus on managing for quality, including organizational analysis, process development, and selection of improvement tools. Strategies for soliciting employee involvement. Prerequisite: BUSA 505. (2)

549 Contemporary Human Resource Management

Seminar addressing current issues in human resource management. Topics may include staffing, health care costs, training, team-building, employee involvement, workplace violence, substance abuse, ADA compliance, harassment, and workplace diversity. Consideration of successful strategies of progressive companies. Prerequisite: BUSA 505. (2)

553 Transnational Management

Examination of ways in which traditional approaches to globalization—multinational adaptation, worldwide technology transfer, and global standardization—may be synthesized into transnational strategy and practice. Emphasis on analyzing foreign environments and political risk, developing and managing global strategic alliances, integrating and controlling across borders, leveraging leading-edge practices, negotiating across cultures, and developing global competencies for functional, country, and top-level managers. Implications for small as well as for large organizations. Prerequisite: BUSA 505. (2)

558 New Venture Management

Examines the entrepreneurial skills and conditions needed for effective new business start-ups. Specific issues such as the appropriate selection and characteristics of new venture leaders and staff, capitalization and financing, market entry, and management of transition challenges encountered across the entire life cycle of the venture are considered using case studies and presentations. (2)

560 Global Marketing Management

Designing and managing marketing activities across national boundaries. Topics include strategic marketing plans, product modification or creation for foreign markets, interacting with political players and how culture, geography and economics affect marketing planning. Prerequisite: BUSA 506, 507. (2)

566 Developing New Products/Services

Study of the process required for developing a new product or service. Some areas addressed include the external environment

(economic conditions, competition, and intended market) and internal variables such as resources and company mission. Small student teams will create a new product/service concept and establish a timeline for its development. Prerequisite: BUSA 506, 507. (2)

567 Assessing Marketing Opportunities

Learning to identify and analyze marketing opportunities. Understanding market segmentation, product positioning and pricing through research analysis. Topics include research design, survey methods, and statistical analysis. Emphasis is placed on being able to identify problems, select appropriate research tools, interpret results and convey the results to end-users of the research. Prerequisite: BUSA 506. (4)

574 Advanced Service and Manufacturing Delivery Systems

The course deals with the managerial and operational challenges of advanced service and manufacturing systems characterized by tight integration, short time cycles and considerable variety and scope. In particular, computerized advanced manufacturing system, JIT, synchronous manufacturing, and customer integrated service systems will be discussed. Such systems will be reviewed as competitive strategies along with the attendant organizational implications. Prerequisite: BUSA 506, 507. (2)

577 Project Management

Study of the unique conditions, challenges, requirements, and techniques associated with designing and managing major non-repetitive undertakings. Topics include the applicability of project management, the relationship of the project life cycle to the nature of activities and composition of the project team, project manager roles, leading the project team, dealing with uncertainty and unfamiliarity, project management structures, management information needs and uses, and planning and control techniques. Prerequisite: BUSA 505. (2)

590 Seminar

Selected advanced topics. (2-4)

591 Independent Study

Individualized reading and studies. Minimum supervision after initial planning of student's work. (1-4)

Chemistry

The history of civilization is inseparable from the history of chemistry. Everything that occurs in nature—from mental processes and behavior, to the furniture we live around, to the tools we use for work or play, to the problems of pollution—is chemically based. Chemistry seeks to understand the fundamental nature of matter, the changes in its composition, and the energy changes accompanying these changes. Use of this knowledge influences our lives in many profound ways. Whether interested in the chemical profession itself, including biochemistry, polymer chemistry, radiation chemistry, and other specialties, or in chemistry in conjunction with other fields such as business, the social sciences, and the humanities, students will have suitable programs available to meet their interests at PLU. Diversity in career planning is a key concept in the chemistry department. Programs are available which are broadly applicable to the health, biological, physical, environmental behavioral, and fundamental chemical sciences.

The chemistry department's courses, curriculum, faculty, and facilities are approved by the American Chemical Society. The staff of seven persons with doctor-

ates has composite expertise in virtually every field of pure and applied chemistry. The faculty are very active in basic and applied research, and most are also significantly involved in the community, applying their expertise to enhance the quality of life of the citizens.

The department uses numerous scientific instruments in the laboratories. Such major research and teaching equipment include: 300 MHz Fourier transform nuclear magnetic resonance, Fourier transform infrared, ultraviolet, visible, atomic absorption, emission, and electron spin resonance spectrometers; X-ray crystallographic diffractometer; gas and liquid chromatographs; gas chromatograph—mass spectrometer; precision refractometer; dipolometer; short path distillation apparatus; scintillation counter; zone refiner; fluorimeter, and C-H-N analyzer.

Faculty research projects involving student participation are in progress in many important fields of chemistry. Some of the areas are: polymer structure and properties, laser spectroscopy, toxicology of tributyltin, synthesis of heterocyclic compounds, chemical cleavage of lignin, environmental monitoring, structural and magnetic studies of inorganic complexes, organic kinetics, photochemical reactions, characterization of fungal enzymes, the role of nutrition in health, and the biochemistry of drug actions.

FACULTY: Swank, *Chair*; Fryhle, Giddings, Huestis, Nettet, Tonn, Waldow.

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 of 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 to 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 at the earliest possible time. Opportunities for honors work in chemistry are described below.

Students deciding to major in chemistry should officially declare their intent as soon as possible and not later than after having completed Chemistry 331 and after consultation with a faculty adviser in the chemistry department. Transfer students desiring to major in chemistry should consult a departmental adviser no later than the beginning of their junior year.

The option requirement of the College of Arts and Sciences should be met by Option I, preferably in German.

The chemistry department considers computer usage to be an increasingly important tool in professional and personal activities. Further, laboratory work in the department places considerable emphasis on computer use. Therefore, the department strongly recommends that a student planning to major in chemistry take at least one two-credit hour course in computer science.

BACHELOR OF ARTS MAJOR: Chemistry 115, 116, 321, 331, 332, 333, 334, 341, 342, 343, 460. Required supporting courses: Physics 153, 154, 163, 164; Math 151, 152.

BACHELOR OF SCIENCE MAJOR (three alternatives):

- General**—leads to American Chemical Society certification; Chemistry 115, 116, 321, 331, 332, 333, 334, 341, 342, 343, 344, 405 or 450 or 456, 410, 435, 460; Physics 153, 154, 163, 164; Math 151, 152. For American Chemical Society certification, 450 and either 405, 440, or 456 are required.
- Biochemistry emphasis:** Chemistry 115, 116, 321, 331, 332, 333, 334, 341, 343, 403, 405, 410, 435, 460; Biology 161, 162, 323; four hours selected from Biology 326, 328, 331, 346, 359, 385, 407, 441 or Chemistry 342; Physics 153, 154, 163, 164; Math 151, 152.
- Chemical-physics emphasis:** Chemistry 115, 116, 331, 332, 333, 334, 341, 342, 343, 344, 460; Physics 153, 154, 163, 164, 331, 332, 336, 356; Math 151, 152, 253.

Generalized Chemistry Curriculum for the B.S. Degree

| FALL | SPRING |
|--|-------------------------------|
| First-Year (1) | |
| Chemistry 115 | Chemistry 116 |
| Math 151 | Math 152 |
| Physics 153, or Biology 161 for biochemistry emphasis (2) | Physics 154 or Biology 162(2) |
| Optional fourth course (3) | PE 100 or activity |
| PE 100 or activity | Core course |
| Sophomore | |
| Chemistry 331, 333 | Chemistry 332, 334 |
| Physics 153 or Biology 161(2) | Physics 154 or Biology 162(2) |
| Two additional courses | Two additional courses |
| Junior | |
| Chemistry 341, 343 | Chemistry 342, 344 |
| Chemistry 321 | Chemistry 410 |
| Core Course(s) | Core Course(s) |
| Electives | Electives |
| Senior | |
| Chemistry 460 | Chemistry 435 |
| Electives | Electives |

- Refer to the Division of Natural Sciences section of this catalog for other beginning curriculum options.
- The department stresses the importance of taking physics during either the freshman or the sophomore year. This permits a better understanding of chemistry and enables a student to complete degree requirements with no scheduling difficulties in the junior and senior years. Students interested in the Bachelor of Science with biochemistry emphasis should plan to take physics in the alternate year.
- Students desiring to fulfill the College of Arts and Sciences foreign language requirement under Option I, or who desire to attain or maintain a language proficiency, should take a language course as part of their optional selections.

DEPARTMENTAL HONORS: In recognition of outstanding work the designation *with Departmental Honors* may be granted to Bachelor of Science graduates by vote of the faculty of the chemistry department, based on the student's performance in these areas:

- Course work:** The grade point average in chemistry courses must be at least 3.50.
- Written work:** From the time a student declares a major in chemistry, copies of outstanding work (e.g., laboratory, seminar, and research reports) will be kept for later summary evaluation.
- Oral communication:** Students must evidence ability to communicate effectively as indicated by the sum of their participation in class discussion, seminars, help session leadership, and teaching assistantship work.
- Independent chemistry-related activities:** Positive considerations include the extent and quality of extracurricular work done in background reading, independent study, and research;

assisting in laboratory preparation, teaching, or advising; any other chemistry-related employment, on campus or elsewhere; and participation in campus and professional chemistry-related organizations.

The departmental honors designation will appear on a graduating chemistry major's transcript.

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.

CHEMICAL ENGINEERING: Students interested in pursuing studies in chemical engineering should see the course outline in the *Engineering* section of this catalog. The department chair should be consulted for assignment of a program adviser.

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

Course Offerings

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 105 or 115. Also suitable for environmental studies, general science teachers, B.A. in earth sciences, and general university core requirements or College of Arts and Sciences Option III. Students must meet the university entrance requirements in mathematics before enrolling in the course. I (4)

105 Chemistry of Life

Organic and biochemistry pertinent to chemical processes in the human organism; suitable for liberal arts students, nursing students, and prospective teachers. Students who have not completed high school chemistry recently should take 104 before taking 105. II (4)

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, radio-chemistry, and inorganic qualitative analysis. Designed primarily for students who want to major in chemistry, biology, engineering, geology, or physics. Students interested in health sciences should refer to the *Preprofessional Programs* section of this catalog. High school chemistry required. Students with no high school chemistry or weak mathematical background should take 104 before this course. Corequisite: Math 140. Prerequisite: 115 for 116; I for 115, II for 116. (4,4)

210 Nutrition, Drugs, and the Individual

An introduction to basic metabolic interactions, general endocrinology, mind and body interactions, and roles of drugs in modifying biological and behavioral functions. Nutrition topics include food preparation, "the balanced meal philosophy," nutritional myths, the effects of stress, environmental and societal influences on diet. Prerequisites: one year of high school chemistry or equivalent suggested. Meets general university core requirements. I (4)

321 Analytical Chemistry

Chemical methods of quantitative analysis, including volumetric, gravimetric, and selected instrumental methods. Prerequisites: 116 and MATH 140. I (4)

331, 332 Organic Chemistry

An interpretation of properties and reactions of aliphatic and aromatic compounds on the basis of current chemical theory. Prerequisite: 116. Corequisites: 333, 334. I II (4, 4)

333, 334 Organic Chemistry Laboratory

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

336 Organic Special Projects Laboratory

Individual projects emphasizing current professional-level methods of synthesis and property determination of organic compounds. This course is an alternative to 334 and typically requires somewhat more time commitment. Students who wish to prepare for careers in chemistry or related areas should apply for departmental approval of their admission to this course. II

341 Physical Chemistry

A study of the relationship between the energy content of systems, work, and the physical and chemical properties of matter. Topics include classical and statistical thermodynamics, thermochemistry, solution properties, and phase equilibria. Prerequisite: CHEM 115, MATH 152, PHYS 154. I (4)

342 Physical Chemistry

A study of the physical properties of atoms, molecules and ions, and their correlation with structure. Topics include classical and modern quantum mechanics, bonding theory, atomic and molecular structure, spectroscopy, and chemical kinetics. Prerequisites: CHEM 115, MATH 152, PHYS 154. II (4)

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, 343 or consent of instructor required for 344. I II (1,1)

403 Biochemistry

An overview, including biochemical structure, mechanisms of reactions, metabolism, genetics, and the biochemistry of the cell. Majors are encouraged to take both 403 and 405 for a more complete understanding of biochemistry. Also for B.A. majors and non-majors interested in biochemistry as a supporting field of knowledge. Prerequisites: 332, 334. I (4)

405 Biochemistry

A study of chemical reactions and structures in living cells. Topics include enzyme kinetics and mechanisms of catalysis, metabolism, and biochemical genetics. Concepts introduced in Physical Chemistry and Biochemistry will be applied in this course. Laboratory designed to stimulate creativity and problem-solving abilities through the use of modern biochemical techniques. Designed for students interested in graduate school or research. Prerequisites: 332, 334, 341 and/or 342 or permission, 403. II (3)

410 Introduction to Research

A course designed to introduce the student to laboratory research techniques, use of the chemical literature, including computerized literature searching, research proposal and report writing. Emphasis on the student developing and making progress on an independent chemical research problem chosen in consultation with a member of the chemistry faculty. Student will attend seminars as part of the course requirement. II (2)

435 Instrumental Analysis

Theory and practice of instrumental methods along with basic electronics. Special emphasis placed on electronics, spectrophotometric, radiochemical, and mass spectrometric methods. Prerequisites: 321, 341 and/or 342, 343. II (4)

440 Advanced Organic Chemistry

Students will develop a repertoire of synthetic methodology and a general understanding of a variety of organic reaction mechanisms. Topics may include, for example, synthetic organic strategies and design, the analysis of classic and recent total syntheses from the literature, and advanced applications of instrumentation in organic chemistry. Prerequisite: 332. a/y 1994-95 II (2)

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 includes synthesis and an in-depth exploration of the physical properties of non-metal, coordination and organometallic compounds. Prerequisites: 331, 332, 341; Corequisite 342. a/y II (3)

456 Polymers and Biopolymers

A course presenting the fundamentals of polymer synthesis, solution thermodynamic properties, molecular characterization, molecular weight distribution, and solution kinetics. Free radical, condensation, ionic, and biopolymer systems are covered, with illustrated applications taken from the medical, engineering, and chemical fields. The one-credit laboratory examining polymer synthesis through experiments is optional. Prerequisite: 341; Corequisite, 342. a/y II (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 credit will be awarded in the spring semester. I II (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 consists 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)

Chinese Studies

The Chinese Studies program is an interdisciplinary program which is designed to provide students interested in China a broad foundation in Chinese language, culture, and history, and an opportunity to focus on the religious-philosophical world view and the economic structure of China. The program requires that major and minor students complete coursework in at least three different disciplines: Chinese language, history, and anthropology, with optional work in religion, business, and, for applicable students, integrated studies.

Students who participate in the university's China exchange programs (currently at the Sichuan Union

University, Tunghai University, and Zhongshan University) may request that credits earned through these programs be counted toward the major or minor. With the approval of the program director, selected January-term, summer, and experimental courses may be included in the major or minor.

FACULTY: A committee of faculty administers this program: Guldin, *Director*; Barnowe, Clausen, Giddings, Hua, Lee.

BACHELOR OF ARTS MAJOR: 36 semester hours (24 required, 12 elective); students must take at least one Chinese history course.

Required Courses: (24 semester hours)

Anthropology 343 – East Asian Cultures
Chinese 101 – Elementary Chinese
Chinese 102 – Elementary Chinese
Chinese 201 – Intermediate Chinese
Chinese 202 – Intermediate Chinese

Senior seminar, project, or internship – selected in consultation with the Chinese Studies program director. (Possible choices for a senior seminar include History 496 and, for students in the Integrated Studies Program, Integrated Studies 351.)

Electives: (12 semester hours)

Anthropology 345 – Contemporary Chinese Culture
Business 340 – International Business*
Chinese 351 – Composition and Conversation
Chinese 371 – Chinese Literature in Translation
History 338 – Modern China
History 339 – Revolutionary China
History 496 – Seminar: The Third World (A/Y on China)**
Religion 132 – Religions of East Asia
Religion 390 – Studies in the History of Religion:
Philosophical – Religious Traditions of China (A/Y)**
Integrated Studies 351 – Integrated Studies Seminar*

MINOR: 20 semester hours (8 required, 12 elective)

Required Courses: (8 semester hours in Chinese language)

Chinese 101 – Elementary Chinese
Chinese 102 – Elementary Chinese
(or one equivalent year of university level Chinese, upon approval of the program director)

Electives: (12 semester hours from at least two additional departments)

Anthropology 345 – Contemporary Chinese Culture
Chinese 371 – Chinese Literature in Translation
History 338 – Modern China
History 339 – Revolutionary China
Religion 390 – Studies in the History of Religion:
Philosophical – Religious Traditions of China (A/Y)**

* *Business 340 and Integrated Studies 351 may count for program credits only when the individual student's course project is focused on China and is approved by the program director.*

** *History 496 and Religion 390 may be counted toward program requirements when these courses focus specifically upon China.*

Classics

The Classics Program is a cooperative effort among the Departments of 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 40 semester hours, 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.

CLASSICS COMMITTEE: Snee, *Coordinator*; Jansen, Myrbo, Oakman, Pilgrim.

Latin 101-202 – Elementary
 Latin 201-202 – Intermediate
 Greek 101-102 – Elementary
 Greek 201-202 – Intermediate
 Art 110 – Introduction to Art
 Art 180 – History of Western Art I
 Art 386 – Imagery and Symbolism
 Classics 231 – Masterpieces of European Literature
 Classics 250 – Classical Mythology
 Classics 321 – Greek Civilization
 Classics 322 – Roman Civilization
 Natural Sciences 201 – History of Science Through the Scientific Revolution
 Philosophy 331 – Ancient Philosophy
 Religion 211 – Religion and Literature of the Old Testament
 Religion 212 – Religion and Literature of the New Testament
 Religion 221 – Ancient Church History
 Religion 330 – Old Testament Studies
 Religion 331 – New Testament Studies
 Independent Study Courses
 Selected January-term 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.

All core classics courses are taught out of the Department of Languages.

College of Arts and Sciences

Division of Humanities

English
 Languages
 Philosophy
 Religion

Division of Natural Sciences

Biology
 Chemistry
 Computer Science
 Earth Sciences
 Engineering
 Mathematics
 Physics

Division of Social Sciences

Anthropology
 Economics
 History
 Political Science
 Psychology
 Social Work and Marriage and Family Therapy
 Sociology

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 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:

| | |
|---------------------------|---------------------------|
| Anthropology | History |
| Applied Physics | Individualized Study |
| Art | Legal Studies |
| Biology | Mathematics |
| Chemistry | Music |
| Chinese Studies | Norwegian |
| Classics | Philosophy |
| Communication | Physics |
| Computer Engineering | Political Science |
| Computer Science | Psychology |
| Earth Sciences | Religion |
| Economics | Scandinavian Area Studies |
| Electrical Engineering | Social Work |
| Engineering Science (3-2) | Sociology |
| English | Spanish |
| French | Theatre |
| German | |

Not more than 44 semester hours earned in one department may be applied toward the bachelor's degree in the College.

COLLEGE OF ARTS AND SCIENCES REQUIREMENTS:

In addition to meeting the entrance requirement in foreign language (two years of high school language, one year of college language, or demonstrated equivalent proficiency), candidates in the College of Arts and Sciences (all B.A., B.S., B.A.Rec., B.A.P.E. and B.S.P.E. degrees) must meet option I, II, or III below:

- I. Completion of one foreign language through the second year of college level. This requirement may also be satisfied by completion of four years of high school study in one foreign

- language or by satisfactory scores on a proficiency examination administered by the PLU Department of Languages.
- II. Completion through the first year of college level of a foreign language other than that used to satisfy the foreign language entrance requirement. This option may also be met by satisfactory scores on a proficiency examination administered by the PLU Department of Languages.
 - III. Four semester hours in history, literature, or language (at the 201 level, or at any level in a language other than that used to satisfy the foreign language entrance requirement) in addition to courses applied to the general university requirements, and
Four semester hours in logic, mathematics (college algebra or above), computer science, or statistics in addition to courses applied to the general university requirements.

High school languages used to satisfy any of the above options must have been completed with grades of C or higher.

Courses used to satisfy either line of Option III of the College of Arts and Sciences requirement may not be used to satisfy general university requirements. Any college-level foreign language course numbered 201 or above used to satisfy Option I and any completion of collegel-level language through 102 used to satisfy Option II may also be used to satisfy the Perspectives on Diversity requirement in Cross-Cultural Perspectives.

Candidates for the B.A. in English, for the B.A. in Education with concentration in English, for the B.A. in Global Studies, for the B.B.A. in International Business, and for election to the Arct Society must meet Option I above.

Communication and Theatre

The faculty of the Department of Communication and Theatre is committed to a philosophical perspective on communication as the process by which shared understandings are created between audiences through the use of symbols. Implicit within this understanding is agreement upon the assumption that people interact with one another for the purpose of achieving outcomes, and that this interaction is accomplished through a variety of media.

Teaching must balance the need to prepare students with specific skills as communicators with the need to locate the learning of those skills in the broader context of the liberal arts tradition. We strive to produce students who have mastered the competencies demanded in their field of communication study. We also endeavor to insure that our students have an appreciation of all aspects of the communication spectrum as well as a broader understanding of the process by which shared meanings are created.

Within the Department of Communication and Theatre, five distinct, yet interrelated areas of human communication may be explored: broadcasting, interpersonal communication, journalism, public relations, and theatre. Students majoring in any of these areas articulate and test their ideas, develop their individual abilities, and gain competence in various strategies for improving effective communication. They acquire knowledge and skills that apply to nearly every aspect of their private and public lives.

Career prospects for students trained in communication and theatre are excellent. A person's career may ultimately

turn out to be quite different from what was originally anticipated, of course, but in a rapidly changing world, certain fundamental skills and resources are necessary for adaptation and success. As the work environment in the coming decades becomes increasingly oriented toward communications, it will be critically important for students to have the ability to communicate clearly and effectively, both orally and in writing. Those who major or minor in one of the communication arts will be far ahead of their contemporaries who neglect to prepare for the world of tomorrow.

FACULTY: Inch, Chair; Bartanen, Becvar, Ewart, Harney, Parker, Rowe, Spicer, Wilson.

CORE REQUIREMENT: Only the following courses from Communication and Theatre may be used to meet the general university core requirement in the arts: 151, 160, 162, 163, 241, 358, 359, 363, 364, 458.

COMMUNICATION CORE SEQUENCE: Broadcast, journalism, interpersonal communication, and public relations majors must take an initial core of courses as follows: 123, 271, 283.

NOTE: 123 and 271 must be taken in the sequence listed. They cannot be taken concurrently.

DECLARATION OF MAJOR: Students who want to declare a communication major with an emphasis in broadcasting, interpersonal communication, journalism, or public relations:

1. Will, at the time of declaration, have a cumulative grade point average of at least 2.5.
2. Will have successfully completed the Communication Core (123, 271, and 283) with a grade point average of 2.5 or higher. Transfer students will be given the opportunity to pass a pre-test on material taught in 123, 271, and 283.

BACHELOR OF ARTS MAJORS: Maximum of 40 semester hours in any of the areas of concentration:

1. *Broadcasting – required courses:* 123, 271, 283, 373, 374, 378, and 381, plus 12 additional hours from 300 and 400 level communication courses selected after consultation with adviser. Required supporting areas: 4 hours each in economics, history, and political science plus 8 additional hours in one of those areas. Students must earn a grade of B in 283 or have the instructor's permission in order to advance in the sequence.
2. *Interpersonal Communication – required courses:* 123, 271, 283, 328, 330, 437, plus 16 additional hours from 300 and 400 level communication courses selected after consultation with adviser.
3. *Journalism – required courses:* 123, 271, 283, 380, 381, 384, 480, plus 12 additional hours from 300 and 400 level communication courses selected after consultation with adviser. Required supporting areas: 4 hours each in economics, history, and political science plus 8 additional hours in one of those areas. Students must earn a grade of B in 283 or have the instructor's permission in order to advance in the sequence.
4. *Public Relations – required courses:* 123, 271, 283, 385, 435, plus 20 additional hours from 300 and 400 level communication courses selected after consultation with adviser.
5. *Theatre – Acting/Directing Emphasis – required courses:* 151, 160, 225, 250, 352, 357, 363, 364, 425, plus 6 hours from communication and theatre courses in consultation with adviser.
6. *Theatre – Design/Technical Emphasis – required courses:* 151, 160, 225, 250 or 454, 352, 356, 363, 364, 425, 452 or 453, plus 6 hours from communication and theatre courses in consultation with adviser.

All candidates for the B.A. degree must satisfactorily complete a formal internship of 1 to 8 semester hours under the supervision of a faculty member. Students may register for Communication or Theatre 225 or 425 or may register for Cooperative Education 376 or 476. In the latter case, regular Cooperative Education guidelines must be followed. Internships do not count as part of the 40-hour maximum in any of the areas of concentration.

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

BACHELOR OF FINE ARTS MAJOR: At least 54 semester hours in any of the two areas of concentration:

1. *Broadcasting – required courses:* 123, 271, 283, 373, 374, 378, and 381, plus 26 hours selected in consultation with adviser.
2. *Theatre – Acting/Directing Emphasis – required courses:* 123, 151, 241, 250, 352, 357, 363, 364, 454, plus 18 hours selected in consultation with adviser.
3. *Theatre – Design/Technical Emphasis – required courses:* 151, 225, 250 or 454, 352, 356, 363, 364, 425, 452 or 453, plus 18 hours selected in consultation with adviser.

All candidates for the B.F.A. degree must satisfactorily complete a formal internship of 1 to 8 semester hours under the supervision of a faculty member. Students may register for Communication or Theatre 225 or 425 or may register for Cooperative Education 376 or 476. In the latter case, regular Cooperative Education guidelines must be followed.

BACHELOR OF ARTS IN EDUCATION:

See *School of Education*.

MINORS:

1. *Interpersonal Communication:* 20 semester hours, including 123, 437, plus 12 hours from 300 and 400 level communication courses selected in consultation with adviser.
2. *Public Relations:* 20 semester hours, including 123, 271, 283, 385, plus 4 hours from 400 level communication courses selected in consultation with adviser.
3. *Theatre:* 20 semester hours, including 151, 160, 241, 250, plus 4 hours from communication and theatre course selected in consultation with adviser.
4. *The Dance Minor* is cross-referenced with the School of Physical Education. See the description of that minor under *Physical Education*.
5. *The Publishing and Printing Arts Minor* is cross-referenced with the Department of English. See the description of that minor under *English*.

Course Offerings: Communication

123 Communication and Theatre: A Way of Seeing, A Way of Sharing

Introduces the study of communication and theatre. An overview of the nature of human communication; theatre as a distinct communication form; the systematic analysis of communication by scholars. Use of a critical perspective rather than a historical one. Students learn how to use critical tools to examine communication in various forms, including interpersonal contexts, theatre, television, film, and print. Introduction of the research and reasoning tools necessary for people seeking a career in a communication field. (4)

225, 425 Communication Practicum

One semester hour credit may be earned each semester, but only 4 semester hours may be used to meet university requirements. Students put classroom theory to practical application by individually completing a project relating to an aspect of communication. An instructor in the area of interest must approve the project and agree to provide guidance. I II.

234 Introduction to Research in Communication

The study of methods of gathering, interpreting, and evaluating data in the study of human communication. Both quantitative and qualitative research methods. (2)

271 Media Literacy

Introduces the critical study of media and their effects by discussing three elements of media literacy: understanding the technical nature of media and providing rudimentary knowledge of their operation; understanding the media as an industry and how the profit motive affects production, presentation and consumption of media; and understanding the effects of mediated messages on individual and collective behavior. (4)

283 Communication as Process: Speaking and Writing

Introduces writing and speaking as distinct yet interrelated parts of the communication process. Class divided into two groups; each group will spend half the semester in the writing seminar and the other half in the speaking seminar. Writing seminar introduces copy formats and style rules for writing in communication-related careers. Students complete a number of diverse writing assignments to appreciate the mechanics of writing and the role of audiences. Speaking seminar introduces the basic techniques of public speaking. Students complete several types of speeches to learn basic skills such as topic selection, research, organization, audience analysis, and delivery. Prerequisite: 123. (4)

321 The Book in Society

See English 322. (4)

322 Publishing Procedures

See English 322 (4)

324 Nonverbal Communication

Focus on the nonverbal aspects of communication within the framework of interpersonal interaction. Prerequisite: 123 or consent of instructor. (2)

326 Group Communication

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

328 Argumentation

The study of reason-giving in social decision-making. Analysis of the genres, forms, and techniques of arguers. Particular emphasis is given to studying academic, legal, and public policy debates. I (4)

330 Public Speaking

Focus on a variety of speaking situations and presentational methods. Topics vary according to the skill level of course participants. Potential topics include audience analysis, technical reporting, using visual aids, and persuasion. Open to both majors and non-majors. I II (4)

333 Foundations of Communication Theory

An introduction to the theoretical concepts and research tools of interpersonal and mass communication research. Prerequisites: 123, 271, or consent of instructor. I II (4)

334 Gender and Communication

Attempts to analyze and understand the relationship between gender and communication behavior. Comparison and contrast of male and female communication styles, similarities and differences in language usage, interpersonal dialogues, group discussions and listening in personal and professional arenas. Analysis of the impact of gender-based communication issues such as assertiveness and aggression, power and conflict resolution, dominance and interruption. (4)

335 Intercultural Communication Workshop

Designed to acquaint students with the influence of cultural backgrounds, perceptual systems, social organization, language, and nonverbal messages in intercultural communication. Intercultural experiences outside the classroom are arranged and will be required. Intended for those whose work or lifestyle is likely to intensely involve them with someone from another culture. (2)

336 Communicating in Business and the Professions

Business communicators must present their ideas clearly and persuasively; conduct effective information gathering and information giving interviews; and understand the significance of communication in the organizational context. Focus on the nature of communication processes in organizational settings and opportunity to develop specific communication skills. Through readings, discussion, observation, experience, and evaluation, students will be introduced to public speaking techniques used in informative and persuasive contexts, interviewing strategies, and the role of listening. (4)

373 Audio Production

Elements of audio production, analysis of program design, scripting, and production tools and techniques. Lecture and laboratory. Prerequisite: 283 or consent of instructor. (4)

374 Video Production

Analysis and application of program design, writing and production tools and techniques. Lecture and laboratory. Prerequisite: 283 or consent of instructor. (4)

378 Broadcast Journalism

Techniques of broadcast journalism. Applications of news gathering, writing, and reporting in a broadcast context. News and feature assignments using broadcast equipment in the field and studio. Prerequisite: 374. (4)

380 Newspaper Editing, Layout, and Design

Selection and editing of news copy and headline writing. Selection, sizing, and cropping of photos. Functions of layout. Principles of newspaper design and their practical applications. Prerequisite: 283. (4)

381 Media Law and Principles

The theory and application of law in news gathering, publishing, and broadcasting. (4)

384 Advanced News Reporting

Reporting of politics and police, courts and other governmental functions, investigative reporting and writing. Blend of field trips and writing exercises. Prerequisite: 283. (2)

385 Introduction to Public Relations

Introduction to the theory, research, and practical aspects of public relations. Problem-solving toward creating shared understandings between profit and non-profit organizations and their various constituencies. Strong emphasis on writing. Prerequisite: Completion of communication core (123, 271, 283) and a grade of B- or higher in 283 or consent of instructor. I II (4)

388 Editorial Writing

Research and writing of editorials and commentaries for newspapers and broadcast. Function of the editorial and editorial pages in the news media. Prerequisite: 283. (2)

390 Ethics in Communication

Starting from basic principles of moral philosophy, students explore ethical issues involving those engaged in communications professions, such as journalism, public relations, broadcasting and advertising, both from the standpoint of the individual and from that of the profession. Class discussion centers on case studies as students learn to recognize ethical dilemmas and create strategies for dealing with them. II (4)

435 Organizational Communication

Communication systems and studies within formal organizations. Focus on theory and research of informational and directive communication as related to channels, structures, status, involvements, morale, and leadership. Prerequisite: 333 or consent of instructor. (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: 333 or consent of instructor. (4)

437 Advanced Interpersonal Communication

The study of the theories, concepts, and applications of communication at the dyadic level. How people interact at this level and how the qualities of those interactions influence their communication competence and success. Prerequisite: 333 or consent of instructor. (4)

438 Advanced Public Relations

Through case studies, students examine current issues in public relations research and practice. Emphasis on research models, issues management, influence of organizational culture on the public relations function, and public relations management. Prerequisite: 385 or consent of instructor. (4)

439 Intercultural Communication

Analysis of contemporary theory and research on the effects of a variety of cultural variables on communication among people. The influence of cultural backgrounds, perception, social organization, language, and nonverbal aspects of messages in intercultural settings. Intercultural experiences outside the classroom required. Prerequisite: 333. (4)

440 Conflict and Communication

Understanding of the role played by communication in the creation, management, and resolution of human conflict. Use of the theories of prominent conflict and peace scholars and significant case studies to develop a method for better understanding the nature and resolution of conflict. (4)

450 Workshop in Effective Public Speaking

Audience analysis, topic selection, organization of ideas for various audiences, types of speeches, use of visual aids, and delivery. Designed for both novices and those who have had some experience as speakers. A week-long series of lectures, discussions, readings, exercises, and practical applications to help participants become more comfortable and effective as speakers. (2)

475 Advanced Media Production

Producing, scripting, directing, performing and evaluating sophisticated audio and video programming. Prerequisite: 374. (4)

480 In-Depth and Investigative Reporting

Group reporting in depth on a single issue. Students select the subject, organize the staff, research and interview, provide illustrations, edit copy, and lay out the completed work. Submission of the students' work to *The Mast* for possible publication. Prerequisites: 380, 384. (4)

485 Intradisciplinary Perspectives in Communication

A seminar to acquaint senior level communication majors with the relationship of communication theory, mass communication, and theatre as parts of the discipline of human communication. Limited to 16 students who have completed the bulk of their major requirements. Discussion of research and philosophical issues common to the three areas. Students complete a research paper covering some application of the intradisciplinary nature of communication. (4)

491, 492, 493 Special Studies in Communication

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

For graduate students only. (1-4)

Course Offerings: Theatre**151 Stage Technology**

Basic theory and procedure of all backstage elements in the theatre, costumes, scenery, props, lights, makeup, and management. I (4)

160 Introduction to Theatre

Study of both practical and theoretical aspects of theatre. Exposure to theatre and its numerous offshoots (e.g., film, television, rock concerts) through audience participation and personal contact. Development of heightened awareness and appreciation of what makes for good theatre. (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 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)

163 History of the Foreign Film

Concentrates on the development and growth of international film. Societal influences such as economic factors, public attitudes and mores, and political positions reflected in the world throughout the past 75 years. (4)

225, 425 Theatre Practicum

One semester hour credit may be earned each semester, but only 4 semester hours may be used to meet university requirements. Students put classroom theory to practical application by individually completing a project relating to an aspect of theatre. An instructor in the area of interest must approve the project and agree to provide guidance. I II

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. (4)

351 Stage Makeup

Specialized work in planning and application of techniques from straight makeup through aging, three dimensional, and special effects. (4)

352 Stage Management

All of the facets of managing a theatrical production: planning, scheduling, rehearsal process, documentation, and interpersonal relationships. (4)

356 Stage Lighting

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

357 Intermediate Acting, The Actor At Work

Study of the actor on today's stage. Work on the analysis and performance of the modern realistic play. Practical experience in the art of the actor through performance of scenes from plays of the modern theatre, emphasis on the importance of play analysis by the actor, and examination of current acting theory. Prerequisite: 250. (4)

358 Advanced Acting

Study of the work of an actor; character analysis and embodiment, using scenes from plays; includes styles of acting as defined by historical period. Prerequisite: 357. II (4)

359 Acting for the Non-Actor

Study of the actor's craft and the implementation of theory. Specifically designed for those who have nourished a curiosity to explore the art of acting but have been intimidated by a lack of knowledge or prior experience. Introduction of acting theory to those who have never participated in any theatrical endeavor. Emphasis on individual awareness and interest. Not open to theatre majors or minors. (4)

363 History of the Theatre: Aeschylus Through Turgenev

Theatre as it evolved from its primitive origin through representative societies; Ancient Greece, Rome, Renaissance, Modern European, and American. Emphasis on 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

(See description for 363.) II (4)

452 Scenic Design

Development of artistic and technical abilities in the field of scenic design incorporating many periods and styles as well as preparation of models, rendering, and draftings. (4)

453 Costume Design

Development of artistic and technical abilities in the field of costume design incorporating history, patterns, and renderings. (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. Study of many different directing philosophies. Each student is required to direct scenes from plays representative of all periods of theatre history. A final project, consisting of a contemporary scene, will culminate the course. Prerequisites: 151, 250, and junior status. II (4)

458 Creative Dramatics

Designed to acquaint the student with materials, techniques, and theories of creative dramatics. Students participate in creative dramatics. 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)

491, 492, 493 Special Studies in Theatre

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 Theatre

For graduate students only. (1-4)

Computer Science

Computer science deals with the theory, design, and application of computing systems and the study of the storing and manipulation of data and information. The core study of computer science broadly divides into six general areas: software design, programming language concepts, algorithms, data structures, computer elements and architecture, and theoretical foundations. The program at Pacific Lutheran University provides a broad base core of fundamental material in each of these areas. The program stresses analysis and design experiences with substantial laboratory work, including software development. In addition, students are exposed to a variety of programming languages and systems. Students can choose from a number of upper level courses which insure a depth of knowledge in the core material as well as an understanding of current developments in the field.

The Bachelor of Science degree in computer science has been accredited by the Computer Science Accreditation Commission of the Computing Sciences Accreditation Board, Inc.

FACULTY: Edison, *Chair*; Beaulieu, Blaha, Brink, C. Dorner, Hauser, Rosenfeld, Spillman.

BEGINNING CLASSES: There are several beginning level classes in computer science designed for students with various needs:

Computer Science 220: This is a course for all students wishing an introduction to the computer and applications of software packages.

Computer Science 144: This is the first course in the computer science major and is a course in Pascal programming. Students majoring in computer science, engineering, mathematics, most sciences, and the management information systems concentration in business, will choose this course as their beginning course.

Computer Science 110, 210, and 115: These courses provide students other opportunities for gaining experience with computers and their applications at an introductory level.

COMPUTER EQUIPMENT: The program is supported by PLU's VAX 6210/6220 cluster computing systems, along with approximately 40 IBM-PC microcomputers, which are available for general student use. In addition, the department operates a lab which contains NeXT and SUN workstations, MSDOS and Macintosh microcomputers, an HP 9000 system, and an Intel hypercube.

COMPUTER CAREERS: Graduates with computer science degrees have a wide range of career opportunities open to them, including software development, systems analysis, hardware development, database management, computer product support, education, and applications programming.

COMPUTER SCIENCE MAJOR: Students majoring in computer science may choose to earn either a Bachelor of Arts degree or a Bachelor of Science degree. The Bachelor of Arts program is the minimum preparation suitable for further professional study and is often combined with extensive study or a second major in an allied field. The Bachelor of Science is a strong, scientific degree which contains additional courses in computer science, mathematics, and science and serves both students going directly into employment on graduation and those going into graduate programs.

Both degrees are based on the same core courses: Computer Science 144, 270, 380, 486, Engineering 346, Mathematics 151,

152, 245, 230 (or 331). Students should begin Computer Science 144-270 and Mathematics 151-152 as early in their program as possible.

BACHELOR OF ARTS MAJOR: At least 26 semester hours of computer science including 144, 270, 380, 486, Engineering 346, a second computer language (240, 242, 243 or 343 are suggested). The remaining hours are from computer science courses numbered above 329 (excluding 449). Engineering 446, 480 and 481 count as computer science courses. Up to 4 hours may be substituted from Math 341, 345, and 346. Required supporting: Math 151, 152, 230 or 331, 245.

BACHELOR OF SCIENCE MAJOR: 40 semester hours in computer science plus 30 hours of supporting courses in mathematics and science. The 40 semester hours of computer science must include 144, 270, 343, 375, 380, 486, Engineering 346, and 14 additional credits of approved elective courses, one of which must be from 367, 420, 436, 444. Elective courses submitted for approval are to be selected from the computer science courses numbered above 329 (except 449 and 501-509), Engineering 446, 480, 481, or hours from Math 341 and 346 not counted toward the 30 hours of required supporting courses. The 30 hours of supporting courses in mathematics and science must include:

1. Math 151, 152, 245, 230 (or 331), 345 (or 341).
2. A minimum of 12 hours of approved Science/Quantitative Methods which includes a year's sequence of a laboratory science (Physics 153-154 with 163-164, Chemistry 115-116, Biology 161-162, Earth Sciences 131-132) and two additional science courses.
3. The remaining hours, if any, may be chosen from any math course numbered above 329 (except 446) or any natural science/quantitative methods course.

The Bachelor of Science degree in Computer Science has been accredited by the Computer Science Accreditation Commission of the Computing Sciences Accreditation Board, Inc.

MINOR IN COMPUTER SCIENCE: Computer Science 144, 270, 380, and Engineering 346 plus a second computer language. Required supporting: Math 151 or 128.

MINOR IN INFORMATION SCIENCE: Computer Science 144, 270, 367, Business 281, 325, plus 4 hours from Business 282, 364, 380, 421, 428, 487. Strongly recommended: Computer Science 242 or 243.

SECONDARY TEACHING MINOR: See description under *School of Education*.

ELEMENTARY TEACHING MAJOR: See description under *School of Education*.

STATE ENDORSEMENT REQUIREMENTS: See description under *School of Education*.

MASTER OF ARTS IN COMPUTER APPLICATIONS: See *Graduate Studies*.

MASTER OF SCIENCE IN COMPUTER SCIENCE: See *Graduate Studies*.

Course Offerings

A grade of C or higher is strongly recommended in all prerequisite courses.

110 BASIC

Introduction to interactive computing, branching, looping, subscripts, functions, input/output, subroutines and simple file techniques in the context of the BASIC language and system development. Not normally taken by computer science majors. Prerequisite: high school algebra. (2)

115 Introduction to the World of Mathematics and Computers (Math 115)

A study of mathematics and computers in the modern world with a wide variety of applications and a historical perspective. This class is designed for students without extensive knowledge of mathematics, but who want to acquire a basic understanding of the nature of mathematics and computers. Not intended for majors in science or mathematics or computer science. Some BASIC and/or LOGO programming is included. Prerequisite: two years of college preparatory mathematics or equivalent. I II (4)

144 Introduction to Computer Science

An introduction to computer science including algorithm design, structured programming, numerical/non-numerical applications and use of data files. The Pascal programming language will be used. Required for computer science majors and minors. Prerequisite: MATH 140 or MATH 128 or equivalent. 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 in computer science. Admission only by department invitation. (1-2)

210 Introduction to Computerized Information Systems

Introduction to computers including operating systems, word processing, spreadsheets, and database management. Examples on IBM PC's. Students cannot take both 210 and 220 for credit. Prerequisite: MATH 128 or 140 or equivalent. (2)

220 Computerized Information Systems

Introduction to computers and their use including management information systems development, telecommunications, operating systems, spreadsheets, graphics, and database management. Examples on IBM PC's. Students will demonstrate use of a word processor. (Additional class sessions on word processing are available, if needed.) Students cannot take both 220 and 210 for credit. Prerequisite: MATH 128 or 140 or equivalent. I II (4)

240 FORTRAN Programming

An accelerated introduction to the FORTRAN programming language. Study of the rules of statement formation. Topics include input/output, computation, branching, looping, data types, and subprograms. Numeric and non-numeric problems will be solved. Some previous experience with programming is recommended. Prerequisite: MATH 128 or 140 or equivalent. a/y (2)

242 COBOL Programming

Presentation and application of the COBOL programming language to business problems. Prerequisite: 144, 110, 220, or consent of instructor. a/y II (2)

243 C Programming

A workshop in the C programming language for experienced programmer of other high-level languages. Prerequisite: 270 or equivalent knowledge of a high level programming language. 243 and 343 cannot both be taken for credit. II (1)

270 Data Structures

Continuation of Pascal programming techniques and a study of data structures including linked lists, trees, queues, stacks and graphs. Applications of these forms to sorting, searching, and data storage will be made. Prerequisite: a grade of C- or higher in 144. I II (4)

322 Microcomputers in the Classroom

Introduction to the use of microcomputers in educational settings. Topics: 1) The computer as a teacher tool using word processing, spreadsheet, and grading programs, 2) Computer assisted instruction, 3) Software evaluation, 4) Integrating software into the curriculum, 5) Copyright laws and public

domain software, and 6) Software currently used in education settings. Pre or co-requisite: EDUC 251 or 253. Does not count toward degrees in computer science. (2)

330 Introduction to Artificial Intelligence

An introduction to concepts of artificial intelligence, including expert systems, natural language processing, image understanding, and problem solving techniques. The AI programming language LISP will be taught and used in several projects. Prerequisite: 270, Math 245. a/y 1994-95 I (4)

343 Programming Language Concepts

A study and comparison of features found in different computer languages. Imperative (including C), object-oriented, functional, and declarative languages will be studied. Programs will be written in several of the languages. Prerequisite: 270. II (4)

348 Modeling and Simulation

An applications structured programming course solving various problems. Statistics, data structures, mathematical modeling, simulation, documentation, and team programming techniques will be applied. Prerequisites: MATH 245, CSCI 270 and either MATH 345 or MATH 341. a/y II (4)

367 Data Base Management

An introduction to the fundamental concepts necessary for the design, use, and implementation of database systems. The hierarchical and network models are examined, and the entity-relationship and relational models are studied in detail. The course includes a major small-group project. Prerequisite: 270. II (4)

375 Design and Analysis of Algorithms

Basic data structures reviewed and applied to the analysis of problems associated with searching, sorting, strings, and minimal paths. Study of the complexity and storage requirements of the algorithms. Use of top-down and structured programming. Prerequisite: 270, MATH 245. I (4)

380 Assembly Language and Computer Organization

Computer assembly language applied to various problems. Topics include data forms, instruction formats, addressing, linking, macro definition, and computer architecture. Prerequisite: 270. Strongly recommended: ENGR 346. (4)

385 Computer Architecture

An introduction to the structure and operating of large computer systems. Topics include data representation, memory structure, I/O processing, multi-processing systems such as parallel, pipeline, and stack machines. Examples of the architecture of several large systems are analyzed including TI ASC, Cray and Intel Hypercube. Prerequisite: 380, MATH 245. (2)

386 Computer Networks

An introduction to computer networks and computer communication. Topics include system topology, message and packet switching, bus structures and data-link transmission. Prerequisite: ENGR 346. a/y (2)

391 Problem Solving and Programming Seminar

This course is designed to improve advanced problem solving and programming skills, including advanced data structures. A goal of the course is participation in the regional ACM programming competition. Pass/Fail only. Students may take this course more than once. Prerequisite: 270 or consent of instructor. I (1)

412 Computer Graphics

A study of the techniques and theory used to generate computer graphics. Both two- and three-dimensional representations will be covered including geometric transformations, windowing, hidden surfaces, and rendering techniques. Course work includes several programming assignments plus a project. Prerequisites: 270 and MATH 230 or 331. a/y 1994-95 (4)

420 Software Engineering

An engineering approach to the development of large software packages. Topics include software requirements definition, structured programming, software design, specifications, and software testing. This course includes a major small-group project. Prerequisite: 270, MATH 245. a/y 1994-95 II (4)

436 Pattern Recognition

The use of the computer to recognize patterns in data. Topics include artificial intelligence, cluster analysis algorithms, learning algorithms, and pattern processing. The course includes a major small-group project. Prerequisites: 270, MATH 245. a/y II (4)

438 Expert Systems

The development of AI systems which operate at the level of a human expert. Students will explore the structure of expert systems and use an expert system development tool such as OPS 5. Prerequisite: 330 or consent of instructor. a/y II (4)

444 Operating Systems

An introduction to computer operation including batch processing systems, interacting systems, multi-programming systems, storage management techniques and resource control. In addition, the course includes an analysis of the deadlock problem and basic file systems. The course includes a major small-group project. Prerequisite: 380, MATH 245. I (4)

449 Computer Science in the Secondary School

Methods and materials in secondary school computer science teaching. I.OGO, PILOT, etc., may be considered. Does not count toward a major in computer science. Prerequisite: 144. a/y 1994-95 II (2)

455 Compilers

An introduction to the organization, specification, and analysis of programming languages. Topics including scanning, parsing, object code, run-time machine structures and optimization. Prerequisite: 380, MATH 245. a/y 1994-95 (2)

475 Theory of Computing

Study of the theory of computation. Turning machines, formal languages, recursive theory, complexity, NP-completeness, and the halting problem may be considered. Prerequisites: 270, MATH 245. a/y (4)

486 Senior Seminar

Written and oral presentation of a topic of interest by the student under the supervision of a faculty member. Discussion of the skills needed for good technical communication. Study of the social implications of computing. Prerequisites: Senior computer science major or consent of department chair. II (2)

490 Seminar in Computer Science

Selected topic from the list below or topic of current interest in the discipline. (1-4)

- a. *Fault Tolerant Computing*: An introduction to the methods of fault detection and location in digital systems and to techniques for the reliable design of computing systems. Prerequisite: ENGR 346.
- b. *Computer Security*: The study of the protection of data and program access to computer system. Topics include data encryption, code breaking techniques, access controls and inference controls. Prerequisite: 270, MATH 245.
- c. *Parallel Programming*: An introduction to the theory and techniques used in the design of parallel programs including implementation on several machines. Prerequisites: 270, MATH 245.
- d. *Object-Oriented Design and Programming*: Theory, methods, and application of techniques for using objects and object-oriented languages for solving programming problems. Prerequisite: 270.

- e. *Parallel Processing Topologies*: A survey of several of the standard supercomputer architectures including shuffle-exchange, butterfly, n-cube, and Moebius. Prerequisites: 270, MATH 245.
- f. *Genetic Algorithms*: A survey of the field of genetic algorithm, the course explores their general structure, their mathematical foundations, their implementations and applications. Prerequisite: 270.
- g. *Robotics*: An introduction to the design, operation, and application of robots, covering issues in robot cinematics and robot vision. Prerequisites: 270 and ENGR 346.
- h. *Neural Networks*: A course in the theory and operation of neural computing systems covering the neural structures in the brain, models of neural systems, implementation of associative memories using artificial neurons and the design of neuron-based learning systems. Prerequisite: 270.
- i. *Algorithms + Data Structures = Programs: Harnessing the Power of Computers to Solve Problems*: Developing the necessary skills to use computers for solving complex problems. Identifying classes of problems; learning how to dissect problems into small, easily manageable units; and then putting together these units to form a complex solution. Problems modeled after those appearing in the ACM programming competition. Focus on building a large vocabulary of data structures and on combining data structures and algorithms to form a complete program. Prerequisite: 270 or equivalent.
- j. *Graphical User Interface Development*: Techniques for writing programs using graphical user interfaces for Microsoft Windows. Includes object oriented interface packages and a study of inheritance and polymorphism of objects. Students use available visual compiler tools and complete a project commensurate with their abilities and background. Prerequisites: 270 and an introduction to objects.

491, 492 Independent Study

Prerequisite: consent of department chair. (1-4)

495 Computer Science Research

The student becomes involved in an ongoing research project in computer science under the supervision of a faculty member. Prerequisite: consent of instructor. (1-4)

503 Workshops in Educational Technology

Workshops designed to expand teachers' knowledge about the application of new computer and related technology in educational settings Does not count toward degrees in computer science. (1-4)

520 Advanced Digital Design

Continuation of topics from Engineering 346. The design of digital control systems, asynchronous circuits; digital signal processors; digital filters; timing considerations; use of computer-aided design tools. Prerequisite: ENGR 346, MATH 152. (4)

538 Expert Systems

Requires students to generate an expert system, in addition to covering topics of 438. Prerequisite: 330 or consent of instructor. a/y (4)

544 Advanced Operating Systems

Continuation of topics in 444 leading to the development of an operating system. Emphasis on the interaction between the hardware structure and the operating system; operating data structures; and operating system security. Prerequisite: 444. II (2)

570 Mathematics of Computer Science

The techniques of proof commonly employed in computer science (constructive, induction, and recurrence relations), scheduling problems, sets, relations, posets, grammars, computability, selected topics from algorithmic graph theory; probabilistic and approximation algorithms, groups and finite fields (applications to coding theory and cryptography), and NP-Completeness. Prerequisite: 375. II (4)

580 Microprocessor Development Systems

Development of software on 8 and 16 bit microprocessors; microprocessor applications; interfacing; microprocessor organization; interrupt structures. Prerequisites: 380, ENGR 346. (2)

586 Graduate Design Seminar

Written and oral presentation of a topic of interest to the student under the supervision of a faculty member. Discussion of methods and techniques appropriate to the discipline and study of the social implications of computing. Students may not receive credit for this course if they receive credit for 593, Thesis. Prerequisite: Full graduate standing and the completion of at least one graduate level course.

590 Graduate Seminar

Selected topic of current interest. Possible topics include Modeling and Simulation, Computer Architecture, Computer Networks, Computer Graphics, Software Engineering, Pattern Recognition, Compiler Implementation, Theory of Computing, Fault Tolerant Computing, Computer Security, Parallel Programming, Object-Oriented Design and Programming, Parallel Processing Topologies, Genetic Algorithms, Robotics, Neural Networks. Algorithms + Data Structures = Programs, Graphical User Interface Development. A research project is required. Prerequisite: Graduate standing. (1-4)

591 Independent Reading and Research

Individual reading and research on select topic. Intended for advanced graduate students. Minimum supervision after initial planning of student's project. Prerequisite: consent of department. (1-6)

593 Thesis

Research study to meet thesis option requirement for M.A. or M.S. degree. (1-6)

Cooperative Education Internships

Cooperative education assumes that experiential learning can be an appropriate component of any quality educational program. Though it shares this assumption with other experiential learning strategies such as fieldwork placements and practica, it differs in several respects. Cooperative education introduces students to an educational work experience early in their academic careers and weaves opportunities for work and learning throughout their undergraduate programs, rather than concentrating on practical course work at the end. As the name suggests, cooperative education represents a systematic cooperation between the university and a variety of employers in the community.

Although the program's career-related advantages are obvious, its main benefits are educational. Students gain an appreciation of the relationship between theory and application, and may learn, both early and first-hand, about new developments in a particular field. Cooperative education provides timely and extended opportunities for developing communication skills orally and in writing.

A cooperative education program can enable students to become aware of opportunities to contribute creatively to the changing dimensions of work in present-day society.

The university and employers benefit as well. The university develops stronger and more creative connec-

tions with its community. Employers derive a more efficient device for training and recruiting. More importantly, the partnership provides a unique opportunity for employers to participate in an important educational service to the community.

FACULTY: Martinson, *Director*; Phelps, *Program Manager*

TWO MODELS: The Cooperative Education Program accommodates both part-time and full-time work modes. Part-time work which allows students the opportunity to take on-campus courses concurrently is labeled the "Parallel Model." A full-time work experience fits under the "Alternating Model." In most cases, students will follow one or the other, but some departments or schools may develop sequences that combine both parallel and alternating work modes.

Full-time summer work, for example, would be classified as an alternating cooperative education experience, and many summer jobs provide for learning that relates to students' academic objectives.

THE PROCESS FOR STUDENTS: In order to be eligible for admission into the Cooperative Education Program a student must have completed 30 semester hours and be in good standing.

Students who wish to participate apply to either the Co-op Office in Ramstad Hall or to a Co-op faculty coordinator or sponsor serving this function in specified departments, divisions, or schools. Both written application and personal interview are required in order to determine eligibility, terms for placement, areas of interest, academic requirements, and kinds of positions available.

Students are responsible for their learning activities during their cooperative education position. Each student must seek out and arrange for academic supervision from a faculty coordinator or sponsor. Faculty are responsible for insuring that the work experience provides appropriate learning opportunities for helping to establish the learning agreement, and for determining a grade.

Learning is facilitated through: (1) use of a "Learning Agreement"; (2) completing an academic project; (3) periodic contact with the faculty sponsor; (4) attendance at one workshop during the work experience; and (5) an on-site supervisor who accepts the responsibility to function in a resource role.

The learning agreement, developed by each student with the assistance of a faculty sponsor, lists learning objectives with measurable indicators of learning, and also incorporates supplementary resources such as reading materials and participation in work-related training sessions. The learning agreement is signed by the student, the faculty sponsor, the program director, and the work supervisor, each of whom receives a copy.

Contact between the faculty sponsor and the student must be sufficient to allow the sponsor to serve as a resource and provide academic supervision. Typically, this can be accomplished during one or two site visits. Students in a "parallel" cooperative education program may arrange to meet with the sponsor on campus. Those involved in "alternating" programs some distance from campus may maintain contact through periodic phone conferences, when site visits are impractical.

Employers are responsible to: (1) provide opportunities for students to achieve their learning objectives within the limits of their work settings; (2) help students develop skills related to the contextual aspects of the work world (such as relationships with co-workers); and (3) facilitate students' integration into their work setting so that their employment proves valuable and productive.

Students are required to register for at least one credit hour after accepting a Co-op position. Throughout an undergraduate academic career a student may receive a maximum of 16 semester hours of credit in cooperative education.

Course Offerings

376 Work Experience I

A supervised educational experience in a work setting. Requires the completion of a Cooperative Education Learning Agreement in consultation with a faculty sponsor. (1-8)

476 Work Experience II

A supervised educational experience in a work setting providing for advanced level of responsibility. Requires the completion of a Cooperative Education Learning Agreement in consultation with a faculty sponsor. (1-8)

477 International Work Experience

A supervised educational experience in a foreign setting. Requires completion of the International Cooperative Education Agreement, completion of a clearance checklist, and an approved plan of reporting in consultation with a faculty sponsor. (1-12)

576 Work Experience III

A supervised educational experience at the graduate level. Requires completion of a Cooperative Education Agreement in consultation with a faculty sponsor and the student's graduate program adviser. (1-4)

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. Field trips are thus a routine part of many courses.

Graduates in earth sciences hold positions in the National Park Service, the U.S. Geological Survey, oil and mining groups, and geotechnical engineering, as well as education. The demand for qualified graduates in pollution management and geotechnical applications continues.

Most fields require post-graduate degrees, and to this end, a number of PLU graduates have pursued master's and doctoral programs at major universities.

FACULTY: Foley, *Chair*; Benham, Lowes, Whitman; assisted by Huestis.

The department's programs remain flexible, allowing fairly easy scheduling of courses. The department strongly recommends that all students complete Math 140 or higher before enrolling in 300 level and higher courses in earth sciences. Students should also 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 scheduling conflicts.

BACHELOR OF SCIENCE (GEOLOGY) MAJOR: 40 semester hours; courses include: 131, 132, 323, 324, 325, 326, 327, 329, 335, and 425, plus two from 328, 330, 334, 341 or 350; at least 2 hours in 490 or higher. Necessary supporting courses include: Chemistry 115, 116; Physics 125, 126 (135 and 136 labs) (or Physics 153, 154 and labs); Mathematics 151, 152 or Computer Science 220. Biology 323 and additional courses are recommended when paleontology is a major interest.

BACHELOR OF ARTS MAJOR: 32 semester hours; courses include: 131 plus at least two lower division from 132, 133, 202, 222; two courses from 324, 325, 326, 327, 329, and two courses from 323, 328, 334, 335, 341, 350; 2 credits from 490 or higher. Recommended: one course from either 330 or 425. Required supporting courses include: Chemistry 104, 105, or 115, 116. Options reflect a student's interests and are discussed with an adviser.

BACHELOR OF ARTS IN EDUCATION:

See *School of Education*.

MINOR: 20 semester hours of courses in earth sciences, excluding January term courses, completed with grade of C or higher. Required: 131 and at least three upper division courses.

Course Offerings

131 Physical Geology

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 II (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)

133 Environmental Geology

Study of the geologic environment and its relationship to humans, with emphasis on geologic features and processes that create hazards when encroached upon by human activity, including earthquakes, volcanic eruptions, landslides and avalanches, and solutions to problems created by these hazards. II 1994-95 (4)

202 General Oceanography

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

323 Mineralogy

Crystallography and mineralogy, both ore and rock-forming minerals. Prerequisites: 131 or consent of instructor. (4)

324 Igneous Petrology

Applied and theoretical study of the genesis, nature, and distribution of igneous rocks, at microscopic to global scales. Emphasis on rocks and processes of Washington volcanoes and intrusions, with many examples from elsewhere. Prerequisites: 131, 326, or consent of instructor. a/y II (2)

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 of instructor. a/y I 1994-95 (3)

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. Prerequisite: 131 or consent of instructor. a/y I (2)

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. a/y I (3)

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. a/y I 1994-95 (3)

329 Metamorphic Petrology

Consideration of the mineralogical and textural changes that rocks undergo during orogenic episodes, including physical-chemical parameters of the environment as deduced from experimental studies. These include both "regional" and "contact" metamorphism, metamorphic facies, rock fabrics, the role of fluids, and metasomatism. Prerequisites: 131, 326, or consent of instructor. a/y II (2)

330 Survey and Mapping Principles

Introduction to techniques and instrumentation of basic surveying and cartography. Includes leveling and transit traverses, baseline measurements, and triangulation; also, applications of aerial photos and their interpretation for geologic mapping. Techniques for compiling geologic data and construction of geologic maps are among the essential skills covered. a/y II (2)

334 Groundwater

The origin of groundwater, flow in aquifers, groundwater resource evaluation and development, wells, water quality, including pollution, and geothermal resources. Emphasis on problems with groundwater in the Puget Sound area, with additional examples from diverse geologic environments. Prerequisite: 131 or consent of instructor. a/y II 1994-95. (3)

335 Geophysics

Study of the physical nature of the earth, the properties and the processes, employing techniques from seismology, heat flow, gravity, magnetism, and electrical conductivity. Emphasis on understanding the earth's formation, structure, and plate tectonics processes as well as geophysical exploration techniques. Laboratories include data collection in the field, processing interpretation, and modeling with emphasis on applications of computers to geophysical problems. Prerequisites: 131, one semester of calculus, physics (high school level or above), or consent of instructor. a/y II 1994-95. (3)

341 Energy and Mineral Resources for the Future

A survey of the world's energy and mineral resources comprising the raw materials of industrialized societies. Studies include geological occurrence, global distribution, and quantities of such reserves; also, their fundamental technologies and economics, as well as the political framework in which they are developed. a/y I (3)

350 Marine Geology

Study of the 70% of the earth beneath the oceans, focusing on the extensive discoveries of the past few decades. Emphasis on marine sediments, sedimentary processes, plate tectonic processes, and the historical geology of the oceans. Laboratory use of sedimentological and geophysical techniques to investigate selected regions of the oceans. Prerequisite: 131, 202, or consent of instructor. a/y II (3)

425 Geologic Field Mapping

Combining a survey of regional field geology with a series of local mapping projects, this course introduces field techniques of geologic map-making. Included are traversing and data assembly, map construction, section measurements, structural analysis, and chronological synthesis. Graphics techniques are also covered. Prerequisites: previous geology courses and consent of instructor. S (5)

490 Seminar (1-2)**491, 492 Independent Study (1-4)****493 Seminar in Tectonics**

Reviews of books and journal articles dealing with various aspects of large-scale movements of the earth's crust. II (1-2)

494 Seminar in Geochemistry

Reviews of literature on the chemical aspects of sediments, magmatism, metamorphism, lithification, and/or hydrothermal systems. I (1-2)

496 Seminar in Economic Mineral Deposits

Selected readings on the nature, origin, occurrence of, and exploration for concentrations of metallic and industrial minerals in crustal rocks. Class discussions will be held twice weekly. I (1-2)

497 Research (1-4)

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: Nugent, *Chair*; Brue, R. Jensen, M. Miller, N. Peterson, Reiman, Vinje, Wentworth.

BACHELOR OF ARTS MAJOR: (A) Minimum of 38 semester hours, including 151, 152, 351, 352, 486, 12 hours of electives in economics, 4 hours selected from Statistics 231 or Mathematics 341, and 4 hours selected from Economics 244, 343 (if not used as economics electives), Business 281, Mathematics 348, or up to 4 hours in computer science. (B) A grade point average of 2.50 in all classes included in the 38 semester hours toward the major. With departmental approval, Economics 130 may be substituted for Economics 152 for purposes of major and minor requirements.

For students planning graduate work in economics or business, additional math preparation will be necessary. For specific courses, consult your major adviser.

HONORS MAJOR: Outstanding students may choose to pursue graduating in economics with honors. In addition to meeting all other major requirements, in order to be granted departmental honors a student must: (A) have an overall university grade point average of 3.5 or better; (B) take four hours beyond the standard major in 495, Honors Thesis (Students apply for admission to this course in the second semester of their junior year. The department grants admission to 495, Honors Thesis, based on the student's prior work in economics and the quality of the general research proposal.); (C) present the results of the work completed in 495, Honors Thesis, at a meeting of Omicron Delta Epsilon (the economics honorary).

MINOR: 22 semester hours, including 151, 152, 351 or 352, and 12 additional hours of electives, 4 of which may be in statistics.

ECONOMICS HONORARY: The department offers membership in Omicron Delta Epsilon, the International Economics Honorary, to qualified majors. For specific criteria, see any departmental faculty member.

BACHELOR OF ARTS IN EDUCATION: See *School of Education*.

Course Offerings

130 Global and Environmental Economic Principles

What is the "correct" amount of pollution? What is the value of an ancient cedar tree? What does pop music have in common with U.S. auto production? Micro-economic principles are used to analyze these and other environmental and global issues. Analysis of public policy and private behavior; appropriate pricing, resource valuation, taxes and subsidies, trade policies, sustainable development, and income growth and distribution. Students cannot take both 130 and 152 for credit. (4)

151 Principles of Macroeconomics

This course introduces students to the economy as a whole and major issues such as inflation, unemployment, economic growth, and international trade. These and other issues are analyzed by studying the household, business, government, and international sectors. Many alternative explanations for the economy's performance will be examined. (3)

152 Principles of Microeconomics

The course introduces students to the study of economic decision making by firms and individuals. Economic tools and concepts such as markets, supply and demand, and efficiency are applied to contemporary issues including wage and price determination, income distribution, environmental protection, and global production. (3)

244 Econometrics

Introduction to the methods and tools of econometrics as the basis for applied research in economics. Specification, estimation and testing in the classical linear regression model. Extensions of the model and applications to the analysis of economic data. Prerequisite: STAT 231 or equivalent. (4)

321 Labor Economics

Analysis of labor markets and labor market issues; wage determination; investment in human capital, unionism and collective bargaining; law and public policy; discrimination; labor mobility; earnings inequality, unemployment, and wages and inflation. Prerequisites: 130 or 152, or consent of instructor. (4)

331 International Economics

Regional and international specialization, comparative costs, international payments and exchange rates; national policies which promote or restrict trade. Prerequisites: 130 or 152, or consent of instructor. (4)

341 Economic Development: Comparative Third World Strategies

Analysis of the theoretical framework for development with applications to alternative economic development strategies used in the newly emerging developing countries. Emphasis on comparison between countries, assessments of the relative importance of cultural values, historical experience, and governmental policies in the development process. Prerequisites: 151 or consent of instructor. (4)

343 Operations Research

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

345 Mathematical Topics in Economics

An introduction to basic applications of mathematical tools used in economic analysis. Topics include simple linear models of supply and demand, single and multivariable maximization models, and linear difference and differential equation models of economic growth. Prerequisites: 130 or 151 or 152, or consent of instructor. (4)

351 Intermediate Macro Economic Analysis

National income determination including policy implications within the institutional framework of the U.S. economy. Prerequisites: 130 or 152, and MATH 128 or 140 or 151. (4)

352 Intermediate Micro Economic Analysis

Theory of consumer behavior; product and factor prices under conditions of monopoly, competition, and intermediate markets; welfare economics. Prerequisites: 130 or 152, or consent of instructor and MATH 128, 140, or 151. (4)

361 Money and Banking

The nature and role of money; monetary theory; tools and implementation of monetary policy; regulation of intermediaries; banking activity in financial markets; international consequences of and constraints on monetary policy. Prerequisites: 151, 152, or consent of instructor. (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. Prerequisites: 151, 152, or consent of instructor. (4)

371 Industrial Organization and Public Policy

An analysis of the structure, conduct, and performance of American industry and 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. Prerequisites: 151, 152, or consent of instructor. (4)

381 Comparative Economic Systems

An analysis and comparison of contemporary economic systems. The course includes examination of the capitalist, mixed and centrally planned models, including an historical perspective. The economic systems of selected countries will also be studied. Prerequisites: 151, 152, or consent of instructor. (4)

399 Internship

A research and writing project in connection with a student's approved off-campus activity. The primary goal is to gain insight into applications of the ideas and methodologies of economics. Prerequisites: sophomore standing plus one course in economics, and consent of the department. (1-4)

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 neoclassical economists, and the Keynesians. Prerequisite: 351 or 352 (may be taken concurrently). (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 of instructor. (1-4)

491, 492, 493 Independent Study

Prerequisite: consent of the department and completion of either 351 or 352. (1-4)

495 Honors Thesis

Independent research supervised by one or more faculty members. Research proposal and topic developed by the student in the junior year. Application to enroll is made in the second semester of the junior year. Prerequisite: economics major and consent of the department. (4)

500 Applied Statistical Analysis

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

501 Graduate Workshops

Graduate workshops in special fields or areas for varying period of time. (1-4)

504 Economic Analysis and Policy Decisions

Basic economic concepts applied to policy formation and operating decisions in a global framework. (4)

543 Quantitative Methods

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

590 Graduate Seminar

Selected topics as announced. Prerequisite: consent of instructor. (1-4)

591 Directed Study (1-4)**595 Graduate Readings**

Independent study card required. (4)

598 Research Project (4)**599 Thesis (4)**

School of Education

The School of Education offers programs of study leading to certification for elementary and secondary teachers, nurses, administrators, and personnel in special education. 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: Brickell, *Acting Dean*; Reisberg, *Acting Associate Dean*; Baughman, Churney, Ford, Gerlach, Glasgow, Lamoreaux, Leitz, Lewis, Minetti, Mosher, Mulder, G. Nelson, E. Olson, Owens, Rickabaugh, Wentworth, G. Williams, 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, program administrators, special education teachers, and guidance counselors, with the Master of Arts in Education the highest degree approved. The accreditation gives PLU graduates reciprocity with many other states.

Programs for the preparation of school administrators and school librarians are available. The School offers coursework toward the conversion, renewal, or reinstatement of teaching certificates. For preparation of school nurses, see School of Nursing section of this catalog.

The School of Education offers graduate degrees in Classroom Teaching, Educational Administration, Educational Psychology, Literacy Education, and Special Education. Information regarding these programs is available from the director of graduate programs in the School of Education (535-7272).

ELIGIBILITY REQUIREMENTS FOR PROFESSIONAL

STUDIES: Students seeking to register for Education 302 or for Educational Psychology 261/Education 262 must apply to the School of Education, in order to receive a tally card for registration. Official transcripts of all college/university work, writing samples, and official documentation of college admission test scores must be submitted to the School of Education by the first Friday in October or March before being admitted to the School of Education and allowed to enroll in education courses the following term.

Requirements include:

- Evidence of verbal and quantitative ability as illustrated by one of the following test scores:
 - Scholastic Aptitude Test (SAT)
Verbal 425 or above; Total 910 or above**
 - Washington Pre-College Test (WPCT) or (TETEP)
Verbal 48 or above; Total 103 or above**
 - American College Test Assessment (ACT)
Verbal 20 or above; Composite 23 or above**

* This requirement may be waived for persons who have completed a baccalaureate degree; or who have completed two or more years of college level coursework, have demonstrated competency through college level coursework, and are over the age of twenty-five.

** Test score requirements are set by the State of Washington and are subject to change.
- Sophomore standing (30 or more semester hours)
- Cumulative grade point average (GPA) of 2.50
- Psychology 101: grade of C or higher
- English 101: grade of C or higher

Application forms and procedures for admission to professional studies in education are available from the School of Education. Students who do not meet all the requirements may exercise the appeal process for admission to Education 302 or Educational Psychology 261/Education 262. Admission appeal process forms are available from an adviser in the School of Education.

All students admitted to Education 302 or Educational Psychology 261/Education 262 are admitted provisionally to a program of professional studies, subject to conditions and procedures identified in the Elementary/Secondary Initial Level Certification Handbooks, available in the School of Education. Continuation in the program of professional studies is subject to continuous assessment of student development and performance.

BAE and/or CERTIFICATION REQUIREMENTS: Students become candidates for certification when they have successfully completed the following:

1. All course work with a cumulative grade point average of 2.50 or above.
2. Professional Education Sequence for elementary or secondary teaching.
3. An approved teaching major(s) or concentration(s) (see requirements as listed under Academic Preparation).
4. All courses in education and in major and minor fields with grades of C or higher (for secondary education, B- or higher required in education courses).
5. Achievement of proficiency in writing and math skills.
6. Anthropology 210/History 210 or Anthropology 102 for secondary teaching and Anthropology 102 for elementary teaching.
7. Coursework or courses on the issues of abuse, as approved by the School of Education (SPED 480).
8. A student teaching experience. Students must complete all necessary procedures by the last Friday in October for fall student teaching or the last Friday in November for spring student teaching.
9. A valid first aid card.

TEACHER CERTIFICATION

Initial Teaching Certificate: Students who successfully complete a program of professional studies in the School of Education, and who meet all related academic requirements for a degree or a certificate, will be recommended by the School of Education for a Washington initial teaching certificate. Additional state requirements for the certificate include a Washington State Patrol check, an FBI fingerprint check, and a passing score on state entry-to-practice tests. Information regarding all state requirements and procedures for certification is available in the School of Education. *State requirements are subject to immediate change. Students should stay in close contact with their School of Education advisers for updates in program or application requirements.*

Initial Teaching Certificate Renewal: Under state regulations in effect at the publication of this catalog, the Initial Certificate is valid for four years, and may be renewed for an additional three years by meeting the following requirements:

1. In order to be eligible to renew or have an initial certificate reissued, an individual must have completed all coursework requirements for continuing certification or have completed 10 semester (15 quarter) hours of study since the issuance of the MOST RECENT initial certificate in the role for which renewal or reissuance is being sought (WAC 180-79-065) (1)(a). The individual must also meet the recency requirement described below. In some cases the same credits may apply to both the renewal/reissuance requirement and the recency requirement.
2. In order to be eligible to obtain, renew, or have an initial certificate reissued, the individual must have completed 10

semester (15 quarter) hours within the seven years preceding application for the initial certificate. The recency requirement does not apply to individuals who are seeking the continuing certificate. (WAC 180-79-065)(3)

3. An individual must complete the renewal application form and send it to the School of Education, with the \$15 renewal fee (*check made payable to Pacific Lutheran University*).
4. An individual must have a copy of his or her Initial Certificate on file in the School of Education.

Converting to the Continuing Certificate: At the time of publication of this catalog, state requirements include:

1. 30 semester hours of upper division or graduate level post-baccalaureate study.
2. 180 days of full-time teaching, of which 30 days must be with the same employer.
3. Two endorsements.
4. Coursework in issues of abuse.

Although the master's degree is no longer required, any School of Education MAE degree can be used to meet the academic requirements for the continuing certificate. Other means by which the School of Education can help persons meet continuing certification requirements will be considered as they become known.

ELEMENTARY PREPARATION

General requirements: In addition to the general university and core requirements in all curricula, certain specific requirements in general education must be met.

1. Anthropology 102, Exploring Anthropology; Culture and Society (recommended) or Anthropology 210/History 210, Global Perspectives, or the equivalent must be taken.
2. Biology 111 or another life science course must be taken.
3. Natural Sciences 106 or another physical science course must be taken.
4. Mathematics 223 or equivalent must be taken.

A year course in one laboratory science may be substituted by those who have adequate background from high school in the other science area.

Professional Education Sequence, Elementary Program:

- | | |
|----------|---|
| SPED 190 | Exceptional Children and Adults, 3 hours (no prerequisite) |
| EDUC 253 | Child Development and Schools, 4 hours (2.50 GPA and sophomore status required; prerequisites: ENGL 101 and PSYC 101) |
| EDUC 322 | General Methods, Upper Elementary, 4 hours |
| or | |
| EDUC 324 | General Methods, Elementary, 4 hours (Prerequisites for all General Methods courses: 2.50 GPA, junior standing, EDUC 253 or 321, application, screening and acceptance into the School of Education). |
| EDUC 421 | Teachers and the Law, 1 hour. |
| EDUC 430 | Student Teaching Primary, 10 hours (single) |
| or | |
| EDUC 432 | Student Teaching, Upper Elementary, 10 hours (single) |
| EDUC 434 | Student Teaching, Elementary, 8 hours (dual) (For Student Teaching a GPA of 2.50 and senior standing are required along with positive field evaluations from EDUC 253 and EDUC 322-4. Prerequisites: EDUC 253, 322-4, 325, 326, 408, 410, and 412 and methods in art, music, and physical education; all conditions to full admission met; satisfactory writing, spelling, and math skills.) |
| EDUC 435 | Professional Seminar, 2 hours (must be taken concurrently with EDUC 430 or 432) |

Professionalized Subject Matter (16-20 hours required of all elementary candidates):

- EDUC 325 Reading in the Elementary School (4)
- EDUC 326 Mathematics in the Elementary School (2)
- EDUC 408 Language Arts in the Elementary School (2)
- EDUC 410 Science/Health in the Elementary School (2)
- EDUC 412 Social Studies in the Elementary School (2)
- ARTD 341 Elementary Art Education (2)

or

- EDUC 457 The Arts, Media and Technology (2)
- MUSI 341 Music in the Elementary School (1-4)
- PHED 322 Physical Education in the Elementary School (1-4)

Professional Education Sequence, Elementary Program (New Program, beginning Spring 1995):

- SPED 200 Individuals with Special Needs (2)
- EDUC 302 Human Learning: Growth and Development (3)
- EDUC 303 Field Observation (1)
- EDUC 357 Media and Technology in K-8 Classrooms (2)
- EDUC 358 Practicum I (1)
- EDUC 400 Topics in Elementary Education: Classroom Issues and Instructional Strategies (3)
- EDUC 401 Practicum II (1)
- EDUC 406 Mathematics in K-8 Education (3)
- EDUC 408 Literacy in K-8 Education (3)
- EDUC 410 Science/Health in the Elementary School (3)
- EDUC 412 Social Studies in the Elementary School (3)
- EDUC 430 Student Teaching in K-8 Education (9)
- EDUC 435 Topics in Elementary Education: Classroom Practice in the Context of Educational Foundations (3)
- SPED 499 Teaching for Individual Differences-Elementary (2)
- ART 341 Elementary Art Education (2)

and

- MUSI 341 Music in the Elementary School (1-4)

or

- SOTA 341 Integrating Arts in the Classroom (2)
- PHED 322 Physical Education in Elementary Schools (2)

SECONDARY PREPARATION

General requirements: In addition to the general university requirements in all curricula, certain specific requirements for general education must be met.

1. Anthropology/History 210, Global Perspectives (recommended) or Anthropology 102, Culture and Society, must be taken.
2. Computer Science 322, Microcomputers in the Classroom, must be taken (Physical Education and Music Education degree majors excepted).
3. Minimum grade requirements include a cumulative grade point average of 2.50 for the following:
 - a. Entrance to professional sequence.
 - b. Enrollment in any course in professional education.
 - c. Graduation and/or certification.
4. Grades of C or higher in the following:
 - a. All courses in majors and minors.
 - b. English 101, Psychology 101, Anthropology/History 210 or Anthropology 102.
 - c. Computer Science 322.

Professional Education Sequence, Secondary Education (minimum of 30 semester hours):

- EPSY 261 Human Relations Development (3) (Prerequisite: Admission to the sequence)
- EDUC 262 Foundations of Education (3) (Prerequisites: Admission to the sequence and concurrent enrollment in EPSY 261)
- EDUC 263 School Observation (1) (Prerequisites: Admission to the sequence and concurrent enrollment in EDUC 262)
- EPSY 361 Psychology for Teaching (3) (Prerequisite: EPSY 261)

- SPED 362 Teaching for Individual Differences – Secondary (4) (Prerequisites: EDUC 262/263, EPSY 261) (Not required for special education majors or minors)
- EDUC 44X Subject Area Methods (3) (Prerequisites: EDUC 262/263, EPSY 261, 361, SPED 362)
- EDUC 461 General Teaching Methods – Secondary (3) (Prerequisites: EPSY 261, EDUC 262, concurrent enrollment in EDUC 462)
- EDUC 462 Teacher Assisting – Secondary (1) (Prerequisites: EPSY 261, EDUC 262, concurrent enrollment in EDUC 461)
- EDUC 468 Student Teaching – Secondary (9) (Prerequisites: EPSY 261, 361, EDUC 262, 263, 461, 462, SPED 362, senior standing, cumulative GPA of 2.50 or higher; a valid first aid card must be on file before student teaching placement can be finalized)

Recommended Sequences:

Undergraduate Students

| | |
|-------------------------------|---------|
| EPSY 261, EDUC 262, 263 | 7 hours |
| EPSY 361, SPED 362 | 7 hours |
| EDUC 461, 462, 44X | 7 hours |
| EDUC 468 | 9 hours |

Graduate Students (with B.A./B.S. degrees)

| | |
|---|----------|
| EPSY 261, EDUC 262, 263 | 7 hours |
| EPSY 361, EDUC 461, 462, SPED 362 | 11 hours |
| EDUC 44X, 468 | 12 hours |

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: anthropology, art, biology, chemistry, drama, earth sciences, economics, English, French, German, history, journalism, language arts, mathematics, music, Norwegian, physical education, physics, political science, psychology, science, social studies, sociology, Spanish, and speech. Minors only are available in Chinese, computer science, health, and Latin.

The majors and minor in the elementary and secondary education programs have been revised because of changes in the Washington Administrative Code. Except in the areas of English/language arts, science, and social studies, the elementary major fulfills areas of study required by the State for endorsement. See an education adviser for current information.

PREPARATION FOR SENIOR HIGH SCHOOL TEACHING:

Students preparing for senior high teaching must complete approximately 32-69 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, 2) develop competencies in special education in response to federal special education legislation, and 3) develop proficiency in one or more languages, particularly Spanish and Asian languages. 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, foreign language, or physical education must have student teaching experience and coursework in methodology on both the elementary and secondary levels. Detailed information regarding K-12 certification is available in the School of Education office. A School of Education adviser is required in addition to an adviser in art, music, or physical education.

ELEMENTARY EDUCATION MINOR: Students preparing for elementary classroom teaching should choose one of the following options:

Cross-Disciplinary Studies (12 hours required)

Select 12 hours from:

| | |
|-----------------------|------------------------|
| Children's Literature | Computers in Education |
| Speech | Child Development |
| Geography | Special Education |

Special Education (18 hours required)

(see listing for Minor under Special Education K-12)

Reading Endorsement

| | |
|----------|--|
| EDUC 408 | Language Arts in the Elementary School (3) |
| EDUC 510 | The Acquisition and Development of Language and Literacy (2) |
| EDUC 511 | Strategies for Language/Literacy Development in Classrooms (2) |
| EDUC 513 | Language/Literacy Development: Assessment and Instruction (4) |
| EDUC 538 | Strategies for Whole Literacy Instruction (K-12) |
| EDUC 528 | Children's Literature in K-8 Curriculum (2)* |
| EDUC 529 | Adolescent Literature in the Secondary Curriculum (2)* |
| EDUC 503 | On Campus Workshops in Education (2)* |
| | Elective (2) |

*May substitute ENGL 364 or equivalent 4-hour children's literature course for EDUC 528 and the children's literature electives.

Mathematics

12 hours in mathematics required (possibly including computer science), selected in consultation with School of Education adviser.

SPECIAL EDUCATION (K-12): The 32 semester hour teaching major and 18 semester hour minor must be taken in conjunction with an academic teaching major. Students completing this major along with the required professional education sequence for elementary or secondary teachers will be recommended for an endorsement in special education. Students not majoring in education may be excused from the requirements of taking Education 302 or Educational Psychology 261/Education 262.

Major (26 hours minimum)

Required Courses (minimum of 21 hours):

| | |
|----------|--|
| SPED 190 | Exceptional Children and Adults (3) |
| SPED 290 | Introduction to Learning Disabilities (3) |
| SPED 390 | Introduction to Developmental Disabilities (3) |
| SPED 393 | Introduction to Behavior Disorders (3) |
| SPED 398 | Assessment in Special and Remedial Education (3) |
| SPED 399 | Practicum in Special Education (2) |
| SPED 407 | Curriculum and Instruction for Learners with Special Needs (4) |

Elective Courses (minimum of 5 hours):

| | |
|----------|---|
| SPED 191 | Observation in Special Education (1) |
| SPED 296 | Educating the Physically Challenged and Medically Fragile (2) |
| SPED 395 | Introduction to Language Development and Disorders (2) |
| SPED 403 | Parent/Professional Partnership in Special Education (2) |
| SPED 408 | Career and Vocational Education for Students with Special Needs (2) |
| SPED 475 | Supervising Para-Professionals and Volunteers (1) |
| SPED 479 | Special Techniques in Reading (4) |
| SPED 480 | Issues in Child Abuse and Neglect (1) |
| SPED 490 | Early Learning Experiences for Special Needs Children (2) |
| SPED 492 | Methods of Teaching Early Childhood Special Education (2) |
| SPED 494 | Computer Application in Special Education (2) |

Student Teaching (required – minimum of 6 hours):

| | |
|----------|--|
| SPED 438 | Student Teaching in Elementary Special Education (6) |
| SPED 439 | Student Teaching in Secondary Special Education (6) |

Minor (18 hours minimum)

Required Courses (minimum of 14 hours):

| | |
|----------|--|
| SPED 190 | Exceptional Children and Adults (3) |
| SPED 290 | Introduction to Learning Disabilities (3) |
| SPED 398 | Assessment in Special and Remedial Education (3) |
| SPED 399 | Practicum in Special Education (1) |
| SPED 407 | Curriculum and Instruction for Learners with Special Needs (4) |

Elective Courses (minimum of 4 hours):

| | |
|----------|---|
| SPED 296 | Educating the Physically Challenged and Medically Fragile (2) |
| SPED 390 | Introduction to Developmental Disabilities (3) |
| SPED 393 | Introduction to Behavior Disorders (3) |
| SPED 395 | Introduction to Language Development and Disorders (2) |
| SPED 399 | Practicum in Special Education (1) |
| SPED 403 | Parent/Professional Partnership in Special Education (2) |
| SPED 408 | Career and Vocational Education for Students with Special Needs (2) |
| SPED 475 | Supervising Para-Professionals and Volunteers (1) |
| SPED 480 | Issues in Child Abuse and Neglect (1) |
| SPED 490 | Early Learning Experiences for Special Needs Children (2) |
| SPED 494 | Computer Application in Special Education (2) |

Please note: Special Education 190 is a prerequisite to ALL special education coursework. Education 302 or Educational Psychology 261/Education 262 is a prerequisite for ALL 300 or 400-level Special Education courses. Students not majoring in education may be excused from this requirement.

EARLY CHILDHOOD – SPECIAL EDUCATION

See Graduate Studies.

LIBRARY LEARNING RESOURCE SPECIALIST: Preparation of School Librarians (16 semester hours)

Students interested in preparing for the responsibility of administering a school library may meet suggested standards through the following program:

Prerequisite:

EDUC 253 or EPSY 261/EDUC 262, or teacher certification.

Required:

| | |
|--|--|
| EDUC 506 | Foundations of School Library Media Center Management (2) |
| EDUC 507 | Principles of Information Organization, Retrieval, and Service (2) |
| EDUC 508 | Principles of Bibliographic Analysis and Control (2) |
| EDUC 509 | Foundations of Collection Development (2) |
| EDUC 537 | Media and Technology for School Library Media Specialists (2) |
| EDUC 538 | Strategies for Whole Literacy Instruction (K-12) (2) |
| EDUC 555 | Curriculum Development (2) |
| <i>Electives – one of the following:</i> | |
| EDUC 528 | Children's Literature in K-8 Curriculum (2) |
| EDUC 529 | Adolescent Literature in the Secondary Curriculum (2) |
| EDUC 456 | Storytelling (2) |

PRINCIPAL'S AND PROGRAM ADMINISTRATOR'S

CERTIFICATE: Preparation programs leading to certification at the initial and continuing levels for school and district-wide program administrators are available through the School of Education. Specific requirements for the certificates are

identified in handbooks available upon request. Master's degrees in educational administration are described in the *Graduate Studies* section of this catalog.

CERTIFICATION REQUIREMENTS FOR SCHOOL COUNSELORS AND SCHOOL NURSES:

Educational Staff Associate certification for school counselors or for school nurses is individually designed through a Professional Education Advisory Board, consisting of a school district, related professional associations, and Pacific Lutheran University. For information regarding counselor certification, contact the School of Education. For information regarding school nurse certification, contact the School of Nursing (535-8872).

Teaching Major/Minor Requirements

ANTHROPOLOGY

State endorsement requirements: 1) Cultural Anthropology, 2) Physical Anthropology, 3) Archaeology.

Secondary teaching major: 32 semester hours required.

Anthropology 101, 102, 354, 480. 4 hours from Anthropology 220, 230, 330, 336, 345. 4 hours from Anthropology 210, 350, 360, 375, 380, 392. 8 hours from Anthropology 103, 332, 365, 370, 465.

Secondary teaching minor: 20 semester hours required. Anthropology 101, 102. 8 hours from Anthropology 210, 220, 230, 330, 336, 345, 354. 4 hours from Anthropology 103, 332, 365, 370, 465.

Elementary teaching major: 24 semester hours required.

Anthropology 101, 102, 354. 8 hours from Anthropology 210, 220, 230, 330, 336, 345. 4 hours from Anthropology 103, 332, 365, 370, 465.

ART

State endorsement requirements: 1) Art history or criticism, 2) Aesthetics or philosophy of art, 3) Drawing, 4) Painting, 5) Sculpture, 6) Instructional methods in art.

K-12 teaching major: 32 semester hours required. Art 160, 226, 230, 250, 365. 8 hours from Art 196, 255, 326, 355, 370. 4 hours from Art 110, 180, 181, 380.

Art minor: 24 semester hours required. Art 160, 250, 365. 4 hours from Art 196, 230, 255, 326, 370. 4 hours from Art 180, 181. 4 hours from Art 110, 380.

Elementary teaching major: 24 semester hours required. Same as art minor.

BIOLOGY

State endorsement requirements: 1) Genetics, 2) Ecology or evolution theory, 3) Botany, including laboratory experience, 4) Zoology, including laboratory experience, 5) Laboratory management and safety, 6) Science technology and society or bioethics.

Secondary teaching major: 41 semester hours required. Biology 161, 162, 323, 340. Biology 201 or 328, 424 or 475, 324 or 326, 331 or 346 or 407. 4 hours of electives from Biology 205 or above. Required supporting: Chemistry 105 or 115.

Secondary teaching minor: 25 semester hours required. Biology 161, 162, 323. 8 hours of electives from Biology 201 or above. Required supporting: Chemistry 105 or 115.

Elementary teaching major: 25 semester hours required. Same as secondary teaching minor.

CHEMISTRY

State endorsement requirements: 1) Organic chemistry, including laboratory experience, 2) Inorganic chemistry, including laboratory experience, 3) Analytic chemistry, including laboratory experience, 4) Physical chemistry, 5) Laboratory management and safety.

Secondary teaching major: 54 semester hours required.

Chemistry 115, 116, 321, 331, 332, 333, 334, 341, 342, 343, 344, 403. Required supporting: Math 151, 152, Physics 153, 154, 163, 164.

Secondary teaching minor: 26 semester hours required.

Chemistry 115, 116, 210, 331, 332, 333, 334. 4 hours from Chemistry 321 or 403.

Elementary teaching major: 24 semester hours required.

Chemistry 104, 105, 115, 116, 210. 4 hours of electives from Earth Sciences.

CHINESE

State endorsement requirements: 1) Writing/composition in the designated foreign language, 2) Conversation in the designated foreign language, 3) Reading in the designated foreign language, 4) History and culture of the designated foreign language.

Secondary teaching minor: 24 semester hours required.

Chinese 101, 102, 201, 202, 351, 371.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor.

COMPUTER SCIENCE

State endorsement requirements: 1) Computers and society, 2) Computer software, 3) Data structures, 4) Assembly language, 5) Structured programming in BASIC or Logo, 6) Structured programming in one of the high level languages: LISP, C, Pascal, PROLOG, FORTRAN, PL 1, Smalltalk, COBOL, Modula 2, FORTH, RPG.

Secondary teaching minor: 24 semester hours required.

Computer Science 144, 270, 322, 380, 449. Required supporting: Math 128 or 151. 4 hours from Computer Science 110-210 or 220.

Elementary teaching major: 26 semester hours. Same as secondary teaching minor, plus 2 hours from Special Education 494.

DRAMA

State endorsement requirements: 1) Acting skills, 2) Theatre production, 3) Theatre history or history of drama, 4) Creative drama, 5) Theatre directing.

Secondary teaching major: 32 semester hours required.

Theatre 151, 160, 241, 250, 352, 357, 363 or 364, 454.

Secondary teaching minor: 20 semester hours required.

Theatre 151, 250. 4 hours from Theatre 160, 363, 364. 8 hours from Theatre 351, 352, 454, 458.

Elementary teaching major: 24 semester hours required.

Theatre 151, 160, 250. 8 hours from Theatre 351, 352, 454, 458. 4 hours of electives.

EARTH SCIENCES

State endorsement requirements: 1) Physical geology, 2) Historical geology, 3) Environmental geology, 4) Oceanography, 5) Astronomy, 6) Meteorology.

Secondary teaching major: 45-46 semester hours required.

Earth Sciences 131, 132, 133 or 202, 222, Natural Sciences 206 (Astronomy), Meteorology. 12-13 hours from Earth Sciences 323, 324, 325, 326, 327, 328, 330, 334, 341, 350. Chemistry 104 or 115. Physics 125, 135. 4 hours from Math 140 or higher or one course from Computer Science 115, 144 or 220.

Secondary teaching minor: 20 semester hours required.

Earth Sciences 131, 132, 133, 202, 222, Natural Sciences 206 (Astronomy), Meteorology.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor with 4 additional hours of earth sciences electives at the 300 level or higher. Select from 323, 324, 325, 326, 327, 328, 329, 335, 250.

ECONOMICS

State endorsement requirements: 1) Macroeconomics, 2) Microeconomics, 3) History and/or development of economic thought.

Secondary teaching major: 32 semester hours required. Economics 130 or 151-152, 351, 352, 486. 8 hours from Economics 343, Statistics 231, Math 341, Business 281, or an elective in computer science. 8 hours of electives in economics, 4 hours of which may be statistics and/or including Economics 399, 490, 491, 492, 493 for variable credit.

Secondary teaching minor: 20 semester hours required. Economics 130, 351, 352, 486. 4 hours of electives in economics, which may include statistics.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor with 4 additional hours of electives in economics or statistics.

ENGLISH

State endorsement requirements: 1) American literature, 2) English literature, 3) Comparative literature, 4) Linguistics or structure of language, 5) Writing/composition.

Secondary teaching major: 32 semester hours required beyond English 101. English 241, 251, 252, 327 or 328, 403. 4 hours of a period, 4 hours of an author, and 4 hours from English meeting the comparative requirement (English other than American or British). All majors must present two years of one foreign language at the college level or show equivalent proficiency.

Secondary teaching minor: 20 semester hours required beyond English 101. English 241, 251 or 252, 327 or 328, 403. 4 hours from English 216, 217, 218, 231, 345, 364, 365.

Elementary teaching major: 24 semester hours required beyond English 101. English 241, 251 or 252, 328, 364, 403. 4 hours of electives in English.

ENGLISH/LANGUAGE ARTS

State endorsement requirements: 1) Drama, 2) Speech, 3) Journalism.

Secondary Teaching major: 44 semester hours required. English 241, 251 or 252, 327 or 328, 403. 4 hours from English 216, 217, 218, 231, 365. 8 hours in speech from Communication 123, 328, 330, 436, 450, Theatre 241. 8 hours in drama from Theatre 151, 250, 352, 458. 8 hours in journalism from Communication 283, 380, 381, 388.

Elementary teaching major: 24 semester hours required. English 241, 251 or 252, 327 or 328. 4 hours from English 403, Languages 200. 4 hours from English 364, 365. 4 hours from Communication 123, 330, 450, Theatre 241, 458.

FRENCH

State endorsement requirements: 1) Writing/composition in the designated foreign language, 2) Conversation in the designated foreign language, 3) Reading in the designated foreign language, 4) History and culture of the designated foreign language.

Secondary teaching major: 32 semester hours required beyond French 101-102. French 201, 202, 321, 351, 352, 421, 422, 431 or 432.

Secondary teaching minor: 20 semester hours required beyond French 101-102. French 201, 202, 321, 351, 352.

Elementary teaching major: 24 semester hours required beyond French 101-102. French 201, 202, 321, 351, 352. 4 hours from upper division French elective.

GERMAN

State endorsement requirements: 1) Writing/composition in the designated foreign language, 2) Conversation in the designated foreign language, 3) Reading in the designated foreign language, 4) History and culture of the designated foreign language.

Secondary teaching major: 32 semester hours required beyond German 101-102. German 201, 202, 321, 322, 351, 352, 421, 422.

Secondary teaching minor: 20 semester hours required beyond German 101-102. German 201, 202, 321 or 322, 351, 352.

Elementary teaching major: 24 semester hours required beyond German 101-102. German 201, 202, 321 or 322, 351, 352. 4 hours from upper division German elective.

HEALTH

State endorsement requirements: 1) Substance use and abuse, 2) Wellness and illness, 3) Nutrition, 4) Human physiology, 5) Safety education.

Secondary teaching minor: 16 semester hours required. Health 260, 270, 292, 295, 321, 323, 325, 327. 2 hours of electives approved by health coordinator.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor, and 10 hours of electives in health education.

HISTORY

State endorsement requirements: 1) Washington State or Pacific Northwest history and government, 2) United States history, 3) World, Western, or Pacific Rim history or civilizations.

Secondary teaching major: 32 semester hours required. 8 hours from History 251, 252, 253. History 107 or 108, 460 or 461, Senior Seminar. 4 hours of electives from non-Western history and 8 hours of upper division electives in history.

Secondary teaching minor: 20 semester hours required. 4 hours from History 251, 252, 253. History 107 or 108, 460 or 461. 4 hours of electives from non-Western history and 4 hours of upper division electives in history.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor. Anthropology 354.

JOURNALISM

State endorsement requirements: 1) News and feature writing, 2) Copy editing, 3) News production, 4) Copy makeup and design, 5) Legal rights and liabilities of the press.

Secondary teaching major: 32 semester hours required. Communication 123, 271, 283, 333, 380, 381, 384, 388. 4 hours of electives.

Secondary teaching minor: 20 semester hours required. Communication 123, 271, 283, 380, 381.

Elementary teaching major: 24 semester hours required. Communication 123, 271, 283, 380, 381, 384, 388.

LATIN

State endorsement requirements: 1) Writing/composition in the designated foreign language, 2) Conversation in the designated foreign language, 3) Reading in the designated foreign language, 4) History and culture of the designated foreign language.

Secondary teaching minor: 24 semester hours required. Latin 101, 102, 201, 202. Classics 250 or 322. 4 hours from upper division Latin elective.

Elementary teaching major: 24 semester hours required. Latin 101, 102, 201, 202, Classics 250, 322.

MATHEMATICS

State endorsement requirements: 1) Euclidean geometry, 2) Non-Euclidean geometry, 3) Differential calculus, 4) Integral calculus, 5) Discrete mathematics (a combination of at least two of the following: probability, statistics, combinatorics, business applications, logic, set theory, functions).

Secondary teaching major: 41 semester hours required. Math 151, 152, 203, 245, 321, 331. 4 hours of electives above 342, or Computer Science 320 or above (not Math 446, not Computer Science 322). 4 hours from Math 341 or 433. Required supporting: Computer Science 144, Physics 153, 163.

Secondary teaching minor: 22-24 semester hours required. Math 151, 152, 321, Computer Science 144. 2-4 hours from Math 230 or 331. 4 hours from Math 245, 341, 433.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor with additional elective hours in mathematics, if necessary.

MUSIC

State endorsement requirements: 1) Score reading, 2) Music theory, 3) Music history and/or culture, 4) Conducting, 5) Instructional music, 6) Instructional methods in general music.

K-12 Teaching Major (music specialist): See the requirements for the degree Bachelor of Music Education (B.M.E.), as listed under Music in this catalog:

- B.M.E. – K-12 Choral
- B.M.E. – K-12 Instrumental (Band Emphasis)
- B.M.E. – K-12 Instrumental (Orchestra Emphasis)

Elementary teaching major: 24 semester hours required.

Music minor (see requirements listed under Music in this catalog), plus Music 341.

NORWEGIAN

State endorsement requirements: 1) Writing/composition in the designated foreign language, 2) Conversation in the designated foreign language, 3) Reading in the designated foreign language, 4) History and culture of the designated foreign language.

Secondary teaching major: 32 semester hours required. Norwegian 101, 102, 201, 202, 351, 352. 4 hours from upper division elective in Scandinavian culture and 4 hours from upper division elective in Scandinavian literature.

Secondary teaching minor: 24 semester hours required. Norwegian 101, 102, 201, 202, 351. 4 hours from upper division elective in Scandinavian culture.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor.

PHYSICAL EDUCATION

State endorsement requirements: 1) Care and prevention of student injury, including first aid, 2) Kinesiology, 3) Exercise physiology, 4) School physical education, sports, or athletic law, 5) Sociology and/or psychology of sports, 6) Instructional methods in physical education for the handicapped, 7) Instructional methods in physical education.

K-12 teaching major: 53 semester hours required. Biology 205, 206, Health Education 281, Physical Education 277, 283, 285, 286, 287, 288, 322, 326, 328, 345, 478, 480, 484, 486.

K-12 teaching minor: 19 semester hours required. Health Education 281, Physical Education 283, 288, 322, 328, 334, 345. 6 hours from Physical Education 285, 286, 287.

Elementary academic major: 23 semester hours required. Health Education 281, Physical Education 283, 288, 322, 328, 334, 345. 8 hours from Physical Education 285, 286, 287.

PHYSICS

State endorsement requirements: 1) Mechanics, including laboratory experience, 2) Electricity and magnetism, including laboratory experience, 3) Light and sound, including laboratory experience, 4) Thermodynamics, modern physics, or astronomy.

Secondary teaching major: 42 semester hours required. Physics 153, 154, 163, 164, 223, 331, 336, 351, 354, Math 151, 152, 253.

Secondary teaching minor: 25-26 semester hours required. 10 hours from Physics 125, 126, 135, 136 or 153, 154, 163, 164. 7-8 hours from Physics 205, 223, 331, 336, 341/347, 351 or Chemistry 341, Physics 354, Natural Sciences 206. Required supporting: Math 151, 152.

Elementary academic major: 25-26 semester hours required. Same as secondary teaching minor.

POLITICAL SCIENCE

State endorsement requirements: 1) American government, 2) International relations or studies, 3) Comparative government or political systems, 4) Political theory.

Secondary teaching major: 32 semester hours required. Political Science 101, 151. 8 hours from Political Science 345, 354, 361, 363, 364, 368, 371, 372, 373. 4 hours from Political Science 231, 331, 338. 4 hours from Political Science 381, 384, 385, 386, 387. 4 hours from Political Science 210, 325, 326. 4 hours of electives in political science.

Secondary teaching minor: 24 semester hours required. Political Science 101, 151. 4 hours from Political Science 345, 354, 361, 363, 364, 368, 371, 372, 373. 4 hours from Political Science 231, 331, 338. 4 hours from Political Science 210, 381, 384, 385, 386, 387. 4 hours from Political Science 325, 326.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor.

PSYCHOLOGY

State endorsement requirements: 1) Human behavior, 2) Learning theories, 3) Developmental psychology, 4) Interpersonal psychology.

Secondary teaching major: 32 semester hours required. Psychology 101, 242, Statistics 241. 4 hours from Psychology 342, 348. 4 hours from Psychology 352 and 444. 4 hours from Psychology 325, 354, 462, 464, 271. 8 hours of electives in psychology.

Secondary teaching minor: 24 semester hours required. Psychology 101, 242. Statistics 241. 4 hours from Psychology 342, 348. 4 hours from Psychology 352 or 444. 4 hours from Psychology 325, 354, 462, 464, 471.

Elementary teaching major: 24 semester hours required. Psychology 101, Statistics 231, Psychology 221, 352, 444, and 8 hours of electives determined in consultation with elementary education adviser (suggestions include Psychology 342, 348, 350, 440, 450, 453, and specialty courses offered through the department).

SCIENCE

State endorsement requirements: 1) Chemistry, 2) Physics, 3) Biology, 4) Earth sciences.

Secondary teaching major: 63-69 semester hours required. Biology 161, 162, 323, Chemistry 104, 105, Earth Sciences 133 or 222, Physics 125, 126, 135, 136 or Physics 153, 154, 163, 164. 8 hours from Earth Sciences 131, 132. 4 hours from 300 or higher. A minor is required in one of the following: biology, chemistry, earth sciences, or physics.

Elementary teaching major: 24 semester hours required, including 8 hours in life science, 8 hours in physical science, and 8 hours of electives.

SOCIAL STUDIES

State endorsement requirements: 1) Economics, 2) Anthropology, sociology, or psychology, 3) Geography, 4) Political science.

Secondary teaching major: 44 semester hours required.

Anthropology 354, Economics 130, History 107 or 108, 251 or 252 or 253, 460, Political Science 151, Sociology 101, 4 hours in non-Western history, 4 hours of upper division political science, 8 hours of upper division electives chosen from two of the following disciplines: anthropology, economics, psychology, or sociology.

Elementary teaching major: 24 semester hours required.

Anthropology 354, History 251 or 252 or 253, 460, 4 hours from History 107 or 108 or non-Western history, 8 hours of electives from anthropology, economics, political science, psychology, or sociology.

SOCIOLOGY

State endorsement requirements: 1) Group behavior, 2) Social institutions, 3) Social process, 4) Theory and history of sociology.

Secondary teaching major: 32 semester hours required.

Sociology 101, 396, 397, 8 hours from Sociology 240, 336, 386, 440, 8 hours from Sociology 330, 351, 380, 391, 412, 443, 4 hours from Sociology 234, 260, 395.

Secondary teaching minor: 20 semester hours required.

Sociology 101, 396, 397, 4 hours from Sociology 330, 336, 351, 380, 391, 412, 443, 4 hours from Sociology 234, 240, 336, 386, 395, 440.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor with 4 additional hours of electives in sociology.

SPANISH

State endorsement requirements: 1) Writing/composition in the designated foreign language, 2) Conversation in the designated foreign language, 3) Reading in the designated foreign language, 4) History and culture of the designated foreign language.

Secondary teaching minor: 32 semester hours required beyond Spanish 101-102. Spanish 201, 202, 321, 322, 351, 352, 8 hours from Spanish 421, 422, 431, 432.

Secondary teaching major: 20 semester hours required beyond Spanish 101-102. Spanish 201, 202, 321 or 322, 351, 352.

Elementary teaching major: 24 semester hours required beyond Spanish 101-102. Spanish 201, 202, 321, 322, 351, 352.

SPECIAL EDUCATION

State endorsement requirements: 1) Exceptionality, 2) Alternative delivery system and strategies for special education, 3) Student assessment and evaluation, 4) Procedural and substantive legal issues in special education, 5) Instructional methods in special education.

K-12 teaching major: 32 semester hours required. Special Education 190, 290, 390, 393, 398, 399, 407, 5 hours from Special Education 191, 296, 395, 403, 408, 475, 479, 480, 490, 492, 494. Majors must also register for 6 hours of special education student teaching (SPED 438 or 439) in addition to 8 hours of elementary or secondary student teaching (EDUC 434 or 466).

Special education minor: 18 semester hours required. Special Education 190, 290, 398, 399, 407, 4 hours from Special Education 296, 390, 393, 395, 399, 403, 408, 475, 480, 490, 494.

SPEECH

State endorsement requirements: 1) Public speaking, 2) Debate, 3) Group process, 4) Interpersonal communication.

Secondary teaching major: 34 semester hours required.

Communication 123, 283, 326, 328, 330, 333, 435, 436.

Secondary teaching minor: 18 semester hours required.

Communication 123, 326, 328, 330, 333.

Elementary teaching major: 24 semester hours required. Same as secondary teaching minor with 6 additional hours of electives.

Course Offerings**253 Child Development and Schools**

Introduction to the nature of schools and teaching in contemporary society, overview of human development with special emphasis on intellectual, social, emotional, and physical development of elementary age children in a school setting. Weekly public school observations required with students responsible for their own transportation. Prerequisites: ENGL 101, PSYC 101, sophomore standing, 2.50 GPA, writing and math skills assessment. (4)

262 Foundations of Education

Introduction to teaching; historical, philosophical, social, political, ethical and legal foundations. Federal and state legislation for special populations. Prerequisites: ENGL 101, PSYC 101, test scores, sophomore standing, cumulative GPA of 2.50. (3)

263 School Observation

Graded observation in schools. Concurrent with 262. (1)

302 Human Learning: Growth and Development

Overview of theories of human development emphasizing the individual cognitive, linguistic, socio-cultural, emotional, and physical development of children and adolescents in and out of school. Course experiences provide opportunities to connect developmental theory with current practice and to consider age-appropriate and pedagogically sound approaches to foster learner's continued growth. Initial course in Elementary Education certification program; permission required. (Concurrent with 303.) (3)

303 Field Observation

Observation of the developmental nature of growth in learners in various settings including K-8 schools. Emphasis on the development of the skills of observation and informal assessment. (Concurrent with 302.) (1)

321 Human Development

Emotional, social, intellectual, and physiological development from infancy through adolescence. A weekly four-hour observation in the public school is required. (Individually assigned.) Students responsible for their own transportation. Prerequisites: PSYC 101, ENGL 101, junior standing, 2.50 GPA. (2-4)

322 General Methods – Primary

Competencies will be developed for teaching in grades K-3, with observation and participation in public schools. Prerequisites: 253 or 321, 2.50 GPA. (4)

323 General Methods – Upper Elementary

Competencies will be developed for teaching in grades 4-6, with observation and participation in public schools. Prerequisites: 253 or 321, 2.50 GPA. (4)

324 General Methods – Elementary

Competencies will be developed for teaching in grades K-6. Extended experience and participation in public school classrooms will be provided. Prerequisites: 253 or 321, MATH 323, and concurrent enrollment in courses 325, 326, 408, 410, 412, 2.50 GPA. (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. Prerequisites: 322-324 or concurrently with 322-324. 2.50 GPA. (4)

326 Mathematics in the Elementary School

Basic mathematical skills and abilities needed by the elementary school teacher, recent developments and materials. Prerequisites: 253, MATH 323 or equivalent. 2.50 GPA. (2)

341 Philosophy of Vocational Education

Objectives of high school business education programs, the business curriculum, layout and facilities planning, the evaluation of business teachers and competence for business occupations. Examination of information resources and current thought in business education, cooperative education, and distributive education. (2)

342 Methods of Teaching Typing

Application of research findings and psychological principles to the teaching of typing. Prerequisite: advanced typing. (2)

343 Methods of Teaching Bookkeeping

Application of research findings and psychological principles to the teaching of bookkeeping. Prerequisite: BUSA 281. (1)

344 Methods of Teaching General Business Subjects

Application of research findings and psychological principles to the teaching of general business, consumer economics, economics, business law, business mathematics, and business communications subjects. Prerequisites: ECON 151-152 and BUSA 281. (1)

345 Methods of Teaching Secretarial Subjects

Application of research findings and psychological principles to the teaching of shorthand, office practice, simulation, word processing, and related subjects. Prerequisites: advanced typing and advanced shorthand. (2)

357 Media and Technology in K-8 Classrooms

Consideration of the role of media in today's society and its potential in the learning process as a way of facilitating learner empowerment. Opportunities to practice the operation, application, and integration of a variety of current technologies in classrooms will be provided. Prerequisites: EDUC 302, 303. (Concurrent with 358, 406, 408.) (2)

358 Practicum I

Extended experience and participation in an assigned public school classroom. Prerequisites: EDUC 302, 303. (Concurrent with 357, 406, 408.) (1)

400 Topics in Elementary Education: Classroom Issues and Instructional Strategies

Consideration of current theory into practice as pertinent to effective teaching and learning, including classroom management, organization of classroom environments, and meeting the needs of diverse learners. Synthesis and application of content from previous and current methods courses including lesson planning, role of reflective practice, pedagogical philosophy and belief systems, and evolving definitions of teaching and learning. Emphasis on self-evaluation, analysis, and critique of the development of personal teaching strengths. Prerequisites: 302, 303, 357, 358, 406, 408. (Concurrent with 401, 410, 412.) (3)

401 Practicum II

Extended experience and participation in an assigned public school classroom focusing on application of content methods courses. Includes collection of video lessons. Prerequisites: 302, 303, 357, 358, 406, 408. (Concurrent with 400, 410, 412.) (1)

406 Mathematics in K-8 Education

Exploration of mathematical principles and practices consistent with NCTM curriculum standards. Emphasis on demonstrating the usefulness of math in a variety of real-world settings and across curriculum areas. Practice in methodology, planning, and assessment as developmentally appropriate for learners. Prerequisites: 302, 303. (Concurrent with 357, 358, 408.) (3)

408 Literacy in K-8 Education

Participation in the development of appropriate curricular strategies and instructional methods for supporting the diversity of learners' language/literacy growth. Daily and long range lesson planning and evaluation techniques will be practiced as they relate to literacy education. Prerequisites: 302, 303. (Concurrent with 357, 358, 406.) (3)

410 Science/Health in K-8 Education

Strategies for teaching science by using inquiry methods and problem-solving techniques will be employed to explore interactive curricula from an environmental point of view. Issues of nutrition and health will also be addressed. Daily and long range lesson planning and evaluation techniques will be practiced as they relate to science/health education. Prerequisites: 302, 303, 357, 358, 406, 408. (Concurrent with 400, 401, 312.) (3)

412 Social Studies in K-8 Education

Focus on drawing connections between the content of social studies curricula and the lived experiences of human lives. Course content includes investigation of issues related to democratic values and beliefs, active citizenry, multiculturalism, global perspectives, and the environment. Daily and long range lesson planning and evaluation techniques will be practiced as they relate to social studies education. Prerequisites: 302, 303, 357, 358, 406, 408. (Concurrent with 400, 401, 410.) (3)

421 Teachers and the Law

A brief study of students', parents', and teachers' rights and responsibilities with some emphasis on the question of liability. (1)

430 Student Teaching in K-8 Education

Teaching in classrooms of local public schools under the direct supervision of School of Education faculty and classroom teachers. Prerequisites: 302, 303, 357, 358, 406, 408. (Concurrent with 435.) (9)

432 Student Teaching - Upper Elementary (Single)

Teaching in classrooms of local public schools under the direct supervision of School of Education faculty and classroom teachers. Prerequisites: EDUC 251 or 321, 323 or 324, 325, 326, 408, 410, 412, art, music, and physical education methods. 2.50 GPA. Concurrent enrollment in 425. (10)

434 Student Teaching - Elementary (Dual)

Designed for persons who do dual student teaching. Ten weeks of teaching in classrooms of local public schools under the direct supervision of School of Education faculty and classroom teachers. Prerequisites: EDUC 253 or 321; 322, 323, or 324; and 325, 326, 408, 410 and 412, art, music, and physical education methods. 2.50 GPA. Concurrent enrollment in 435. (8)

435 Topics in Elementary Education Classroom: Practice in the Context of Educational Foundations

School-based experiences will be explored in the context of the historical, socio-cultural, political, legal, financial, ethical, and philosophical foundations of education. Student teaching experiences will be shared and analyzed to encourage the understanding of broader educational issues. Prerequisites: 302, 303, 357, 358, 406, 408. (Concurrent with 430.) (3)

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. (6)

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. Independent study card required. (6)

44X Subject Area Methods

Instructional strategies, long and short range planning, curriculum and other considerations specific to the disciplines. Prerequisites: 262, 263, EPSY 261, 361, SPED 362

440 Art in the Secondary School (3)**444 English in the Secondary School (3)****445 Foreign Languages in the Secondary School (3)****446 Mathematics in the Secondary School (3)****447 Science in the Secondary School (3)****448 Social Studies in the Secondary School (3)****449 Computer Science in the Secondary School (2)****456 Storytelling**

A combination of discovery and practicum in the art of storytelling. Investigates the values and background of storytelling, the various types of and forms of stories, techniques of choosing and of telling stories. Some off-campus practice. Demonstrations and joint storytelling by and with instructor. (2)

457 The Arts, Media, and Technology

Students use a variety of techniques, equipment, and materials to explore ways of seeing and expressing how they see and experience their environment. Exploration of ways to incorporate these techniques into the classroom. Computers, video cameras, book-production, models, animation, cartoons, photography, and posters, along with the standard fare of tape recorders, slide shows, movies, film strips, and overheads are manipulated as media to express a view of the world creatively. (2)

461 General Teaching Methods – Secondary

Skills and understandings related to decision-making, instructional techniques, evaluation and testing, classroom management, and discipline. Prerequisites: 262, 263; concurrent with 462. (3)

462 Teacher Assisting – Secondary

Guided instructional assistance and tutoring in schools; concurrent with 461. (1)

466 Student Teaching – Secondary (Dual)

Designed for persons who do dual student teaching. Ten weeks of teaching in the public schools under the direction and supervision of classroom and university teachers. Prerequisites: 262, 461, and EPSY 361. 2.50 GPA. May be taken concurrently with 467. (8)

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. Prerequisites: student teaching or teaching experience; 262, 253, EPSY 361. May be taken concurrently with student teaching. G (2)

468 Student Teaching – Secondary

Teaching in public schools under the direction of classroom and university teachers. Prerequisites: 262, 263, 461, 462; EPSY 261, 361; SPED 362; senior standing; cumulative GPA of 2.50 or higher. (9)

473 Parent-Teacher Relationships

Issues and skills important in conferencing and parent-teacher relationships. Emphasis on effective communication skills. Special education majors and teachers examine relevant placement processes and parent needs. (2)

485 The Gifted Child

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

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. Prerequisites: conference with the instructor or the dean of the School of Education.

497 Special Project

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

501 Workshops

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

503 On-Campus Workshops in Education

On-campus graduate workshops in education for varying lengths of time; enrollment subject to adviser's approval.

505 Issues in Literacy Education

Initial course required for all students in the master's program in literacy education. Overview of historical and current theory, practice, definitions, and research in language and literacy acquisition and development in and out of schools. Discussion of possibilities for program involvement, projects, goals, and collaboration. Required of any track option selected. (2)

506 Foundations of School Library Media Center Management

Functions of the school library media center with particular emphasis on the roles and responsibilities of the school library media specialist within instructional and administrative arenas. The taxonomies of school library media center management including the planning, delivery, and evaluation of programs. (2)

507 Principles of Information Organization, Retrieval, and Service

Exploration of a broad range of data and information in primary and secondary sources, including document, bibliography, full-text, statistical, visual, and recorded formats. Access points and strategies for effective information retrieval in print, media, and electronic resources. Information interviewing techniques, instructional strategies for library media center information resources, and local, regional, and national information networks. (2)

508 Principles of Bibliographic Analysis and Control

The organization and structure of a broad range of information formats with an emphasis on the analysis of standard bibliographic components prescribed by national bibliographic databases. Techniques to construct bibliographic records using national standards, including MARC (Machine Readable Cataloging), AACR2 (Anglo-American Cataloging Rules, Second Edition), and the Dewey Decimal Classification System. The selection, generation of data, and maintenance of electronic bibliographic database systems. (2)

509 Foundations of Collection Development

The philosophical bases and parameters of collection development in the school library media center. Techniques for community analysis, collection evaluation, and collection maintenance. Bibliographic resources for selection of materials with special emphasis on the criteria for evaluation of print, media, and electronic formats. The acquisition process for instructional materials in the K-12 system. A major emphasis is the analysis of a school library media center's support of school/district curricular goals and objectives. (2)

510 The Acquisition and Development of Language and Literacy

Investigation of how young children acquire their first language and what they know as a result of this learning. Emphasis on the relationships among meaning, function, and form in language acquisition as well as the relationships between cognition and language and their parallels to literacy acquisition. The basis for promoting a school environment that maximizes language learning/teaching potential. Prerequisite: Literacy Foundations. (2)

511 Strategies for Language/Literacy Development in Classrooms

The developmental nature of literacy learning with emphasis on the vital role of language and the interrelatedness and interdependence of listening, speaking, reading, and writing as language processes. Emphasis on developing strategies for putting an understanding of language acquisition and development into effective classroom practices that will promote continual, successful teaching and learning. Focus on stages of literacy development in reading and writing through the elementary grades. Prerequisite: 510. (2)

513 Language/Literacy Development: Assessment and Instruction

Understanding of a wide variety of strategies and tools for assessing and facilitating students' development in reading, writing, listening, and speaking. Emphasis on a broad range of possibilities in assessment, evaluation, diagnosis, and instructional implementation. Topics include an overview of testing resources and their appropriate use, the use of portfolios, techniques for observations/anecdotal records, experiences with miscue analysis, and the teaching and learning of appropriate intervention strategies to promote the development of readers and writers at all levels. The major course project includes assessing a reader, developing a profile of appropriate reading strategies, and designing and implementing an instructional plan to help the reader develop effective, efficient reading strategies. Prerequisite: 510; highly recommended to be taken at the end of the track sequence. (4)

515 Professional Seminar; Continuing Level, Teachers

The preparation and sharing of selected topics related to the minimum generic standards needs of the individual participants. Required for the continuing level certification of teachers. (2)

516 Teacher Supervision

Identification and development of supervisory skills for teachers who work with other adults in the classroom. Supervision of student teachers, consultants and resource specialists, parent volunteers, classified aides, and peer and cross-age tutors. (1)

528 Children's Literature in K-8 Curriculum

Investigation of genres of contemporary children's literature and development of a personal repertoire for classroom use. Current issues and trends in children's literature and professional resources available for teachers and library media specialists to evaluate and select appropriate literature. Possibilities for the integration of literature as curricular text to enhance/extend K-8 curriculum. Strategies include the use of literature circles, writing, and fiction and non-fiction in the content areas. Techniques for introducing children's literature into the classroom and library media center. (2)

529 Adolescent Literature in the Secondary Curriculum

Genres in adolescent literature and exploration of strategies for integration of young adult materials across the middle and secondary school curriculum. Current issues and trends in adolescent literature and professional resources available for teachers and library media specialists to evaluate and select appropriate literature. Techniques for introducing adolescent literature into the classroom and library media center. (2)

530 Children's Writing

Current theory and practice in the teaching and learning of writing in elementary classrooms. Implementation strategies, including the importance of models and demonstration, the place of talk and dialogue in the teaching/learning process, the use of conferencing and response, appropriate developmental spelling expectations, the role of children's literature, and writing across the curriculum. Particular emphasis on a process approach and the setting up of a Writing Workshop based on current research. (2)

537 Media and Technology for School Library Media Specialists

The management of media and technology services in the school library media center, the function and operation of media equipment and materials used in school library media centers, and the trends and issues involved in media and technology. Special emphasis on emerging technologies used in K-12 instructional programs (CD-ROM, interactive video, distance learning, computer technologies). (2)

538 Strategies for Whole Literacy Instruction (K-12)

The use of language as a tool for learning across the curriculum, and the roles of language in all kinds of teaching and learning in K-12 classrooms. Strategies for reading/writing in content areas, thematic teaching, topic study, and integrating curriculum. The concept of information literacy and models of instruction with emphasis on Washington State Information Skills Curriculum Models. (2)

544 Research and Program Evaluation

Knowledge of evaluation techniques, including portfolios, and of research design; ability to interpret educational research; to identify, locate, and acquire typical research and related literature; to use the results of research or evaluation to propose program changes and write grants. (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. Prerequisites: Admission to the graduate program; 544; minimum of 24 semester hours of coursework leading to the M.A.; consultation with student's adviser. (2)

550 Educational Administrative Theory

Introduction to the role and function of the principalship with emphasis on team building and interpersonal professional relationships and ethical decision-making. Prerequisite: Admission to the graduate program or permission of graduate adviser. (3)

551 Educational Law

Study of contemporary federal, state, and local statutes, regulations, and case law and their application to public and private schools (K-12). Prerequisites: Admission to the graduate program; 544. (2)

552 School Finance

Local, state, and federal contributors to school finance, its philosophy and development; the development and administration of a school budget. Prerequisites: Admission to the graduate program; 544. (2)

553 School/Community Relations

Knowledge and skill development for communication patterns in the school setting and with associated agencies, including medical, legal, and social services, as well as with students, parents, and staff. Prerequisite: Admission to the graduate program. (3)

554 Seminar in Educational Administration

The preparation and sharing of selected presentations related to needs of individual participants. Required for continuing certification of principals and program administrators. Registration must take place in the fall semester and participation will be continuous for the academic year. (2)

555 Curriculum Development

Types of curriculum organizations, programs and techniques of curriculum development. Prerequisites: Admissions to the graduate program, 544. (2)

556 Secondary and Middle School Curriculum

A variety of facets of secondary and middle school programs: finance, curriculum, discipline, evaluation, classroom management, the basic education bill, legislative changes, and special education. Development of secondary and middle schools from their beginnings to the present. Critical issues in the education scene today. (3)

558 Instructional Supervision

Differentiated models of supervision, including techniques in clinical supervision, teacher evaluation, disciplinary action and dismissal. Prerequisites: Admission to the graduate program, 544, 550, 553. (2)

559 Personnel Management

Knowledge and skill development in working with personnel issues, including legal principles in hiring, firing, in-service and staff development, support services, and contract negotiation. Prerequisites: Admission to the graduate program, 544, 550, 553. (3)

562 Schools and Society

Individual and cooperative study of the socio-cultural and cultural, political, legal, historical, and philosophical foundations of current practices of schooling in America. Emphasis on the current status of schools and the evaluation of their past, present, and future. Prerequisite: Admission to the MA/Cert Program or consent of instructor. (3)

563 Integrating Seminar

Students work cooperatively and individually to integrate education coursework, field experience, and individual perspective throughout the MA/Cert program. Focus on current issues including child abuse, multicultural and diverse populations, law, teacher collaboration. Prerequisite: Admission to the MA/Cert program. (1)

568 Internship in Teaching

Internship in classroom settings. Fourteen weeks of teaching under the direct supervision of cooperating teachers and university supervisors. Designed for students in the MA/Cert program. (6)

585 Comparative Education

Comparison and investigation of materials and cultural systems of education throughout the world. Emphasis on applying knowledge for greater understanding of the diverse populations in the K-12 educational system. (3)

586 Sociology of Education

Viewing the educational system as a complex and changing social institution. Emphasis on value orientations from diverse human populations and their impact on K-12 education and educational issues. (3)

587 History of Education

A study of great men and women whose lives and writings have shaped and continue to shape the character of American education. Emphasis on tracing the interdisciplinary and diverse antecedents of American education. (3)

589 Philosophy of Education

Philosophical and theoretical foundations of American education as well as the social philosophy of growing diverse populations in the K-12 schools. (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 requirements. No credit is given, nor is tuition assessed.

595 Internship in Educational Administration

Students will register for 2 semester hours in each of two semesters. Internship in educational administration jointly planned and supervised by the School of Education and public and/or private school administrators in full compliance with state requirements. Prerequisites: Admission to the graduate program or to the credentialing program; completion of educational administration concentration; consultation with adviser. (2, 2)

596 Graduate Seminar

Students register for 1 semester hour in each of two semesters. Professional seminars are scheduled and presented by candidates, their university professors, and professional colleagues in the schools in partnership. Prerequisites: Completion of coursework in educational administration concentration. (2)

597 Independent Study

Projects of varying length related to educational issues or concerns of the individual participant and approved by an appropriate faculty member and the dean. (1-4)

598 Studies in Education

A research paper or project on an educational issue selected jointly by the student and the graduate adviser. Prerequisites: Admission to the graduate program; 544, 545; minimum of 26 hours of coursework leading to the M.A.; consultation with the student's adviser. (2)

599 Thesis

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 are expected to defend their thesis in a final oral examination conducted by their committee. (3-4)

Educational Psychology**261 Human Relations Development**

Study and laboratory experiences in the development of human relations skills, especially the core skills of helping needed to facilitate problem-solving and personal academic growth. Prerequisites: ENGL 101, PSYC. 101, test scores, sophomore standing, cumulative GPA of 2.50. (3)

361 Psychology for Teaching

Principles and research in human development and learning, especially related to teaching and to the psychological growth, relationships, and adjustment of individuals. Prerequisites: EDUC 262, 263; EPSY 261. (3)

368 Educational Psychology

Principles and research in human learning and their implications for curriculum and instruction. Prerequisites: EDUC 251, 253. (4)

501 Workshops

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

512 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)

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)

536 Affective Classroom Techniques

Exploration of 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)

550 Beginning Practicum

Learn and practice the basic counseling skills in a structured and closely supervised environment. Learn through role-plays, observation, counseling clients and feedback via peers, instructor, clients, transcriptions, audio and video tapes. Clients used in this practicum will be relatively high functioning and will usually be seen in an observation room. (3)

555 Practicum

In addition to those skills learned in Beginning Practicum, learn and practice various counseling approaches, skills and techniques with individuals from diverse populations in community or various school settings. In addition to university faculty, there will be on-site supervision by counselors. Prerequisites: EPSY 550 and 561. (3)

560 Secondary School Practicum

Guided instructional assistance and tutoring in schools; concurrent with 461. Designed for the MA/Cert program. (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. (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. Students will co-facilitate a laboratory group. Prerequisite: EPSY 512. (2)

565 Advanced Human Development

A comparative study of human development at various levels through observational assessments using non-standardized instruments: e.g., sociometric scales, autobiographies, interviews, interaction analysis, and other appropriate measurements. A practicum (a minimum of one hour each week) is required in a school or appropriate agency. Prerequisite: Fifth year or graduate status. (4)

566 Advanced Cognition, Development, and Learning

The study of principles and current thought and research in cognition, development, and learning. Application to the organization, planning, and delivery of instruction. Prerequisite: Admission to the MA/Cert program or consent of instructor. (3)

569 Career Guidance

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

570 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 both individuals and groups. Students incorporate consultation experience following the Adlerian model. (4)

575 Mental Health

Basic mental health principles as related to interpersonal relationships. Focus on self-understanding. Laboratory experiences as arranged. (4)

578 Behavioral Problems

Adlerian concepts provide the basis for observation, motivation, modification, and life style assessment. Skills for assisting people in developing responsibility for their own behavior. Laboratory experience as arranged. (4)

583 Current Issues in Exceptionality

The characteristics of exceptional students and the counselor's role in dealing with a variety of problems they may have. Learning disabilities, emotional problems, physical problems, and the gifted student. G (2-4)

597 Independent Study

Projects of varying length related to educational issues or concerns of the individual participant and approved by an appropriate faculty member and the dean. (1-4)

598 Studies in Education

A research paper or project on an educational issue selected jointly by the student and the graduate adviser. It will be reviewed by the student's graduate committee. (2)

599 Thesis

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 are expected to defend their thesis in a final oral examination conducted by their committee. (3-4)

Special Education**190 Exceptional Children and Adults**

Introduction to the needs and characteristics of exceptional children and adults. Federal and state legislation, current issues, and practices of delivering services to individuals with disabilities. Prerequisite for all special education coursework. Required for all elementary education majors. (3)

191 Observation in Special Education

Observation in special education settings in the local area. (1)

200 Individuals with Special Needs

Introduction to the needs and characteristics of individuals with special needs. Federal and state legislation, current issues, and service delivery systems will be included. Prerequisite for all SPED and Elementary Certification coursework. (2)

290 Introduction to Learning Disabilities

Overview of the field of learning disabilities, including concepts, assessment and instructional practices. Prerequisite: EDUC 253 or EPSY 261/EDUC 262 or consent of instructor. (3)

296 Educating the Physically Challenged and Medically Fragile

The course focuses on meeting the psychological, social, and educational needs of individuals who are physically challenged and/or medically fragile. An overview of the most common medical problems and necessary modifications of curriculum and instructional techniques. (2)

NOTE: PREREQUISITE FOR 300/400 LEVEL SPECIAL EDUCATION: EDUC 302 or EPSY 261/EDUC 262 or consent of instructor. Students not majoring in education may be excused from this requirement.

362 Teaching for Individual Differences – Secondary
Curriculum modification and teaching and management methods for working effectively with exceptional learners in regular classrooms. (4)

390 Introduction to Developmental Disabilities
A study of the emotional, social, physical, and mental characteristics of individuals with developmental disabilities, including methods of assessing and teaching from medical, psychological, social, and educational points of view. (3)

393 Introduction to Behavior Disorders
Examination of current problems and issues as they relate to the instruction and management of learners with behavior disorders. Includes study of behavioral and academic characteristics of this population. (3)

395 Introduction to Language Development and Disorders
Introduction to language disorders, assessment, and intervention. Focus on theories of language development and normal language acquisition. (2)

398 Assessment in Special and Remedial Education
Study of a variety of informal and formal assessment tests and procedures. Curriculum-based assessments, systematic classroom observation, norm-referenced tests, task analysis, and criterion-referenced tests and procedures are examined. Includes the role of assessment in eligibility and program planning. (3)

399 Practicum in Special Education
Experience with children and youth who have special needs. 1 hour credit given after successful completion of 45 clock hours and specific course competencies. Prerequisite: SPED 290 or consent of instructor. (1-2)

403 Parent/Professional Partnership in Special Education
Methods for communicating effectively with parents of special needs children. (2)

407 Curriculum and Instruction for Learners with Special Needs
Focus on teaching academic, social, and adaptive skills to learners with special needs. Includes writing individual education plans, data based instruction, task analysis, and instructional sequencing. Prerequisites: General Methods, SPED 290, or consent of instructor. (4)

408 Career and Vocational Education for Students with Special Needs
Focus on career education curricula, assessment, life adjustment, and vocational instruction for learners with special needs. Includes community transition programs, supervised work and living arrangements, and assessment of occupational skills. (2)

438 Student Teaching in Elementary Special Education
Teaching in special education programs under the direction and supervision of school and university personnel. 8 weeks. Prerequisite: consent of instructor. (6)

439 Student Teaching in Secondary Special Education
Teaching in special education programs under the direction and supervision of school and university personnel. 8 weeks. Prerequisite: consent of instructor. (6)

475 Supervising Para-Professionals and Volunteers
Emphasis on the effective management of para-professionals and volunteers in the classroom. (1)

480 Issues in Child Abuse and Neglect
Scope and problems of child abuse, neglect, and family violence, including behaviors exhibited by abused and neglected children and adolescents. Includes identification and reporting procedures, and the legal and professional responsibilities of the educator. Methods for teaching personal safety will be addressed. (1)

485 The Gifted Child
A study of the gifted learner's characteristics and needs. Focus on instructional procedures designed to further development. (2)

490 Early Learning Experiences for Special Needs Children
Implications of normal and atypical child development for the learning process. (2)

492 Methods of Teaching Early Childhood Special Education
Early childhood methods, materials, curriculum, and techniques for teaching children with special needs. Prerequisite: SPED 490 or consent of instructor. (2)

494 Computer Application in Special Education
An introduction into the application of computer technology for learners with special needs. Focus on current issues and uses of computer technology including computer assisted instruction, software evaluation, pupil and data management, and assistive devices. (2)

499 Teaching for Individual Differences – Elementary
Designed to give pre-service teachers skills and knowledge in the areas of assessment, instruction, and management of learners with special needs. Prerequisite: 200. (2)

501 Off-Campus Workshops in Special Education
Off-campus graduate workshops in special education for varying lengths of time. (1-4)

503 On-Campus Workshops in Special Education
On-campus graduate workshops in special education for varying lengths of time. (1-4)

513 Language/Literacy Development: Assessment and Instruction
See Education 513.

520 Teaching Special Needs Students in Elementary Programs
Introduction and overview of services for special needs students in elementary programs. Includes procedural and substantive legal issues in special education, program modification, and classroom management. (2)

521 Teaching Special Needs Students in Secondary Programs
Introduction and overview of services for special needs students in secondary programs. Includes procedural and substantive legal issues in special education, program modification, and classroom management. (2)

522 The Role of Health Professionals in Special Education
This course introduces health professionals in the school to learners with special needs. Topics include roles of parents as well as medical concerns, early intervention, teaming, substance abuse, and suicide prevention. (3)

523 Educational Procedures for Students with Learning Disabilities
Designed for students in the Master of Arts of Education: Classroom Teaching – Certification. An introduction into teaching procedures for students with learning disabilities. Includes concepts in characteristics, assessment, and instructional practices. Prerequisite: Admission to the MA/Cert program. (3)

524 Educational Procedures for Students with Developmental Disabilities

Designed for students in the Master of Arts in Education: Classroom Teaching – Certification. An examination of the emotional, social, physical, and mental characteristics of individuals with developmental disabilities. Includes assessment and instruction from medical, psychological, social, and educational viewpoints. Prerequisite: Admission to the MA/Cert program. (3)

525 Procedures for Students with Behavior Disorders

Designed for students in the Master of Arts in Education: Classroom Teaching – Certification. An examination of instructional and management procedures for learners with behavior disorders. Includes study of academic and behavioral characteristics of these students. Prerequisite: Admission to the MA/Cert program. (3)

530 Current Issues in Assessment

Current issues in the use of assessment information for making educational decisions about students. Prerequisite: SPED 398 or consent of instructor. (2)

531 Severe and Profound Disabilities

Introduction to the physical, social, and education needs of individuals with severe and profound disabilities. (2)

532 Education and Training of Individuals with Severe and Profound Disabilities

In-depth study of educational prescription and programming for learners who are severely and profoundly disabled. Emphasis on teaching strategies and curriculum modification as they apply to this population. (2)

533 Current Issues in Developmental Disabilities

Current issues related to the education of individuals with developmental disabilities. Prerequisite: SPED 390 or consent of instructor. (2)

534 Current Issues in Behavior Disorders

Current issues related to the education of individuals with behavior disorders. Prerequisite: SPED 393 or consent of instructor. (2)

535 Current Issues in Learning Disabilities

Current issues related to the education of individuals with learning disabilities. Prerequisite: SPED 290 or consent of instructor. (2)

537 Current Issues in Language Disorders

Current issues and approaches in assessing and remediating children with language disorders. Prerequisite: SPED 395 or consent of instructor. (2)

538 Current Issues in Early Childhood Special Education

Current issues related to young children with special needs. Prerequisite: SPED 490 or consent of instructor. (2)

539 Administration of Early Childhood/Special Education Programs

In-depth study of the administration of early childhood programs with emphasis on remediation techniques and transdisciplinary approaches. Prerequisite: SPED 538. (2)

540 Early Intervention Programs

Current practices in medical, therapeutic, and educational intervention techniques used in the rehabilitation of special needs children from birth to age six. (2)

541 Assessment of Infants and Preschoolers

Use of appropriate tools and procedures in diagnosing and evaluating young children's needs, leading to relevant educational programming. Prerequisites: SPED 492, 540. (2)

568 Internship in Special Education

Internship in special education settings. Fourteen weeks of teaching under the direction and supervision of cooperating teachers and university supervisors. Designed for students in the MA/Cert program. (6)

570 Applied Behavior Analysis for Teachers

A survey of the principles and techniques of applied behavior analysis. Includes behavior modification and its ethical application, self-control techniques, cognitive behavior modification, organization and research design. (2)

575 Introduction to Collaborative Consultation

Introduction to the principles and practices of a consulting teacher model in special education. Focus on instructional delivery appropriate for providing direct and indirect services to learners with special needs in mainstream classes. (2)

576 Communication Skills for Collaborative Consultation in Special Education

Emphasis on the interpersonal skills necessary for the consulting teacher in special education. The course will explore the variables involved in developing cooperation between professional educators. (2)

588 Administration of Special Education Programs

Investigation of existing special education administrative units; pupil placement procedures, student staffings, program reimbursement procedures, and federal funding models. (3)

590 Research in Special Education

Review of current research on selected topics in special education. (1)

591 Research in Early Childhood/Special Education

A combination of organized coursework and independent study in early childhood/special education. Specialized study in a selected topic. Prerequisite: SPED 490 or consent of instructor. (1)

592 Research in Learning Disabilities

A combination of organized coursework and independent study in early learning disabilities. Specialized study in a selected topic. Prerequisite: SPED 535 or consent of instructor. (1)

593 Research in Behavior Disorders

A combination of organized coursework and independent study in behavior disorders. Specialized study in a selected topic. Prerequisite: SPED 534 or consent of instructor. (1)

594 Research in Developmental Disabilities

A combination of organized coursework and independent study in developmental disabilities. Specialized study in a selected topic. Prerequisite: SPED 533 or permission of instructor. (1)

595 Special Education: Internship

Projects of varying length related to trends and issues in special education and approved by an appropriate faculty member and the dean. (1-4)

597 Independent Study

Projects of varying length related to trends and issues in special education and approved by an appropriate faculty member and the dean. (1-4)

598 Studies in Education

A research paper or project on an educational issue selected jointly by the student and the graduate adviser. It will be reviewed by the student's graduate committee. (2)

599 Thesis

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 are expected to defend their thesis in a final oral examination conducted by their committee. (3-4)

Engineering

Engineering, a practical art and profession, is more than 50 centuries old. Its heritage boasts a vast spectrum of achievements, including the pyramids of ancient Mesopotamia (2000 B.C.), the Colosseum of Rome (75 A.D.), and more recently, the 16-megabit random-access memory chip (1990 A.D.). Engineering uses materials and knowledge from science and mathematics with experience, imagination, creativity, and inspiration to provide benefit to our daily lives. At the same time, engineering must be practiced with an appropriate awareness and concern for its potential adverse effects on human beings and the environment. The engineering code of ethics states the purpose of engineering — “to safeguard life, health, and property and to promote the public welfare.” The goal of engineering education at Pacific Lutheran University is to combine the skills of mathematics, the knowledge of science, and the techniques of engineering design, along with an appreciation of the broader areas of human interest and concern, to produce competent and responsible engineering.

PLU's programs in engineering provide a strong base in mathematics, physics, and engineering. Such a foundation will enable PLU graduates to adapt readily to future changes in technology. PLU programs are based on the premise that the engineering profession requires life-long learning.

In the development and implementation of technology, engineers are responsible for project conceptualization, design, study, testing, construction, and maintenance. Such projects usually involve economics, personnel management, and administration. Often technical projects require communication with peers, managers, and government representatives. PLU is uniquely qualified to educate engineers for such responsibilities because it combines technical courses with the liberal arts curriculum.

The Department of Engineering offers four-year Bachelor of Science (B.S.) degree programs in Electrical Engineering and Computer Engineering. The department also offers a five-year 3-2 or dual-degree program which leads to a B.S. in Engineering Science from PLU and an engineering degree from a second institution. At the second institution, the engineering specialty may be chosen from a variety of engineering disciplines.

Closely associated with these three programs is a B.S. in Applied Physics. This program offers concentrations in Mechanical Engineering and Electrical Engineering.

Students interested in an engineering degree program should contact a member of the engineering faculty for assistance and advice.

FACULTY: Upton, Chair; Gutmann, Hauelsen, MacGinitie, Spillman.

Electrical Engineering

Electrical engineering is the largest single discipline within engineering education and the engineering profession. It encompasses a number of areas of specific interest. Electrical engineering at PLU includes study in electrical circuits, devices, systems, and electro-optics. The curriculum involves a substantial component of both classroom and laboratory experience. It

seeks to balance the student's knowledge of current engineering practice with an understanding of the underlying science and engineering design principles, allowing graduates to keep pace with evolving technology.

B.S. MAJOR IN ELECTRICAL ENGINEERING: Engineering 131, 132, 245, 246, 345, 346, 445, 446, 491; Mathematics 151, 152, 253; Physics 153, 154, 163, 164, 331, 354; Computer Science 144; Chemistry 115; technical electives — four hours from Engineering 233, 234, 333, 334, 434; one course from Mathematics 230, 331, 356, Physics 223, 332; eight additional hours from upper division engineering or approved physics or computer science courses.

A typical electrical engineering program is as follows:

| | |
|------------------|--|
| <i>Freshman</i> | Engineering 131, 132 Physics 153, 154, 163, 164 Mathematics 151, 152 |
| <i>Sophomore</i> | Engineering 245, 246 Mathematics 253 Physics 354 Computer Science 144 Technical elective |
| <i>Junior</i> | Engineering 345, 346 Physics 331 Chemistry 115 Technical electives (2) |
| <i>Senior</i> | Engineering 445, 446, 491 Technical elective |

MINOR IN ELECTRICAL ENGINEERING: Engineering 131, 132, 245, 246, and 345 or 346; Physics 125, 126, 135, 136 or Physics 153, 154, 163, 164; Physics 354; Mathematics 151, 152, 253; Computer Science 144 or 240.

Computer Engineering

Computer engineering is a relatively new engineering specialty that has grown out of rapidly evolving micro- and mini-computer technology. The curriculum consists of essential and advanced elements from computer science and electrical engineering, developing both hardware and software expertise. Electives permit concentration in areas such as integrated circuit design, microprocessor applications, computer design, application software development, and artificial intelligence.

B.S. MAJOR IN COMPUTER ENGINEERING: Engineering 131, 132, 245, 246, 345, 346, 491; Mathematics 151, 152, 253, and either 245 or 331; Computer Science 144, 270, 380; Physics 153, 154, 163, 164; technical electives — 13 hours from Engineering 445, 446, 480, 481, 492, Computer Science 348, 367, 375, 385, 444, 455, Mathematics 356, Physics 331, 332, 354; technical electives must include four hours from Physics 354, Mathematics 356.

A typical computer engineering program is as follows:

| | |
|------------------|--|
| <i>Freshman</i> | Engineering 131, 132 Physics 153, 154, 163, 164 Mathematics 151, 152 Computer Science 144 |
| <i>Sophomore</i> | Engineering 245, 246, 346 Mathematics 253 Computer Science 270 Physics 354 |
| <i>Junior</i> | Engineering 345 Computer Science 380 Mathematics 331 Technical elective |
| <i>Senior</i> | Technical electives (2) |

Engineering Science

The degree in engineering science is awarded in the 3-2 Engineering program. The 3-2 or dual-degree program consists of three years of introductory science and engineering at PLU followed by two years of study at a second school offering a desired engineering specialty, resulting in one degree from each institution. The 3-2 program is appropriate for students interested in a wide variety of engineering disciplines including mechanical, chemical, civil, aeronautical, and others. PLU has formal 3-2 agreements with Columbia University (New York City) and Washington University (St. Louis); transfers to other engineering schools can easily be arranged.

The five-year, 3-2 program provides the opportunity to integrate an excellent liberal arts background along with study in engineering in a variety of disciplines. The student has the further advantage of beginning study in the atmosphere of a smaller school where emphasis is on teaching and attention is given to individual students.

B.S. MAJOR IN ENGINEERING SCIENCE: The requirements for this B.S. degree from PLU are the successful completion of: (1) the PLU core curriculum, (2) the engineering and science courses listed below, and (3) an engineering degree at the second school. The general university requirements that do not apply are: (1) completion of a minimum of 128 semester hours on the PLU transcript, (2) completion of a minimum of 40 semester hours from courses numbered 300 and above, (3) at least 20 of the minimum 40 semester hours of upper division work must be taken at PLU, and (4) the final 32 semester hours of a student's program must be completed in residence at PLU.

Engineering: 131, 132, 334, Mathematics 151, 152, 253; Physics 153, 154, 163, 164, 354; Computer Science 144 or 240; Chemistry 115 (Chemistry 116 is recommended for students attending Columbia); technical electives—three courses from Engineering 245, 246, 345, 346 (electrical specialty) and Engineering 233, 234, 333, 434 (mechanical specialty).

A typical engineering science program is as follows:

| | |
|------------------|---|
| <i>Freshman</i> | Engineering 131, 132 Physics 153, 154, 163, 164 Mathematics 151, 152 |
| <i>Sophomore</i> | Engineering 233, 234 or Engineering 245, 246 Mathematics 253 Physics 354 Computer Science 144 or 240 |
| <i>Junior</i> | Engineering 245 or 233 Engineering 334 Chemistry 115 |

For 3-2 chemical engineering, required courses are Engineering 131, 132, 233, 234; Mathematics 151, 152, 253; Physics 153, 154, 163, 164, 354; Chemistry 115, 116, 331, 333, 341, 343; Chemistry 332, 334 and 456 are recommended. The following is a typical program:

| | |
|------------------|--|
| <i>Freshman</i> | Engineering 131, 132 Physics 153, 154, 163, 164 Mathematics 151, 152 Chemistry 115, 116 |
| <i>Sophomore</i> | Engineering 233 Mathematics 253 Chemistry 331, 332, 333, 334 |
| <i>Junior</i> | Physics 354 Engineering 334 Chemistry 341, 343, 456 |

In this program, Engineering 333 may be substituted for Chemistry 341. It is also recommended that Chemistry 321 be taken if time permits.

Course Offerings

131 Introduction to Engineering I

An introduction to the engineering profession and development of basic skills important to the profession, including problem solving, engineering design, graphics, use of computers, computer programming, engineering economics, and ethics in engineering. Seminar series of lectures by speakers from industry, universities, and alumni. Prerequisite: Completion of college-preparatory mathematics. I (3)

132 Introduction to Engineering II

An introduction to the engineering profession and development of basic skills important to the profession, including problem solving, statistics engineering design and graphics, engineering economics, and ethics in engineering. Project-team work is an integral part of the course. Prerequisite: 131. II (2)

233 Statics

Engineering statics using vector algebra; conditions for equilibrium, resultant force systems, centroid and center of gravity, methods of virtual work, friction, kinematics of particles. Prerequisites: PHYS 153. I (3)

234 Mechanics of Solids

Mechanics of deformable solid bodies, deformation, stress, constitutive equations for elastic materials, thermoelasticity, tension, flexure, torsion, stability of equilibrium. Prerequisite: 233. II (4)

245 Electrical Circuits I

Introduction to the fundamental concepts of DC circuits including Ohm's and Kirchhoff's Laws and the function of inductive and capacitive elements. Prerequisite: PHYS 154. I (4)

246 Electrical Circuits II

Theory of electrical circuits including transient response, AC steady state—single and three phase, frequency and time domain analysis, computer analysis of steady state and transient response using SPICE. Laboratory work is part of the course. Prerequisite: 245. II (4)

333 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 introduction to statistical thermodynamics. Prerequisite: PHYS 154. I (4)

334 Materials Science

Fundamentals of engineering materials including mechanical, chemical, thermal, and electrical properties associated with metals, ceramics, polymers, composites, and semiconductors. Focus on how useful material properties can be engineered through control of microstructure. Prerequisite: PHYS 154, CHEM 115. II (4)

345 Analog Electronics

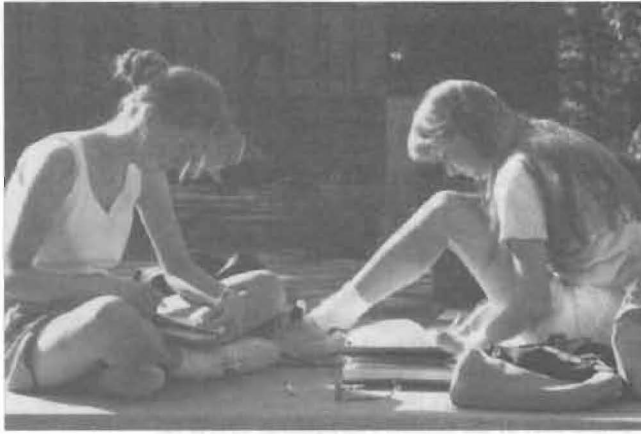
An introduction to analog integrated circuit design techniques, including single and multistage amplifiers, frequency response and feedback methods. Laboratory work is part of this course. Prerequisite: 246. I (4)

346 Digital Electronics

Analysis of digital design techniques, including a review of combinational logic, flip flops, registers, counters, and timing circuits. I II (4)

434 Transport: Momentum, Energy and Mass

Concepts and equations of classical continuum fluid mechanics: momentum, energy, and mass transport, transport coefficients—viscosity, thermal conductivity, mass diffusivity—inviscid and laminar flows, boundary layers, experimental and numerical modeling of transport processes. Prerequisite: 333 or consent of instructor. II (4)



445 Linear Systems and Control

Modeling, analysis, computer simulation, and design of continuous and discrete-time mechanical, electrical, and electro-mechanical feedback control systems. Laplace transforms, frequency response, and state-space techniques are used to develop performance parameters, examine stability, and design controllers. Extensive use of examples and case studies to develop robust PI, PD, and PID controllers and compensators. Prerequisite: 246. I (4)

446 VLSI Design

An introduction to the design of very large scale integrated systems using computer-aided design methods. Topics include MOS devices, fabrication procedures, chip architecture, chip topology, and system timing. Prerequisite: 346. II (2)

480 Microprocessors

Study of microprocessors and their use in microcomputer systems. Data representation, programming, interrupts, I/O interfacing, data communications, available software, and program development studied in lecture and laboratory sessions. Prerequisites: 346, 380. I (4)

481 Computer-Aided Design of Digital Systems

An introduction to use of CAD systems for digital design. Basic principles of combinational and sequential logic design are reviewed. Simulators, computer hardware description languages, and other computer-aided design tools are developed. Prerequisite: 346. II (2)

491 Senior Design Project

Individual or small-team project that takes a design concept from the proposal stage to the testing stage. Each student or team will work directly with one faculty member for the design project and will be required to prepare a technical report and provide a presentation. The goal of this design project is to expose the student to engineering design which involves creativity, the experience of open-ended problems with alternate solutions, and the use of design methodology. It is also planned that the student will confront realistic constraints such as economic factors, safety, reliability, ethics, and social impact. Completion of this course satisfies the core requirement for a senior seminar project. I II (2-4)

492 Independent Study

Projects of varying length related to a student's major. Students may expand their Senior Design Project by taking one to four hours. The project must be approved before enrollment by the faculty adviser and the department chair. I II (1-4)

English

English offers excellent preparation for any future requiring integrative thinking, skill in writing, discernment in reading, an appreciation of human experience and aesthetic values, and the processes of critical and creative expression. Business, government, education, and publishing are areas where our graduates frequently make their careers.

Our program offers concentrations in literature, writing, and publishing. The English Department also supports the study abroad programs, and we offer study tours to such places as Europe, Australia, and the Caribbean.

FACULTY: Bergman, Chair; M. Benton, P. Benton, Brown Carlton, Cady, Campbell, Eyster, Jansen, Jones, Marek, D. M. Martin, Rahn, D. Seal, Temple-Thurston. Assisted by E. Nelson.

ENGLISH MAJOR (EMPHASIS ON LITERATURE): At least 32 hours in English beyond 101, including three surveys (241, 251, 252); at least one course in a historical period (342, 343, 345, 381, 384, 389, 390, 391, 392); at least one course in a major author (382, 383, 440, 451, 452); and 12 hours of electives, excluding internships.

ENGLISH MAJOR (EMPHASIS ON WRITING): The Writing Emphasis at PLU is part of a growing awareness in colleges and universities of the importance of writing within programs of English, and has been designed for a broad spectrum of students, from those wishing to focus on fiction and poetry, to those interested in more pragmatic types of writing, to those set on exploring theoretical issues in rhetoric and composition.

At least 32 hours in English, distributed as follows:

A. *Literature (12 hours)*

1. Literature surveys (8 hours from the following)
 - 241, American Literature
 - 251, English Literature to 1750
 - 252, English Literature after 1750
2. Major Author (4 hours)

B. *Writing (at least 16 hours in writing, with at least 8 hours upper division)*

1. At least 12 hours, from at least two of the following lines
 - a. Imaginative Writing
 - 227, Imaginative Writing I
 - 327, Imaginative Writing II
 - 326, Writing for Children
 - b. Expository Writing
 - 221, Research and Writing
 - 222, Writing in a Discipline
 - 323, Writing in a Professional Setting
 - 324, Freelance Writing
 - c. Creative Nonfiction
 - 225, Autobiographical Writing
 - 325, Personal Essay
2. Senior Project/Seminar (at least 4 hours in the following)
 - 425/426, Writing on Special Topics
 - 427, Imaginative Writing II
 - 428, Introduction to Critical Theory

NOTE: The following course is designed differently each time it is taught, and may be used to satisfy various writing categories above, depending upon the particular design of the course when taken:

421, Tutorial in Writing

C. *Elective (at least 4 elective hours in English beyond 101)*

CHILDREN'S LITERATURE: Students completing 363 and 8 hours from 362, 365, 366 or other approved courses (all with grades of B or higher) will be recognized for special competence in children's literature.

MINOR (EMPHASIS ON LITERATURE): 20 semester hours, (excluding 101 and 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, 4 hours in British literature after 1700, and at least 4 additional hours in literature.

MINOR (EMPHASIS ON WRITING): 20 semester hours, (excluding 101 and 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 12 hours in writing courses drawn from 221, 222, 225, 227, 323, 324, 325, 326, 327, 328, 351, 366, 421, or other approved courses in writing.

MINOR (EMPHASIS ON PUBLISHING AND PRINTING ARTS): See separate listing under *Publishing and Printing Arts*.

PROSPECTIVE TEACHERS: Student preparing to teach in junior or senior high school may earn either a Bachelor of Arts in English with certification from the School of Education, or a Bachelor of Arts in Education with a teaching major in English. See the *School of Education* section of this catalog for the additional requirements for certification or the Bachelor of Arts in Education.

FOREIGN LANGUAGE REQUIREMENT: All English majors must complete at least two years of a foreign language at the university level, or the equivalent (See *College of Arts and Sciences Foreign Language Requirements, Option I*.)

Course Offerings

All literature courses fulfill the general university core requirement in literature.

AMERICAN LITERATURE

- 241 American Literature
- 342 Twentieth-Century American Poetry
- 343 Twentieth-Century American Fiction and Drama
- 345 Canadian Factor
- 440 Seminar – A Major American Author

BRITISH LITERATURE

- 251 English Literature: Beginnings to 1750
- 252 English Literature: After 1750
- 381 Studies in Medieval Literature
- 382 Chaucer and His Age
- 383 Shakespeare
- 384 English Renaissance Literature
- 389 Restoration and Eighteenth Century English Literature
- 390 The English Romantic Movement
- 391 Victorian Literature
- 392 Twentieth-Century British Literature
- 451 Seminar – A Major British Author Before 1750
- 452 Seminar – A Major British Author Since 1750

GENRE AND SPECIAL STUDIES

- 216 Poetry
- 217 Short Story
- 218 Drama
- 230 Contemporary Literature
- 231 Masterpieces of European Literature
- 232 Women's Literature
- 233 Post-Colonial Literature
- 234 Environmental Literature
- 350 The Writer As Reader
- 363 Children's Literature
- 364 Special Topics in Children's Literature

- 365 Fantasy and Fairy Tales
- 381 Studies in Medieval Literature
- 491, 492 Independent Reading and Research
- 597 Graduate Research

WRITING, LANGUAGE, AND PUBLISHING

- 101 Inquiry Seminar: Writing for Discovery*
- 221 Research and Writing*
- 222 Writing in an Academic Discipline*
- 224 Travel Writing*
- 225 Autobiographical Writing*
- 227 Imaginative Writing I
- 321 The Book in Society
- 322 Publishing Procedures
- 323 Writing in Professional Settings*
- 324 Free-Lance Writing*
- 325 The Personal Essay*
- 326 Writing for Children
- 327, 427 Imaginative Writing II
- 328 Advanced Composition for Teachers*
- 331 The Art of the Book I
- 332 The Art of the Book II
- 351 The Writer's Craft
- 403 The English Language
- 421 Tutorial in Writing
- 425, 426 Writing on Special Topics
- 428 Introduction to Critical Theory

*Indicates courses that fulfill the general university writing requirement.

101 Inquiry Seminar: Writing for Discovery I II (4)

216 Poetry

A study of poems and conventions of poetry from the Greek classics to modern projective verse. Intended to develop the reader's ability to respond with sensitivity and discrimination to a rich variety of poetic forms. Fulfills general university core requirement in literature. I (4)

217 Short Story

Examines the development of short fiction, concentrating on themes and techniques of the genre. Includes stories by American, British, Continental, and Latin American writers. Fulfills general university core requirement in literature. I II (4)

218 Drama

A survey of masterpieces from classical Greece to the present, with emphasis on the basic elements of drama (plot, character, language) and on the traditional genres (tragedy, comedy). Fulfills general university core requirement in literature. II (4)

221 Research and Writing

Strategies for writing academic research papers are practiced, including developing appropriate research topics, locating and using a variety of relevant sources, substantiating generalizations, and using paraphrase and citation accurately. (2, 2 or 4)

222 Writing in an Academic Discipline

Taken jointly with a course in a content discipline. Students fulfill two general university requirements, one in writing and one in the humanities, social sciences, or natural sciences, depending upon which discipline is participating in a given semester. The writing practices of a particular field such as philosophy, history, anthropology, or biology are studied in tandem with the subject matter of the field. Team-taught by an instructor in English studies and an instructor in the participating discipline. (4)

224 Travel Writing

Writing about travel, while traveling or upon return. Students keep travel journals, produce short travel essays, and read selected travel writers. Emphasis on both interior and exterior journeys. (4)

225 Autobiographical Writing

Reading autobiography and writing parts of one's own, with an emphasis on how writing style and personal identity complement each other. Fulfills general university writing requirement. I II (4)

227 Imaginative Writing I

A beginning workshop in writing poetry and short fiction. Includes a study of techniques and forms to develop critical standards and an understanding of the writing process. (Prerequisite: 101 or its equivalent, Advanced Placement, or consent of instructor.) Does not fulfill general university requirements. I II (4)

230 Contemporary Literature

Emphasis on American fiction since 1950. Fulfills general university core requirement in literature. I (4)

231 Masterpieces of European Literature

Representative works of classical, medieval, and early Renaissance literature. Fulfills general university core requirement in literature. (Cross-referenced with CLAS 231) I (4)

232 Women's Literature

Fiction, poetry, and other literature in English (British, American, Canadian, Commonwealth) by women writers, with emphasis on the twentieth century. Includes an introduction to feminist theories of reading and writing. Fulfills general university core requirement in literature. (4)

233 Post-Colonial Literature

A survey of literature in English from areas once part of the British Empire in Africa, India, the Caribbean, Australia, and New Zealand. Fulfills general university core requirement in literature. (4)

234 Environmental Literature

Examines representations of nature in literature, and the ways in which humans define themselves and their relationship with nature through those representations. Focuses on the tradition of nature writing in American literature from Thoreau and Muir to Barry Lopez and Annie Dillard, and includes imaginative works from other cultures. Fulfills general university core requirement in literature. (4)

241 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. Fulfills general university core requirement in literature. I II (4)

251 English Literature: Beginnings to 1750

Emphasis on the continuity and variety of English literature from Beowulf through Neo-classicism and the early novel. Fulfills general university core requirement in literature. I (4)

252 English Literature: After 1750

English literature, especially poetry, from the emergence of romanticism to the 20th century. Fulfills general university core requirement in literature. II (4)

321 The Book in Society

A critical study of the role of books in our history, society, and daily lives. Topics include the paperback revolution; gender issues in books and publishing; censorship and manipulation, especially in books for children; small presses and "alternative" publishing; technological horizons; and tensions between the cultural and commercial dimensions of book publishing. I (4)

322 Publishing Procedures

A workshop introduction to the world of book publishing, involving students in decisions about what to publish and how to produce it. Editing, designing, and preparing a manuscript for production. Plans for marketing a finished product. II (4)

323 Writing in Professional Settings

Students working in professional settings analyze the rhetorical demands of their job-related writing. Using their work-in-progress, students produce or revise documents that meet those demands effectively. (2, 2 or 4)

324 Free-Lance Writing

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

325 Personal Essay

Students write essays on topics of their choice, working particularly on voice and style. These essays rely less upon formal logical structures than upon personal thought and the integration of events and ideas in the writer's life. Readings will provide a range of approaches and contents, and may center on a specific theme. (4)

326 Writing for Children

A workshop in writing fiction and non-fiction for children and teenagers, with an introduction to the varieties of contemporary children's literature. Does not fulfill general university requirements. II (4)

327, 427 Imaginative Writing II

An advanced workshop in writing poetry and short fiction. Some attention will be given to procedures for submitting manuscript for publication. Does not fulfill general university requirements. I II (4)

328 Advanced Composition for Teachers

Students are introduced to philosophical, social, and pragmatic issues confronting teachers of writing. Responding to composition theories that address these issues, students obtain extensive practice in expository writing. Required for certification by the School of Education. (4)

331 The Art of the Book I

The combination studio course and seminar explores the visual properties of language. It introduces the history, principles, and techniques of typography, printing, and the book arts through both classroom study and a variety of studio projects. I II (4)

332 The Art of the Book II

Individual projects to explore further typography and fine book-making. Production of a small edition of an original text—selected, edited, designed, illustrated, printed, and bound by one or a team of students. I II (1-4)

342 Twentieth-Century American Poetry

Representative poets from the generation of Robert Frost and Ezra Pound to our contemporaries. a/y II (4)

343 Twentieth-Century American Fiction and Drama

Literature and society to the 1950s, with emphasis on major authors between the Wars, including Hemingway, Faulkner, O'Neill. a/y II (4)

345 Canadian Fiction

Novels and short stories by Anglo-Canadians, with some attention to French-Canadian literature in translation. II (4)

363 Children's Literature

An introduction to a rich literary tradition, with analysis in depth of such authors as H.C. Andersen, Tolkien, Lewis, Potter, Wilder, and LeGuin. I (4)

364 Special Topics in Children's Literature

Content varies each year. Possible topics include genres, themes, historical periods, and traditions. May be repeated for credit with different topic. II (4)

365 Fairy Tales and Fantasy

Selected fairy tales are told, and various ways to interpret them are explored. Fantasy is studied as a genre, with emphasis on kinds of fantasies, such as pure fantasy, sword and sorcery, the detective novel, science fiction, and horror fiction. I (4)

381 Studies in Medieval Literature

Studies in the literature of Western Europe from 700 to 1500, excluding Chaucer. Consideration of genres, themes, and the place of literature in medieval life. a/y I (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. a/y II (4)

383 Shakespeare

Ten to twelve representative plays, as well as selected poems and sonnets. Recommended as background: 251. I (4)

384 English Renaissance Literature

Studies the Golden Age of English literature. Selected poets from Wyatt to Marvell, including Sidney, Spenser, Shakespeare, Donne, and Jonson; selected playwrights from Kyd to Webster; selected prose from More to Bacon and Browne. I (4)

389 Restoration and Eighteenth Century English Literature

A study of neo-classic writings and the developing social awareness of the preromantic age: Dryden and Pope to Johnson and Blake. Examination of the beginnings of the novel in Defoe, Richardson, Fielding, Smollet, and Sterne. II (4)

390 The English Romantic Movement

A study of the romantic awakening in England: Blake, Wordsworth, Coleridge, Shelley, Keats, Byron, and others. Attention also to novelists of the period such as Austen and Scott. II (4)

391 Victorian Literature

Selected authors (including Carlyle, Tennyson, Dickens, and Hardy) and topics from a period of rapid and momentous social change. I (4)

392 Twentieth-Century British Literature

Selected playwrights from Shaw to Beckett; poetry of Yeats, Hardy, Thomas, and Auden; fiction of Joyce, Woolf, Lawrence, Greene, Lessing, and others. I (4)

403 The English Language

Studies in the structure and history of English. Includes syntactical and stylistic analysis, issues of usage, and introductory readings in semantics, psycholinguistics, sociolinguistics, and the philosophy of language. Considers the history of English in relation to media (speech, writing, printing, electronic media), to culture (literature, dictionaries, grammars), and to cross-cultural resonances (English as an amalgam, as a world language, as a set of dialects). (4)

421 Tutorial in Writing

Guided work in an individual writing project. A plan of study must be approved before the student may register for the course. (1-4)

425, 426 Writing on Special Topics

In a cross-disciplinary seminar, students will read and write about a contemporary issue from multiple perspectives. Representative topics might be environmental justice, literacy, or multiculturalism, and will vary from semester to semester. Writing in a wide range of academic and creative genres determined by their particular educational goals, students will shape their papers to meet the rhetorical demands of publications relevant to their academic or professional future. (4)

427 Imaginative Writing II

Advanced work in writing poetry or short fiction. Students use this course number to enroll in English 327 for a second time.

428 Introduction to Critical Theory

Issues in literary studies and in composition studies are discussed in relationship to influential movements such as reader-response, cultural studies, feminism, and deconstruction. In some semesters, the focus will be on one representative movement or on a particular theorist whose work has provoked responses from a range of theoretical perspectives. Recommended for prospective graduate students. (4)

440 Seminar-A Major American Author

Concentrated study of the work, life, influence, and critical reputation of a major American author, including substantial library research. I (4)

451 Seminar-A Major British Author Before 1750

Concentrated study of the work, life, influence, and critical reputation of a major British author from the Renaissance to the age of Fielding and Dr. Johnson, including substantial library research. a/y II (4)

452 Seminar-A Major British Author Since 1750

Concentrated study of the work, life, influence, and critical reputation of a major British author from the age of Blake to the present, including substantial library research. II (4)

491, 492 Independent Reading and Research

An intensive course in reading. May include a thesis. Intended for upper division majors. I II (1-4)

597 Graduate Research (1-4)

English as a Second Language

The Intensive English Language Institute (operated by the American Cultural Exchange) is an affiliate of PLU offering intensive English classes, which are designed to prepare international students for studies in U.S. colleges and universities. IELI also offers classes for students who are coming to study with the primary goal of improving their language skills. The institute is authorized to grant I-20 forms; however, admission to the institute does not constitute admission to the university, and no transferable credit is given for institute courses.

The primary goal of the Intensive English Language Institute (IELI) at Pacific Lutheran University is to prepare students for successful academic careers at American colleges and universities by providing them with a strong background in English and academic study skills. The skills-based curriculum covers listening, reading, writing, grammar, and speaking in a modular format.

LISTENING READING WRITING
LECTURE PREPARATION
AUDIT/AUDIT REVIEW

When new students enter the Institute, they are given a series of skills placement tests. On the basis of these tests, students are placed either in one of the three modules or in Lecture Prep or Audit/Audit Review. Students progress through the modules, studying the skills they are weakest in with the option of work in other skill areas. As students master each skill area they move on to the next. This Focal

Skills program was developed by Dr. Ashley Hastings, and has proved very successful in allowing students to work through the various skill areas at their own pace. All students receive 20 hours per week of instruction.

The faculty at IELI has extensive training and experience in teaching English as a Second Language, and all hold the terminal degree of M.A. in TESL or its equivalent. Having lived, travelled, and taught English in many countries throughout the world, both the faculty and staff have gained an awareness of other peoples, their languages, and their cultures.

FACULTY: Cothren, *Director*; Avery, Biggs, Clifthorne, Gillis, Hodges, McBride, J. Poulshock

Course Offerings

Listening Module (15 hours per week)

Reading Module (15 hours)

Writing Module (15 hours)

Lecture Preparation (5 hours): A course covering note-taking skills, summarization, identifying main and supporting ideas of a lecture, and giving opinions about the lecture. Students complete a "mock" college-level academic course, including reading in a college text, taking quizzes and exams, and completing a special project for the course. (This course is a prerequisite for Audit/Audit Review.)

Audit/Audit Review (15 hours): The student and his/her ESL instructor will audit a course at PLU, taking notes on daily lectures, reading required texts, and taking quizzes and exams with other PLU students. During the other three hours, the students go over the lecture notes from the course, discuss text and supplementary reading assignments, explore difficult or different concepts, prepare for exams, refine writing skills, and learn to write a college research paper. Completion of Lecture Preparation is prerequisite to enrolling in this course.

Electives (5 hours): Elective classes include TOEFL preparation, research skills, English through Songs, Business English, Grammar, Pronunciation, etc. Call the office for specific information.

Special Studies (5–20 hours): All levels. Courses are designed to help those who wish to improve their English for professional or personal reasons. Under certain circumstances, a less intensive schedule or private tutorials may be arranged.

Credit Courses: Qualified advanced level students may request permission to take regular university classes for credit. This provides students an opportunity to earn credits toward their degree while completing their advanced courses in English as second language.

When students have met IELI's standards of proficiency—determined by exit examinations—in all skill areas of English, they are ready to do university level work, and the IELI staff assists in placing them in a suitable academic program. PLU's English language proficiency requirement for admission can be satisfied with a recommendation from the IELI director. A student must have a B or better in the Audit/Audit Review course to qualify for this recommendation. Students who are not planning to attend a college or university after their language studies are not required to take the 15 hour Audit/Audit Review course and will receive IELI's certificate of program completion after finishing the advanced level courses.

To enhance formal educational experience, the following activities are also available to IELI students:

RESOURCE CENTER: Students are encouraged to take advantage of the resource center which is equipped with audio and video tapes and equipment, textbooks, reading materials, and computers to help students work on their language skills outside of the regular classroom assignments. A professional tutor is available 10 hours per week to guide students with their study goals. Community members can also make use of the resource center for a monthly fee.

CONVERSATION PARTNERS: English language students are encouraged to sign up for a conversation partner with whom they can meet on a regular basis (once or twice a week) for coffee, lunch, or more extensive activities. The American students who participate in the Conversation Partners Program are often students who are preparing for careers in global studies, languages, education, and other fields. Some of these students have lived abroad or are from families who have hosted international students and all have expressed interest in learning more about other people and cultures. Conversation partners are recruited and screened by the Institute and receive orientation materials from IELI.

HOST FAMILIES: IELI has a long-established community-based host family program for students who wish to live with a U.S. family for one or more semesters. The American families—all screened by the Institute—provide students with room or room and board at reasonable rates. In addition to the standard bedroom furniture, the rooms are provided with a desk, chair, and good lighting; family rules are agreed upon in advance and a formal written agreement is drawn up. The student completes a questionnaire that indicates preferences such as: children in family, urban or suburban setting, likes and dislikes, etc. The host family is also given an opportunity to express preferences or expectations. This information is then used to place students in the home most suitable for both parties. Weekend and/or holiday visits with an American family can also be arranged.

COUNSELING: IELI assists its students with career choices, college placement, immigration matters, medical and dental referrals, and personal concerns.

ACTIVITIES: Special cultural and social activities are planned regularly for students. In addition, field trips add significantly to the cultural enrichment of the students. IELI students and staff take trips to Mt. Rainier, local museums of natural history, art galleries, zoos, children's day care centers, retirement homes, the Ports of Tacoma and Seattle, and the Seattle Center. IELI students can also participate in intramural sports activities such as soccer, volleyball, and basketball. Six tennis courts, a golf course, a swimming pool, and several gymnasiums give students additional opportunities for recreation.

The Intensive English Language Institute is located on Park Avenue just north of 121st Street.

Telephone Number: (206) 535-7325

FAX Number: (206) 535-8794

Environmental Studies

The Environmental Studies Program at PLU provides students the opportunity to link environmental themes to any area of the curriculum they select for major study. The integrative approach of this minor, essential to the development of an understanding of the global impact of human civilization on the natural environment of our planet, encourages students to blend many perspectives on environmental issues into their coursework.

This program examines the relationship between humans and the environment through a wide variety of perspectives within the university curriculum, in disciplines as varied as art, business, education, nursing, engineering, theatre, as well as the natural sciences, social sciences, and humanities.

The program is overseen by an interdisciplinary faculty committee. Students interested in the Environmental Studies minor should meet with the chair of the Environmental Studies Committee.

FACULTY: A committee of faculty administers this program: Whitman, *Chair*; Bergman, Hallam, Hansen, Hansvick, Howell, Nugent, Olufs, Tonn.

MINOR REQUIREMENTS: 24 semester hours

1. **Earth Sciences/Environmental Studies 222 – Conservation of Natural Resources** (4)

2. **Chemistry 104 – Environmental Chemistry** (4)

Students majoring in a natural science discipline who have taken a higher level Chemistry course (115 or above) will be allowed to substitute another course in consultation with the Environmental Studies Committee.

3. **Values and Meaning** (4)

Students select one course from the following which examines values, perception, and expression as they relate to environmental issues:*

- Art 226 – Black and White Photography
- Communication 490 – In-Depth Investigative Reporting
- English 324 – Free-lance Writing
- Integrated Studies 241 – Energy, Resources, and Pollution
- Psychology 464 – Environmental Psychology
- Religion 365 – Christian Moral Issues (Environmental Ethics only)

*Students must notify the instructor of their intent to complete a minor in Environmental Studies so that they can focus their independent work in each course (writing, art, term paper...) on an environmental theme or issue. Other courses may be substituted or added to the curriculum pending approval of the committee.

4. **Systems and Implementation** (4)

Students select one course from the following which pursues the study of institutions where environmental perspectives and policies are applied:*

- Economics 130 – Global and Environmental Economic Principles
- Political Science 354 – State and Local Government

*Students must notify the instructor of their intent to complete a minor in Environmental Studies so that they can focus their independent work in each course (writing, art, term paper...) on an environmental theme or issue. Other courses may be substituted or added to the curriculum pending approval of the committee.

5. **Environmental Studies 350 – Environmental Methods of Investigation** (4)

6. **Environmental Studies 490 – Capstone Project** (4)

Course Descriptions

222 Conservation of Natural Resources

Principles and problems of public and private stewardship of our resources with specific reference to the Pacific Northwest. (Cross-referenced with Earth Sciences 222). (4)

350 Environmental Methods of Investigation

Focus on the methodology of data collection, analysis, and application for environmental studies. Use and integration of the techniques and principles of environmental biology, chemistry, and geology as well as application to public issues. Students participate in an ongoing study of a nearby watershed which will include collecting data at regular intervals, reviewing the appropriate literature, managing applied statistics, mapping data distribution, studying related toxicology, incorporating land use patterns, designing and implementing a project safety plan, participating in hypothesis testing. A final presentation of the results of the study, in a seminar and written format, will be required. (4)

490 Capstone Project

Research project of the student's design which should incorporate material and methods from earlier courses but have a focus selected to reflect the specific interest of the student. A public presentation of results is required. The project must be approved in advance by the Environmental Studies Committee. (4)

491 Independent Study

Opportunity to focus on specific topics or issues in environmental studies under the supervision of a faculty member. (1-4)



Global Studies

The Global Studies Program is a response to global trends which increasingly affect our lives. The program focuses on the formation and emergence of the modern world and its growing economic, cultural, political, and ecological interdependence. By combining academic learning with language skills and practical experience, the Global Studies Program provides students with the knowledge, perspectives, and skills they need to understand and to function effectively in today's world.

FACULTY: A committee of faculty administers this program: Clausen, *Program Director*; Benham, Brusco, Carr, Kibbey, Nugent, Predmore, Temple-Thurston

GLOBAL STUDIES COMPLEMENTARY MAJOR: The Global Studies major is termed a "complementary" major because it is a second major in addition to a regular disciplinary major. Students electing the Global Studies major are required to declare a traditional disciplinary major before they declare a Global Studies major.

In addition, the Global Studies major is multidisciplinary, drawing both its course and faculty from departments of the Divisions of Humanities, Natural Sciences, and Social Sciences and from the Schools of the Arts and Business.

Students may not apply more than two courses (8 semester hours) from their primary major or from courses taken to fulfill general university core requirements to the complementary major. However, such special crediting of courses from the primary major to the complementary major must be approved by the Global Studies program director.

MAJOR REQUIREMENTS: As the title of this program implies, it approaches the world as a whole in assessing both problems and solutions arising in this age of transition. The fundamental changes taking place in our contemporary world are studied systematically in the Global Studies Program's core courses while its five issue area concentrations allow students to choose one general world problem for specialized study. Students take a minimum of 32 semester hour—balanced evenly between core requirements and an issue area concentration.

A. *Global Studies Core* (16 semester hours)

- 1. Anthropology/History/Political Science 210, Global Perspectives** (4 semester hours). This course provides a conceptual basis for defining global issues, explaining historical trends giving rise to these issues, and analyzing alternative perspectives and related responses.
- 2. Anthropology 102, Exploring Anthropology: Culture and Society** (4 semester hours). This course assists students in defining their own perceptions as derived from a specific cultural context and in assessing how their views relate to those of other people in this world.
- 3. Economics 130, Global and Environmental Economic Principles** (4 semester hours). What is the "correct" amount of pollution? What is the value of an ancient cedar tree? What does pop music have in common with U.S. auto production? Macro- and micro-economic principles are used to analyze these and other environmental and global issues. Analysis of public policy and private behavior; appropriate pricing, resource valuation, taxes and subsidies, trade policies, sustainable development, and income growth and distribution.
- 4. Global Studies Seminar, divided into Global Studies 410, Global Futures: Theory and Methods and 411, Research Seminar** (2 semester hours each). The first segment analyzes alternative theories as to future directions for contemporary events. The second enables students to put

into practice concepts, data, and perspectives learned during their course of study by producing original research using primary sources, either human or written. Field work for this last requirement may be done overseas while students are participating in a study abroad program. Permission and direction must be given by the program director.

B. *Issue Area Concentrations* (16 semester hours)

Four courses must be taken from one of the five concentrations outlined below. Upon approval of the program director, students may choose to take three courses from one concentration and one from another.

C. *Language*

Students must demonstrate proficiency in a language relevant to their coursework and at a level consistent with Option 1 of the College of Arts and Sciences foreign language requirement. This may be accomplished through proficiency examination or through the equivalent of 16 semester hours of coursework.

D. *Experiential Component*

The general goals of this program entail both intellectual conceptualization and practical application. Students must be able to link theoretical analysis with experience in order to acquire the knowledge, skills, and perspectives needed in this interconnected yet diverse world. Such learning can only come through involvement; therefore students are encouraged to participate in an experiential program preferably overseas, but local internships are also possible. Credit equivalent to one course of the student's issue area concentration may be taken under the direction of a Global Studies faculty member.

ISSUE CONCENTRATIONS:

1. **Global Environment**

- a. Required:**
Earth Sciences 22 – Conservation of Natural Resources
- b. Electives:**
At least two electives must be upper division courses. Independent studies are available upon the approval of the instructor and the Global Studies director.
Biology 424 – Ecology
Biology 425 – Biological Oceanography
Chemistry 104 – Environmental Chemistry
Earth Sciences 341 – Energy and Mineral Resources for the Future
Integrated Studies 241 – Energy, Resources, and Pollution
Integrated Studies 242 – Population, Hunger, and Poverty

2. **International Trade**

- a. Required:**
Business 340 – International Business
Economics 331 – International Economics
- b. Electives:**
Business 474 – International Marketing
Business 475 – Marketing Management
Political Science 331 – International Relations
Political Science 347 – Political Economy

3. **International Relations**

- a. Required:**
Political Science 331 – International Relations
- b. Electives:**
Anthropology 375 – Law, Politics, and Revolution
History 356 – American Diplomatic History
Integrated Studies 221 – The Experience of War
Political Science 338 – American Foreign Policy
Political Science 347 – Political Economy

4. Third World Development**a. Required:**

Integrated Studies 245 – The Development of Third World Underdevelopment *or*
Integrated Studies 246 – Cases in Third World Development

b. Electives:

Anthropology 345 – Contemporary China
Anthropology 375 – Law, Politics, and Revolution
Economics 341 – Economic Development: Comparative Third World Strategies
English 233 – Post-Colonial Literature
History 205 – Islamic Middle East to 1945
History 211 – The World Since 1945
History 335 – Latin American History: Central America and the Caribbean
History 336 – Southern Africa
History 338 – Modern China
History 339 – Revolutionary China
Integrated Studies 246 – Cases in Third World Development *or*
Integrated Studies 245 – The Development of Their World Underdevelopment

5. Cultural Diversity**a. Required:**

Anthropology 360 – Ethnic Groups

b. Electives:

At least two electives must be upper division courses. Independent Studies are available upon the approval of the instructor and the Global Studies director.
Anthropology 336 – Peoples of Latin America
Anthropology 343 – East Asian Cultures
Anthropology 345 – Contemporary China
Anthropology 392 – Gods, Magic, and Morals
Economics 381 – Comparative Economic Systems
English 233 – Post-Colonial Literature
History 380 – Asian American History and Culture

Languages 271 – Literature and Society in Modern Europe
Languages 272 – Literature and Social Change in Latin America

Music 432 – Music of the World's Peoples
Political Science 381 – Comparative Legal Systems
Religion 131 – The Religions of South Asia
Religion 132 – The Religions of East Asia
Religion 133 – The Religions of the West
Religion 364 – Theological Studies
Religion 390 – Studies in History of Religions
Spanish 322 – Latin American Civilization and Culture

MINOR REQUIREMENTS:**A. Global Studies Core**

- 1. Anthropology/History/Political Science 210 Global Perspectives** (4 semester hours). Required of all students.
- 2. Global Studies 410, Global Futures: Theories and Methods** (2 semester hours) *or* a fourth course in the student's concentration (4 semester hours). To be decided in consultation with the program director.

B. Concentration

- 1. Third World Development** (3 courses)
Anthropology 345 – Contemporary China
Economics 341 – Economic Development
English 233 – Post-Colonial Literature
History 205 – Islamic Middle East to 1945
History 211 – The World Since 1945
History 335 – Latin American History: Central America and the Caribbean
History 336 – Southern Africa
History 338 – Modern China
History 339 – Revolutionary China

Integrated Studies 245 – The Development of Third World Underdevelopment

Integrated Studies 246 – Cases in Third World Development
Political Science 386 – African Political Systems
Political Science 387 – The Middle East
Spanish 322 – Latin American Civilization and Culture
Spanish 432 – Modern Spanish – American Literature

2. International Relations (3 courses)**a. Required:**

Political Science 331 – International Relations

b. Elective:

Anthropology 375 – Law, Politics, and Revolution
History 356 – American Diplomatic History
Integrated Studies 221 – The Experience of War
Politics Science 338 – American Foreign Policy
Political Science 347 – Political Economy

3. International Trade (3 courses)**a. Required:**

Economics 331 – International Economics

b. Electives:

Business 340 – International Business
Business 474 – International Marketing
Political Science 331 – International Relations

4. Global Environment (3 courses)

Biology 424 – Ecology
Biology 425 – Biological Oceanography
Chemistry 104 – Environmental Chemistry
Earth Sciences 22 – Conservation of Natural Resources
Earth Sciences 341 – Energy and Mineral Resources for the Future
Integrated Studies 241 – Energy, Resources, and Pollution
Integrated Studies 242 – Population, Hunger, and Poverty

5. Cultural Diversity (3 courses)

Anthropology 336 – Peoples of Latin America
Anthropology 343 – East Asian Cultures
Anthropology 345 – Contemporary China
Anthropology 360 – Ethnic Groups
Anthropology 392 – Gods, Magic, and Morals
Economics 381 – Comparative Economic Systems
English 233 – Post-Colonial Literature
History 380 – Asian American History and Culture
Language 271 – Literature and Society in Modern Europe
Language 272 – Literature and Social Change in Latin America
Music 432 – Music of the World's People
Political Science 381 – Comparative Legal Systems
Religion 131 – The Religions of South Asia
Religion 132 – The Religions of East Asia
Religion 133 – The Religions of the West
Religion 364 – Theological Studies
Religion 390 – Studies in History of Religions
Spanish 322 – Latin American Civilization and Culture

Course Offering**411 Research Seminar**

Required of all students majoring in Global Studies. This is the capstone seminar. Students write an original research paper and discuss those papers during the semester. Prerequisite: ANTH/HIST/POLS 210, (4)

History

Through the study of history at Pacific Lutheran University students gain an understanding and appreciation of the historical perspective. Opportunities for developing analytical and interpretive skills are provided through research and writing projects, internships, class presentations, and study tours. The practice of the historical method leads students off campus to their hometowns, to Europe or China or the American West, and to community institutions, both private and public. The department emphasizes individual advising in relation to both self-directed studies and regular courses. The university library holdings include significant collections in American, European, and non-Western history. The Nisqually Plains Room of the library specializes in Pacific Northwest community studies. Career outlets for majors and minors are either direct or supportive in business law, teaching, public service, news media, and other occupations.

FACULTY: Clausen, *Chair*; Bermingham, Browning, Carp, Kraig, Lee, Martinson, Nordquist.

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 requirement 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 requirement by enrolling in History 460. All senior majors are required to take four hours of seminar credit.

MINOR: 20 semester 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

Courses in the Department of History are offered in the following fields:

AMERICAN FIELD

- 251 Colonial American History
- 252 Nineteenth-Century American History
- 253 Twentieth-Century American History
- 294 The United States Since 1945
- 352 The American Revolution
- 355 American Popular Culture
- 356 American Diplomatic History
- 359 History of Women in the United States
- 381 The Vietnam War and American Society
- 451 American Legal History
- 460 West and Northwest
- 471 History of American Thought and Culture
- 494 Seminar: American History

EUROPEAN FIELD

- 107, 108 History of Western Civilization
- 321 Greek Civilization
- 322 Roman Civilization
- 323 The Middle Ages
- 324 Renaissance
- 325 Reformation

- 328 Nineteenth-Century Europe
- 329 Europe and the World Wars: 1914-1945
- 332 England: Tudors and Stuarts
- 334 Modern Germany, 1848-1945
- 360 Holocaust: Destruction of the European Jews
- 495 Seminar: European History

NON-WESTERN FIELD

- 109 East Asian Societies
- 205 Islamic Middle East to 1945
- 210 Global Perspectives
- 211 The World Since 1945
- 335 Latin American History: Central America and the Caribbean
- 336 Southern Africa
- 338 Modern China
- 339 Revolutionary China
- 340 Modern Japan
- 380 Asian American History and Culture
- 496 Seminar: The Third World

ALL FIELDS

- 499 Internship
- 401 Workshops
- 480 Introduction to Historical Methods and Research
- 492 Independent Study
- 501 Graduate Workshops
- 590 Graduate Seminar
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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)

109 East Asian Societies

A historical overview of the traditional cultures, traditions, and lives of the people of China and Japan. Discussion of the lives of peasants, emperors, merchants, and warriors in each society. Attention to the great technological and artistic developments in each society. (4)

205 Islamic Middle East to 1945

An introductory survey course on the history of the Middle East from the time of Muhammed in the 7th century through World War II. The course emphasizes two key concurrent components: First, the origins and development of Islamic civilization, including study of religion, philosophy, science, art, government, and society. Secondly, assessment of the changing political landscape of the Islamic empires, including Arab, Turkish, and Persian units. The course will end with a review of the establishment of modern Egypt, Turkey, and Iran. (4)

210 Global Perspectives: The World in Change

A survey of global issues affecting the human condition in a rapidly changing and increasingly interdependent world: modernization and development; economic change and international trade; diminishing resources; war and revolution; peace and justice; and cultural diversity. These issues are examined in a multidisciplinary light using case studies drawn from non-Western and Western nations. Emphasis on the development of a global perspective which recognizes human commonalities as well as diversity in perceptions, values, and priorities. (Although cross-referenced with ANTH 210 and POLS 210, students may receive history credit only when this course is scheduled as a history class.) (4)

211 The World Since 1945

A historical survey on how Third World nations have sought independence in the post-World War II period. Emphasis on events in the Western world leading to World War II and the effects of that war on the Third World. Case studies of countries from Asia, Africa, Latin America, and the Middle East as examples of the diversity inherent in quests for independence. (4)

251 Colonial American History

American institutions from colonial times to the 1790s; 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 era 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)

294 The United States Since 1945

This seminar examines selected topics in recent U.S. history such as the Cold War, the Civil Rights Movement, the Vietnam War, the Women's Movement, Watergate, and the Iran-Contra Affair. The topics provide a means to address the nature of the study of history and of its research methodologies. Enrollment restricted to freshmen and sophomores. (4)

321 Greek Civilization

The political, social, and cultural history of Ancient Greece from the Bronze Age to the Hellenistic period. Special attention to the literature, art, and intellectual history of the Greeks. (Cross-referenced with CLAS 321) (4)

322 Roman Civilization

The history of Rome from the foundation of the city to A.D. 337, the death of Constantine. Emphasis on Rome's expansion over the Mediterranean and on its constitutional history. Attention to the rise of Christianity within a Greco-Roman context. (Cross-referenced with CLAS 322) (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 crises in the sixteenth century: Lutheranism, Zwinglianism, Anglicanism, Anabaptism, Calvinism, Roman Catholic reform; Weber thesis, the beginnings of Baroque arts. (4)

328 Nineteenth-Century Europe

The expansion of European civilization from 1800 to 1914. (4)

329 Europe and the World Wars: 1914-1945

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, 1948-1945

The Revolutions of 1848 and unification of Germany; Bismarckian and Wilhemian empires; Weimar Republic and the rise of National Socialism; the Third Reich. (4)

335 Latin American History: Central America and the Caribbean

Survey of the major aspects of Central American and Caribbean history from colonial to modern times. Use of selected case studies to illustrate the region's history. Study in inter-American relations. (4)

336 Southern Africa

Examination of the history of pre-colonial African kingdoms, Western imperialism, settler colonialism, and the African struggle for independence. Emphasis on the period since 1800. Focus on the countries of South Africa, Namibia, Angola, Mozambique, Zimbabwe, and on the issues of nationalism, racism, and revolution. (4)

338 Modern China

The beginning of China's modern history, with special emphasis on the genesis of the Chinese revolution and China's position in an increasingly integrated world. Lecture, discussion, films, and guest speakers. Limited class size. (4)

339 Revolutionary China

While History 338 is not a prerequisite, the course picks up where it leaves off. Beginning in 1911, an examination of the course of the Chinese revolution, China's liberation, and the changes since 1949. Lecture, discussions, films, and guest speakers. Limited class size. (4)

340 Modern Japan

Study of how Japan became the modern "miracle" in East Asia. Primary focus on traditions that enabled Japan to change rapidly, the role of the challenge of the West in that change, the industrialization of Japan, the reasons for war with the U.S., and the impact of the war on contemporary Japan and its social and economic institutions. (4)

352 The American Revolution

The American Revolution as a series of essentially political events stretching from the Seven Years War in 1763 through Thomas Jefferson's defeat of John Adams in the Presidential election of 1800. The Colonists' initial resistance to the reorganization of the British Empire after 1763; the evolution of active resistance into revolution; the decision to declare independence; the experience of war; the struggle to establish legitimate and effective governments; the framing and ratification of the Constitution; and the Federalist-Republican battles of the 1790s. Emphasis on the role of political thought and ideology in the development of republican government in the United States. (4)

355 American Popular Culture

Study of motion pictures, popular music, radio and television programs, comic strips and paperback fiction. Insights into the values and ideas of American culture from watching it at play. Examination of popular entertainment arts and the ways they reflect and influence American attitudes and actions. No prerequisites. (4)

356 American Diplomatic History

The practice, function, and structure of American foreign policy with particular emphasis on the twentieth century. (4)

359 History of Women in the United States

A focused, thematic examination of issues and evidence related to women's experiences from the colonial period to the present. Provides a broad historical context for evaluating the nature, impact, and influence of women's contributions to culture and society. (4)

360 Holocaust: Destruction of the European Jews

Investigation of the development of modern anti-semitism, its relationship to fascism, the rise of Hitler, the structure of the German dictatorship, the evolution of Nazi Jewish policy, the mechanics of the Final Solution, the nature of the perpetrators, the experience and response of the victims, the reaction of the outside world, and the post-war attempt to deal with an unparalleled crime through traditional judicial procedures. (4)

380 Asian American History and Culture

An introductory survey of Asian American history and culture, focusing on Chinese, Japanese, Korean, Filipino, Asian Indian, Indochinese, and Pacific Islander experiences in the period 1840-1990s. Topics include: 1) the emigrant-immigrant process; 2) immigrant community culture; 3) the Anti-Asian movement; 4) ethnic politics and political culture; 5) ethnic enterprise and economic development; 6) the challenge of acculturation/assimilation; and 7) a brief survey of contemporary Asian American issues. (4)

381 The Vietnam War and American Society

Examination of changes in American society that resulted from United States involvement in the Vietnam war. Discussion of military strategy and guerrilla warfare, as well as diplomatic, political, social, and cultural aspects of the war. Origins of the conflict, North and South Vietnamese politics, the experience of American soldiers, the nature of the anti-war movement and the counter-culture, the role of media coverage of the war, the evolution of U.S. policy decisions, the morality and ethics of the war, and the "lessons" of Vietnam. (4)

399 Internship

A research and writing project in connection with a student's approved off-campus work or travel activity, or a dimension of it. Prerequisite: sophomore standing plus one course in history, and consent of the department. (1-6)

401 Workshops

Workshops in special fields for varying periods of time. (1-4)

451 American Legal 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)

480 Introduction to Historical Methods and Research

Focus on historical methodology, research techniques, and the writing of history from a wide range of historical primary sources. Introduction to different types of historical analysis, interpretations, and methodologies. Library and Internet-computer research skills, critical analysis of historical documents, the relationship between evidence and interpretation, and construction of historical narratives from primary sources. (4)

492 Independent Study (1-4)**494 Seminar: American History (4)****495 Seminar: European History (4)****496 Seminar: The Third World**

This research seminar alternates its focus from East Asia one year to Africa and Caribbean/Latin America the next. (4)

502 Graduate Workshops

Graduate workshops in special fields or areas for varying periods of time. (1-4)

590 Graduate Seminar

Selected topics as announced. Prerequisite: consent of the instructor. (1-4)

591 Directed Study (1-4)**595 Graduate Readings**

Independent Study Card Required. (4)

598 Research Project (4)**599 Thesis (4)**

Honors Program

The Honors Program at Pacific Lutheran University is designed to enrich the educational experience of a select group of academically accomplished and highly motivated undergraduate students. It challenges students to perform at the highest level of their academic potential in specially designed honors foundation classes and also in a challenge seminar.

ORGANIZATION:**1. Honors Foundation Courses**

- a. Elective Honors Courses/Sections 8 hours
- b. Creative Expression 4 hours
- c. Models of Thought and Their Evaluation 4 hours

2. Preparation for the Challenge Seminar

- a. Honors Program retreat to determine Challenge Seminar topics
- b. Specific preparatory courses for the seminar (optional)
- c. Preliminary reading list for the seminar

3. Challenge Seminar 4 hours

The Honors Foundation Courses are designed and organized to provide early opportunities for students to interact with their intellectual peers in especially challenging settings. These courses, approved by the Honors Council, are also intended to help prepare students for the Challenge Seminar.

The Challenge Seminar, taken when students are seniors or second semester juniors, will address some significant problem of our contemporary and future world. Seminar participants will be expected to produce individually and collectively outstanding research which will be presented to the university community.

ADMISSION CRITERIA: Admission into the honors program is by application to the Honors Council. The council is responsible for establishing the criteria for initial admission and subsequent continuation in the program. Application guidelines are available through the Admissions Office.

All Regents' and President's Scholars are invited to apply. The Honors Council will also invite other incoming students to apply upon the suggestion of the dean of admissions. All continuing PLU students with a 3.5 grade point average may apply, as well as entering transfer students with a 3.5 incoming grade point average. Other exceptional students may initiate their own application into the program. In all cases the council will make a global judgment about the student's likely success in the program and not limit its admission decisions strictly on the basis of grade point average or other test scores. In order to graduate with university honors, students in the program must complete their studies with a minimum cumulative grade point average of 3.3.

Division of Humanities

The Departments of English, Languages, Philosophy, and Religion comprise the Division of Humanities. They share a central concern about language, literature, and world views. As academic majors and minors, and in support of professional programs and preparation for other fields, studies in humanities are at the heart of a liberal education. They serve generally as a means to realizing excellence in one's life, and they expose one to a wide variety of different perspectives on culture, meaning, and value. The charge of the humanities is to think and act perceptively, humanely, and creatively in a complex and ever changing society.

The division is committed to superb undergraduate teaching. Classes emphasize communication skills, rigorous analysis of texts and ideas, critical assessment of arguments, and thoughtful reflection. The potential for creative service to the community is nurtured in a variety of ways including internships in Publishing and Printing Arts (a minor in English), the outreach programs of the Scandinavian Cultural Center, and collaborative projects with local school districts.

Faculty members of the division participate extensively in the Chinese Studies, Environmental Studies, Global Studies, Integrated Studies, Legal Studies, and Women's Studies programs. They provide leadership for the interdisciplinary Classics and Scandinavian Area Studies majors and for the Writing Center. The division enriches campus life through the Humanities Film Series, public lectures and colloquia, and an annual publication, *Prism*, that features faculty dialogue and research.

FACULTY: Petersen, *Divisional Dean*; faculty members of the Departments of English, Languages, Philosophy, and Religion.

As a division within the College of Arts and Sciences, the Division of Humanities offers programs in each constituent department leading to the B.A. degree. Course offerings and degree requirements are listed under:

English
Languages
Philosophy
Religion

See also the sections of this catalog on Chinese Studies, Classics, Environmental Studies, Global Studies, Integrated Studies, International Education, Legal Studies, Publishing and Printing Arts, Scandinavian Area Studies, and Women's Studies.

Individualized Major

Supervised by the Faculty Council for Individualized Majors, this program offers junior and senior students the opportunity to develop and complete a personally designed, interdisciplinary, liberal arts major. The course of study culminates in a senior thesis, to be agreed on by the Council, the student, and his or her adviser.

Successful applicants to this program will normally have a cumulative grade point average of 3.30 or higher, although in exceptional cases, they may demonstrate their potential in other ways to the Faculty Council for Individualized Majors.

Admission to the program is granted by the Council on the basis of a detailed plan of study, proposed and written by the student, and submitted to the Council any time after the beginning of the second semester of the student's sophomore year. The proposal must outline a complete plan of study for the time remaining until the granting of a degree. Study plans may include any of the traditional elements from a standard B.A. or B.S. degree program.

Once approved by both the faculty sponsor and the Faculty Council for Individualized Majors, the study plan supplants usual degree requirements, and, when completed, leads to conferral of the B.A. degree with Special Honors.

STUDY PROPOSALS MUST INCLUDE THE FOLLOWING:

1. A *Statement of Objectives*, in which the student describes what the degree is expected to represent and why the individualized course of study is more appropriate than a traditional degree program.
2. A *Program of Study*, in which the student describes how the objectives will be attained through sequences of courses, reading programs, regular course work, independent study, travel, off-campus involvement, personal consultation with faculty members, or other means.
3. A *Program of Evaluation*, in which the student describes the criteria to be used to measure achievement of the objectives and specifies the topic of the senior thesis.
4. A *Statement of Review*, in which the student describes how previous course work and life experiences have prepared him or her for the individualized study program.
5. *Letters of Recommendation*. The study proposal must be written in close consultation with the chair of the Faculty Council for Individualized Majors and with a faculty member who agrees to act as primary sponsor and adviser to the student throughout the course of study. The faculty sponsor must comment on the feasibility of the proposal and on the student's ability to carry it out. It is strongly recommended that a secondary faculty sponsor be asked to co-sponsor and endorse the proposal.

All subsequent changes in the study plan or the senior thesis must be submitted in writing to the Faculty Council for Individualized Majors for approval.

Further information is available from the Provost's Office.

Integrated Studies

The Integrated Studies Program (Core II) is designed as an alternative mode of satisfying core curriculum requirements. Consisting of a constellation of interdisciplinary courses, the program explores a central theme — the Dynamics of Change — from a variety of academic perspectives. The program stresses critical thinking and writing. And it encourages the growth of camaraderie as students progress together through its sequences.

A brochure is available from the Admissions Office or the program coordinator in the Office of Special Academic Programs.

FACULTY: Selected from Anthropology, Art, Biology, Chemistry, Earth Sciences, Economics, English, History, Languages, Mathematics, Music, Philosophy, Physics, Political Science, Psychology, Religion, and Sociology.

Integrated Studies Committee: D. M. Martin, *Chair*; P. Benton, Gold, M. Jensen, Killen, Kraig, McDade, Whitman.

Integrated Studies Coordinator: Carr.

CORE II COURSE REQUIREMENTS: (7 courses, 28 hours)

1. INTG 111-112: Origins of the Modern World (8 hours)
Normally taken in the first year.
2. Four 200-level ISP courses (16 hours)
Normally taken in the second and third years. May include approved program of study abroad. Students select four courses, subject to the approval of the Integrated Studies Program Committee.
- 7-8 of the following courses, or similar new courses, are offered each year:
 - 221 – The Experience of War
 - 222 – Prospects for War and Peace
 - 223 – The Emergence of Mind and Morality
 - 224 – The Brain, Consciousness, and Transcendence
 - 226 – The Quest for Global Justice
 - 231 – Gender, Sexuality, and Culture
 - 232 – Topics in Gender
 - 233 – Imaging the Self
 - 234 – Imaging the World
 - 241 – Energy, Resources, and Pollution
 - 242 – Population, Hunger, and Poverty
 - 245 – The Development of Third World Underdevelopment
 - 246 – Cases in Third World Development
 - 247 – The Cultures of Racism
3. INTG 351: Concluding Seminar (4 hours)
Taken after or with the last 200-level course

HONORS PROGRAM STUDENTS: Students in the University Honors Program may use Integrated Studies 111 and 112 as foundation courses by supplementing them with the 1-hour ISP Honors Colloquia (113 in the fall, 114 in the spring).

Honors in Integrated Studies may be awarded upon application to students who have at least a 3.5 average in Integrated Studies courses, who present a portfolio of outstanding papers from 200-level Integrated Studies courses, who create an exemplary seminar project, and who are recommended by program faculty. Students selected for honors are encouraged to make a public oral presentation of their seminar work. The Integrated Studies Committee will determine who qualifies for honors.

POLICIES AND GUIDELINES FOR CORE II:

1. To acquire a common background, Integrated Studies/Core II students usually take the required 111-112 sequence in their first year, before taking 200-level courses. Exceptions can be

made for students with heavy first-year loads, for transfer students, or for students who shift from Core I.

2. Some 200-level Integrated Studies courses are offered in two-semester sequences; others are designed for single semester. Courses offered as a fall-spring sequence should be taken in order if possible. Single-semester courses and the fall-spring sequences themselves can be taken concurrently and in any order.
3. To assure adequate balance and breadth, the Integrated Studies Program Committee must approve the particular set of four 200-level courses that each student elects. Normally the student submits the proposed four-course set for approval while taking the second 200-level course.
4. Students in the Integrated Studies Program are strongly encouraged to study abroad. With prior approval, an appropriate combination of courses abroad supplemented with an integrative project may take the place of one or more of the 200-level Integrated Studies courses.
5. The Seminar (351) is taken as the concluding Integrated Studies course, either after or concurrently with the last 200-level course.
6. Students may switch from Core II to Core I at any time by requesting the Integrated Studies Program coordinator to apply their Integrated Studies course credit to Core I requirements.
7. All Integrated Studies courses (except the seminar) are open to Core I students as space is available (Core II students have priority in enrollment).
8. The Integrated Studies Program is directed by an eight-person committee of faculty representing the academic areas participating in the program. The Integrated Studies Program committee elects a chair and is supported by the dean for special academic programs as program coordinator.

Course Offerings

(111-112) Origins of the Modern World

The sequence traces the roots and development of a world culture and economy based on ideas and values identified with western Europe and the United States. It surveys the origins of modern Western culture and its interaction with other cultures through World War I, emphasizing the developments of religious, philosophical, and political ideas and the emergence of arts and sciences.

111 Authority and Discovery

This course considers the new social and political ideas, the renewal of the arts, religious reform, and the emergence of modern science up to and during the Renaissance, the Reformation, the Scientific Revolution, and the Enlightenment. It examines the themes of authority, discovery, the individual, nature, new worlds, liberty, the search for truth, and the powers of reason and faith. I (4)

112 Liberty and Power

Developments in literature, science, politics, and industrialization are explored through the Enlightenment, the American and French Revolutions, the Industrial Revolution, Romanticism, Darwinism, Socialism, and Imperialism. The course continues themes from 111 and considers shifting understandings of transcendence, secularization, and truth, as well as the turn toward evolutionary views of nature and history, new kinds of social and technological power, and emerging ideas of class, gender, and ethnicity. II (4)

113 Honors Colloquium I (1)

114 Honors Colloquium II

Small-group discussion of current issues for University Honors Program students enrolled in the Integrated Studies Program. Other students welcome as space permits. (1)

221 The Experience of War

Essential background is established by studying the complex history of several major wars of our time (e.g., World War II, the Vietnam War, the conflict in the Middle East). Emphasis is placed on the personal experience of war as soldier, civilian, and citizen. The ethical decisions individuals must make in war-time are considered as well as the society's decisions about when and how to go to war. Particular attention is given to the theory of "just and unjust" wars. I (4)

222 Prospects for War and Peace

A study of the institutions and situations (political, economic, religious, psychological, historical) that keep the modern world on the brink of war and make a stable, just peace so elusive. Consideration is given to pacifism and the "just war" tradition, as well as to the technology and politics of nuclear war and its balance of terror. Students complete an independent project on topics such as the draft, the economics of a military state, arms control, the competitions for resources, anti-colonialism, and Marxism. II (4)

223 The Emergence of Mind and Morality

A survey of genetics and evolution, with emphasis on the brain and the emergence of social behavior in animals, prepares for a critical study of the claims of sociology that human culture and morality can be explained in terms of our biological origins. I (4)

224 The Brain, Consciousness, and Transcendence

Study of the brain as the center of perception, emotion, consciousness, and knowledge. Includes a study of the brain's functions, an investigation of spiritual, mystical, and other self-transcending experiences, and an exploration of the relationship between mind and brain, materialistic and non-materialistic explanations, and the nature of personal commitment. II (4)

225 Violence in the United States

This course examines violence within and among the multiple cultures of the United States. It considers issues of interpersonal violence (e.g., spouse and child abuse, pornography, rape, murder) and collective violence (e.g., gang activity, media violence, racism, terrorism, U.S. military involvement in other countries). Historical patterns are discussed along with various theories (sociological, psychological, theological, philosophical) on causes and prevention. These theories offer grounds for critiquing the patterns of violence and public responses to them. (4)

226 The Quest for Global Justice: Systems and Reality

This course uses systems (holistic) models to comprehend the search for justice by humankind in the past, in the present, and for the future. A wide range of interdisciplinary materials are used to study issues such as the distribution of wealth and resources in the ancient Near East and in contemporary Latin America, as well as in the United States. The focus on systems thinking lends coherence and promotes analytical and synthetic skills. Participants develop their own perspectives on the issues and devise models for action as well as for comprehension. II (4)

231 Gender, Sexuality, and Culture

In the course we examine ourselves and our world through the lens of gender. Using interdisciplinary, multicultural, and feminist perspectives, we examine issues such as socialization and stereotypes, relationships and sexuality, interpersonal and institutional violence, revolution and social change. (4)

232 Topics in Gender

This course covers current topics in feminist studies of gender and will vary each year according to the interests of faculty and students. (4)

232 Imaging the Self

A series of exercises in the visual and literary arts that reveal how the self is discovered and constructed in our daily world through many kinds of images, including dreams, costumes, songs, childhood memories, houses, church services, dances, television, poverty, sketching, and constructing models. The emphasis is on doing or making, followed by reflective analysis. I (4)

234 Imaging the World

An exploration of how humans perceive, interpret, and shape their own worlds. Following an introduction to symbols, symbol systems, and the creating of meaning, the construction of world images in science and theology through myth, model, and paradigm are studied. The model of symbolic logic is built to organize language and thought. Science is then considered as a process of the application of logic to empirically gathered data. Views of a variety of scientists and philosophers on the way science is done and the way scientists come to know are considered. Theological models are examined. Finally, some images of the world through the eyes of poets are compared to these scientific and theological representations. II (4)

241 Energy, Resources, and Pollution

Energy, natural resources, and pollution are examined through scientific, social scientific, and ethical methods. The class will focus on practical and political problems of sustaining energy and natural resource production and limiting pollution with a maximum of justice and participative decision-making. (4)

242 Population, Hunger, and Poverty

The interrelationship of population, food, and poverty is examined in a scientific, economic, and political context as it relates to global problems. The course deals with the practical and ethical problems of sustaining food production, population growth, and poverty. The course includes case studies of Third World countries for class analysis and student projects. (4)

245 The Development of Third World Underdevelopment

This course traces the origins and growth of the concept "Third World" and the models, views, contexts, and approaches in interpreting this phenomenon. Particular attention is focused on understanding social and cultural changes in the Third World in terms of development/underdevelopment. Political, economic, literary and religious analyses will be used in trying to determine how the Third World thinks about itself. I (4)

246 Cases in Third World Development

How people in the Third World think and act to bring about social change, and the value they give it is the focus in this course. Building upon the theories and methods presented in the first course, issues such as education, health, population, resource management, urbanization, and industrialization will be examined using case studies. The case studies will be organized regionally so that common and distinct features can be evaluated. II (4)

247 The Cultures of Racism

This course examines difference forms of racism and their manifestations in two countries with troubled histories. We will study how the societies of the United States of America and the Republic of South Africa experience racism and explore their struggle toward greater equality. Readings will be drawn from psychology, sociology, and literature. II (4)

Concluding Seminar**351 Integrated Studies Seminar**

A recapitulation and integration of themes from the previous sequences, with additional readings and discussion. Students investigate an individual topic from an interdisciplinary perspective, make a formal oral presentation, and complete a substantial paper. Prerequisite: 111-112 and two additional sequences. May be taken concurrently with the last course of the final sequence. I II (4)

International Programs

PLU's international programs encourage students to expand their understanding of humanity's global condition in a changing and increasingly interdependent world. Multi-focused international programs provide opportunities for on-campus study of global issues and of the world's regions, cultures, and societies. Global issues include, for example, modernization and development; global resources and trade; and peace, justice, and human rights. Cultural foci are Africa, Asia, Europe, Latin America, the Middle East, and Scandinavia. Study of these issues and regions is made possible by diverse off-campus study opportunities and international student exchange.

To pursue a program in international or intercultural studies, students may enroll in courses offered by departments such as Languages, Political Science, and History, or choose among the special multi-disciplinary programs listed below which offer majors and minors in international studies.

General information about PLU's international programs is available from the Center for International Programs.

CHINESE STUDIES: The Chinese Studies program is an interdisciplinary program designed to provide students interested in China a broad foundation in language, culture, and history. For specific information see the *Chinese Studies* section of this catalog.

GLOBAL STUDIES: Students interested in diverse cultures and international, global issues may undertake a multi-disciplinary major or minor program designed to reflect their geographic, thematic, or disciplinary interests.

Major: The Global Studies major is termed a "complementary" major because it is taken as a second major in addition to a regular disciplinary major. For specific information see the *Global Studies* section of this catalog.

Minor: The theoretical orientation and requirements parallel those for the major and are detailed in the *Global Studies* section of this catalog.

SCANDINAVIAN AREA STUDIES: The Scandinavian Area Studies major is a flexible program in which the study of Scandinavia is enhanced through a cross-disciplinary approach. For specific information see the *Scandinavian Area Studies* section of this catalog.

Off-Campus Programs:

To encourage students to expand their visions of the world, PLU makes available various opportunities to study and travel in other countries. Students are encouraged to spend the summer, semester, January term, or full academic year abroad. The Center for International Programs has information to assist students in selecting and preparing for study abroad programs. The interdependence of all nations of the world and the need to gain basic knowledge of people, their cultures, and their interrelationships cannot be overemphasized in the late 20th century. With this focus in mind, PLU supports several categories of programs.

SECTION A: PLU-Sponsored Programs

INDEPENDENT LIBERAL ARTS COLLEGES ABROAD:

These programs are hosted by the Independent Liberal Arts Colleges Abroad (ILACA), a consortium of Pacific Northwest schools including PLU, Gonzaga University, the University of

Puget Sound, Whitman College, the University of Portland, and Willamette University.

- a. **England:** Student may choose to spend a semester studying in England through PLU's London and Watford programs. Offered in both fall and spring semesters, the London program provides students with a study experience in one of the most exciting cities of the world. Courses taught both by Northwest professors and by native British professors make extensive use of 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. During spring semester a second program site is available to students in Watford, England. In a more suburban setting within minutes of London, students in Watford participate in a program format parallel to the London program.
- b. **Spain:** PLU, along with other schools in the ILACA consortium, sponsors a one-semester program at the University of Oviedo during the spring semester each year. Oviedo, capital of the Principality of Asturias in northwestern Spain, is a lively, beautiful city with a twelve-hundred year old history. The university, founded in 1608, is located in the heart of the city. This provides an excellent setting for a semester designed for advanced study in Spanish language and culture. A minimum two years of Spanish language study is required for participation. Students live with Spanish families, take special classes at the university, and participate in extracurricular activities with Spanish students.

RECIPROCAL PROGRAMS: PLU currently offers five exchange programs. These academic programs provide a limited number of exchanges each year. In all cases, the PLU student is integrated into the local university and culture.

- a. **Norway:** PLU students may participate in an exchange program with Agder College in Kristiansand, Norway. Criteria used for selection of participants include proficiency in a Scandinavian language, a strong academic record, motivation, and personal adaptability. PLU students live in university housing and study Norwegian language and literature. This is a full academic year program.
- b. **Sweden:** A student exchange program between PLU and the University of Linköping began in the fall of 1982. Criteria used in the selection of participants include proficiency in a Scandinavian language, a strong academic record, motivation, and personal adaptability. PLU students live in dormitories and study Scandinavian history, modern Scandinavian literature, Scandinavian political and social structure, and Swedish language. This is a full academic year program.
- c. **People's Republic of China—Zhongshan University:** PLU students may spend a full year or semester in the People's Republic of China through an exchange with Zhongshan University in Guangzhou (Canton). At Zhongshan, students live in university housing and take intensive studies in Mandarin Chinese as well as courses in Chinese culture. Students should have had at least one year of Chinese language before applying.
- d. **People's Republic of China—Sichuan Union University:** Students may spend a semester or year at Sichuan Union University (SUU) in Chengdu. At SUU, in addition to classes in Mandarin and Chinese culture, students may take assorted science courses that are taught in English. Often a PLU professor will accompany the group and teach one of the courses. Extensive study tours are included. Fluency in Mandarin is not required.
- e. **Tanzania:** In a consortium effort with other colleges and universities of the Lutheran Church, PLU offers a five-month exchange opportunity at the University of Dar es Salaam in Tanzania. Following an orientation in New York, students depart as a group for Dar es Salaam, Tanzania. Students study

Swahili language and select three or four courses from the wide offering of courses at the University of Dar es Salaam.

- f. **Other Options:** By special arrangement, PLU offers two additional exchange programs: Nordland College in Bodo, Norway, and Tunghai University in Taichung, Taiwan, R.O.C. Contact the Center for International Programs for details.

DENMARK'S INTERNATIONAL STUDIES (DIS) provides for semester or year-long study in English in Copenhagen. The instructors are Danish, representing faculty from nearby universities and schools. This program is Europe's largest study center for American students, allowing a wide variety of course offerings in liberal arts, international business, and architecture and design. A rich immersion in Danish culture is provided through living with the Danes, daily contact with Danish faculty, and optional language instruction.

INSTITUTE OF EUROPEAN STUDIES (IES)/INSTITUTE OF ASIAN STUDIES (IAS) offers semester, year-long, or summer study at various centers throughout the world. PLU students may choose to study in London, or Durham, England; Dijon, Paris, or Nantes, France; Milan, Italy; Madrid or Salamanca, Spain; Freiburg or Berlin, Germany; Vienna, Austria; Tokyo or Nagoya, Japan; Singapore; Thailand; Adelaide or Canberra, Australia; Indonesia; China; and Russia. Studies include a combination of local university courses and classes taught expressly for Institute students. Courses are taught in the language of the country where the center is located, except in Singapore, Thailand, Indonesia, Nagoya, Tokyo, Vienna, and the European Common Market program in Freiburg, where instruction is in English. In all other cases, PLU students need to be conversant in the language of the country. Living arrangements vary from full room and board to independent housing. Each center allows for integration into the local culture through housing, student activities, field trips, and travel. Scholarships are available to qualified students at all IES/IAS centers.

UNIVERSITY OF OSLO, OSLO, NORWAY: Applicants must have one year of college Norwegian at the program start date. The "Oslo Year" incorporates Norwegian language, literature, and culture and is an excellent opportunity for the Scandinavian Studies student.

CUERNAVACA, MEXICO: Fall and spring semester programs are offered in Cuernavaca. The fall semester programs are: "Social Policy and Human Services in Latin America," focusing on the issues facing Latin America in the areas of education and social services; and "Women and Development: Latin American Perspective," exploring women's role in development, liberation theology, and historical concepts of gender roles in Latin America. The spring programs are: "International Development and Human Rights in Latin America," exploring the relationship of approaches of development to the achievement of basic human rights, and "Contemporary Issues in Mexico and Central America." This interdisciplinary program has an emphasis on the history of political change, the struggle for social justice, and the role of the church in Latin America. Some Spanish language background is advised for these programs.

UNIVERSITY OF LANCASTER, LANCASTER, ENGLAND: This semester or full year program allows students to be integrated into a British university. There are over 500 courses offered by the university. Students can easily continue their business, science, humanities, and social science studies at Lancaster.

SERVICE LEARNING PROGRAMS: The Partnership for Service-Learning provides semester, full year, or summer programs in Israel, England, Scotland, Mexico, Ecuador, Jamaica, France, South Dakota, and India. Through ties with several

universities and educational programs, the Partnership will help the student arrange an experience that combines academic pursuits with study, observation, and social service in non-traditional settings.

INTERNATIONAL COOPERATIVE EDUCATION

(WORK/STUDY): A unique opportunity to become acquainted with the work, language, and culture of a foreign country is provided through the International Cooperative Education Program. At present, ten-week summer work stations are available in England, Turkey, Thailand, Japan, China, Mexico, Hungary, Ukraine, Kenya, and Germany.

In most locations, one or two years of a foreign language are required. Students successfully completing the screening process are provided a work contract for their stay and depart only after securing both employment and housing. During the ten-week program, which extends from mid-June through August, participants complete a 4-credit independent study, which is to be supervised by PLU instructors. The student's monthly salary depends on the position and the country.

The Center for International Programs is currently developing semester programs in Scotland and Trinidad. These programs, led by PLU faculty, will be announced in the fall of 1994.

SHORT TERM STUDY

- a. **January:** PLU also emphasizes courses during the January term. Preliminary notices about the tours are available in May of each year, and the final sign-up is in November. Students should contact the instructor of each course or the Center for International Programs for more information.
- b. **Summer:** PLU often offers travel courses during the summer. Coordinating offices for these tours include Summer Studies, Alumni, and Q Club. Also on file in the Center for International Programs is information on summer study and travel programs around the world.

SELECTED PROGRAMS: Some opportunities are available to PLU with the School for Field Studies and also the ELCA sponsored programs (India, Namibia, Nicaragua).

SECTION B: PLU-Approved Study Abroad Programs

1. In addition to the PLU-sponsored programs, there are countless other opportunities for study abroad. Many U.S. colleges and universities have programs throughout the world, and PLU students may study through these programs by special arrangement. Information and application forms for several programs are available in the Center for International Programs. Credits awarded by an accredited U.S. college or university are transferable to PLU. However, direct aid from PLU cannot be transferred to other colleges. Credits transferred to PLU after a study abroad experience sponsored by a U.S. accredited college or university will be recorded with a letter grade. Credits for studies directly in a foreign university will be recorded as pass/fail.
2. PLU students who plan to study directly in a foreign school (not in a program sponsored by a college in the U.S.A.) must be sure to file a letter of intent with the Center for International Programs and with the chair of their major department before leaving PLU. This letter must include what classes will be taken, where and for what length of time they will study abroad, and how the international experience will relate to their academic program. On the basis of this information, plus a record of lectures attended and examinations completed, academic credit may be given by PLU. Students are advised to save all papers and other materials relating to coursework taken abroad. All credit transferred to PLU will be pass/fail. PLU reserves the right to require examinations covering the subjects studied.

CREDITS: PLU awards PLU credit for all programs listed in *SECTION A: PLU-Sponsored Programs*. All courses taken on a PLU-sponsored program will be listed on the PLU transcript with appropriate department numbers assigned. Grades will also be posted, although they will not be included in the PLU cumulative grade point average.

PROGRAM COSTS AND FINANCIAL AID FOR PLU-SPONSORED PROGRAMS:

Reciprocal Exchange Programs: Semester charges are based on the PLU tuition rate for 14 credits plus the cost of on campus housing and a full meal plan.

Other PLU-Sponsored Programs: Students are charged a program fee which does not exceed the base cost of the program plus an administrative fee of \$700 per semester. Each of the PLU-sponsored programs will, therefore, have a different program fee.

On PLU-sponsored programs, students eligible for financial aid may transfer their aid awards (with the exception of some talent awards and work study) to their student accounts.

FOREIGN LANGUAGES: It is recommended that, before embarking, students acquire a solid foundation in the language of the country where they will be studying. Students may, with the assistance of the chair of the Department of Languages and the off-campus study adviser, prepare a written request for academic credit in a recognition of their advanced facility in a foreign language.

FINANCIAL AID: Financial aid is available to qualified students who are studying through PLU-sponsored programs. Government loans can apply toward affiliated programs and other specially arranged programs.

Languages

Learning foreign languages opens windows to the world. Meeting another people brings us to understand their culture, their hopes, and the way they see us. We discover how their language helps shape their world-view. And as we become able to think and live within that language, we gain the experience to look through their window back at our own culture. Knowledge of foreign languages has always been a mark of an educated person, and today foreign languages are as important as ever.

Knowing a foreign language can open doors to new experiences and challenging careers. A foreign language is useful and often necessary for careers in education, law, government services, medicine, and journalism. Knowing a foreign language can provide more flexibility in choosing a profession and can allow greater mobility within it. Students considering a career in education should note that there is a shortage of foreign language teachers in several areas.

The department encourages students to study abroad as part of their undergraduate programs. For information on study abroad, see the *International Programs* section of this catalog.

Majors are available in Chinese Studies, Classics, French, German, Norwegian, Scandinavian Area Studies, and Spanish. Minors are offered in Chinese, Chinese Studies, French, German, Greek, Latin, Norwegian, and Spanish. Instruction is also given in Japanese and American Sign Language.

FACULTY: Webster, *Chair*; R. Brown, Hua, M. Jensen, E. Nelson, Predmore, Ramon-Lacabe, Snee, Swenson, Toven, T. Williams, Xu.

COURSES THAT MEET CORE I REQUIREMENTS: All language courses numbered 201 and above, and all first year courses of a foreign language not previously studied, as well as Chinese 371 and Language 272 (both taught in English), meet 6-B of Perspectives on Diversity, Cross-Cultural Perspectives; Sign Language meets 6-A of Perspectives on Diversity, Alternative Perspectives. All literature courses offered in English translation or in the original language meet the Literature Requirement, A-2.

PLACEMENT IN LANGUAGE CLASSES: There are no departmental prerequisites for the study of foreign languages. Students with previous experience in a language may qualify for placement into intermediate or advanced courses. To determine the appropriate level, students take the language placement examination at the beginning of the fall semester.

Potential majors are encouraged to obtain as much high school preparation as possible. Those qualifying for advanced placement may be allowed to waive certain major or minor requirements.

BACHELOR OF ARTS MAJORS AND MINORS: Requirements for the various majors and minors are listed below under the individual languages. Majors must complete at least 12 semester hours in residence at PLU, four of which must be taken either in the senior year or upon return from a study abroad program. Minors must complete at least 8 semester hours in residence.

PROSPECTIVE TEACHERS: A full range of teaching majors and minors is offered. The required professional methods course is Languages 445. Students preparing to teach in junior or senior high school may earn either a Bachelor of Arts degree in French, German, or Spanish along with certification from the School of Education, or a Bachelor of Arts in Education degree with a teaching major in French, German, or Spanish. In Scandinavian Studies, an elementary teaching major and secondary and elementary teaching minors are available.

See the *School of Education* section of this catalog for the certification requirements and the Bachelor of Arts in Education requirements.

HONORS MAJOR: Requirements for an honors major in languages are as follows: (1) a major in one foreign language; (2) a minor in a second foreign language; (3) a minimum grade point average of 3.5 in all courses taken in PLU's Department of Languages; (4) at least one departmentally approved term abroad; and (5) completion of an approved senior project.

Course Offerings

Courses in the Department of Languages are offered in the following general fields in addition to elementary, intermediate, and advanced language:

CULTURAL HISTORY

A. In English

- Classics 250 – Classical Mythology
- Classics 321 – Greek Civilization
- Classics 322 – Roman Civilization
- Scan 150 – Introduction to Scandinavia
- Scan 322 – Contemporary Scandinavia
- Scan 323 – The Vikings
- Scan 324 – The Emigrants

B. In Respective Language

- French 321 – French Civilization and Culture
- German 321 – German Civilization to 1750
- German 322 – German Civilization Since 1750
- Spanish 321 – Spanish Civilization and Culture
- Spanish 322 – Latin American Civilization and Culture

LITERATURE**A. In English**

Languages 271 – Literature and Society in Modern Europe

Languages 272 – Literature and Social Change in Latin America

Chinese 371 – Chinese Literature in Translation

Classics 250 – Classical Mythology

Scan 250 – Masterpieces of Scandinavian Literature

Scan 421 – Ibsen and Strindberg

Scan 422 – Twentieth-Century Scandinavian Literature

B. In Respective Language

French 421, 422 – Masterpieces of French Literature

French 432, 432 – Twentieth-Century French Literature

German 421 – German Literature from the Enlightenment to Realism

German 422 – Twentieth-Century German Literature

Spanish 421, 422 – Masterpieces of Spanish Literature

Spanish 431, 432 – Twentieth-Century Spanish Literature

Languages**271 Literature And Society in Modern Europe**

Reading and discussion of works in English translation by authors like Flaubert, Ibsen, and Th. Mann, who exemplify Realism and Naturalism in various European literatures. Emphasis on social themes, including life in industrial society, the changing status of women, and class conflict. No prerequisite. Satisfies the general university core requirement in literature. (4)

272 Literature and Social Change in Latin America

Readings in English translation of fiction from modern Latin America. Discussions focus on social and historical change and on literary themes and forms. Authors include major figures like Carlos Fuentes, Mario Vargas Llosa, Gabriel Garcia Marquez, and Jorge Luis Borges. No prerequisite. Satisfies the general university core requirement in literature. (4)

445 Methodology of Teaching Foreign Languages

Theory and techniques of foreign language teaching; emphasis on developing proficiency in a second language; attention paid to special problems in the individual languages. (3)

491, 492 Independent Study (1-4)

597, 598 Graduate Research (1-4)

Chinese

Minor in Chinese: 20 semester hours which may include 101-102.

The major and minor in *Chinese Studies* are described in their own section of this catalog.

101, 102 Elementary Chinese

Introduction to Mandarin Chinese. Basic skills in listening, speaking, reading, and writing. Laboratory practice required. I II (4, 4)

201, 202 Intermediate Chinese

Develops further the ability to communicate in Mandarin Chinese, using culturally authentic material. Laboratory practice required. Prerequisite: 102 or equivalent. I II (4, 4)

351 Composition and Conversation

Review of grammar with emphasis on idiomatic usage; reading of contemporary authors as models of style; conversation on topics of student interest. Conducted in Chinese. Prerequisite: 202 or equivalent. I (4)

371 Chinese Literature in Translation

An introduction to the most important works and writers of the Chinese literary tradition, from early times to the modern period. Poetry, prose, drama, and fiction will be included. Slide and film presentations supplement the required readings. No knowledge of Chinese required. (4)

491, 492 Independent Study (1-4)

Classics

The major in classics is described in this catalog under *Classics*.

231 Masterpieces of European Literature

Representative works of classical, medieval, and early Renaissance literature. Fulfills general university core requirement in literature. (Cross-referenced with ENGL 231.) I (4)

250 Classical Mythology

Study of the major myths of Greece and Rome through the texts of Homer, Hesiod, the Greek tragedians, Appollonius, Vergil, and Ovid; emphasis on the traditions of mythology, going back to pertinent Mesopotamian and Hittite materials, and forward to influences of classical myths on later literature and arts; attention to modern interpretations of ancient myths. All readings in English; satisfies the general university core requirement in literature. (4)

321 Greek Civilization

The political, social, and cultural history of Ancient Greece from the Bronze Age to the Hellenistic period. Special attention to the literature, art, and intellectual history of the Greeks. (Cross-referenced with HIST 321.) (4)

322 Roman Civilization

The history of Rome from the foundation of the city to A.D. 337, the death of Constantine. Emphasis on Rome's expansion over the Mediterranean and on its constitutional history. Attention to the rise of Christianity within a Greco-Roman context. (Cross-referenced with HIST 322.) (4)

Greek

Minor in Greek: 20 semester hours, which may include 101-102.

101, 102 Elementary Greek

Basic skills in reading classical, koine, and patristic Greek. I II (4, 4)

201, 202 Intermediate Greek

Review of basic grammar, reading in selected classical and New Testament authors. I II a/y (4, 4)

491, 492 Independent Study (1-4)

Latin

Minor in Latin: 20 semester hours, which may include 101-102.

101, 102 Elementary Latin

Basic skills in reading Latin; an introduction to Roman literature and culture. I II (4, 4)

201, 202 Intermediate Latin

Review of basic grammar; selected readings from Latin authors. I II a/y (4, 4)

491, 491 Independent Study (1-4)

French

Major in French: A minimum of 32 semester hours beyond 101-102, including 201-202, 321, 351-352 and three 400-level courses.

Minor in French: 20 semester hours, excluding 101-102 and including 201-202, 351, and two additional upper division courses.

101, 102 Elementary French

Essentials of pronunciation, intonation, and structure; basic skills in listening, speaking, reading, and writing. Lab attendance required. I II (4, 4)

201, 202 Intermediate French

Review of basic grammar, development of vocabulary and emphasis on spontaneous, oral expression. Reading selections which reflect the cultural heritage and society of the Francophone world. Lab attendance is required. I II (4, 4)

321 Civilization and Culture

Present-day France as reflected in current literature, periodicals, television and films, written compositions and oral reports. Prerequisite: 202. (4)

351, 352 Composition and Conversation

Advanced grammar, stylistics, composition, and conversation on current topics. Prerequisite: 202. I II (4, 4)

421, 422 Masterpieces of French Literature

Social and aesthetic importance of works representative of major periods from the Middle Ages through the nineteenth century; may include Christine de Pizan, Rabelais, Montaigne, Marguerite de Navarre, Moliere, Corneille, Pascal, Voltaire, Rousseau, Hugo, and Baudelaire. Prerequisite: 352. I II a/y (4, 4)

431, 432 Twentieth-Century French Literature

Social and aesthetic importance of selected twentieth century writers from France and other francophone countries. May include Gide, Camus, Sartre, Beckett, Aimée Césaire, Miriam Bâ, Ousmane Sembene, Yves Thériault, and Anne Hébert. Prerequisite: 352. I II a/y (4, 4)

491, 491 Independent Study (1-4)**German**

Major in German: A minimum of 32 semester hours beyond 101-102, including 201-202, 321-322, 351-352, and two 400-level courses

Minor in German: 20 semester hours, excluding 101-102 and including 201-202, 351, and two additional upper division courses.

101, 102 Elementary German

Basic skills of oral and written communication in classroom and laboratory practice. Use of materials reflecting contemporary German life. 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. I II (4, 4)

321 German Civilization to 1750

From the Middle Ages to the Enlightenment. A survey of German culture and its expression in creative works of art, music and literature, with particular emphasis on Martin Luther and the Protestant Reformation. Prerequisite: 202. I a/y (4)

322 German Civilization Since 1750

From the Enlightenment to the present. This survey covers representative works and trends in German politics, philosophy, literature, art and music, with emphasis on the Age of Goethe and Beethoven. Prerequisite: 202. 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. Prerequisite: 202 or equivalent. I II (4, 4)

421 German Literature From the Enlightenment to Realism

Representative works of German literature from about 1750 to 1890, including Sturm and Drang, Classicism and Romanticism. Reading will include such authors as Goethe, Schiller, Buchner, and Keller. Prerequisite: 352. I a/y (4)

422 Twentieth-Century German Literature

Representative works from Naturalism to the present, including Expressionism and Socialist Realism. Readings will cover works from both east and west, and will include such authors as Brecht, Kafka, Thomas Mann, Rilke, and Seghers. Prerequisite: 252. II a/y (4)

451 Advanced Composition and Conversation

Emphasis on idiomatic German using newspapers and other current sources for texts. Strongly recommended for students planning to obtain a credential to teach German in public secondary schools. Students should take this course in the junior or senior year. Prerequisite: 352. (4)

491, 492 Independent Study (1-4)**Japanese****101, 102 Elementary Japanese**

Basic skills in listening, speaking, reading, and writing with a rich cultural context. I II (4, 4)

201, 202 Intermediate Japanese

Develops further the ability to communicate in Japanese using culturally authentic material. Prerequisite: 102 or equivalent. I II (4, 4)

Norwegian

Major in Norwegian: A minimum of 32 semester hours, including 101-102, 201-202, 351-352, and Scandinavian 421 or 422. *Minor in Norwegian:* 20 semester hours, which may include 101-102.

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. I II (4, 4)

201, 202 Intermediate Norwegian

Develops a command of the language while further acquainting students with the Norwegian cultural heritage. Reading selections introduce Norwegian folklore and daily life. I II (4, 4)

351 Conversation and Composition

Increases student ability for self-expression, both orally and in writing. Contemporary materials are selected as models of style and usage. Prerequisite: 202 or equivalent. I (4)

352 Advanced Conversation and Composition

Emphasizes the finer points of structure, style, and good taste. Prerequisite: 351 or equivalent. II (4)

491, 492 Independent Study (1-4)**Scandinavian**

Major in Scandinavian Area Studies: 40 semester hours: A cross-disciplinary approach to the study of Scandinavia. See the section of this catalog on *Scandinavian Area Studies*.

150 Introduction to Scandinavia

An overview of the Nordic countries, highlighting contributions in art and music and the cultural life of Denmark, Finland, Iceland, Norway, and Sweden. The roads to parliamentary democracy and current issues in the five nations are also outlined. (2)

250 Masterpieces of Scandinavian Literature

A survey of major authors and works from the Scandinavian countries, beginning with the prose and poetry of the Viking Age. The contributions of Hans Christian Andersen, Knut Hamsun, Selma Lagerlof and others are discussed. All readings in English translation. Satisfies the general university core requirement in literature. (4)

322 Contemporary Scandinavia

Neutrality and occupation; the emergence of the welfare state; social reforms, planned economics, and cultural policies; Scandinavia and the European community. Readings in the original for majors; class conducted in English. a/y (4)

323 The Vikings

The world of the Vikings; territorial expansion; interaction of the Vikings with the rest of Europe. In English. (2)

324 The Emigrants

The mass emigration from Scandinavia to North America; reasons for the exodus; life in the new homeland. In English. (2)

421 Ibsen and Strindberg

The great writers of nineteenth century Scandinavian literature—Henrik Ibsen and August Strindberg—are studied against the backdrop of their time and the work of other authors who contributed to the breakthrough of modern forms and themes. Emphasis on drama. Class conducted in English; readings in translation for non-majors. Satisfies the general university core requirement in literature. a/y (4)

422 Twentieth-Century Scandinavian Literature

Recent trends in Scandinavian literature are illustrated by leading writers like Isak Dinesen, Tarjei Vesaas, and Par Lagerkvist. Emphasis on prose fiction and poetry. Class conducted in English; readings in translation for non-majors. Satisfies the general university core requirement in literature. a/y (4)

491, 492 Independent Study (1-4)**Sign Language****101, 102 Sign Language**

An introduction to the structure of American Sign Language and to the world of the hearing impaired. Basic signing skills and sign language vocabulary; fingerspelling; the particular needs and problems of deaf people. Material presented through demonstrations, drills, mime, recitals, lectures, and discussions. I II (4, 4)

Spanish

Major in Spanish: A minimum of 32 semester hours beyond 101-102, including 201-202, 321, 322, 351-352, and two 400-level courses.

Minor in Spanish: 20 semester hours, including 101-102 and including 201-202, 351, and two additional upper division courses.

101, 102 Elementary Spanish

Essentials of pronunciation, intonation, and structure; basic skills in listening, speaking, reading, and writing. Lab 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. Lab attendance required. I II (4, 4)

321 Civilization and Culture of Spain

Historic and artistic elements which have shaped Spanish thought and behavior from the beginnings to the present. 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. II (4)

351, 351 Composition and Conversation

Advanced grammar, stylistics, and composition; conversation based on everyday situations, current events, and pertinent literary selections. Prerequisite: 202. I II (4, 4)

421, 422 Masterpieces of Literature of Spain

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: 352. I II a/y (4, 4)

431 Twentieth-Century Literature of Spain

Drama, novel and essay of Spain from the "Generation of 1898" to the present. Prerequisite: 352. (4)

432 Modern Spanish-American Literature

Development of the literature of Mexico, Central and South America from the "Modernista" movement (1888) to the present. Emphasis on period will vary. (4)

491, 492 Independent Study (1-4)

Legal Studies

Legal Studies is an interdisciplinary degree program focusing on the nature of law and judicial processes. Consistent with the purposes of the American Legal Studies Association, the Legal Studies Program at PLU provides alternative approaches to the study of law from the academic framework of the social sciences, the humanities, business, and education. The program emphasizes the development of a critical understanding of the functions of law, the mutual impacts of law and society, and the sources of law. Students in Legal Studies pursue these goals through courses, directed research, and internships in offices and agencies involved in litigation and legal processes.

FACULTY: Dwyer-Shick, *Director*; Atkinson, Brue, Jobst, Lee, MacDonald, Menzel.

BACHELOR OF ARTS MAJOR: 32 semester hours

- Required courses* (12 hours)
 - Introduction to Legal Studies (POLS 170)
 - Judicial Process (POLS 371)
 - Legal Research (POLS 374)
- General electives* (8 hours): Two courses from the following:
 - American Legal History (HIST 451)
 - Comparative Legal Systems (POLS 381)
 - Philosophy of Law (PHIL 328)
 - Sociology of Law (SOC1 351)

3. *Special electives* (12 hours): Three courses from the following (also, courses in group 2 not taken to fulfill general elective requirements may be used to fulfill special elective requirements in group 3):

Business Law (BUSA 435)
 Civil Liberties (POLS 373)
 Constitutional Law (POLS 372)
 Industrial Organization and Public Policy (ECON 371)
 Internship in Legal Studies (POLS 471)
 Law and Society (BUSA 230)

MINOR: 20 semester hours, including Political Science 170 and four additional courses selected in consultation with the program director.

Marriage and Family Therapy

The Marriage and Family Therapy program is a graduate program leading to the M.A. in Social Sciences. 45 semester hours are required in the program. For further information, see the *Graduate Studies* section of this catalog.

The Marriage and Family Therapy program is accredited by the Commission on Accreditation for Marriage and Family Therapy Education of the American Association for Marriage and Family Therapy (AAMFT).

FACULTY: Storm, *Coordinator*; Keller, York, and practica supervisors.

Course Offerings

500 Human Development

Individual personality development, normal and abnormal manifestations, over the life span. The course, which is integrated with systems content, also surveys how personality relates to social relationships, especially within the family. (4)

501 Graduate Workshops

Graduate workshops in special fields or areas for varying periods of time. (1-4)

503 Systems Approach to Marriage and Family Therapy

An introduction to the systems theory approach for treatment strategy and intervention. Exploration of the family life cycle and family systems oriented assessment models. Strategies for initial interviews, hypothesis formulation, designing a strategy for intervention, and the process of termination. (4)

504 Family Development

The study of family interaction from a developmental viewpoint. The course explores how family life cycle stages are affected by divorce, remarriage, ethnicity, feminist issues, and other unplanned events. Students participate in a one-hour lab in the Family and Children's Center. (4)

507 Comparative Marriage and Family Therapy

Intensive comparative study of the theoretical rationale of the prominent schools of thought within the field of marriage and family therapy. Studies include the range of strategies, techniques and research of structural, behavioral communication, and analytical approaches to marriage and family therapy. Prerequisite: 503. (4)

510 Human Sexuality and Sex Therapy

Basic principles and strategies of treatment for the six most common sexual dysfunctions. The nature of sexual health, a brief review of anatomy and physiology of the sexual response, and the biological and psychological determinates of sexual dysfunction. Prerequisite or co-requisite: 503. (2)

511 Psychosocial Pathology: Relationship to Marriage and the Family

The assessment of psychosocial pathology and its relationship to family interpersonal structures and dynamics. Exploration of the treatment techniques and assumptions of leading family therapists regarding such psychosocial dysfunctions as divorce, family violence, delinquency, psychosomatic symptoms, drug addiction, and disturbed adolescents. Prerequisite: 503. (4)

512 Professional Studies in Marriage and Family Therapy

Professional ethics and Washington State laws which affect clinical practice are studied, including family law, legal responsibilities, rules of confidentiality and interprofessional cooperation. Further study explores licensure, certification, and the role of professional organizations. (3)

519 Practicum I (2)

Prerequisite: 503, 507 and 512 may be taken concurrently when schedule allows. 512 may also be taken concurrently with 521, Practicum II, with faculty approval.

521 Practicum II (2)

523 Practicum III (2)



525 Practicum IV (4)

The four semesters of practica are part of a continuous process toward developing specific therapeutic competencies in work with marriages and families. The practica present a competency-based program in which each student is evaluated regarding: 1) case management skills; 2) relationship skills; 3) perceptual skills; 4) conceptual skills; and 5) structuring skills. Practica requirements include 100 hours of supervision of 500 client contact hours. Faculty are AAMFT-approved supervisors and use "live supervision and video tapes of student sessions" as the primary methods of clinical supervision.

520 Theory I (2)

522 Theory II (2)

524 Theory III (2)

The three semesters of theory taken in conjunction with 519, 521, and 523 constitute an in-depth study of one approach toward marriage and family therapy with an emphasis on applying theory in practice.

590 Graduate Seminar

Selected topics as announced. Prerequisite: consent of the instructor. (1-4)

591 Director Study (1-4)

595 Graduate Readings

Independent study card required. (4)

598 Research Project (4)

599 Thesis (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 PLU is designed to serve five main objectives: (1) to provide backgrounds for other disciplines, (2) to provide a comprehensive pre-professional 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 creations, analysis, and critique of mathematical topics, and (5) to provide a view of mathematics as a part of humanistic behavior.

FACULTY: Yiu, *Chair*; Benkhalti, Dollinger, B. Dorner, C. Dorner, J. Herzog, M. Herzog, N.C. Meyer, G. Peterson, Wu.

BEGINNING CLASSES: A placement test and background survey are used to help insure that students begin in mathematics courses which are appropriate to their preparation and abilities. Enrollment is not permitted in any of the beginning mathematics courses (Math 91, 99, 111, 112, 128, 140, 151) until the placement test and background survey are completed.

Majors in mathematics, computer science, engineering, and other sciences usually take Math 151 and 152 (calculus). Math 151 is also appropriate for any student whose high school mathematics preparation is strong. Those who have had calculus in high school may omit Math 151 and enroll in Math 152 after consultation with a mathematics faculty member. Those who have less mathematics background may begin with Math 140 before taking Math 151. Math 111 and 112 provide preparation for Math 140.

Business majors may satisfy the mathematics requirement for that degree in any of three ways. Those with strong mathematics background may take Math 151 followed either by Math 230 or by both Math 152 and 331. Alternatively, Math 128 alone will satisfy the mathematics requirement for business. Math 111 serves as preparation for Math 128 for those whose high school background is not strong.

For students who plan only one mathematics course, a choice from Math 115, 128, 140, 151 is advised, depending on interest and preparation.

Remedial: Math 91 (Intermediate Algebra) is available for those who are not ready for other classes. Math 91 does not count toward graduation requirements.

MATHEMATICS MAJOR: The foundation of the mathematics program for majors is the three semester sequence of calculus (Math 151, 152, 253) and linear algebra (Math 331). These courses are usually taken in sequence in the first four semesters. Students with a calculus background in high school may receive advanced placement into the appropriate course in this sequence.

Upper division work includes courses in modern algebra, mathematical analysis, applied mathematics, mathematical statistics, and geometry. Required upper division courses include Abstract Algebra (Math 433), Mathematical Analysis (Math 455), Mathematical Statistics (Math 341), and Senior Seminar (Math 486). Math 433 should be taken in the junior year and Math 455 in the senior year. Statistics 341 may be taken either the junior or

the senior year. Math 486 extends over two semesters beginning in the fall semester; May graduates begin this capstone experience course in the fall semester of the senior year, while December graduates must begin this course in the fall semester of their junior year.

Students majoring in mathematics are encouraged to include work in computer science since many careers applying mathematics will require computer experience. It is also a good idea to study one or more subjects outside of mathematics (perhaps leading to a minor) which make substantial use of mathematics. While many subjects are appropriate, some of the more common are as follows: economics, business, physics, engineering, chemistry, and biology.

BACHELOR OF ARTS MAJOR: Minimum of 34 semester hours of mathematics courses numbered above 150, including 151, 152, 253, 331, 433, 455, 486 and Math/Stat 341. Required supporting: Computer Science 144, which should be taken in the freshman year. Physics 153-163 or Computer Science 375 or Economics 345 is strongly recommended. (Math 223, 230, and 446 may not be counted toward the major.)

BACHELOR OF SCIENCE MAJOR: Students may either complete one of the concentrations listed below or satisfy the following general criteria. Required supporting courses for both the general criteria and for the concentrations are: Computer Science 144, Statistics 341, and one of Physics 153-163 or Computer Science 375 or Economics 345.

GENERAL CRITERIA: At least 40 hours of mathematics courses numbered above 150, including 253, 331, 433, 455, 486 and at least one of 434, 456 or Math/Stat 342. (Math 223, 230, and 446 may not be counted toward the major.)

CONCENTRATIONS:

Actuarial: 151, 152, 253, 331, 356, 433, 455, 486, Statistics 342 and Statistics 348. (Economics 345 is strongly recommended as a supporting course). This concentration includes a minor in statistics.

Applied Mathematics: 151, 152, 253, 331, 351, 356, 433, 455, 456, and 486.

Graduate School: 151, 152, 253, 331, 433, 434, 455, 456, 486 and one upper division elective.

Mathematics for Computer Science: 151, 152, 245, 253, 331, 433, 455, 486, Computer Science 348 and Computer Science 475.

Mathematics for Physics: 151, 152, 253, 331, 351 or 356, 433, 455, 456, 486, Physics 354 and Physics 356.

Secondary Education: 151, 152, 203, 245, 253, 321, 331, 433, 446, 455, 486. Also requires completion of certification requirements in the School of Education.

Statistics: 151, 152, 253, 331, 433, 455, 486, one upper division elective, Statistics 342 and Statistics 348. This concentration includes a minor in statistics.

BACHELOR OF ARTS IN EDUCATION: See *School of Education* section of this catalog.

MINOR IN MATHEMATICS: 20 semester hours of mathematics courses, including 151, 152, 253 and 8 hours of upper division mathematics courses excluding 223, 446 and Interim courses. Strongly recommended: Computer Science 144 or 110.

MINOR IN STATISTICS: See *Statistics* section of this catalog.

Course Offerings

A grade of C or higher is strongly recommended in all prerequisite courses. A placement test and background survey are required before registering for beginning mathematics courses if prerequisites have not been completed at PLU.

91 Intermediate Algebra

A review of high school algebra; solving linear and quadratic equations, factoring, simplifying expression, exponents and graphing. Designed for students whose mathematical preparation is inadequate for Math 111. Does not count toward graduation requirements. I (4)

99 Directed Study in Fundamental Mathematics

Designed for students who need further help with the basics in mathematics to prepare them for higher level courses. Enrollment by arrangement with instructor. Does not count toward graduation requirements. (I-4)

111 College Algebra

A review of algebra emphasizing problem solving skills and applications to business problems. This class is appropriate as preparation for Math 128 or 112 (and then 140). Prerequisites: two years of high school algebra or Math 91. I II (2)

112 Plane Trigonometry

Trigonometric and inverse trigonometric functions, identities, graphing, solution of triangles; logarithmic and exponential functions and other tools such as complex numbers. For students who are proficient in algebra but do not know trigonometry. Prerequisite: at least two years of high school algebra. I II (2)

115 Introduction to the World of Mathematics and Computers

A study of mathematics and computers in the modern world with a wide variety of applications and a historical perspective. This class is designed for students without extensive knowledge of mathematics, but who want to acquire a basic understanding of the nature of mathematics and computers. Not intended for majors in science or mathematics or computer science. Some BASIC and/or LOGO programming is included. Prerequisite: two years of college preparatory mathematics. I II (4)

128 Linear Models and Calculus, an Introduction

Matrix theory and linear programming, introduction to differential and integral calculus. Concepts are developed stressing applications. This course is primarily for business majors, but is open to all students interested in business, economics, and behavioral science applications. Prerequisites: two years of high school algebra or Math 111 or equivalent. Cannot be taken for credit if Math 151 (or the equivalent) has been previously taken with a grade of C or higher. I II (4)

140 Functions, Analytic Geometry and Probability

Problem solving and analytic geometry are emphasized. Topics include systems of equations, matrices, induction, the binomial theorem, and probability (including an introduction to expected value and standard deviation). Additional topics may be selected from inequalities, trigonometry, complex numbers, and the theory of equations. This course will also prepare students for calculus and computer science. Prerequisites: 111 and 112 or equivalent high school material. I II (4)

151 Analytic Geometry and Calculus

Analytic geometry, functions, limits, derivatives and integrals with applications. Prerequisite: Math analysis or pre-calculus in high school or Math 140 or equivalent. I II (4)

152 Analytic Geometry and Calculus

Applications and techniques of integration, transcendental functions, polar coordinates, improper integrals, and infinite sequences and 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)

203 History of Mathematics

A study in the vast adventure of ideas that is mathematics from ancient cultures to the 20th century. The evolution of concepts of number, measurement, demonstration, and the various branches of mathematics in the contexts of the varied cultures in which they arose. Prerequisite: Math 151 or equivalent or consent of instructor. Satisfies line 3 of natural sciences/mathematics requirement in the distributive core. Satisfies mathematics/computer science requirement in options II and III of the College of Arts and Sciences foreign language/alternative requirements. a/y II 1994-95 (4)

223 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: consent of instructor. I II (4)

230 Matrix Algebra

A survey of matrix algebra and determinants with applications, such as linear programming. A first look at abstract methods including some techniques of proof. Prerequisite: 151. I II (2)

245 Discrete Structures

Provides the mathematical background necessary for upper division work in computer science. Sets, relations, functions, combinatorics, and graph theory and their relation to topics in computer science. Techniques for logical reasoning including methods of quantified logic, deduction, induction, and contradiction will be taught and applied throughout the course. Prerequisite: 152. II (4)

253 Multivariable Calculus and Differential Equations

An introduction to vectors, multidimensional calculus, partial differentiation, vector analysis, differential equations, and applications. Emphasis 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 of instructor. I (4)

331 Linear Algebra

Vectors and abstract vector spaces, matrices, inner product spaces, linear transformations. Proofs will be emphasized. Prerequisite: 152. I II (4)

341 Introduction to Mathematical Statistics

Description of data (univariate and bivariate), introduction to probability (axioms, discrete and continuous random variables, expectations), special distributions (binomial, Poisson, normal, gamma), statements of law of large numbers and central limit theorem, elements of experimental design (control, randomization, blocking), sampling distributions, point estimators (bias efficiency, methods of moments and maximum likelihood), confidence intervals, hypothesis tests, regression (if time permits). Prerequisite: 152. I (4)

342 Probability and Statistical Theory

Continuation of Math/Stat 341. Topics may include: joint, marginal, and conditional distributions, correlations, distributions of functions of random variables, moment generating functions, Chebyshev's inequality, convergence in probability and limiting distributions, introduction to inference in regression and one-way analysis of variance, introduction to Bayesian and non-parametric statistics, power test and likelihood ratio tests. Prerequisite: 341. a/y 1995-96 II (4)

345 Computational Probability and Statistics

An introduction to concepts from probability and statistics and their relationship to computing. Topics include both discrete and continuous distributions, descriptive statistics and regression, together with the use of the computer for solving problems in these areas, and application of these areas to problems in computing. 345 cannot be taken for credit after 341. Prerequisites: 152 and CSCI 144. Recommended: MATH 245 II. (2)

348 Applied Regression Analysis and *nova*

Linear, multiple and nonlinear regression, regression diagnostics and violations of model assumptions, analysis of variance, experimental design including randomization and blocking, multiple comparisons, analysis of covariance. Substantial use of a statistical computer package and an emphasis on exploratory analysis of data. Prerequisite: 341 or consent of instructor. a/y 1994-95 II (4)

351 Differential Equations

An introduction to differential equations emphasizing the applied aspect. First and second order, differential equations, boundary-value and eigenvalue problems, power series solutions, nonlinear differential equations, numerical methods, the LaPlace transformation. Prerequisite: 253. II a/y 1994-95 (4)

356 Numerical Analysis

Numerical theory and application in areas of solution of nonlinear equations, matrix theory, interpolation, approximations, numerical differentiation and integration, solution of differential equations, and Fourier transforms. Prerequisites: 253 or (152 and either 230 or 331); CSCI 144 or other computer language. a/y 1995-96 II (4)

381 Seminar in Problem Solving

This course is designed to improve advanced problem solving skills in mathematics. A goal of the course is participation in the Putnam Mathematics Competition. Students will work on problems from past mathematical competitions and other sources; they will present solutions to the group and discuss problem solving techniques. Pass/Fail only. Students may take this course more than once. Prerequisite: 152 or consent of instructor. I (1)

433, 434 Abstract Algebra

Topics from groups, rings, modules, fields, field extensions, and linear algebra. Prerequisite: 331; 433 I (4); 434 a/y II 1995-96 (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 (3)

455, 456 Mathematical Analysis

Extended treatment of topics introduced in elementary calculus. Prerequisite: 253 and 433 (with consent of instructor 433 may be taken concurrently). 455 I (4); 456 II (4)

486 Senior Seminar

Oral and written presentation by students of information learned in individual research under the direction of an assigned instructor. Discussion of methods for communicating mathematical knowledge will be included. Required of all senior mathematics majors seeking a B.A. or B.S. degree. The course lasts two semesters beginning in the fall semester; students graduating in May should start the course in the fall of their senior year and students graduating in December should begin the course in the fall of their junior year. A grade of In Progress (IP) will be given after the first semester. Final written and oral

presentations by the students will be given in the spring semester after which regular grades will be assigned. Prerequisite: senior (or second semester junior) math major or consent of department chair. I-II (2)

490 Topics in Mathematics

Selected topics from the list below or current interest. II (1-4)

- a. *Combinatorics*
Elementary counting methods, inclusion-exclusion principle, recurrence relations, generating functions, introduction to Polya counting theory and Ramsey theory. Prerequisite: 152 and either 230 or 331.
- b. *Complex Analysis*
Complex numbers, functions of a complex variable, contour integration, Cauchy Integral Theorem, power series, residues. Prerequisite: 253.
- c. *Dynamical Systems: Chaos and Fractals*
The mathematical theory of chaotic dynamical systems and fractal geometry. Topics: bifurcation, quadratic maps, strange attractors. Cantor sets, symbolic dynamics, Sarkovskii's theorem, fractals, fractal dimension, Julia sets, Mandelbrot set, iterated function systems, escape time algorithm, collage theorem. Use of computer graphics. Prerequisite: 331 and consent of instructor. Recommended: 455.
- d. *Graph Theory*
Paths, cycles, trees, planar graphs, Hamiltonian graphs, coloring, 4-color theorem, digraphs, applications. Prerequisite: 152 and either 230 or 331.
- e. *Group Representations*
Introduction to groups, point groups, space groups, representations of groups, applications to problems in physics and physical chemistry. Prerequisite: 331. II
- f. *Number Theory*
Prime numbers, divisibility, modular arithmetic, an introduction to Diophantine equations, applications. Prerequisite: 152.
- g. *Operations Research*
Optimization problems, linear programming, network flow analysis, stochastic models, queueing theory. Prerequisite: 152 and either 230 or 331.
- h. *Partial Differential Equations*
Solutions and behavior of LaPlace, wave and heat equations, Fourier series and integrals, LaPlace transform. Prerequisite: 253. II
- i. *Topology*
Metric spaces, topological spaces, continuity, compactness, connectedness, homotopy. Prerequisite: 253 or 331.
- j. *Transform Methods*
Transform methods, including continuous and discrete Fourier Transforms, fast Fourier transforms, applications. Prerequisite: 152 and 331.

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)

Medical Technology

Medical Technology is a professional program in clinical laboratory sciences for which the university provides pre-professional preparation as well as a Bachelor of Science in Medical Technology (B.S.M.T.). This degree is customarily awarded as a second baccalaureate degree in addition to a degree in either biology or chemistry after completion of one year of clinical training in a program accredited by the Committee on Allied Health Education and Accreditation of the American Medical Association in addition to the fulfillment of pre-professional requirements. Upon completion of the combined academic and clinical program, the student is eligible to take the medical technology certificate examination given by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

Although the minimum requirements for medical technology are as outlined below, many of the clinical internship programs require or strongly recommend a baccalaureate degree in biology or in chemistry before admission to clinical training. Therefore, a student should consider first earning a bachelor's degree with either of these majors.

The minimum academic requirements for entry into clinical training as published by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) are 16 semester hours each of biology and chemistry and one course in college level mathematics or the equivalent. The biology courses must include microbiology and immunology. The chemistry must include at least one course in organic chemistry or bio-chemistry. Both the biology and chemistry courses must be considered acceptable toward majors in those fields. The mathematics requirement must be 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 hours of academic credit before admission to clinical training.

REQUIREMENTS FOR THE B.S.M.T. DEGREE:

1. *Biology*
Biology 161, 162, 323 – Principles of Biology I, II, III
Biology 328 – Microbiology
Biology 385 – Immunology
Biology 407 – Molecular Biology
2. *Chemistry*
Chemistry 115, 116 – General Chemistry
Chemistry 321 – Analytical Chemistry
Chemistry 331, 332, 333, 334 – Organic Chemistry
3. *Mathematics*
Mathematics 140 – Functions, Analytic Geometry, and Probability

Very strongly recommended:

Physics 125, 126, 135, 136 – General Physics

Also recommended:

Biology 331 – Genetics
Biology 346 – Cellular Physiology
Biology 441 – Mammalian Physiology
Chemistry 403 – Biochemistry

The remainder of the requirements for a major in biology or chemistry should also be fulfilled.

Music

The study of music is, in these times of stress and rapid change, a type of investment that can provide enduring satisfaction.

The staff and facilities of Pacific Lutheran University are such that students may pursue studies in many branches of music leading to academic degrees as well as lifelong enjoyment. Degree programs include the Bachelor of Arts, the Bachelor of Fine Arts, the Bachelor of Music Education, the Bachelor of Musical Arts, and the Bachelor of Music. The Bachelor of Arts in Education with a major in music is offered for those intending to become teachers in the public schools.

Both the undergraduate and graduate programs are accredited regionally and nationally. Pacific Lutheran University is an associate member of the National Association of Schools of Music.

PLU music graduates find places for themselves as teachers of music in public and private schools and colleges, and as conductors, composers, private teachers, and classroom teachers. A considerable number contribute greatly to church worship as organists, choir directors, or full-time ministers. Some have found satisfying careers in music merchandising, others in concert management. Still others, with emphasis on performance, are in opera and on the concert stage, as well as in popular entertainment, vocally and instrumentally.

Facilities include space and instruments for individual practice and recital. Private study in keyboard is available in piano, organ, and harpsichord. Other private study includes voice and all string, wind, and percussion instruments, taught by regularly performing musicians. Professional-quality experience is available to qualified performers in band, orchestra, choir, jazz, and chamber ensembles.

Exposure to musical literature is to be gained not only through intensive course work in history and literature, but also in attendance at the large number of concerts annually presented by the performing organizations as well as by students, faculty, and guest artists in recital.

It must be emphasized that music majors form but a part of the multi-faceted program of music at PLU. All students are eligible to audition for the performing organizations and constitute perhaps half of the membership. Introductory music courses during both the regular semesters are designed for exploration and self-fulfillment.

FACULTY: Robbins, *Chair*; Bradley, Dahl, Farner, Frohnmayr, Gard, Grieshaber, Hoffman, M. Kirk, C. Knapp, Kracht, Nance, Sparks, Vaught Farner, Youtz; assisted by Agent, Boughten, Campos, Eby, Field, Habedank, O. Hanson, Harkness, Harty, Hill, Holloway, Houston, B. Johnson, N. Kirk, S. Knapp, Nierman, F. Peterson, Porth, Pressley, Shapiro, Sussman, Terpenning, Timmerman, Turner, Wall, Wilson.

For introductory courses to the field of music, see the descriptions of Music 101, 102, 103, 104, and 120.

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 program.

Following is the program for all entering freshmen who intend to major in music:

| COURSES: | FALL | SPRING |
|-------------------------------|---------|--------|
| Music Fundamentals*: 111, 113 | 2**+2** | |
| Music and Culture: 120 | 4 | |
| Theory/Ear Training: 124, 126 | | 4 |
| Keyboarding: 121, 122 | 1 | 1 |
| History: 130 | | 3 |

* These courses are prerequisite to Theory 124. All freshmen should register for 111, will be given a placement test during the first class meeting, and, based on the test outcome, placed in either 124, 113 or retained in 111.

** Half-semester courses.

MUSIC MINOR: 22 semester hours, including Music 120; one of the following: Music 121, 122 or 202 (1 credit); 124, 126; 4 hours of Private Instruction (Music 202-219); 4 hours of Ensemble (Music 360-384); one of the following: Music 101, 102, 103, 104, 130, 230, 232; 1-2 hour(s) of music elective(s).

Undergraduate Music Major Degrees:

ENTRANCE AUDITION: To be admitted to a music major program, prospective students must audition for the music faculty.

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 higher 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.

MUSIC CORE: The following core is required in all music degree programs:

| | |
|------------------------------|----------|
| Music and Culture: 120 | 4 hours |
| Keyboarding: 121, 122 | 2 hours |
| Theory: 124, 223 | 6 hours |
| Music History: 130, 230, 232 | 9 hours |
| Ear Training: 126, 225, 226 | 3 hours |
| | 24 hours |

The Music core is fundamental to the pursuit of the music major and should be completed in sequence in the first four semesters of study. Music core requirements must be fulfilled by enrollment in specific courses and may not be taken by means of independent study.

ENSEMBLE REQUIREMENT: Music majors are required to participate each semester in a music ensemble.

KEYBOARD PROFICIENCY: Basic keyboard skills are required in all music majors (B.M., B.M.E., B.M.A., B.A.). Attainment of adequate keyboard skills is 1) adjudicated by the Keyboard Proficiency Jury, administered each term and 2) for Bachelor of Music and Bachelor of Music Education students, a prerequisite to their sophomore juries (see below). Consult the Music Student Handbook for details.

LANGUAGE REQUIREMENT: Vocal performance majors are required to take at least one year of language study in French or German (see department handbook).

MUSIC MAJOR JURIES: Students pursuing Bachelor of Music and Bachelor of Music Education degrees are required to pass sophomore and degree recital juries. Consult the Music Student Handbook for details.

BACHELOR OF ARTS MAJOR: Maximum of 40 semester hours including music core (24 hours), plus 4 hours of ensemble; 439; 8 hours of private instruction. Keyboard proficiency required. In addition to requirements listed above, candidates for the B.A. degree must meet the foreign language option requirement in the College of Arts and Sciences.

BACHELOR OF MUSIC EDUCATION:

Bachelor of Music Education: K-12 Choral
 Bachelor of Music Education: K-12 Instrumental (Band)
 Bachelor of Music Education: K-12 Instrumental (Orchestral)
 Consult the School of Education section of this catalog.

K-12 Choral

| | |
|---|-------------|
| Music† – Core | 24 |
| Music 360-363 – Large Ensemble | 7 |
| Music 204/404/420* – Private Instruction: Voice | 6 (6 sem.)* |
| Music 240† – Foundations of Music Education | 3 |
| Music 248† – Guitar Laboratory | 1 |
| Music 340† – Fundamentals of Music Education | 2 |
| Music 342† – Materials in K-9 Music | 2 |
| Music 345† – Basic Conducting | 2 |
| Music 348† – Practicum in Music Education | 1 |
| Music 421/422† – Advanced Keyboard Skills I/II | 2 |
| Music 442† – Methods in K-9 Music | 2 |
| Music 443† – Methods and Materials for Secondary Choral Music | 2 |
| Music 445† – Advanced Conducting | 2 |
| Music 453† – Vocal Pedagogy | 2 |

Keyboard proficiency required. 58 credits

Sophomore and degree juries required.

† Prerequisite for student teaching.

* Consecutive fall/spring semesters.

** Half recital.

K-12 Instrumental (Band Emphasis)

| | |
|--|-------------|
| Music† – Core | 24 |
| Music 370/371/380 – Large Ensemble | 7 |
| Music 375/376 – Jazz Ensemble | 1 |
| Music 240† – Foundations of Music Education | 3 |
| Music 245† – Percussion/Brass Laboratory | 1 |
| Music 241/242† – String Laboratory | 2 |
| Music 243/244† – Woodwind Laboratory | 2, 4 |
| Music 246† – Brass Laboratory | 1 |
| Music 326† – Orchestration | 2 |
| Music 340† – Fundamentals of Music Education | 2 |
| Music 345† – Basic Conducting | 2 |
| Music 348† – Practicum in Music Education | 1 |
| Music 2--/4-- – Private Instruction | 6 (6 sem.)* |
| Music 420** | |
| Music 444† – Methods and Materials for School Band Music | 3 |
| Music 445† – Advanced Conducting | 2 |

Keyboard proficiency required. 58 credits

Sophomore and degree juries required.

† Prerequisite for student teaching.

* Consecutive fall/spring semesters.

** Half recital.

K-12 Instrumental (Orchestral Emphasis)

| | |
|--|-------------|
| Music† – Core | 24 |
| Music 370/371/380 – Large Ensemble | 7 |
| Music 381 – Chamber Ensemble | 1 |
| Music 240† – Foundations of Music Education | 3 |
| Music 245† – Percussion/Brass Laboratory | 1 |
| Music 241/242† – String Laboratory | 2 |
| Music 243/244† – Woodwind Laboratory | 2, 4 |
| Music 246† – Brass Laboratory | 1 |
| Music 326† – Orchestration | 2 |
| Music 340† – Fundamentals of Music Education | 2 |
| Music 345† – Basic Conducting | 2 |
| Music 348† – Practicum in Music Education | 1 |
| Music 2--/4--/420** – Private Instruction | 6 (6 sem.)* |
| Music 420** | |
| Music 445† – Advanced Conducting | 2 |
| Music 454† – Methods and Materials for String Teachers | 3 |

Keyboard proficiency required. 58 credits

Sophomore and degree juries required.

† Prerequisite for student teaching.

* Consecutive fall/spring semesters.

** Half recital.

BACHELOR OF MUSICAL ARTS:

| | |
|--|------------|
| Music† – Core | 24 |
| Music – Large Ensemble | 8 |
| Music 2--/4-- – Private Instruction | 8 |
| Music 345 – Basic Conducting | 2 |
| Music 423 – Form I | 2 |
| Theory Electives | 4 |
| Jazz Theory | |
| Counterpoint | |
| Orchestration | |
| Composition | |
| Arranging | |
| Form II, III | |
| Performance Electives | 4 |
| Private Instruction | |
| Ensembles | |
| Laboratory Classes | |
| Pedagogy Classes | |
| Improvisation | |
| Electronic Music Practicum | |
| Accompanying | |
| Organ Improvisation | |
| Advanced Keyboard Skills | |
| Music 439 – Senior Seminar: Topics in Music Literature | 4 |
| Music Electives | 6 |
| Keyboard proficiency required. | 62 credits |
| In a cognate field outside of music, an academic minor or second major required. | |

BACHELOR OF MUSIC:

| |
|---|
| Bachelor of Music in Instrumental Performance |
| Bachelor of Music in Organ Performance |
| Bachelor of Music in Piano Performance |
| Bachelor of Music in Vocal Performance |
| Bachelor of Music in Composition |
| Bachelor of Music in Church Music |

Instrumental Performance

| | |
|--|--------------|
| Music – Core | 24 |
| Music 370/371/380 – Large Ensemble | 8 |
| Music 323 – Counterpoint | 2 |
| Music 326 – Orchestration | 2 |
| Music 345 – Basic Conducting | 2 |
| Music 2--/4-- – Private Instruction | 22 (8 sem.)* |
| Music 420** | |
| Music 381 – Chamber Ensemble | 4 |
| Music 384 – Contemporary Arts Ensemble | 1 |
| Music 423 – Form I | 2 |
| Music 424 or 425 – Form II or III | 2 |
| Music 439 – Senior Seminar: Topics in Music Literature | 4 |
| Music 448 – Practicum in Studio Pedagogy | 1 |
| Music Elective | 1 |
| Keyboard proficiency required. | 75 credits |
| Sophomore and degree juries required. | |

* Consecutive fall/spring semesters.

** Full recital.

Violin/Viola majors will take an additional 2 semester hours of Music 491 Independent Study: String Pedagogy. Recommended: Music 324 Advanced Counterpoint.

Organ Performance

| | |
|--|--------------|
| Music – Core | 24 |
| Music – Ensemble (to include Chamber Ensemble) | 7 |
| Music 323 – Counterpoint | 2 |
| Music 331 – Music of J.S. Bach | 2 |
| Music 345 – Basic Conducting | 2 |
| Music 352 – Organ Improvisation | 1 |
| Music 384 – Contemporary Arts Ensemble | 1 |
| Music 203/403 – Private Instruction: Organ | 21 (8 sem.)* |
| Music 420** | |
| Music 219 – Private Instruction: Harpsichord | 2 (2 sem.) |
| Music 423 – Form I | 2 |
| Music 424 or 425 – Form II or III | 2 |
| Music 436 – History of Organ Building | 2 |
| Music 438 – Hymnology and Music of the Liturgy | 2 |
| Music 439 – Senior Seminar: Topics in Music Literature | 4 |
| Music 448 – Practicum in Studio Pedagogy | 1 |
| Keyboard proficiency required. | 75 credits |
| Sophomore and degree juries required. | |
| * Consecutive fall/spring semesters. | |
| ** Full recital. | |

Piano Performance

| | |
|--|--------------|
| Music – Core | 24 |
| Music – Large Ensemble | 2 |
| Music 323 – Counterpoint | 2 |
| Music 345 – Basic Conducting | 2 |
| Music 202/402 – Private Instruction: Piano | 22 (8 sem.)* |
| Music 420** | |
| Music 219 – Private Instruction: Harpsichord | 1 |
| Music 351 – Accompanying*** | 2 |
| Music 383 – Two Piano Ensemble | 2 |
| Music 384 – Contemporary Arts Ensemble | 1 |
| Music 423 – Form I | 2 |
| Music 424 or 425 – Form II or III | 2 |
| Music 431 – History of Piano Literature and Performance | 2 |
| Music 451 – Piano Pedagogy*** | 4 |
| Music 439 – Senior Seminar: Topics in Music Literature | 4 |
| Music 421 – Advanced Keyboard Skills I | 1 |
| Piano Ensemble/Accompanying Electives | 2 |
| Keyboard proficiency required. | 75 credits |
| Sophomore and degree juries required. | |
| * Consecutive fall/spring semesters. | |
| ** Full recital. | |
| *** Piano performance majors may elect additional emphasis in accompanying or pedagogy. Those seeking emphasis in accompanying shall elect two additional hours of Music 351 and shall accompany two full vocal or instrumental recitals. Those seeking emphasis in pedagogy shall elect four additional hours of Music 451. | |

Vocal Performance

| | |
|---|--------------|
| Music – Core | 24 |
| Music – Large Ensemble | 8 |
| Music 323 – Counterpoint | 2 |
| Music 345 – Basic Conducting | 2 |
| Music 202/402 – Private Instruction: Voice | 19 (8 sem.)* |
| Music 420** | |
| Music 253 – Diction I | 1 |
| Music 254 – Diction II | 1 |
| Music 353 – Solo Vocal Literature | 2 |
| Music 354 – History of Music Theater | 2 |
| Music 366 – Opera Workshop | 2 |
| Music 421/422 – Advanced Keyboard Skills I/II | 2 |
| Music 423 – Form I | 2 |
| Music 424 or 425 – Form II and III | 2 |

| | |
|--|---|
| Music 453 – Vocal Pedagogy | 2 |
| Music 439 – Senior Seminar: Topics in Music Literature | 4 |

Keyboard proficiency required. 75 credits

Sophomore and degree juries required.

* Consecutive fall/spring semesters.

** Full recital.

Recommended: Music 324 Advanced Counterpoint, PE 241

Modern Dance, COMA 250 Fundamentals of Acting

Composition

| | |
|--|----|
| Music – Core | 24 |
| Music – Ensemble | 6 |
| Music 249 – Electronic Music Laboratory | 1 |
| Music 323 – Counterpoint | 2 |
| Music 326 – Orchestration | 2 |
| Music 327 – Composition (private study) | 16 |
| Music 345 – Basic Conducting | 2 |
| Music 2-/4-- – Private Instruction: Principal Instrument | 6 |
| Music 384 – Contemporary Arts Ensemble | 2 |
| Music 421/422 – Advanced Keyboard Skills I/II | 2 |
| Music 423 – Form I | 2 |
| Music 424 – Form II | 2 |
| Music 425 – Form III | 2 |
| Music 432 – Music of the World's People | 2 |
| Music 439 – Senior Seminar: Topics in Music Literature | 4 |

Keyboard proficiency required. 75 credits

Sophomore and degree juries required.

Church Music

| | |
|---|--------------|
| Music – Core | 24 |
| Music 360-363 – Choral Ensemble | 6 |
| Music 204/403 or 204/404 – Principal Instrument (Organ or Voice) | 14 (8 sem.)* |
| Music 420** | |
| Music 204/404 or 203/403 – Secondary Instrument (Voice or Organ) | 4 (4 sem.)* |
| Music 352 or 421 – Organ Improvisation or Advanced Keyboard Skills I | 1 |
| Music 323 – Counterpoint | 2 |
| Music 331 – Music of J.S. Bach | 2 |
| Music 335 – Church Music | 2 |
| Music 345 – Basic Conducting | 1 |
| Music 351 – Accompanying | 1 |
| Music 365 – Chapel Choir | 1 |
| Music 381 – Chamber Ensemble | 1 |
| Music 384 – Contemporary Arts Ensemble | 1 |
| Music 423 – Form I | 2 |
| Music 424 or 425 – Form II or III | 2 |
| Music 437 – Masterpieces of Sacred Music | 2 |
| Music 438 – Hymnology and Music of the Liturgy | 2 |
| Music 445 – Advanced Conducting | 2 |
| Music 439 – Senior Seminar: Topics in Music Literature | 4 |

Keyboard proficiency required. 75 credits

Sophomore and degree juries required.

* Consecutive fall/spring semesters.

** Full recital.

Strongly Recommended: Additional religion courses beyond the required courses of Core I or II.

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. I (4)

102 Understanding Music Through Melody

Introduction to the musical arts through exploration of melody as a primary musical impulse in a variety of musical styles. Designed to enhance the enjoyment and understanding of all music through increased sensitivity to melody. Not open to majors. II (4)

103 History of Jazz

Survey of America's unique art form: jazz. Emphasis on history, listening, structure, and style from early developments through recent trends. Meets Core I requirement in arts/literature, line I. II (4)

104 Music and Technology

Survey of the impact of technology on the musical arts, from the evolution of musical instruments and the acoustic space through the audio/video/computer technology of today. Meets Core I requirement in arts/literature, line I. I (4)

111 Music Fundamentals I

Beginning skills in reading and notating music. Rudiments of music theory: key signatures, clefs, and major scales. Requires no previous musical experience and partially fulfills the general university requirement in arts; may be combined with 113 in a single semester to complete the general university requirement in arts. I (2)

113 Music Fundamentals II

A continuation of 111. Minor scales, intervals, triads and diatonic 7th chords. Partially fulfills the general university requirement in arts; may be combined with 111 in a single semester to complete the general university requirement in arts. Prerequisite: 111 or consent of instructor. II (2)

120 Music and Culture

Introduction to ethnomusicological considerations of a variety of music traditions, focusing on calypso, European court music, and Chinese court music. Examination through individual and group research and presentation of social, economic, and religious aspects of music while developing research, critical thinking, and presentation skills. Requires no previous music experience and fulfills the general university requirement in arts and diversity; required for music majors and minors; prerequisite course for 124, 130. I (4)

121 Theory at the Keyboard I

An introduction to keyboarding skills, including sight-reading, group performance, and harmonization of simple melodies. I (1)

122 Theory at the Keyboard II

A continuation of 121. II (1)

124 Theory I

An introduction to the workings of music, including common-practice harmony, jazz theory, and elementary formal analysis. Prerequisite: 113 or consent of instructor. II (3)

126 Ear Training I

Development of aural skills, including interval recognition, sight-singing, rhythmic, melodic and harmonic dictation. Prerequisite: 113 or consent of instructor. II (1)

127 Jazz Theory

Introduction to the theoretical basis of jazz, including melodic, harmonic, and formal aspects as well as ear training. Prerequisite: 124, 126, or consent of instructor. a/y I (3)

130 History I

The evolution of Western music in the Classic and Romantic eras. Prerequisite: 113, co-registration in 124 or consent of instructor. II (3)

201 Class Piano

Group instruction for beginning pianists. May be repeated for credit. I II (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 (1-4)****215 Private Instruction: Baritone/Tuba (1-4)****216 Private Instruction: Percussion (1-4)****217 Private and Class Instruction: Guitar (104)****218 Private Instruction: Harp (1-4)****219 Private Instruction: Harpsichord (1-4)**

1 credit

F II and Spring Semesters: One half-hour private or two one-hour class lessons per week in addition to daily practice. January: Two 45-minute lessons per week in addition to daily practice. Summer: 6.5 hours of instruction TBA in addition to daily practice. Students in piano, voice, and guitar may be assigned to class instruction at the discretion of the music faculty.

2-4 credits

Fall and Spring Semesters. Two half-hour lessons per week in addition to daily practice. Summer: 13 hours of instruction TBA in addition to daily practice.

Special fee in addition to tuition.

221 Keyboard Proficiency

Development of keyboard literacy and skills requisite for majoring in music. May be repeated for credit. I II (1)

223 Theory II

A continuation of 124. Prerequisite: 124 or consent of instructor. I (3)

225 Ear Training III

A continuation of 126. Prerequisite: 126 or consent of instructor. I (1)

226 Ear Training IV

A continuation of 225. Prerequisite: 225 or consent of instructor. II (1)

230 History II

The evolution of Western music from the early Christian era through the Middle Ages, Renaissance, and Baroque eras. Prerequisite: 130 or consent of instructor. I (3)

232 Twentieth-Century Music

The evolution of Western art music in the twentieth century in response to new theoretical constructs, new technologies, and popular and cross-cultural influences. Prerequisite: 230 or consent of instructor. II (3)

240 Foundations of Music Education

Introduction to the basics of teaching music, including philosophy, content, student characteristics, and the nature and organization of musical learning. For students preparing to become music specialists (music education majors only). I (3)

241-242 String Laboratory

Methods and materials of teaching and playing string instruments in the public schools. a/y I II (1, 1)

243-244 Woodwind Laboratory

Methods and materials of teaching and playing woodwind instruments in the public schools. a/y I II (1, 1)

245 Percussion/Brass Laboratory

Methods and materials of teaching and playing percussion and brass instruments in the public schools. a/y I (1)

246 Brass Laboratory

Continuation of brass instrument instruction from Music 245. a/y II (1)

248 Guitar Laboratory

Methods and materials of teaching and playing guitar in the public schools. I (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. a/y II (1)

253 Diction I

Rules and techniques of accurate pronunciation, enunciation, and projection of Italian and German; class discussions, performances, and critiques. a/y I (1)

254 Diction II

Rules and techniques of accurate pronunciation, enunciation, and projection of French; class discussions, performances, and critiques. a/y II (1)

323 Counterpoint

Introduction to the concept, historical evolution and composition craft of counterpoint. Major emphasis on eighteenth century style of Bach and his contemporaries. a/y I (2)

326 Orchestration

The range, transposition, sound, and technical characteristics of instruments. Notation, scoring, and arranging for conventional and unique instrument groupings. Prerequisite: 223. a/y I (2)

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. Special fee in addition to tuition. (1-4)

328 Arranging

Study of orchestration techniques applied to commercial music. Prerequisite: 326 or consent of instructor. a/y I (2)

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)

335 Church Music

Survey of choral music related to the church year suitable for the parish choir. Particular emphasis on building the parish music library. a/y (2)

340 Fundamentals of Music Education

Offered spring semester for students planning to be music specialists, this course provides detailed planning of curricula for various musical skills at different grade levels. Group, individual, and small group instruction, sectionals and large group manage-

ment also discussed. Evaluation, grading, written notices, objectives, goals, course goals, and IEP's for special education, observation of a class at two different situations, interviewing for a job, working with parents, faculty, administration, and community. Prerequisite: 240. II (2)

341 Music for Classroom Teachers

Methods and procedures in teaching elementary school music as well as infusing the arts in the curriculum. Offered for students preparing for elementary classroom teaching (non-music education majors). II (2)

342 Materials in K-9 Music

Study of skill acquisitions, music concepts, and analyzing the range of available resources, including ethnic music and computer assisted instruction. Offered for students preparing to become music specialists (music education majors only). Prerequisite: 240, 340. I (2)

344 Beginning Jazz Improvisation

Introduction to small group jazz performance emphasizing individual improvisation in a variety of jazz styles. a/y I (1)

345 Basic Conducting

Introduction to basic patterns, gestures, and conducting techniques; application to appropriate vocal and instrumental scores. I (2)

348 Practicum in Music Education

Field experience including observation and limited teaching in the schools. Discussion and analysis complements field work. Prerequisite: 340; recommended EDUC 251 or 253. I (1)

349 Electronic Music Practicum

Application of electronic techniques to compositional process. Assigned studio time on a regular basis. Prerequisite: 249. (1-3)

351 Accompanying

Practice in accompanying representative vocal and instrumental solo literature from all periods. Special fee in addition to tuition. (1)

352 Organ Improvisation

Basic techniques of improvisation, particularly as related to hymn tunes. a/y (1)

353 Solo Vocal Literature

Survey of solo vocal literature. a/y II (2)

354 History of Music Theatre

A general survey of the evolution of "Drama per Musica" from opera to musical comedy including in-depth study of selected scores. a/y (2)

360 Choir of the West

A study of a wide variety 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 and musical development through choral singing. Auditions at the beginning of fall semester. (1)

362 University Men's Chorus

The study and performance of repertoire for men's voices. Emphasis on individual vocal and musical development. (1)

363 University Singers

The study and performance of repertoire for women's voices. Emphasis on individual vocal and musical development. (1)

365 Chapel Choir

Repertoire experience with appropriate literature for ongoing church music programs of a liturgical nature. Regular performances for university chapel worship. Participation without credit available. (1)

366 Opera Workshop

Production of chamber opera and opera scenes. Participation in all facets of production. Prerequisite: consent of instructor. (1)

368 Choral Union

Rehearsal and performance of major works in the choral/orchestral repertoire. Open to the community as well as PIU students; membership by audition. special fee in addition to tuition. (1)

370 Wind Ensemble

Study and performance of selected wind and percussion literature using various size ensembles. Membership by audition. (1)

371 Concert Band

Study of selected band literature through rehearsal and performance. Designed for the general university student. Prerequisite: having played instruction through at least junior year of high school or consent of instructor. (1)

375 University Jazz Ensemble

Study of selected big band literature through rehearsal and performance. Membership by audition. (1)

376 Jazz Laboratory Ensemble

Study of the basic style of playing jazz through rehearsal and performance. Membership by audition. (1)

378 Vocal Jazz Ensemble

Study of selected vocal jazz literature through rehearsal and performance. Membership by audition, concurrent registration in 360, 361, 362 or 363 required. (1)

380 University Symphony Orchestra

Study of selected orchestral literature through rehearsal and performance. Membership by audition. (1)

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)

384 Contemporary Arts Ensemble

A performance ensemble integrating all the arts—literary, visual, and performing. Original performance pieces are conceived, developed, and performed by the ensemble using techniques from story and song to electronics and video. Prerequisite: consent of instructor. (1)

401 Private Instruction: Jazz (1-4)

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 (1-4)

415 Private Instruction: Baritone/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)****420 Private Instruction: Degree Recital (1-4)***1 credit*

Fall and Spring Semesters: One half-hour private lesson per week in addition to daily practice. January: Two 45-minute lessons per week in addition to daily practice. Summer: 6.5 hours of instruction TBA in addition to daily practice.

2-4 credits

Fall and Spring Semesters. Two half-hour lessons per week in addition to daily practice. Summer: 13 hours of instruction TBA in addition to daily practice.

Special fee in addition to tuition.

**421/422 Advanced Keyboard Skills I/II**

Focused study of specialized keyboard skills required in various music major programs. Sections offered for particular types of music students. Prerequisite: Successful completion of the Keyboard Proficiency Jury and B.M. or B.M.E. Jury. a/y (1, 1)

423 Form I

Advanced analysis of literature from Classic, Early and Middle Romantic styles in representative genres and media. II (2)

424 Form II

Advanced analysis of literature from late Romantic, Impressionist, and Nationalistic styles in representative genres and media. Prerequisite: 423. a/y I (2)

425 Form III

Advanced analysis of literature from Modern and Contemporary styles in representative genres and media. Prerequisite: 423. a/y I (2)

427 Advanced Orchestration/Arranging

Continuation of 326 or 328 on an individual basis. Prerequisite: 326 or 328. May be repeated for additional credit. Special fee in addition to tuition. (1-2)

431 History of Piano Literature and Performance

A study of representative piano compositions of all periods. a/y (2)

432 Music of the World's People

Introduction to ethnomusicology; techniques of studying music within cultural contexts. In-depth case studies of one American Indian musical culture, followed by music of urban American blues, Ghanaian, Black American, Balkan, Russian, and Indian styles. Includes field study project of one musical culture. 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 Masterpieces of Sacred Music Literature

A survey of Judeo-Christian music through the study of representative major vocal/choral 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)

439 Senior Seminar: Topics in Music Literature

Directed study of selected topics in music literature. Prerequisite: senior standing. Open to juniors for non-degree credit. I (4)

442 Methods in K-9 Music

Orff-Schulwerk and Kodaly techniques for upper elementary and middle school children. Offered for students preparing to become music specialists (music education majors only). Prerequisite: 342. II (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. II (2)

444 Methods and Materials for School Band Music

The organization and administration of the secondary school music curriculum with particular attention to the needs of the band program. Organization, management, teaching methods, rehearsal techniques, and wind-percussion literature appropriate for the various age and experience levels of students in grades 4-12. Prerequisite: 340, 348. II (3)

445 Advanced Conducting

Refinement of patterns, gestures, and conducting techniques; application to appropriate vocal and instrumental scores. Prerequisite: 345, Section A—Instrumental; Section B—Choral. II (2)

448 Practicum in Studio Pedagogy

Study of pedagogical techniques in the private lesson setting, including opportunities for application in teaching situations. May be repeated for additional credit. Prerequisite: consent of instructor. Special fee in addition to tuition. (1)

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.

453 Vocal Pedagogy

Physiological, psychological, and pedagogical aspects of singing. a/y I (2)

454 Methods and Materials for String Teachers

Methods and techniques of teaching strings to all ages and levels, from the beginner to the advanced student. Special emphasis on the physiological and psychological approach to the instrument. Study of string pedagogy in the classroom as well as individual instruction. Prerequisite: 340, 348 or consent of instructor. II (3)

491, 491 Independent Study

Prerequisite: consent of 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 (1-4)****515 Private Instruction: Baritone/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)****520 Private Instruction: Conducting (1-4)****1 credit**

Fall and Spring Semesters: One half-hour private lesson per week in addition to daily practice. January: Two 45-minute lessons per week in addition to daily practice. Summer: 6.5 hours of instruction TBA in addition to daily practice.

2-4 credits

Fall and Spring Semesters. Two half-hour lessons per week in addition to daily practice. Summer: 13 hours of instruction TBA in addition to daily practice.

Special fee in addition to tuition.

527 Composition

A systematic approach to contemporary music composition; students create, notate, and perform works for solo, small and large ensembles. May be repeated for credit. (1-4)

529 Topics in Music Theory

a/y summer only. (4)

532 Music Bibliography and Research Techniques

Survey of the main research tools available for advanced work in music. a/y summer only. (2)

539 Topics in Music History

a/y summer only. (4)

545 Seminar in Advanced Conducting

Directed study of selected scores for large and small ensembles, vocal and instrumental. May be repeated for credit. (2)

549 Electronic Music Synthesis

Directed study of electronic music literature, techniques, and composition. May be repeated for credit. (1-2)

551 Accompanying

Practice in accompanying representative vocal and instrumental solo literature from all periods. Accompanying in performance will be required. Special fee in addition to tuition. (1)

560 Choir of the West

A study of choral ensemble rehearsal techniques with emphasis on score analysis. (1)

561 University Chorale

A study of choral ensemble rehearsal techniques with emphasis on vocal pedagogy in the rehearsal. (1)

565 Opera Workshop

Production of chamber opera and opera scenes. Participation in all facets of production. Prerequisite: consent of instructor. (1)

568 Choral Union

Rehearsal and performance of major works in the choral/orchestral repertoire with emphasis on score analysis. Special fee in addition to tuition. (1)

570 Wind Ensemble

A study of band rehearsal techniques with emphasis on score analysis. (1)

575 University Jazz Ensemble

A study of jazz ensemble rehearsal techniques with emphasis on stylistic considerations. (1)

578 Vocal Jazz Ensemble

Study of vocal jazz ensemble rehearsal techniques with emphasis on stylistic considerations. Membership by audition; concurrent registration in 560 or 561 required. (1)

580 University Symphony Orchestra

A study of orchestra ensemble rehearsal techniques with emphasis on score analysis. (1)

581 Chamber Ensemble

Analysis, rehearsal, and performance of selected instrumental chamber music. Prerequisite: consent of instructor. (1)
Section A—String; Section B—Brass; Section C—Woodwind;
Section D—Early Instruments; Section E—Guitar;
Section F—Percussion.

583 Contemporary Directions Ensemble

Public and laboratory performance of contemporary music. Emphasis on score analysis. (1)

583 Two-Piano Ensemble

Performance of two-piano and piano duet literature, including score analysis. (1)

584 Contemporary Arts Ensemble

A multi-arts ensemble with emphasis on composition techniques, repertoire, and performance. (1)

590 Graduate Seminar

a/y summer only. (1-4)

596 Research in Music (1-4)**599 Thesis (2-4)**

Division of Natural Sciences

The Division of Natural Sciences fulfills a two-fold purpose. It provides preparation for future science professionals and creates a critical scientific awareness vital to any well-educated citizen. The division offers strong programs in the sciences, mathematics, and engineering, providing both pre-professional preparation and undergraduate majors. The study of natural sciences encourages all students to expand their horizons in the liberal arts, and fosters a concern for the larger questions of human values.

Facts provide a foundation for science, but the study of science includes more than learning facts. The science student learns to use available resources so that established facts and new observations related to any chosen problem can be obtained and interpreted. The science student learns to solve problems creatively.

FACULTY: Tonn, *Divisional Dean*; faculty members of the Departments of Biology, Chemistry, Computer Science, Earth Sciences, Engineering, Mathematics, and Physics.

As a division within the College of Arts and Sciences, the Division of Natural Sciences offers major programs in each department leading to B.A. and B.S. degrees, minor programs, and core courses which fulfill general university requirements. The departments provide supporting courses for interdisciplinary programs within the sciences and for other schools of the university. The B.S. in Medical Technology and M.A. and M.S. in Computer Sciences degree programs are also offered. Courses for B.A. in Education degrees with majors and minors in the natural sciences disciplines are available. Specific course offerings and degree requirements are listed under:

| | |
|-------------------------|---------------------------|
| Biology | Engineering |
| Chemistry | Medical Technology |
| Computer Science | Mathematics |
| Earth Sciences | Physics |

See also the sections of this catalog on *Environmental Studies* and on the Health Sciences (under *Pre-professional Programs*).

Course Offerings

The following courses are offered under Natural Sciences. Other courses suitable for meeting the CORE I requirements in Natural Sciences/Mathematics may be found in each of the listings for the departments in the division.

204 History of Science

A survey of the history of science from ancient times to the present. Include areas of astronomy, biology, medicine, physics, geology, chemistry, mathematics, and technology. Discussion of the relation of science to the society of the time. Laboratory demonstrations of selected experiments. a/y I 1995-96 (4)

206 Descriptive Astronomy

Stars and their evolution, galaxies and larger structures, cosmology, and the solar system. Emphasis on observational evidence. Evening observing sessions. No prerequisite courses in science or mathematics. Fulfills Natural Sciences/Mathematics core requirement, line 1 or 2. II (4)

School of Nursing

The School of Nursing is a professional school which combines nursing science with a strong foundation in the liberal arts and the humanities to prepare undergraduate students for generalist nursing practice; builds upon undergraduate nursing educational experiences to prepare nurses for advanced practice in specific specialties; and responds to ongoing education and technological learning needs of practicing nurses to remain current, competent practitioners or to revise the focus of their practice. The school exemplifies the university's mission of educating for service in an environment that encourages questioning, debate, diversity, lifelong learning, and spirituality as vital elements in the human quest for wholeness. Its continuum of educational programs employs dynamic learning opportunities that challenge students to develop skills, attitudes, values, and roles which facilitate individuals, families, and communities to meet their health and wellness needs.

Degree programs within the School of Nursing include the Bachelor of Science in Nursing for basic nursing students, licensed practical nurses, and registered nurses, and the Master of Science in Nursing with Nursing Administration, Continuity of Care, and Nurse Practitioner areas of concentration. The Nurse Practitioner Concentration focuses on preparing Family, OB/GYN, and Geriatric Nurse Practitioners.

A program leading to Educational Staff Associate certification is available for school nurses through the Center for Continued Nursing Learning. Course work is offered in collaboration with the School of Education and the Office of the Washington State Superintendent of Public Instruction.

Workshops and short courses for nurses and others involved in health care are offered through the Continuing Nursing Education Program.

FACULTY: Langan, *Dean*; Pass and Schultz, *Associate Deans*; Aikin, Allen, Burns, Butcher, Cardwell, Ellis, Fitzgerald, Gaspar, Goodwin, Herman-Bertsch, Hirsch, Hughes, Klisch, Levinsohn, Maloney, Minahan, L. Olson, Philichi, Renaud, Robinson, Stewart, Vancini, Wood; Assisted by Rinehart, Schaffler.

UNDERGRADUATE PROGRAMS: The basic undergraduate program is designed for students with no previous preparation in nursing. Graduates who successfully complete the program are eligible to write the NCLEX examination for licensure as registered nurses. They are prepared for beginning professional nursing positions in hospitals and other health agencies. A special sequence of study is available which awards credit and provides credit by examination options for licensed practical nurses. There also is a sequence for registered nurse students, graduates from diploma or associate degree programs, who wish to earn the Bachelor of Science in Nursing degree. These undergraduate programs provide a foundation for graduate study in nursing.

Under the direct supervision of its faculty members, the School uses hospitals, health agencies, and schools in the community as well as the PLU Wellness Center to provide optimal clinical learning experiences for its students.

The School of Nursing is approved by the Washington State Nursing Commission and accredited by the National League for Nursing.

ADMISSION AND CONTINUATION POLICIES:

High School Preparation: It is strongly recommended that applicants complete a program in high school which includes: English, 4 years; mathematics, 2 years (preferably algebra and geometry); social sciences, 2 years; one foreign language, 2 years; laboratory sciences, 2 years (including chemistry); electives, 3 years.

ADMISSION TO THE UNIVERSITY: Pacific Lutheran University welcomes applications from all students who have demonstrated capacities for success at the baccalaureate level. Students who present appropriate academic records and personal qualities are admitted either fall or spring semester. Application procedure and other details are found elsewhere in this catalog. (Students must be accepted by the university before acceptance by the School of Nursing.)

ADMISSION TO THE SCHOOL OF NURSING: Students seeking admission to the basic program, the LPN to BSN sequence, or the RN to BSN sequence must make formal application to both the university and the School of Nursing. Basic students are admitted to the School of Nursing to begin nursing courses each fall and spring semester. Students enrolled in the LPN or RN to BSN sequences generally begin in the fall only. Both full-time and part-time programs of study are available.

Applications for admission to the nursing major are available from the School of Nursing. All application materials including official transcripts are reviewed by the School of Nursing Admissions and Academic Progress Committee and ranked according to stated admission criteria.

Students desiring admission to either fall or spring semester of the following academic year must submit their applications by March 1. The number of available spaces each semester in the School of Nursing is limited; therefore, the selection of students for admission may be competitive. Students desiring to begin the nursing sequence in either fall or spring semester, and who have applied by the March 1 deadline, are notified by May 1. Students are admitted to the term of their choice insofar as it is possible. Additional applications from students wishing to be considered for any remaining places in the spring semester must be submitted by June 30 with notification by August 15.

If there are more applicants for the two semesters of the academic year than can be accommodated, qualified candidates are placed on a waiting list for admission to the spring class if spaces become available. If vacancies occur for the fall semester, those students who have been admitted for spring but who requested fall placement are given first priority. Late applications (after June 30) are reviewed when received and, if the applicant is qualified, he or she is added to the waiting list. Persons on the waiting list for the year who are not admitted because of a lack of space but who continue to desire admission to the nursing major, must request, in writing, that their applications be considered for the following fall.

All potential or pre-nursing students are urged to seek early academic advisement from the admissions coordinator in the School of Nursing in order to enroll for appropriate prerequisites and avoid unnecessary loss of time. The School of Nursing reserves the right of curriculum modification and revision as long as it does not hinder students' progress toward graduation.

ADMISSION CRITERIA*

Minimum criteria for admission to the School of Nursing include:

1. Admission to Pacific Lutheran University. Applicants must have been admitted to Pacific Lutheran University before consideration of their application to the School of Nursing. Admission to the university does not guarantee admission to the School of Nursing.
2. Completion, or pending satisfactory completion of 26 semester credit hours of specified prerequisite course work at PLU, a community college or another accredited university

(comparable course listings are available on request) including Psychology 101 (Introduction to Psychology), Biology 205, 206 (Human Anatomy and Physiology), and Chemistry 105 (Chemistry of Life). RNs and LPNs should also have completed Psychology 352 (Development: Infancy to Maturity) and Sociology 330 (The Family) if they plan to fulfill requirements for the nursing sequence within the described time frame.

3. A minimum grade of 2.00 in each nursing prerequisite course.
4. A cumulative grade point average of 2.5 or higher.
5. Completion of the university graduation math requirement (intermediate algebra at the college level with a grade of C or higher).
6. Physical health and emotional stability sufficient to meet the demands of nursing and provide safe patient care.
7. Fluency in speaking, reading, and writing English.
8. Washington State Patrol Criminal History clearance relative to Child/Adult Abuse Information Act as required of health care workers.
9. Submission of all documents to the School of Nursing by the designated deadlines.

* When the number of qualified applicants exceeds the enrollment limits, the following factors are used to prioritize the admission decisions: grade point average, number of prerequisite course requirements completed, and admission date to the university. Preference is given to applicants who entered PLU as freshmen.

Applicants who have chronic health conditions or disabilities which require alterations to the program of study as approved by the Washington State Board of Nursing, or which prevent the practice of nursing with reasonable skill and safety, should be aware of the possibility that they may not be eligible to sit for the NCLEX licensing examination or obtain a license to practice nursing. Questions should be addressed directly to the Washington State Nursing Commission Nurse Practice Manager at 206-586-8186.

CONTINUATION POLICIES:

1. Completion of approved CPR class – adult and pediatric – before beginning nursing classes with yearly updates.
2. Completion of approved first aid course before beginning nursing classes (waived for RNs, LPNs, EMTs, paramedics).
3. Nursing courses all have prerequisites and must be taken in sequence and/or concurrently as identified in the curriculum plan.
4. A minimum grade of 2.0 (C) must be achieved in all required nursing courses. A student receiving a grade of less than 2.0 in any course which is a prerequisite to another nursing course may not continue in the nursing sequence until the prerequisite course is repeated with a grade of 2.0 or above. (Other policies regarding progression/continuation can be found in the Undergraduate Nursing Student Handbook.)
5. Nursing majors may have no more than 4 semester credit hours of non-nursing courses to be completed at the time of enrollment in the final semester of nursing courses.
6. Incomplete grades in nursing courses must be converted to a passing grade (2.0 or above) before the first day of class of the subsequent semester.
7. Students taking medical or other withdrawals from nursing courses may return to the School of Nursing in accordance with policies listed in the Undergraduate Nursing Student Handbook on a space available basis.
8. The School of Nursing reserves the right to request withdrawal of nursing students who fail to demonstrate academic or clinical competence or who fail to maintain professional conduct. Unsafe practice constitutes grounds for immediate dismissal from the clinical component.

HEALTH: Nursing students are responsible for maintaining optimal health and are teachers of health. Physical examinations, x-rays, and immunizations are required before admission to the program, and periodically thereafter, and are the responsibility

of students. All students must carry personal health/accident insurance.

ENGLISH PROFICIENCY: A certain level of English proficiency is necessary for academic success in nursing as well as for patient safety. Students who are identified by the university as needing the ESL sequence of courses will be required to take the ESL courses before entrance to the School of Nursing or to take the TOEFL and score at least 550.

All students for whom English is their second language must also take and pass the SPEAK test before progression into the junior year of the nursing major. The test is given through the Intensive English Language Institute at the university for a nominal cost to the student. The test consists of seven sections measuring pronunciation, grammar, and fluency. A minimum score of 2.2 (out of a possible 3) in each of the four areas of pronunciation, grammar, fluency, and comprehensibility, and a minimum 2.0 in all the pronunciation sections is considered passing. Students scoring below these levels on pronunciation will be required to obtain additional coursework or assistance before retaking the SPEAK.

ESL students should also be aware that they may not be able to complete the program of study within the described time frame. Individual advising is available and is directed toward assisting students to be successful.

ADDITIONAL COSTS: In addition to regular university costs, students must provide their own transportation between the university campus and the clinical laboratory areas beginning with the first nursing course. Public transportation is limited, so provision for private transportation is essential. Students are required to carry professional liability insurance in specified amounts 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 and equipment (wristwatch, scissors, stethoscope) are also the responsibility of the student.

A Learning Resources Fee of \$55 per semester is charged to cover practice and computer laboratory materials, equipment and supplies. The fee is identified with specific courses and is payable to the Business Office along with university tuition.

Standardized testing fees of approximately \$35.00, payable directly to the School of Nursing, are assessed at the time of enrollment in the final semester of nursing studies.

Programs of Study

PREREQUISITE COURSES TO NURSING MAJOR:

Prerequisite courses to be completed before enrollment in the nursing sequence include:

| COURSE | CREDIT |
|--|--------|
| Biology 205, 206 (Anatomy and Physiology) | 4, 4 |
| Biology 201 (Microbiology)* | 4 |
| Chemistry 105 (Chemistry of Life) | 4 |
| Sociology 330 (The Family)* | 4 |
| Psychology 101 (Introduction to Psychology) | 4 |
| Psychology 352 (Development: Infancy to Maturity)* | 4 |
| Intermediate Algebra | 4 |

(if two years college prep math not completed in high school with grade of C or higher)

*Basic students — corequisite - see curriculum plan.

Prerequisite courses may be taken at PLUJ or at most junior/ community colleges.

BSN BASIC PROGRAM: The curriculum plan and its implementation are designed to foster growth and to encourage initiative and self-direction on the part of students. In addition to nursing requirements, students are expected to meet university requirements.

Nursing courses must be taken concurrently and in sequence as indicated in the sample curriculum, and, if enrolled full time,

normally extend over six semesters. Part-time enrollment also is possible. 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.

First Year - Pre Nursing

Fall Semester

| | |
|---|------------|
| Biology 205 – Human Anatomy and Physiology | 4 |
| Psychology 101 – Introduction to Psychology | 4 |
| English 101 – Writing Requirement | 4 |
| GUR*/Core | 4 |
| Physical Education 100 – Personalized Fitness Program | 1 |
| | 17 credits |

January-Term

| | |
|---------------------------|-----------|
| Freshman Experience | 4 credits |
|---------------------------|-----------|

Spring Semester

| | |
|--|------------|
| Chemistry 105 Chemistry of Life | 4 |
| GUR*/Core (Religion) | 4 |
| Biology 206 – Human Anatomy and Physiology | 4 |
| Critical Conversation | 2 |
| Physical Education | 1 |
| | 15 credits |

Second Year

Fall Semester

| | |
|---|------------|
| Biology 201 – Introductory Microbiology | 4 |
| GUR*/Core | 4 |
| Psychology 352 – Development: Infancy to Maturity | 4 |
| Nursing 212 – Introduction to Health Care | 2 |
| Nursing 251 – Commonalities in Nursing I | 2 |
| Physical Education | 1 |
| | 17 credits |

January-Term

| | |
|-----------------------------------|-----------|
| Elective or GUR* (optional) | 4 credits |
|-----------------------------------|-----------|

Spring Semester

| | |
|---|------------|
| Nursing 232 – Pharmacology in Nursing | 2 |
| Nursing 252 – Commonalities in Nursing II | 2 |
| Nursing 263 – Health Assessment | 2 |
| Nursing 273 – Pathophysiology | 3 |
| GUR*/Core | 4 |
| Physical Education | 1 |
| | 14 credits |

Third Year

Fall Semester

| | |
|---|------------|
| Nursing 322 – Psychosocial Nursing: Clinical | 2 |
| Nursing 324 – Psychosocial Nursing | 4 |
| Nursing 333 – Physiological Nursing I | 2 |
| Nursing 342 – Physiological Nursing I: Clinical | 3 |
| Sociology 330 – The Family | 4 |
| | 15 credits |

January-Term

| | |
|-----------------------------------|-----------|
| Elective or GUR* (optional) | 4 credits |
|-----------------------------------|-----------|

Spring Semester

| | |
|---|------------|
| Nursing 352 – Nursing in the Childbearing Years | 2 |
| Nursing 362 – Nursing in the Childbearing Years: Clinical | 2 |
| Nursing 372 – Nursing of Children | 2 |
| Nursing 382 – Nursing of Children: Clinical | 2 |
| Nursing 392 – Nursing Research | 2 |
| GUR*/Core | 4 |
| | 14 credits |

Fourth Year

Fall Semester

| | |
|--|------------|
| Nursing 423 – Physiological Nursing II | 3 |
| Nursing 433 – Physiological Nursing II: Clinical | 3 |
| Nursing 462 – Leadership in Nursing | 2 |
| Nursing 474 – Nursing Synthesis | 4 |
| GUR*/Core | 4 |
| | 16 credits |

January-Term

Elective or GUR* (optional) 4 credits

Spring Semester

Nursing 436 – Community Health Nursing: Families 3
 Nursing 453 – Community Health Nursing: Clinical 3
 Nursing 472 – Issues and Trends in Nursing 2
 Nursing 473 – Community as Client 3
 11 credits

*GUR = general university requirement

A minimum of 128 semester credit hours is required for the baccalaureate degree. The sequence of required nursing courses comprises 57 semester credit hours.

BSN SEQUENCE FOR LICENSED PRACTICAL NURSES:

This sequence of study is designed to provide career mobility for the experienced licensed practical nurse desiring the Bachelor of Science in Nursing degree. The program allows students the opportunity to validate prior knowledge and clinical competence, enabling progression through the BSN curriculum within a twenty-four month period following completion of prerequisite courses, when enrolled full-time. Part-time enrollment options also are available.

Prospective students are encouraged to seek early advisement to reduce time spent in completing prerequisites and facilitate progress. Some of the courses have special sections for enrolled LPNs. Also, efforts are made to arrange class times to accommodate schedules of LPNs who are working.

Admission/Transfer: Admission to PLU is required before making formal application to the School of Nursing. Licensed practical nurses who began their higher education at other accredited colleges or universities may apply for admission with advanced standing. A grade point average of 2.5 is required by the School of Nursing. The university graduation math requirement (two years of college prep math or an approved math course at the baccalaureate level) must be met before admission.

Transfer Credit: A minimum grade of C in college courses is required for transfer of credit. Transfer into PLU with junior standing (60 semester credit hours) reduces the Religion requirement from 8 to 4 semester credit hours. A maximum of 64 semester (96 quarter) credit hours of community college work is transferable. A quarter credit hour is the equivalent of two-thirds a semester credit hour. To qualify as degree candidates, students must take the final 32 semester hours in residence at PLU.

Advanced Placement:

Non-nursing: Advanced placement may be available through national standardized or departmental examinations. Inquiries should be directed to the Office of Admissions or the department or school offering the particular subject.

Nursing: LPNs may receive credit by examination for selected courses. Each student is individually counseled regarding the appropriateness of seeking such credit. Eligibility for the clinical proficiency examination is determined by the faculty and is based on documentation of significant work and/or student experience in the specific area. Exams must be successfully passed to receive the credit.

The following ACT/PEP* standardized tests are available and, if successfully completed (45 or above), provide credit for the nursing course(s) indicated:

1. Fundamentals of Nursing – Exam #403 – see #3
2. Commonalities in Nursing: Area B – Exam #478 – see #3
3. If Exams #403 and/or #478 are successfully passed, the LPN student is eligible to take ■ Nursing Clinical Proficiency Exam which will allow credit for Nursing 251 (Commonalities in Nursing I) and Nursing 252 (Commonalities in Nursing II), respectively.

*ACT/PEP exams are offered at specific testing sites throughout the state and country, including PLU, on scheduled dates as well as by

the military services. Pre-registration is required. Study guides, testing dates, and registration packets are available in the School of Nursing.

LPN TO BSN PROGRAM OF STUDY: (Full-Time Sequence)**First Year**

| Credit by Examination | CREDITS |
|--|---------|
| Nursing 251 – Commonalities I - required | 2 |
| Nursing 252 – Commonalities II - potential | 2 |
| <i>(Complete during spring before beginning classes)</i> | |

Fall Semester

| | |
|---|---|
| Nursing 212 – Introduction to Health Care | 2 |
| Nursing 263 – Health Assessment | 2 |
| Nursing 273 – Pathophysiology | 3 |
| Nursing 232 – Pharmacology in Nursing | 2 |
| General University Requirement (GUR) | |

January-Term

GUR (if needed) 4

Spring Semester

| | |
|---|---|
| Nursing 324 – Psychosocial Nursing | 4 |
| Nursing 322 – Psychosocial Nursing: Clinical | 2 |
| Nursing 333 – Physiological Nursing I | 2 |
| Nursing 342 – Physiological Nursing I: Clinical | 3 |
| GUR | 4 |

Summer Session

GUR and/or Sociology 330 – The Family 4

Second Year*Fall Semester*

| | |
|---|---|
| Nursing 352 – Nursing in the Childbearing Years | 2 |
| Nursing 362 – Nursing in the Childbearing Years: Clinical | 2 |
| Nursing 372 – Nursing of Children | 2 |
| Nursing 382 – Nursing of Children: Clinical | 2 |
| Nursing 392 – Nursing Research | 2 |
| GUR | |

January-Term

GUR (if needed) 4

Spring Semester

| | |
|--|---|
| Nursing 425 – Physiological Nursing II | 3 |
| Nursing 433 – Physiological Nursing II: Clinical | 3 |
| Nursing 462 – Leadership in Nursing | 2 |
| Nursing 474 – Nursing Synthesis | 4 |

Summer Session

| | |
|--|---|
| Nursing 436 – Community Health Nursing: Families | 3 |
| Nursing 453 – Community Health Nursing: Clinical | 3 |
| Nursing 472 – Issues and Trends in Nursing | 2 |
| Nursing 473 – Community as Client | 3 |

Part-time programs of study are available according to student need within the framework of the curriculum. An appointment should be made with the LPN-BSN Coordinator to develop an individualized plan for program completion.

BSN SEQUENCE FOR REGISTERED NURSES: Registered nurses, graduates from NLN and state-approved associate degree and diploma programs, are encouraged to pursue the Bachelor of Science in Nursing at Pacific Lutheran University. RN students meet the same requirements as basic students. Most are admitted with advanced standing, having completed academic coursework elsewhere. A number of the required nursing courses have special sections for enrolled RN students. Schedules are arranged to accommodate the working nurse with many courses being taught in concentrated blocks of time.

Prospective students are encouraged to seek early advisement to reduce time spent in completing prerequisites and facilitate progress. Once general university requirements and prerequisites have been met, the program may be completed in 12 months with full-time enrollment. Various part-time options are available.

Transfer Credit: Registered nurses who began their higher education at other accredited colleges or universities may apply for transfer credit. A grade point average of 2.5 is required by the School of Nursing. A minimum grade of C in college courses is required for transfer of credit. A maximum of 64 semester (96 quarter) credit hours of community college work is transferable. A quarter credit hour is the equivalent of two-thirds of a semester credit hour. To qualify as degree candidates, students must take the final 32 semester hours in residence at PLU. A total of 128 semester credit hours are required for graduation.

Advanced Placement:

Non-nursing: Advanced placement may be available through national standardized or departmental examinations. Inquiries should be directed to the Office of Admissions and/or the department or school offering the particular subject.

Nursing: These courses are waived for registered nurse students:

| | |
|---|------------------|
| Nursing 232 – Pharmacology in Nursing | 2 |
| Nursing 251 – Commonalities in Nursing I | 2 |
| Nursing 252 – Commonalities in Nursing II | 2 |
| | <u>6 credits</u> |

RN students may earn credit by examination for these courses:

| | |
|---|-------------------|
| Nursing 322 – Psychosocial: Clinical | 2 |
| Nursing 324 – Psychosocial: Theory | 4 |
| Nursing 352 – Nursing in Childbearing Years | 2 |
| Nursing 362 – Nursing in Childbearing Years: Clinical | 2 |
| Nursing 372 – Nursing of Children | 2 |
| Nursing 382 – Nursing of Children: Theory | 2 |
| Nursing 333 – Physiological Nursing I | 2 |
| Nursing 342 – Physiological Nursing I: Clinical | 3 |
| Nursing 423 – Physiological Nursing II | 3 |
| Nursing 433 – Physiological Nursing II: Clinical* | 3 |
| Nursing 474 – Nursing Synthesis* | 4 |
| | <u>29 credits</u> |

*Must have had the equivalent of at least one year of full-time clinical practice experience as a registered nurse to be eligible for credit by examination.

Other opportunities to earn credit by examination may be available on an individual basis based on prior coursework and experience, but no more than 30 credits may be achieved by this method.

The following ACT/PEP standardized tests are available and, if successfully completed, provide credit for the nursing course as indicated:

1. Health Support Area II – Exam #577 – Nursing 333/342 (Physiological Nursing I: Theory and Clinical)
2. Maternal and Child Nursing (Baccalaureate Level) – Exam #457 – Nursing 352/362 (Nursing in the Childbearing Years: Theory and Clinical) and Nursing 372/382 (Nursing of Children: Theory and Clinical)
3. Psychiatric/Mental Health Nursing – Exam #503 – Nursing 324/322 (Psychosocial Nursing: Theory and Clinical)
4. Adult Nursing – Exam #554 – Nursing 423 (Physiological Nursing II: Theory)

If Exam #554 is successfully passed, the RN student is eligible to take a Nursing Clinical Proficiency Exam which will allow credit for Nursing 433 (Physiological Nursing II: Clinical).

Receipt of credit by examination for Nursing 474 (Nursing Synthesis) involves the development of a portfolio documenting previous work experience which meets the course objectives.

If a "Pass" grade or above (45 if ACT/PEP) is not achieved on the designated test or if the RN student elects not to seek credit by examination, the student must enroll in the course as offered.

ACT/PEP exams should be taken before beginning the RN sequence or, if such a plan is not possible, before the subsequent courses for which they are prerequisite. The tests are available at a number of testing sites throughout the state and country including PLU with pre-registration required. Specific registration materials, study guides, and testing dates are available from

the School of Nursing. (The proficiency exam for Nursing 433 and development of the portfolio for Nursing 474 will take place at the designated time during the program sequence.)

RN TO BSN PROGRAM OF STUDY: (Full-Time Sequence)

| Fall Semester | CREDITS |
|--|-------------------|
| Nursing 263 – Health Assessment | 2 |
| Nursing 273 – Pathophysiology | 3 |
| Nursing 212 – Introduction to Health Care | 2 |
| Religion or Sociology 330 – The Family | 4 |
| or Psychology 352 – Development: Infancy to Maturity | 4 |
| | <u>11 credits</u> |

Clinical Proficiency Exam

Nursing 433 – Physiological Nursing II: Clinical

January-Term

GUR (if needed)

Spring Semester

| | |
|--|----------------------|
| Nursing 392 – Nursing Research | 2 |
| Nursing 436 – Community Health Nursing | 3 |
| Nursing 453 – Community Health Nursing: Clinical | 3 |
| Religion or Elective | 2-4 |
| | <u>10-12 credits</u> |

Complete Portfolio (RN's with more than 1 year of clinical experience)

Nursing 474 – Nursing Synthesis

Summer Session

| | |
|---|------------------|
| Nursing 462 – Leadership in Nursing | 2 |
| Nursing 472 – Issues and Trends | 2 |
| Nursing 473 – Community as Client | 3 |
| | <u>7 credits</u> |

Various part-time options are available and can be worked out on an individual basis. If students have less than the equivalent of one year of full-time work experience, Nursing 433 and 474 are included in the program of study.

MASTER OF SCIENCE IN NURSING: Consult the graduate section of this catalog for details of the program leading to the degree of Master of Science in Nursing and/or contact the School of Nursing Graduate Program (535-8872).

SCHOOL NURSE CERTIFICATION: Contact the School of Nursing Center for Continued Nursing Learning (535-7683).

WORKSHOPS AND SHORT COURSES: Contact the School of Nursing Center for Continued Nursing Learning (535-7683).

The information contained herein reflects an accurate picture of the programs of study leading to a Bachelor of Science in Nursing degree from 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.

Course Offerings

212 Introduction to Health Care

Socio-cultural, political, economic, ethical, and legal issues influencing contemporary health care. Focus on major health problems and health care delivery systems. Historical perspectives and trends in professional nursing and nursing education. Prerequisite: Sophomore standing in Nursing. (2)

232 Pharmacology in Nursing

Focuses on pharmacological principles of the major drug classes using a systems approach. Emphasis on pharmacokinetics, mechanisms of action, undesirable effects, and nursing implications. Discussion of client teaching and nursing responsibilities regarding the administration of medication. Prerequisite: 251. Pre- or corequisite: 273. (2)

251 Commonalities in Nursing I

Introduction to the use of the nursing process and psychomotor skills in client care. Opportunities to practice nursing skills in the nursing laboratory and elected clinical settings. Prerequisites: BIOL 205-206, CHEM 105, PSYC 101. Prerequisite or corequisite: NURS 212. (2)

252 Commonalities in Nursing II

Emphasis on the role of the professional nurse in implementation of the nursing process. Selected clinical experiences with adults in extended health care facilities. Prerequisites: BIOL 201, PSYC 352, NURS 251. Prior or concurrent enrollment in NURS 232, 263, 273. (2)

263 Health Assessment

Health assessment of children and adults. Emphasis on interviewing skills and physical, developmental, and psychosocial assessment techniques as part of the nursing process. Prerequisite: BIOL 205, 206, CHEM 105, NURS 212, 251. (2)

273 Pathophysiology

Pathophysiological concepts associated with human responses to real and potential threats to health. Immune response, reaction to injury and infection, pain, disturbances of circulation and respiration, neurological dysfunction and abnormal cell growth as clinical manifestations of selected disorders organized around framework of categories of human functioning. Open to non-majors. Prerequisites: BIOL 201, 205, 206. (3)

322 Psychosocial Nursing: Clinical

Clinical application of the nursing process to promote optimal mental health for clients along the mental health-illness continuum. Emphasis on implementing a variety of therapeutic techniques and nursing interventions including therapeutic communication. Prerequisites: PSYC 352, prior or concurrent enrollment in NURS 324. (2)

324 Psychosocial Nursing

Use of the nursing process in the promotion of mental health for clients along the mental health-illness continuum. A holistic approach to understanding variety of nursing interventions and other contemporary therapeutic modalities in the treatment of clients with mental health problems. Introduction to selected acute and chronic psychiatric disorders. Prerequisites: 232, 252, 263, 273, PSYC 352. (4)

333 Physiological Nursing I

Basic interruptions in the bio-psychosocial processes with resultant health deviations. Focus on selected pathophysiological disorders of adults with nursing interventions to facilitate adaptation and restoration to maximum level of wellness. Holistic approach to meeting needs of clients and families. Teaching and learning strategies for health promotion, restoration, and maintenance. Prerequisites: 232, 252, 263, 273. (2)

342 Physiological Nursing I: Clinical

Clinical application of concepts of pathophysiology and psychopathology to the care of adult clients in hospital settings. The nursing process as framework for professional practice. Prerequisites: Prior or concurrent enrollment in 333. (3)

352 Nursing in the Childbearing Years

Individual and family adaptations throughout the pregnancy cycle. Physiological and psychosocial-cultural aspects of childbearing. Prerequisites: 322, 324, 333, 342; SOCI 330 (2)

362 Nursing in the Childbearing Years: Clinical

Clinical application of maternal newborn theory and skills in hospital, clinic, community, and home environments. Prerequisites: Prior or concurrent enrollment in 352. (2)

372 Nursing of Children

Nursing and health care of children from infancy through adolescence. Childhood needs, childbearing practices, and parental roles. Prerequisites: 322, 324, 333, 342, SOCI 330. (2)

382 Nursing of Children: Clinical

Clinical application of pediatric theory and skills in acute, primary care, and community facilities. Prerequisites: Prior or concurrent enrollment in 372. (2)

392 Nursing Research

Introduction to the research process and basic research skills. Includes purposes of nursing research, problem identification, hypothesis generation and testing, research design, critique process and use of research in nursing. Prerequisites: Have completed 3rd semester of nursing sequence or with consent of Admissions Committee. (2)

423 Physiological Nursing II

Selected complex pathophysiological disorders of a life threatening or chronically disabling nature in adults. Nursing interventions based on understanding the bio-psycho-social disruptions and means of restoring balance to attain optimal level of functioning. Prerequisites: 322, 324, 333, 342, 352, 362, 372, 382, 392. (3)

433 Physiological Nursing II: Clinical

Clinical application of bio-psycho-social, cultural, and spiritual concepts in the care of adult clients in acute care settings. Use of the nursing process and emphasis on cognitive, interpersonal, and psychomotor/technological skills. Prerequisites: Prior or concurrent enrollment in 423. (3)

436 Community Health Nursing: Families

Application of family theory and nursing models to the analysis of needs and care of family clients in community settings. Identification of major public health problems, levels of prevention, health seeking behaviors, health screening, and nursing management of high-risk families. Prerequisites: 322, 324, 333, 342, 352, 362, 372, 382, 392, 423, 433, 474, SOCI 330. (3)

453 Community Health Nursing: Clinical

Clinical application of professional and technical skills in the care of families in community health agencies. Implementation of complex nursing interventions in the home and ambulatory care settings. Refinement of interviewing and case management skills. Opportunity for independent judgment and decision making. Prerequisites: Prior or concurrent enrollment in 436. (3)

462 Leadership in Nursing

Analysis of professional roles and functions in health care delivery systems. Evaluation of the impact of organizational structures on professional nursing practice. Leadership and management styles, concepts of power and authority. Prerequisites: 392 and senior standing in Nursing. (2)

472 Issues and Trends in Nursing

Analysis and evaluation of the impact of selected socio-economic, ethico-legal, and political aspects on professional nursing practice. Professional issues including entry level, credentialing, quality assurance, ethical decision-making and life-long learning. Prerequisites: 392, 423, 433, 462, 474. (2)

473 Community as Client (Clinical)

Nursing strategies for problem solving in community or public health environments. Focus on community assessment, health planning, application of the change process, and health education for high-risk groups. Prerequisites: 462, 474, prior or concurrent enrollment in 436, 453. (3)

474 Nursing Synthesis

Synthesis of critical thinking, independent judgment, decision making, technical and leadership skills in the delivery of health care in acute or chronic situations. Prerequisites: 392, 423, 433, prior or concurrent registration in 462. (4)

491, 942 Independent Study

Prerequisite: Permission of the dean. (1-4)

493 Internship Abroad

525 Models and Theories of Nursing

Focus on the current state of theory development in nursing. Includes the analysis and evaluation of nursing and related models and theories with discussion of their relevance to nursing science and practice. (3)

526 Nursing Leadership and Management

Analysis of principles and processes of management in an increasingly complex health care context. Functions of planning, organizing, staffing, directing and controlling, and selected issues in health care – communication, delegation, power, values, marketing and structure – are examined with emphasis on leadership skill acquisition. (3)

527 Nursing Research

An overview of the research process and its application to nursing practice. Emphasis on evaluation of current research in nursing. Prerequisite: 525. (3)

530 Continuity of Care Nurse Specialist Role

Focus on continuity of care nurse specialist role development emphasizing subroles: expert practitioner, leader, consultant, educator, and researcher. In-depth study leads to development of a role specific position description. Prerequisite or concurrent with 525 or permission of instructor. (2)

531 Theoretical Foundations for Continuity of Care

Critical analysis of nursing and other health related theoretical models underlying advanced practice of the continuity of care nurse specialist. In-depth exploration of advanced practice including: nursing case-management, discharge-planning, quality assurance, and systems analysis. Conceptual synthesis leads to a role specific, process-oriented practice framework. Prerequisite or concurrent: 525, 530. (3)

532 Focused Study in Clinical Specialization

In-depth study of the demographics and epidemiologic trends; clinical management and standards; and key agencies related to selected chronic conditions. Clinical experiences include application of a defined, process-oriented framework for practice in care delivery for chronically ill client/patient groups. Prerequisite or concurrent with 531. (3)

533 Continuity of Care Practicum

Students apply a comprehensive continuity of care model addressing access across agency boundaries within the context of a client-oriented system. Clinical experiences are focused on application of a defined, process-oriented practice framework including advanced assessment to identify needs and resources as well as client/patient/family teaching for select patient groups. Prerequisite: 532, and may be concurrent with 534. (3)

534 Program Development for Continuity of Care

Focus on the synthesis of theoretical models, clinical parameters, and program planning principles. Students develop a continuity of care program for a specific health care population addressing access across agency boundaries within the context of a client-oriented system. Clinical experiences include development of the continuity of care team. Prerequisite or concurrent with 533. (3)

543 Health and Culturally Diverse Populations

Comparative analysis of health beliefs and care practices of western and non-western cultures with emphasis on theoretical and practical dimensions. Seminars focus on cross-cultural view of nursing concepts and professional practices as they relate to values, beliefs, and techniques. Exploration of transcultural caring and curing role behavior and processes of socialization into those roles. Includes contemporary theoretical and research methods for the study of nursing care components. Open to graduate students or senior undergraduate students in good standing with consent of instructor. (2)

545 Life, Death, and Public Policy

Analysis of hard life and death decisions that, increasingly, are making their way into the public policy agenda. The aggregate consequences of the widespread application of biomedical technology will be examined including critical questions. Case studies center around the nurse's role in public policy and decision making. Topics include prenatal intervention, organ transplantation, euthanasia, prevention and lifestyle change, and setting limits on medical care. Open to graduate students or senior undergraduate students with consent of the instructor. (2)

548 Curriculum Development for Nursing

Examination of the theory and practice of curriculum development and evaluation. Students function in the role of a faculty member to plan a curriculum, develop individual courses, and explore methods for course and curriculum evaluation. (2)

549 Teaching in Schools of Nursing

Theoretical and philosophical principles of the teaching/learning process. Teaching strategies and the process of self and student evaluations will be analyzed. Supervised teaching experience included. (2)

556 Financial Management for Health Care Providers

Concepts and processes of financial management for planning, control, and decision making for managers in health care organizations. Introduction to the language of financial management and economics; business plan and budget preparation; variance and trends analysis; issues of cost, quality, and productivity. Computer experience. (3)

559 Nursing Administration Practicum

Synthesize nursing and business administration knowledge through critical analysis, independent judgment, and decision-making. Focus on role analysis, refinement, and theory application in a practice setting. Prerequisites: 526, BUSA 550. (5)

580 Advanced Pathophysiology

Provides the foundation for clinical judgment and client management based on the understanding of pathogenic mechanisms of disease. Content includes interpretation of alterations from normal function, and signs and symptoms indicative of illness. (3)

581 Primary Care

Focus on primary health care concepts across the life span. Students integrate advanced critical decision making and wellness-illness behavior concepts with application to lifestyle changes and communicable and chronic disease processes (e.g., AIDS, STDs). (2)

582 Advanced Family Health Assessment

Exploration of theories, concepts, and advanced practice skills relevant to comprehensive health assessment throughout the life cycle. Emphasis on clinical application of knowledge to primary care of the family within a multicultural environment. Seminar (1 hour) and clinical experiences (4 hours) required. Learning Resources Fee: \$55. (5)

583 Clinical Pharmacotherapeutics

Focus on pharmacotherapeutic management of a variety of common health problems and pregnancy. Legal and ethical implications related to prescriptive responsibilities within the scope of ARNP practice will be included. Meets requirements for initial prescriptive authority in the State of Washington. (2)

584 Family Nurse Practitioner I

Application of theoretical knowledge for assessment and management of family health problems. Learning experiences focus on selected episodic illnesses, chronic conditions, and related health problems throughout the life cycle. Emphasis on diagnostic reasoning and advanced assessment of individuals and families. Knowledge from nursing theories, as well as biological

and behavioral sciences, are integrated. Seminar (1 hour) and clinical experiences (5 hours) required. Prerequisite: 582. (6)

585 Family Nurse Practitioner II

Theory and current research are applied to the comprehensive assessment and management of acute illness and special problems in family primary care. Emphasis on diagnostic reasoning skills in the context of managing complex illness patterns and interruptions in normal family health. Seminar (1 hour) and clinical experiences (7 hours) required. Prerequisite: 584. (8)

586 OB/GYN Nurse Practitioner I

Focus on application of theoretical knowledge for assessment and management of women's health. Learning experiences emphasize women's health promotion needs and routine gynecologic conditions. Content includes the physical and psychosocial dimensions of women's health within a family context across life span development. Seminar (1 hour) and clinical experiences (5 hours) required. Prerequisite: 582. (6)

587 OB/GYN Nurse Practitioner II

Theoretical knowledge and current research are applied to the advanced assessment and management of women experiencing normal pregnancy. Learning experiences focus on health care needs during the prenatal and postpartal periods emphasizing individual client and family needs as well as the psychosocial adjustment of beginning and expanding families in multiple care settings. Seminar (1 hour) and clinical experiences (7 hours) required. Prerequisite: 586. (8)

588 Gerontology Nurse Practitioner I

Students explore application of theory to practice and demonstrate knowledge of normal physiological changes resulting from the aging process. Management of, and interventions for, common client problems are examined. Proficiency in advanced functional assessment of the geriatric client is expected. Seminar (1 hour) and clinical experiences (5 hours) required. Prerequisite: 582. (6)

589 Gerontology Nurse Practitioner II

Nursing management of geriatric clients at various phases along the chronic illness trajectory. Emphasis on recognizing, differentiating, and understanding the interrelationships of complex variables contributing to dysfunction in the aged. Selected theory and research data from nursing, biological, and behavioral sciences are applied. Clinical decision making and development of nursing interventions during on-going interactions with clients and their significant others. Seminar (1 hour) and clinical experiences (7 hours) required. Prerequisite: 588. (8)

590 Role of the Nurse Practitioner

Seminars focus on analysis of the Nurse Practitioner role within the intraprofessional and interprofessional realms of practice, emphasizing collegial working relationships to improve patient outcomes. Students define accountability and responsibility for decision making as Advanced Registered Nursing Practitioners (ARNP). Course requirements include preparation of a paper for publication or major presentation. (1)

592 Independent Study

Opportunities for advanced study in selected topic related to student's area of interest.

597 Computer Application in Nursing Research

Use of selected software programs for computer analysis of data relevant to clinical and nursing research problems. Seminars include decision making regarding statistical strategies appropriate for analysis of problems and data management. Prerequisite: 527. Learning Resources Fee: \$55. (1)

598 Scholarly Inquiry in Nursing Practice

Independent development of research to address a clinical nursing problem of interest. Exploration of the identified prob-

lem will include literature review. Students present and refine their proposals in scheduled seminars. Includes submission of completed proposal and/or submission of a manuscript for publication. (4)

599 Thesis

Application of the research process under the guidance of a faculty committee. May involve replication of a previous study, secondary analysis of research data, an evaluation research project, or an original investigation. (4)

Philosophy

Philosophy is the parent academic discipline that gave birth to today's variety of arts and sciences. It examines basic issues in all fields and explores connections among diverse areas of life. In philosophy the most fundamental and enduring of questions are addressed: How can humans gain knowledge about their world? What limits are there to that knowledge? What is the ultimate nature of the universe? In particular, what is the nature of the human person, and what role or purpose is ours? How should we live? Are there moral, aesthetic, and religious values that can be adopted rationally and used to guide our decisions? Study in philosophy acquaints students with major rival views of the world, encourages them to think precisely and systematically, and helps them to see life critically, appreciatively, and whole.

FACULTY: Cooper, *Chair*; Arbaugh, McKenna, Menzel, Nordby, Reitan.

USES OF PHILOSOPHY: Courses in philosophy meet the needs of a variety of students: (1) those who desire some knowledge of philosophy as a basic element in 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 persons; (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, medicine, 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 exposure to important perspectives, as well as basic skills in interpretation, critical thinking and problem solving, research, analysis, and writing. These — usually coupled with specialized training in other disciplines — fit one for a great variety of positions of vocational responsibility. In most careers, persons with the highest potential for advancement are not those with the most specialized training, but those with the perspective, flexibility and depth, and skills in thought and communication provided by a liberal study such as philosophy.

SUPPORTING PROGRAMS IN PHILOSOPHY FOR

OTHER FIELDS: Students using philosophy to support primary work in other fields may elect a minor or major or some other combination of courses of interest. On approval of the department, one course (4 hours) in another field of study may be used for the philosophy major if it has a direct relationship to the student's individual philosophy program.

Both how philosophy relates to a variety of careers and what specific programs of study are recommended to support work in other disciplines are described in separate brochures available

in the departmental office. These include business, computer science, education, fine arts, health professions, law and public policy, social work, social and natural science, and theological studies.

A DISTINGUISHED PROGRAM: PLU's department of philosophy offers a distinctive course of studies. The permanent faculty all hold the doctorate, have studied at leading institutions, and have participated in professional programs in the United States and Europe. All students, especially majors and minors, receive individual attention and assistance.

UNIVERSITY CORE REQUIREMENT: The general university core requirement of four hours in philosophy may be satisfied by any course offered except 100 Reasoning, and 233 Formal Logic. A variety of 2-4 credit hour courses dealing with moral issues, 226 Moral Problems, 323 Health Care Ethics, and 328 Philosophical Issues in the Law, satisfy this requirement only if 225 Ethical Theory (2 hours) is also taken. The initial course in philosophy is customarily 101, 125, or 225, though rarely are these particular courses strictly a prerequisite for another course. 300-level courses are especially suited for students with particular interests. Faculty consent may be required for registration in some courses.

MINOR: 16 semester hours of approved philosophy courses; for transfer students, at least 8 hours must be taken at PLU. Students considering a minor should discuss their personal goals with departmental faculty.

BACHELOR OF ARTS MAJOR: Minimum of 28 semester hours, including 233 Logic, 435 Advanced Seminar, and any two of the four courses in the history of philosophy sequence (331 Ancient Philosophy, 333 Modern Philosophy, 335 Contemporary Philosophy, and 336 Pragmatism and American Philosophy). On approval of the department, one course (4 hours) in another field of study may be used for the philosophy major if it has a direct relationship to the student's individual philosophy program. Transfer students will normally take 16 or more of their 28 hours at PLU. Students intending to major in philosophy should formally declare this with the department chair and choose a departmental adviser.

HONORS MAJOR:

1. 28 semester hours in philosophy, including 233 Logic, at least two courses in the history of philosophy (331, 333, 335, 336), 435 Advanced Seminar, and 493 Honors Research Project.
2. An honors thesis (part of 493), a major research paper under the supervision of one or more faculty members.
3. Completion of the departmental reading program of primary sources. Honors majors in philosophy are expected to complement their regular courses by reading and discussing 3-4 important works under the personal supervision of department faculty. The reading list should be obtained at an early date from the department chair. It is best that the reading program not be concentrated into a single semester, but pursued at a leisurely pace over an extended period.
4. At least a 3.3 grade point average in philosophy courses, including at least a B in 493.

Course Offerings

100 Reasoning

Development of reasoning skills and an appreciation for the diverse areas to which they apply, for example, in religion, literature, science, and computer language. Students learn how to ask clear questions, recognize and evaluate assumptions and avoid errors of reasoning in arguments. Does not satisfy philosophy core requirement. (2)

101 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. (4)

125 Moral Philosophy

Major moral systems of Western civilization; intensive examination of some contemporary moral theories; critical application to selected moral problems. (4)

225 Ethical Theory

Examination of major moral systems of Western civilization and some contemporary ethical theories. Must be taken concurrently with or before 226, 325, 328 or 323, in order to use those courses for the philosophy core requirement. May not take both 125 and 225 for credit. (2)

226 Moral Problems

Critical application of major historic and contemporary ethical theories to a broad range of selected moral problems. For philosophy core requirement only when paired with 225. (2)

233 Formal Logic

A study of the principles of argument and proof using both natural deduction and axiomatic approaches. An introduction to the use of first order logic in ordinary reasoning and cognitive disciplines, and to the properties of formal systems such as consistency and completeness. Includes an introduction to inductive inference. Does not satisfy philosophy core requirement. (4)

323 Health Care Ethics

Moral problems in health care relationships and delivery systems, considered in relation to fundamental ethical themes and theories generally. Taught in 1-2 hour units, in divisions such as:

- A. *Informed Consent:* Special settings of therapy, research, prisons, mental incompetence.
- B. *Choosing Death:* Valuing life, defining death, "extraordinary means," "killing" vs. "letting die."
- C. *Infants and Children:* Consent and valuing life in newborn care, prenatal diagnosis, child research.
- D. *Distributing Scarce Resources:* Equal access rights, prevention/treatment, life-style effects, etc.

Not for philosophy core requirement unless paired with 225. (1-4)

325 Business Ethics

An examination, in the context of various ethical theories, of the assessment of some particular moral problems confronted in employer-employee relations, advertising, managerial decisions, and corporate social responsibilities. For philosophy core requirement only when paired with 225. (2)

328 Philosophical Issues in the Law

An examination of philosophical issues in law using actual cases as well as philosophical writings. Topics include contract law, sentencing practices, tort liability, and various criminal law defenses. Philosophical themes include natural law and legal positivism, and moral reasoning about individual rights. For philosophy core requirement only when paired with 225. Pre- or co-requisite: one other course in philosophy or legal studies. (4)

331 Ancient Philosophy

The development of philosophical 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. (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. (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. Prerequisite: one previous philosophy course. (4)

336 Pragmatism and American Philosophy

An examination of pragmatism, a major school of American philosophy. Figures include Pierce, James, Mead, and Dewey. Also considered will be those such as Alain Locke, Charlotte Perkins Gilman, and Jane Addams, whose work is part of the pragmatist tradition, and those whose work challenged the development of pragmatist thought (Royce, Santayana, Whitehead). Links with current feminist and continental thought, as well as future possibilities for democratic theory. Prerequisite: one previous philosophy course or consent of instructor. (4)

338 Kierkegaard and Existentialism

Modern existentialism, its main themes, and their relation to other philosophical traditions; its impact on such fields as theology, literature, and psychology. Life and thought of two key figures: Soren Kierkegaard and Jean-Paul Sartre; related thinkers including Nietzsche, Heidegger, Jaspers, Tillich, Buber, Camus, and Marcel. (4)

340 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. (4)

350 Philosophy of Religion

Classical and contemporary views of traditional religious problems: the existence of God, religious experience, revelation, immortality, and others. Prerequisite: one previous philosophy or religion course. (4)

351 Theory of Value

The nature of human values, contemporary discussion 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, human knowledge of them; the character and use of the language of evaluation. Prerequisite: 101, 125, or 225, or consent of instructor. (4)

352 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. (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 of instructor. May be repeated once for credit. (4)

491, 492 Independent Reading and Research

Prerequisite: departmental consent. (1-4)

493 Honors Research Project

The writing of an honors thesis and final completion of the reading program in primary sources required for the honors major. Near the end of the semester, students will present their work to other philosophy majors and department faculty. Prerequisite: consent of the department. (4)

501 Teaching Philosophy to Children

An intensive workshop for training teachers and prospective teachers to introduce reasoning skills and the clarification of ideas to elementary and middle school age children. Participants will be coached in the conduct of classroom philosophical discussion and will participate themselves in the sort of philosophical reflection that the curriculum is designed to foster. Not for philosophy core requirement. No prerequisites; teaching experience preferred. (Cross-referenced with EDUC 501.) (2-4)

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.

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.

The school's professional programs prepare prospective leaders for careers in physical education, health, recreation, athletics, and therapeutics. A master's degree program provides opportunities for advanced study in physical education, sports administration, and exercise science.

Outstanding modern sports facilities include an all-weather 400 meter track, an Olympic-style swimming pool, six lighted tennis courts, a nine-hole golf course, two gymnasiums, racquetball and squash courts, a fitness center, and an all-purpose astro-turf field house.

FACULTY: D. Olson, *Dean*; Chase, Evans, Fisher, Hacker, Hoseth, Kluge, Moore, Officer, M. Seal, F. Westering; assisted by Adachi, Amidon, Applegate, Benson, Boggs, Cinotto, Dawson, Freitag, Haroldson, J. Johnson, Lyons, L. Marshall, McCord, Nicholson, Papacek, Poppen, Rice, Ryan, Weible, Scott Westering, Susan Westering.

UNIVERSITY REQUIREMENT: Four one-hour courses (100-259), including 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 SCIENCE IN PHYSICAL EDUCATION

(B.S.P.E.): 73-76 hours, including completion of program core requirements and one of three concentrations.

Core Requirements: 37-46 hours including Chemistry 115, 116; Chemistry (104, 105)*; Biology (161, 162)**, 205, 206; Physical Education 277, 399 (8 hours), 480, 486, and Psychology 101.

* *Alternate Chemistry requirement for Exercise Science Concentration and Health and Fitness Management Concentration.*

** *Not required for Health and Fitness Management Concentration.*

Exercise Science Concentration: 27 hours, including Physical Education 326, 478; Health Education 292; Math 128 or 140; Computer Science 220; Biology 323 or approved alternate; Psychology 221, 352.

Health and Fitness Management Concentration: 41 hours, including Physical Education 288, 345, 380, 381, 478, 484; Health Education 281, 325, 327, 425; Recreation 287, 330, 483; Computer Science 220 and Business 350.

Pre-Therapy Concentration: 30 hours, including Health Education 281, 382; Biology 201 or 323 or approved alternate; Math 128 or 140 or Statistics 231; Computer Science 220; Physics 125, 126, 135, 136, and Psychology 352 or 453.

In addition to the requirements listed above, candidates for the B.S.P.E. degree must meet the foreign language option requirement as stated by the *College of Arts and Sciences*.

BACHELOR OF ARTS IN RECREATION (B.A. Rec.):

64-67 hours, including completion of program core requirements and one of three concentrations.

Core Requirements: 42 hours, including Physical Education 277, 345; Recreation 287, 330, 360, 399 (8 hours), 483;

Business 350; Psychology 101, 352, and Computer Science 220 or approved alternate.

Administration Concentration: 22 hours, including Business 354, 370; Communication 330; Physical Education 331, plus 8 hours of electives approved by program coordinator.

Health and Fitness Management Concentration: 25 hours, including Physical Education 288, 334, 380, 381, 478, 484; Health Education 281, 325, 327, 425, and Communication 123.

Programming Concentration: 24 hours, including Physical Education 285, 286, 288, 322 (2 hours), 326, 334, 381, and 6 hours of electives approved by program coordinator.

In addition to the requirements listed above, candidates for the B.A. Rec. degree must meet the foreign language option requirement as stated by the *College of Arts and Sciences*.

BACHELOR OF ARTS IN PHYSICAL EDUCATION (B.A.P.E.): 53 hours, including Biology 205, 206; Health Education 281; Physical Education 277, 283, 285, 286, 287, 288, 322 (4 hours), 326, 328, 345, 478, 480, 484, 486. In addition to the requirements listed above, candidates for the B.A.P.E. degree, without teacher certification, must meet the foreign language option requirements as stated by the *College of Arts and Sciences* and complete a senior seminar (2 hours). All courses in major and minor fields used for teacher certification must have grades of C or higher.

Students wishing to receive a **Primary Endorsement in Physical Education K-12 (Teacher Certification)** must meet all requirements established by the *School of Education* for teacher certification in addition to the requirements listed above for the B.A.P.E. At least one supporting endorsement is strongly recommended. Students receiving a B.A.P.E. with certification are not required to fulfill the option requirement as stated by the *College of Arts and Sciences*. All courses in major and minor fields used for teacher certification must have grades of C or higher.

PHYSICAL EDUCATION (K-12) CERTIFICATION

REQUIREMENTS: 34 hours, including English 101; Psychology 101, Anthropology 102/210, Special Education 190, 480; Education 262; Educational Psychology 261, 361; Education 468; plus valid first aid card.

PHYSICAL EDUCATION (K-12) SUPPORTING

ENDORSEMENT: 18 hours, including Health Education 281; one course from among the following: (285, 286, or 287); 288, 322 (2 hours), 326, 328, 334.

HEALTH (4-12) SUPPORTING ENDORSEMENT: 16 hours including Health Education 260, 270, 292, 295*, 321, 323, 325, 327, and 2 hours of electives approved by the program coordinator. (* Students not pursuing an education endorsement will be required to take 2 additional hours of approved electives to replace this course.)

RECREATION MINOR: 18 hours, including Recreation 287, 330, 399 (4 hours), 483, and Physical Education 345.

AQUATICS MINOR: 18 hours, including Physical Education 275, 331, 399 (4 hours), Health Education 292, Business 281, plus 4 hours of electives approved by the aquatics director.

COACHING MINOR: 16 hours, including Physical Education 334, 345, 410, and Health Education 281. Electives: 8 hours including at least one course in coaching theory, from among the following: Health Education 292 (required for non-education majors); Physical Education 361, 370, 371, 372, 374, 378 and 478. Summer courses may be included as electives with the approval of the dean.

DANCE MINOR: 19 hours, including Physical Education 222, 230 or 232, 250, and 462. Electives: 14 hours from Physical Education 360, 401, 491, Theatre 356, Music 245, 249. Summer courses may be included as electives with the approval of the dance coordinator.

EXERCISE SCIENCE MINOR: 21 hours, including Biology 205, 206; Physical Education 360/399 (2 hours), 478, 480, 486. Designed primarily for those with business backgrounds who might work in a fitness center. This program is not designed for education majors.

SPORTS MEDICINE (Specialization): 26 hours, including Biology 205, 206; Health Education 260 and 270 or 327, 281, 382; Physical Education 326, 345, 480, 486. Also required are 1,500 hours of clinical experience, which may include a practicum or internship as required by N.A.T.A. Recommended: A teaching major with the Professional Education Sequence and completion of all requirements for the Provisional Certificate.

SPORTS ADMINISTRATION (Specialization): 16 hours, including Physical Education 345, 399 (8 hours), 410, Health Education 292; plus 2 hours of approved electives. Students must have a major in business, communication, or economics.

Course Offerings

Courses in the School of Physical Education are offered in the following areas:

HEALTH EDUCATION

- 260 Food and Health
- 270 Stress Without Distress
- 281 Injury Prevention and Therapeutic Care
- 292 First Aid
- 295 School Health
- 321 Family Life and Sex Education
- 323 Emotional Health/Disease Prevention
- 325 Consumer Health
- 327 Substance Use and Abuse
- 360 Professional Practicum
- 382 Injury Prevention-Advanced
- 399 Internship
- 425 Health Promotion/Wellness Intervention Strategies
- 491 Independent Study
- 501 Graduate Workshops
- 561 Professional Practicum
- 591 Independent Study
- 597 Graduate Research

RECREATION

- 287 Teaching Methods: Recreation Activities
- 330 Recreation Programming and Leadership
- 360 Professional Practicum
- 399 Internship
- 483 Recreation Administration
- 491 Independent Study
- 501 Graduate Workshops
- 561 Professional Practicum
- 591 Independent Study
- 597 Graduate Research

PHYSICAL EDUCATION

- 275 Water Safety Instruction
- 277 Foundations of Physical Education
- 283 Teaching Methods: Tumbling & Apparatus
- 285 Teaching Methods: Individual & Dual Sports
- 286 Teaching Methods: Team Sports
- 288 Teaching Methods: Weight Training
- 322 Physical Education in the Elementary School
- 326 Adapted Physical Activity
- 328 Curriculum Development and Methods

- 331 Aquatics Management
 334 Scientific Basis for Training
 345 Administration of Sport Programs
 360,361 Professional Practicum, Coaching Practicum
 370-379 Coaching Theory
 380 Exercise Testing and Prescription
 381 Foundations of Health Fitness Management
 399 Internship
 401 Workshop
 410 Coaching—the Person and the Profession
 462 Dance Production
 478 Motor Learning and Human Performance
 480 Exercise Physiology
 484 Measurement and Evaluation in Physical Education
 486 Applied Biomechanics/Kinesiology
 491 Independent Study
 501 Graduate Workshops
 510 Ethics in Physical Education and Athletics
 512 Management of Sport Programs
 514 Sports Promotion
 515 Advanced Studies in Athletic Training
 516 Advanced Adapted Physical Education in the Public Schools
 520 Research Design
 522 Psychology of Sport I
 523 Psychology of Sport II
 530 Contemporary Issues in Physical Education
 535 Health and Fitness in Contemporary Society
 536 Health and Fitness Management
 540 The Scientific Basis for Physical Activity
 545 Motor Development and Learning
 560 Project/Seminar
 561 Professional Practicum
 565 Analysis of Human Movement
 570 Sociology of Sport
 591 Independent Study
 597 Graduate Research
 599 Internship
- 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)
- 150 Adaptive Physical Activity**
 An individualized activity program designed to meet the needs interests, limitations, and capacities of students who have had restrictions placed on their physical activity.
- 151-199 Individual and Dual Activities**
 151 (Beginning Golf), 153 (Archery), 155 (Bowling), 157 (Personal Defense), 162 (Beginning Tennis), 163 (Beginning Badminton), 165 (Racquetball/Squash), 167 (Roller Skating), 168 (Ice Skating), 170 (Skiing), 171 (Canoeing), 172 (Backpacking), 173 (Basic Mountaineering), 174 (Equitation), 177 (Weight Training), 178 (Body Toning), 180 (Bicycling), 182 (Low Impact Aerobics), 183 (Power Aerobics), 184 (Water Aerobics), 186 (Bench Aerobics), 191 (Intermediate Golf), 192 (Intermediate Tennis), 193 (Intermediate Badminton), 194 (Intermediate Equitation), 195 (Intermediate Racquetball/Squash), 197 (Advanced Weight Training).
- 200-219 Aquatics**
 200 (Beginning Swimming), 203 (Synchronized Swimming), 205 (Skin and Scuba Diving), 207 (Basic Sailing), 210 (Intermediate Swimming), 212 (Conditioning Swimming), 214 (Advanced Swimming), 216 (Lifeguard Training).

- 220-240 Rhythms**
 220 (Movement Technique I), 221 (Tai Chi), 222 (Jazz Dance Level I), 224 (Current Dance), 225 (Ballroom Dance), 226 (Folk and Social Dance), 230 (Movement Technique II), 232 (Jazz Dance Level II), 234 (Relaxation Techniques).
- 241-259 Team Activities**
 241 (Basketball and Softball), 243 (Soccer and Volleyball), 244 (Co-ed Volleyball), 245 (Team Handball), 247 (Lacrosse), 250 (Directed sports Participation), 259 (Independent Study/Activity).
- 260 Food and Health**
 A study of the basic requirements necessary to maintain optimal health through wise food choices. Topics include nutrients and their metabolism, dietary guidelines, food fadism, labeling, additives, vegetarianism, obesity, nutrition-related diseases, nutrition during pregnancy, and nutrition for athletes. I II (1)
- 270 Stress Without Distress**
 Consideration of stress, what people should know about stress, how to reduce the harmful effects of stress, and the relationship of increased stress to disease problems. II (1)
- 275 Water Safety Instruction**
 The American Red Cross Water Safety Instructor's Course. Prerequisite: swim test required. 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 II (2)
- 283 Teaching Methods: Tumbling & Apparatus**
 Includes skill development, teaching opportunities, and safety techniques in tumbling and gymnastics. The course is designed for K-12 preparation. I (2)
- 285 Teaching Methods: Individual and Dual Sports**
 Planning, teaching, and evaluating these activities: tennis, badminton, track and field, bowling, archery, golf, and fitness activities. I (4)
- 286 Teaching Methods: Team Sports**
 Planning, teaching, and evaluating these team activities: basketball, soccer, volleyball, rugby, field hockey, softball, touch football, team handball. II (4)
- 287 Teaching Method: Recreation Activities**
 Planning, teaching, and evaluating the following activities: outdoor education, various recreational sports, and rope skipping. II (4)
- 288 Teaching Methods of Weight Training**
 Planning teaching, spotting, and safety in teaching weight training. I (1)
- 292 First Aid**
 This course meets requirements for the American Red Cross Standard First Aid and Personal Safety. I II (2)
- 295 School Health**
 Health concepts which relate to the total school health program, including instruction, services, and environment; relationships between health and all levels of education. II (2)

321 Family Life and Sex Education

A Study of anatomy and physiology, sexual roles, reproduction, responsible relationships, respect for self and others, and physical and emotional well-being. Stress on responsible decision making concerning sexuality by providing accurate information and a variety of personal coping skills and by emphasizing a positive self-concept. Evaluation of school curriculum models. 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. Observation and/or practicum in public schools required. I (2); II (4)

323 Emotional Health/Disease Prevention

Topics include interpersonal communication, cooperation, valuing techniques leading toward a healthier lifestyle through preventive medicine, and related disease problems. II (2)

325 Consumer Health

Information about consumption as it affects personal health. Examination of consuming habits to achieve greater control over total health status. I (2)

326 Adapted Physical Activity

Emphasizes the theory and practice of adaptation in teaching strategies, curriculum, and service delivery for all persons with psychomotor problems, not just those labeled "disabled." Developmental and functional approaches to programming. II (3)

327 Substance Use and Abuse

A study of drug use and abuse and the effect on the human body and mind. I (2)

328 Curriculum Development and Methods

Curriculum development and general methods in physical education. Developing curriculum planning and teaching techniques in K-12 settings. I (4)

330 Recreation Programming and Leadership

Examines the principles, procedures, techniques, and strategies essential to program leisure services successfully and to lead recreation experiences for diverse populations in a variety of settings Prerequisite: 277 or consent of instructor. I (4)

331 Aquatics Management

Topics include training and supervising personnel, financing, programming, pool maintenance and operation, swim meet management, and safety and emergency procedures. Study of pool chemistry, filter operations, and maintenance. Visitation to local pools. (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. I (2)

345 Administration of Sports Programs

Administration of sports programs including budgeting, facility development, promotion, legal implications, and personnel supervision. I (2)

360, 361 Professional Practicum, Coaching Practicum

Students work under the supervision of a coach, teacher, recreation supervisor, or health care provider. Prerequisite: departmental approval. I II (2)

370-379 Coaching Theory

Techniques, systems, training methods, strategy, and psychology of coaching; 370 (Basketball), 371 (Football), 372 (Cross Country/Track and Field), 374 (Soccer), 378 (Softball/Baseball). I II a/y (2)

380 Exercise Testing and Prescription

Provides the theoretical and practical background necessary safely to conduct a variety of exercise testing techniques used to assess components of physical fitness (e.g., cardiovascular and muscular endurance, strength, flexibility, and body composition). Testing techniques that address the evaluation needs of health and symptomatic populations are included. Information will help students to evaluate the results of these assessments objectively and then to develop safe and accurate individualized exercise training programs. II (2)

381 Foundations of Health and Fitness Management

Provides an overview of the fitness business industry and considers related theoretical and practical issues. Discussion of the roles of medical and allied health professionals, as well as various public and private agencies and organizations involved in health and fitness. Current trends in the organization and administration of health and fitness programs are included. I (2)

382 Injury Prevention—Advanced

An advanced study in the recognition and treatment of specific athletic injuries and vulnerable body structures, with emphasis on evaluation, modalities of treatment, rehabilitation, and current issues. Prerequisite: 281. II (2)

399 Internship

Experiences closely assigned to student's career and academic interests. Student identifies problems to be researched, experiences to be gained, and readings pertaining to this interest. An approved firm or organization is mutually agreed upon by the student and the coordinator of this program. Monthly progress reports, evaluations by the supervisor, and other measures of achievement are used to determine the grade. Prerequisites: declaration of major, at least sophomore status, and completion of at least 10 hours in the major. May be taken as Physical Education, Health Education, or Recreation credit. (2-8)

401 Workshop

Workshops in special fields for varying periods. (1-4)

410 Coaching—The Person and the Profession

Personal and professional requisites of successful sports programs, including coaching styles, development of leadership qualities, recruiting methods, development of a philosophy of athletics, organization of pre-/in-/and post-season programs, award systems, and program evaluational consideration of relationships with staff, parents, players, faculty, administration, and media. Budgeting, purchase of equipment and maintenance, and facility planning and usage. II (2)

425 Health Promotion and Wellness Intervention Strategies

Examination of strategies for improving the state of wellness through healthier lifestyles. Topics include the holistic approach to health, behavioral intervention, nutrition and weight control strategies, health-related fitness, strategies to improve adherence to a fitness program, and the cost-effectiveness of health programs in business and industry. Includes computerized assessments; appraisals of health risks; prescriptions for nutrition, health, and activity; and a monitoring system and weight management program. (2)

462 Dance Production

An advanced choreography course combining choreography, costume design, staging, and publicity techniques for producing a major dance concert. (2)

478 Motor Learning and Human Performance

Provides basic theories, research, and practical implications for motor learning, motor control, and variables affecting skill acquisition. I (4)

480 Exercise Physiology

Scientific basis for training and physiological effect of exercise on the human body. Lab required. Prerequisite: BIOL 205-206. I (4)

483 Recreation Administration

Examines the principles, procedures, techniques, and strategies essential to successful administration of leisure services, including organizational excellence, networking, personnel management, motivation, team building, financial management, marketing and sales risk management and entrepreneurship. Prerequisites: RECR 330, 360, PHED 345. II (4)

484 Measurement and Evaluation in Physical Education

The selection, construction, and interpretation of evaluation techniques related to the physical education program. Fulfills Education 467 certification requirement. II (2)

486 Applied Biomechanics/Kinesiology

Opportunity to increase knowledge and understanding about the human body and how the basic laws of mechanics are integrated in efficient motor performance. II (3)

491 Independent Study

Prerequisite: consent of the dean. May be taken as Physical Education, Health Education, or Recreation credit. I II S (1-4)

501 Workshops

Graduate workshops in special fields for varying periods. May be taken as Physical Education, Health Education, or Recreation credit. (1-4)

510 Ethics in Physical Education and Athletics

The study of ethics and ethical decision making in physical education and athletics. (3)

512 Management of Sports Programs

Explores concepts in budgeting, scheduling, personnel, and facilities in physical education, athletic, and fitness programs. (3)

514 Sports Promotion

Designed for those interested in marketing sports and athletic programs. Comprehensive strategies for attracting and retaining sports participants and programs are included. (3)

515 Advanced Studies in Athletic Training

A series of advanced seminars dealing with specific topics in sports medicine. Emphasis on in-depth study of theories, problems, practices, and techniques in the field. (3)

516 Advanced Adapted Physical Education in Public Schools

Consideration of mainstreamed students with disabilities in physical education with special emphasis on disabling conditions, abilities, and contra-indications of physical activity. (3)

520 Research Design

The study of various research designs and their implications for physical education, athletics, and fitness. (3)

522 Psychology of Sport I

Focus on psychological skills in sport emphasizing physiologically based techniques, cognitively based techniques (cognitive restructuring, mental imagery, and attention control), and behaviorally based techniques (goal-setting and modeling). (3)

523 Psychology of Sport II

Focus on various aspects of individual and group motivational processes in sport and exercise settings. Topics include participation motivation, intrinsic/extrinsic motivation, exercise adherence, achievement behavior, and self-confidence. (3)

530 Contemporary Issues in Physical Education

A historical and philosophical framework to study the current issues in the profession today. (3)

535 Health and Fitness in Contemporary Society

Considers the influences of contemporary society on lifestyle choices that impact health and fitness. Emphasis on discussion of principles and concepts associated with developing, implementing, and evaluating school programs that can provide students with a foundation for lifelong health and fitness. Required for teacher candidates. (3)

536 Health Fitness Management

Considers the organizational, administrative, and educational issues which are important in developing, implementing, and evaluating health and fitness programs in various community settings. (3)

540 The Scientific Basis for Physical Activity

Considers the influence of a variety of environmental and developmental variables on the physiological response to exercise and physical activity. Emphasis on ways in which teachers can apply the scientific principles associated with exercise to enhance human performance. (3)

545 Motor Development and Learning

Theoretical and practical information on physical growth as a factor accompanying motor development, fundamental motor skill acquisition, and performance. Required for teacher candidates. (3)

560 Project/Seminar

The students will meet as a class and work in a seminar format to present and defend individual projects. Prerequisite: 520. (3)

561 Professional Practicum

The practicum provides students with opportunities to develop, implement, and evaluate skills associated with their professional interest. In addition to interacting with university faculty, students will work with site supervision. (1-2)

565 Analysis of Human Movement

Considers the influence of anatomical and mechanical principles and concepts on the development of efficient movement. The application of these principles to enhance the movement efficiency of participants in physical activity and sports programs. (3)

**570 Sociology of Sport**

Focuses on sport both as a social institution and as a socializing agent. Topics include sport and economics, gender, race, education, politics, and religion. (3)

591 Independent Study

Independent investigations into areas of special interest to the student which are not covered by courses in the regular graduate program. The types of projects undertaken vary in length and content and are determined in consultation with a faculty adviser. (1-4)

597 Graduate Research

Open to graduate students who minor in the field of physical education. Prerequisite: consent of the instructor. May be taken as Physical Education, Health Education, or Recreation credit. (1-4)

599 Internship (1-4)

Physics

Physics is the scientific study of the material universe at its most fundamental level: the mathematical description of space and time, and the behavior of matter from the elementary particles to the universe as a whole. A physicist might study the inner workings of atoms and nuclei, the size and age of the universe, the behavior of high-temperature superconductors, or the life cycles of stars from interstellar gases to black holes.

Physicists use high-energy accelerators to search for quarks; they design new laser systems for applications in medicine and communications; they heat hydrogen gases to temperatures higher than the sun's core in the attempt to develop nuclear fusion as an energy resource. From astrophysics to nuclear physics to optics and crystal structure, physics encompasses some of the most fundamental and exciting ideas ever considered.

FACULTY: Greenwood, *Chair*; Lang, Mayer, Starkovich, Tang.

Physics

The physics major offers a challenging program emphasizing a low student-teacher ratio and the opportunity to engage in independent research projects. There are two introductory course sequences, College Physics and General Physics; the General Physics sequence incorporates calculus, and is required for the Bachelor of Science major.

BACHELOR OF SCIENCE MAJOR: 36 semester hours, 153, 154, 163, 164, 223, 331, 332, 336, 354, 356, 421, 422. 497-498 may be substituted for 421-422 with consent of the department. Students planning to continue in a graduate physics degree program are strongly urged to take 401 and 406.

Required supporting courses: Math 151, 152, 253; Chemistry 115; either Engineering 333 or Chemistry 341.

A typical B.S. physics major program is as follows:

Freshman Physics 153, 154
 Physics 163, 164
 Math 151, 152

Sophomore Physics 223, 336
 Math 253
 Physics 354

Junior Physics 331, 332
 Chemistry 115
 Physics 356

Senior Physics 401, 406
 Physics 421, 422
 Engineering 333 or Chemistry 341

BACHELOR OF ARTS MAJOR: 24 semester hours: 153 or 125, 154 or 126, 163 or 135, 164 or 136, 223, plus ten semester hours in physics. Required supporting courses: Math 151, 152.

MINOR: 22 semester hours, including 153 or 125, 154 or 126, 163 or 135, 164 or 136; twelve additional hours, of which at least eight must be upper division.

Applied Physics

Also available is a major in Applied Physics, which includes a substantial selection of courses from engineering to provide a challenging and highly versatile degree. Applied Physics can lead to research or advanced study in such areas as robotics—with application in space exploration or joint and limb prosthetics; growth of single-crystal metals, which would be thousands of

times stronger than the best steels now available; mechanics of material failure, such as metal fatigue and fracture; turbulence in fluid flow; photovoltaic cell research for solar energy development; or applications of fluid flow and thermodynamics to the study of planetary atmosphere and ocean currents.

While many Applied Physics graduates pursue professional careers in industry immediately after graduation from PLU, the program also provides excellent preparation for graduate study in nearly all fields of engineering.

BACHELOR OF SCIENCE MAJOR IN APPLIED PHYSICS:

50-52 semester hours. Physics 153, 154, 163, 164, 223, 331, 354, 356, 421, 422; Engineering 131, 132, 334 plus four engineering courses, one of which must be upper division, selected from 233, 234, 333, 434, 245, 246, 345, 346. Physics 336 may be substituted for Engineering 234. Chemistry 341 may be substituted for Engineering 333. Required supporting courses: Math 151, 152, 253; Chemistry 115; Computer Science 240.

A typical applied physics program is as follows:

Freshman Physics 153, 154, 163, 164
 Engineering 131, 132
 Math 151, 152

Sophomore Physics 223, 354
 Engineering 233, 234
 Math 253

Junior Physics 356
 Engineering 333
 Chemistry 115
 Computer Science 240

Senior Physics 331, 421, 422
 Engineering 334, 434

Course Offerings

125, 126 College Physics

These courses 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 135, 136 is required. I II (4, 4)

135, 136 College Physics Laboratory

Basic laboratory experiments are performed in conjunction with the College Physics sequence. Concurrent registration in 125, 126 is required. I II (1, 1)

153, 154 General Physics

A calculus-level survey of the general fields of physics, including classical mechanics, wave motion, electricity and magnetism, and optics. Concurrent registration in 163, 164. Prerequisites: MATH 151 for 153; 153 and MATH 152 for 154. I II (4, 4)

163, 164 General Physics Laboratory

Basic laboratory experiments are performed in conjunction with the General Physics sequence. Concurrent registration in 153, 154 is required I II (1,1)

205 Musical Acoustics

A study of musical sound using physical 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 hours. No prerequisite courses in either mathematics or physics are assumed. a/y II (4)

223 Elementary Modern Physics

A selected treatment of various physical phenomena which are inadequately described by classical methods of physics. Interpretations which have been developed for these phenomena since approximately 1900 are presented at an elementary level. Prerequisite: 154. I (4)

331 Electromagnetic Theory

Electrostatics, dipole fields, fields in dielectric materials, electromagnetic induction, magnetic properties of matter, in conjunction with the development of Maxwell's equations. Prerequisites: 153, 154 and MATH 253. I (4)

332 Electromagnetic Waves and Physical Optics

Proceeding from Maxwell's equations, the generation and propagation of electromagnetic waves is developed with particular emphasis on their application to physical optics. Prerequisite: 331. II (4)

333 Thermodynamics

See *Engineering 333*. a/y II (4)

334 Materials Science

See *Engineering 334*. II (4)

336 Mechanics

Fundamental mechanics; a mathematical formulation of physical problems; particle motion 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. Prerequisite: 154; corequisite: 354 or consent of instructor. a/y 1995-96 II (5)

345 Introduction to Electronics

See *Engineering 345*. I (4)

354 Mathematical Physics I

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. Prerequisites: 154 and MATH 253. II (4)

356 Mathematical Physics II

Boundary value problems, special functions, matrices and tensors, probability theory, eigenvalue problems, complex variables, contour integration, and their applications to physics. Prerequisite: 354. I (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. Corequisite: 356. a/y 1995-96 I (4)

406 Advanced Modern Physics

Modern theories are used to describe topics of contemporary importance such as atomic and sub-atomic phenomena, plasmas, solid-state, and astrophysical events. The application of quantum mechanical techniques are used when appropriate. Prerequisite: 401. a/y II (4)

421 Advanced Laboratory I

Selected experiments from both classical and modern physics are performed using state of the art instrumentation. Corequisite: 331. I (1)

422 Advanced Laboratory II

Continuation of 421 with emphasis on design and implementation of a project under the guidance of the physics staff. Prerequisite: 421. II (1)

434 Transport: Momentum, Energy, and Mass

See *Engineering 434*. a/y II (4)

491, 492 Independent Study (1-4)**497, 498 Research (1-4)**

Political Science

Political science addresses one of the most difficult, yet fundamentally important human endeavors, the governance of people and 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: Olufs, *Chair*; Atkinson, Dwyer-Shick, Kelleher, Spencer; assisted by Bricker

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 Club. The department further sponsors or otherwise encourages active student participation in political life through class activities and through such campus organizations 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 government 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 OR ARTS MAJOR: 36 semester hours.

Required courses: 101, 151, 325, 495 (16 semester hours).

Distributional requirement: One course from each of Group A and Group B (8 semester hours).

Group A – American Government and Public Policy: 345, 354, 357, 361, 363, 364, 368, 371, 372, 373.

Group B – International Relations, Comparative Government, and Political Thought: 326, 331, 338, 347, 381, 384, 385, 386, 387.

Electives: Minimum of 12 semester hours selected from the Political Science curriculum.

Major programs should be planned in consultation with a departmental adviser. In some instances, an internship (450, 458, 464, or 471) may be substituted for 495; students must plan this option with the appropriate faculty intern supervisor, in consultation with the departmental chair.

MINOR: Minimum of 20 semester hours including 101 and 151. Minor programs should be planned in consultation with a departmental adviser.

CONCURRENT ATTAINMENT: No more than 8 semester hours taken to satisfy other major or minor requirements may also be applied to the political science major. No more than 4 such semester hours may also be applied to the political science minor.

RESIDENCY: A minimum of 12 semester hours for the major and 8 semester hours for the minor must be taken in residence.

MINOR IN PUBLIC AFFAIRS: 24 semester hours, including 345 (required) and 20 hours from political science, economics, sociology, and business or statistics.

This minor offers an interdisciplinary study designed to support many major programs whose content has implications for public affairs, and is particularly useful to students contemplating careers in public service or graduate study in public administration, public affairs, and related programs.

The Public Affairs minor includes the following requirements: 1) Political Science 345, Government and Public Policy; 2) at least five additional courses from three of the following groups (courses which are taken as part of a major program may not also count toward the Public Affairs minor):

Political Science (minimum of 8 hours if this group is selected)

- 151 – American Government
- 354 – State and Local Government
- 357 – American Bureaucracy
- 363 – Politics and the Media
- 364 – The Legislative Process

Economics (minimum of 8 hours if this group is selected)

- 150 – Principles of Economics
- 321 – Labor Economics, Labor Relations, and Human Resources
- 362 – Public Finance
- 371 – Industrial Organization and Public Policy

Sociology (minimum of 4 hours if this group is selected)

- 240 – Social Problems and Policies
- 386 – Equality and Inequality
- 412 – Crime and Delinquency
- 472 – Issues in Crime/Deviance

Business/Statistics (minimum of 4 hours if this group is selected)

- BUSA 281 – Financial Accounting
- STAT 231 – Introductory Statistics

On approval by the Public Affairs adviser, up to 8 hours may be earned through participation in an internship program as a substitute for courses listed above (except Political Science 345). Internship opportunities are offered through several departments and provide students with actual work experience in state and local legislative and administrative agencies. Students

interested in internships are urged to consult with their academic advisers and with intern faculty advisers at an early date.

Students interested in the Public Affairs minor should declare the minor in the Department of Political Science and consult with the department's Public Affairs adviser.

MAJOR IN LEGAL STUDIES: 32 semester hours. For additional information, see *Legal Studies*.

MINOR IN LEGAL STUDIES: 20 semester hours. For additional information, see *Legal Studies*.

PRE-LAW: For information, see *Pre-professional Programs*.

BACHELOR OF ARTS IN EDUCATION: For information, 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.

170 Introduction to Legal Studies

An examination of the nature of law, judicial process, and participant roles in the legal system. Particular emphasis given to legal culture including comparative systems, assessments of legal needs and legal services, the legal profession, philosophy of law, and judicial decision-making. (4)

210 Global Perspectives: The World in Change

A survey of global issues affecting the human condition in a rapidly changing and increasingly interdependent world; modernization and development; economic change and international trade; diminishing resources; war and resolution; peace and justice; and cultural diversity. These issues are examined in a multi-disciplinary light using case studies drawn from non-Western and Western nations. Emphasis on the development of a global perspective which recognizes human commonalities as well as diversity in perceptions, values, and priorities. (Cross-referenced with ANTH 210 and HIST 210.) (4)

231 Current International Issues

A survey course in international relations with emphasis on current events. Examination of ideology, economic resources and development, national rivalries, military power, revolutionary movements, population pressures, alliance politics, and multi-lateralism. Relation of these factors to international relations theory. (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

A systematic analysis of the international system highlighting patterns in state interaction. Provides students with the theoretical concepts needed to discern these patterns and make sense of international events. (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 the 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 sub-national levels, in international politics, or from a comparative perspective, as announced by the department. (4)

347 Political Economy

An examination of the ways that politics and economics coincide. Topics include the development of capitalism, socialist approaches, international issues, regional examples, and methods of study. Prerequisite: 101 or ECON 150. (4)

354 State and Local Government

Governmental structures, processes, and policy at the state, local, and regional levels of the American system. Special attention to intergovernmental relations and the role of the national government. (4)

357 American Bureaucracy

An examination of the politics of bureaucracy as encountered by citizens and employees. Topics include the growth of bureaucracies, legal bases, factors of leadership and power, relations between public and private organizations, and the relation between bureaucracy and democracy. (4)

361 Political Parties and Elections

Study of party and electoral systems with particular emphasis on American parties and elections. Examination of party roles in elections and government; party financing; interest groups and political action committees; and voting behavior. (4)

363 Politics and the Media

The role of mass media in American government, politics, and policy. Examines media coverage in contexts of news formation, expression, and effects. Attention to political culture, public opinion, polls and surveys, press freedom and responsibility, and governmental regulation, secrecy, and manipulation. (4)

364 The Legislative Process

A study of 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 leadership, Presidential decision-making, powers and limitations, and the interaction of personality and institution. (4)

371 Judicial Process

An examination of legal processes in various adjudicatory settings. Primary attention given to judicial processes focusing on American civil and criminal law. Includes an examination of administrative law processes among other quasi-judicial forms of conflict resolution. (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)

374 Legal Studies Research

Introduction to various methods of legal analysis, research, and writing. Includes an examination of primary and secondary sources, automated and non-automated research systems, and research strategies for public policy issues. (4)

381 Comparative Legal Systems

Study of legal systems around the world as they actually work within their respective political, economic, social, and cultural contexts. Attention to dispute definition and settlement, juridical participants and processes, and concepts of law and legal activities. (4)

384 Communist Political Systems

Comparative examination of Marxist political systems, particularly the former U.S.S.R., eastern Europe, China, and Cuba. Special attention given to ideology and to the role of the Communist Party. (4)

385 Canadian Political System

The government and politics of Canada, with special attention to federalism, national unity, political culture, and constitutional development. Conditions permitting, the course will include a field trip to Victoria, provincial capital of British Columbia. (4)

386 African Political Systems

Comparative examination of the political systems of Africa. Exposition of pre-colonial, colonial, and contemporary influences with special attention to problems of decolonization, nation-building, and development. (4)

387 The Middle East

Contrasts the history and aspirations of the Arab Nations with the reality of European dominance and its legacy, the formation of the present Arab states and Israel. Events in the region are explained by examining five separate but overlapping conflicts: superpower rivalry, Arabs v. Israelis, progressive v. traditional Arab states, various interpretations of Islam, and agitation by non-state actors. (4)

401 Workshops and Special Topics (1-4)**431 Advanced International Relations**

Examines various theories of international conflict management, including in-depth analysis of historical examples. The development of international law and international governmental organizations are also considered. Prerequisite: 331. (4)

450 Internship in Politics

Internship in the political dimensions of non-governmental organizations. By departmental consent only. (4-12)

458 Internship in Public Administration

An internship with a government department or agency. By departmental consent only. (4-12)

464 Internship in the Legislative Process

An opportunity to study the process from the inside by working directly with legislative participants at the state or local level. By departmental consent only. (Internships with the Washington State Legislature are open only to juniors and seniors with at least one year at PLU who have taken or take concurrently 364.) (4-12)

471 Internship in Legal Studies

An internship with a private or public sector agency or office engaged in legal research, litigation, or law enforcement. (4)

491,492 Independent Reading and Research

By department consent only. (1-4)

495 Senior Seminar

Intensive study into topics, concepts, issues, and methods of inquiry in political science. Emphasis on student research, writing, and presentation. By departmental consent only. (4)

501 Graduate Workshops

Graduate Workshops in special fields or areas for varying periods of time. (1-4)

590 Graduate Seminar

Selected topics as announced. Prerequisite: consent of the instructor. (1-4)

591 Directed Study (1-4)**595 Graduate Readings**

Independent study card required. (4)

598 Research Project (4)**599 Thesis (4)**

Pre-professional Programs

Health Sciences

The Division of Natural Sciences health science committee advises students aspiring to careers in the health sciences. Students having such interests are encouraged to obtain a health sciences adviser early in their program. Summarized below are pre-professional requirements for many health science areas; additional information is available through the health science committee. Catalogs and brochures for many schools and programs are available to students in the Rieke Science Center.

DENTISTRY, MEDICINE, AND VETERINARY MEDICINE:

The overwhelming majority of students entering the professional schools for these careers have earned baccalaureate degrees, securing a broad educational background in the process. This background includes a thorough preparation in the sciences as well as study in the social sciences and the humanities. There are no pre-professional majors at PLU; rather students should select the major which best matches their interests and which best prepares them for alternative careers. In addition to the general university requirements and the courses needed to complete the student's major, the following are generally required for admission to the professional program: Biology 161, 162, 323; Chemistry 115, 116, 331 and 332 (with all laboratories); Mathematics 140; Physics 125 and 126 or Physics 153 and 154 (with appropriate laboratories). Check with a health science adviser for exceptions or for additions suggested by specific professional schools.

OPTOMETRY: Although two years of pre-optometry study is the minimum required, most students accepted by a school of optometry have completed at least three years of undergraduate work. A large percentage of students accepted by schools of optometry have earned a baccalaureate degree. For those students who have not completed a baccalaureate degree, completion of such a degree must be done in conjunction with optometry professional studies.

The requirements for admission to the schools of optometry vary. However, the basic science and mathematics requirements are generally uniform and include: Biology 161, 162, 323; Chemistry 115, 116; one year of college mathematics, including calculus (at least through Mathematics 151); Physics 125 and 126, or Physics 153 and 154 (with appropriate laboratories). In addition, each school of optometry has its own specific requirements; check with a health science adviser.

MEDICAL TECHNOLOGY: The university provides academic preparation suitable for students who choose to enter schools of medical technology. Students may also prepare for post-bachelor's degree training in specialty programs leading to certification in hematology or clinical chemistry. Students may earn a Bachelor of Science in Medical Technology (B.S.M.T.) customarily by successful completion of pre-medical technology coursework at PLU, the fulfillment of requirements for either a biology or chemistry major, and one year of clinical training. The B.S.M.T. is usually earned as a second degree. The details of the degree program and the minimum requirement of admission into medical technology training are described under *Medical Technology*.

PHARMACY: Although the pre-pharmacy requirements for individual schools vary (check with a health science adviser), the following courses are usually required: one year of general chemistry; one year of organic chemistry, with laboratory; college level mathematics (often including calculus); one year of English composition and literature. Other courses often required include microbiology, quantitative analysis, and introductory courses in communication, economics, and political science. For example, the University of Washington School of Pharmacy has approved the following courses as being equivalent to the first two years of its 5-year program leading to the Bachelor of Science degree in pharmacy: Biology 161, 162, 201 (or 328 as a substitute for 201); Chemistry 115, 116, 331 (with laboratory 333), and 332 (with laboratory 334, English 101 and a second course in writing, Mathematics 140 and 151, Statistics 231, electives from humanities and social sciences. Total credits should not be less than 60 semester hours.

PHYSICAL THERAPY: Acceptance to schools of physical therapy has become increasingly competitive in recent years, and students interested in physical therapy are strongly encouraged to meet with a health science adviser as early as possible to determine prerequisites for specific schools. Most physical therapy programs are master's degree programs. Therefore, potential applicants should plan on completing a baccalaureate degree in conjunction with satisfying admission requirements.

The requirements for admission to schools of physical therapy vary. However the basic science and mathematics requirements are generally uniform and include: Biology 161, 162, 323; Chemistry 115, 116; Mathematics 140; Physics 125 and 126 (with laboratories). (Note: there are a few schools which accept Chemistry 104-105 and some that also require Chemistry 331 and 332). In addition to the principles of biology sequence, applicants must complete courses in anatomy and physiology. This admission requirement is met by either the combination 205 and 206 or the combination 361 and 441; biology majors should take 361 and 441, the clear preference of several schools of physical therapy. In addition to the science and mathematics requirements, the various schools have specific science and humanities requirements. Check with a health science adviser regarding these requirements.

Pre-Law

Pre-law at PLU is an advising system, not a prescribed major or curriculum. A primary reason for this approach is that law schools generally prefer individuals with a sound liberal education. Therefore, regardless of their major, students considering applying to law school are encouraged to pursue a broad range of liberal arts courses. Students are advised to undertake work in anthropology, economics, English, history, philosophy, political science, psychology, natural sciences, sociology, speech, and accounting. It is also recommended that students take one or two courses, chosen in consultation with the pre-law adviser, that will help them specifically to develop perspectives on the nature of law and the legal profession.

Students interested in law should 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 catalogs, a newsletter, and other resource materials are available. In addition, students should 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.

Military Science (Army ROTC)

The objectives of the Army ROTC (Reserve Officer Training Corps) are to prepare academically and physically qualified college women and men for the rigor and challenge of serving as an officer in the United States Army - Active, National Guard, or Reserve. To that end, the program stresses service to country and community through an enhancement of leadership competencies which support and build on the concept of "service leadership."

Army ROTC is offered to PLU students on campus. The lower division courses are open to all students and do not require a military commitment for non-scholarship students. The upper division courses are open to qualified students. ROTC is traditionally a four-year program, but individuals with prior service and summer basic camp attendees may complete the program in only two years. Normally, all students participate in one class day per week (two-three hours), three workshops (leadership labs) per semester, and one overnight field training exercise per semester. Physical fitness of all students is monitored and required.

Financial assistance in the form of two and three-year scholarships is available to qualified applicants. The scholarships pay 80% of tuition and provide a book allowance as well as a monthly subsistence of \$100. Students in upper division courses not on scholarship receive \$100 subsistence allowance.

To be commissioned a student must complete the military science curriculum, including successful completion of a six-week advanced camp during the summer before the senior year. Additional information on the Army ROTC program may be obtained by writing Army ROTC, Pacific Lutheran University, Tacoma, WA 98447, or by calling (206) 535-8740.

FACULTY: Major Davis, Captain Henry, Captain Higgins.

The curriculum is designed to prepare students to become future leaders by developing their ability to demonstrate acceptable behavior in each of the following leadership dimensions: Initiative, Oral and Written Communications, Judgment, Decisiveness, Sensitivity, Technical Competence, Planning and Organizing, Administrative Control, Delegation, and Problem Analysis. Behavioral development occurs through course work in the areas of Professional Military Education, Military Knowledge, and Military Skills.

Professional Military Education courses are designed to develop the student's ability to communicate appropriately in writing, to understand the human aspects of command, and to become acquainted with the evolution of warfare and military theory with a particular emphasis on the place of military institutions in society. Courses meeting these requirements are taught by other departments in the university but are required to complete the ROTC program.

Military science courses provide a foundation in such areas as leadership theory, ethics, roles and responsibilities of the officer, and military operations. Military skills are developed during the conduct of leadership workshops and field training exercises.

Leadership development occurs both in and out of the classroom by placing students in a variety of leadership positions. Oral presentations and writing requirement are incorporated in all classes as another means of developing desirable leadership behavior.

The Basic Course consists of two to three hours of academic instruction and military training per week each semester of the freshman and sophomore years. Students beginning the course as sophomores can compress the Basic Course by attending additional academic instruction. There is no military commitment for non-scholarship students in the Basic Course.

The Advanced Course consists of additional academic instruction and physical conditioning plus a six-week advanced summer camp at Fort Lewis, Washington.

Students are furnished with uniforms and necessary textbooks for Military Science courses.

BASIC COURSE:

MS 111, 112 Introduction to Military Science

An introduction to military science, roles of active and reserve units, and special programs associated with Army ROTC. Development of written and oral communication skills for the military leader. (2)

MS 211, 212 Introduction to Leadership

An introduction to leadership and military ethics and values. Through classroom simulations students are evaluated on their potential as leaders and managers. (2)

ADVANCED COURSE:

MS 311, 312 Leadership and Management

A survey of leadership/management and motivational theories. An orientation on the competencies required for the small unit leader. Includes tactics, communications, and land navigation. (3)

MS 411, 412 Professionalism and Ethics

Covers Army values, ethics, and professionalism, responsibilities to subordinates, self, and country, law of land warfare, and the

resolution of ethical/value dilemmas. Also covers logistic and justice systems and the interaction of special staff and command functions. (3)

NOTE: A maximum of 24 semester hours earned in ROTC programs may be applied toward a baccalaureate degree at PLU. Students receiving more than 12 semester hours of ROTC credit toward a PLU degree are required to take one of the following:

- Philosophy 225 (Ethical Theory), 2 hours, and Military Ethics (Philosophy), 2 hours;
- Religion 365 (Christian Moral Issues), 4 hours.
- Integrated Studies 221 (The Experience of War), 4 hours, or
- Integrated Studies 222 (The Prospects for Peace), 4 hours.

Psychology

Psychology is a scientific discipline that seeks to understand human and nonhuman behavior. Psychology is also a profession that attempts to change behavior for the betterment of humankind. Through its curriculum, research activities, and use of community resources, the Department of Psychology provides students with a comprehensive and balanced exposure to psychology as a scientific discipline and profession.

The major in psychology (a) introduces students to scientific methods of psychology, to theories and research findings from the core areas of psychology, and to the history of psychology; (b) provides students with opportunities to explore advanced topics in scientific and professional psychology, conduct psychological research, and gain exposure to the practice of psychology in community settings; (c) helps prepare students for postgraduate work in psychology or in related professions, such as social work, education, medicine, law, and business. The major is also an excellent general preparation for employment in a variety of settings.

The psychology program is designed to meet the needs of a variety of students. To this end, two majors are offered: the Bachelor of Arts and the Bachelor of Science. Either degree provides a solid foundation in psychology, and either can serve as preparation for postgraduate study or employment. However, for those students who intend to pursue the Ph.D. in psychology following graduation from PLU, the Bachelor of Science degree is likely to provide the strongest preparation. The Bachelor of Science degree is also recommended as an excellent pre-professional degree for those students who plan to enter the fields of dentistry, medicine (all branches, including psychiatry), public health, or veterinary medicine.

FACULTY: Moon, Chair; Adachi, Anderson, Baird, R.M. Brown, Hansvick, Lefeune, Moritsugu, Nolph, Severtson.

BACHELOR OF ARTS MAJOR: 36 semester hours in psychology including 101; 242; 493; one of 340, 342, 346, 348; one of 350, 352, 354; plus 16 hours of elective psychology courses. In addition to the 36 hours in psychology, Statistics 231 and accompanying lab taught by members of the psychology department are required.

BACHELOR OF SCIENCE MAJOR: 40 semester hours in psychology including 101; 242; 493; 340 or 342; 346 or 348; one of 341, 343, 347, 349; one of 350, 352, 354; 481; plus 12 hours of elective psychology courses. In addition to the 40 hours in psychology, Statistics 231 and accompanying lab taught by

members at the psychology department and at least 20 semester hours in mathematics and natural science are required. Of the 20 hours, at least 4 hours must be in mathematics and at least 8 hours in biology. Those students who, after graduating from PLU, plan to enter schools of dentistry, medicine, public health, or veterinary medicine should note the specific pre-professional mathematics and science requirements in the appropriate sections of this catalog.

The minor in psychology is designed to supplement another major in the liberal arts or a degree program in a professional school, such as business, education, or nursing.

MINOR: 20 semester hours, of which at least 8 hours must be taken in residence. Statistics 231 (or equivalent) may be used as part of the 20 hour requirement.

Psychology 110 and 111 do not count 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 department'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

Effective techniques for college study. Note-making, study methods, examination skills, time management, educational planning. Class work supplemented by individual counseling. (May not be applied to core, language, or psychology major or minor requirements.) I II (4)

111 College Reading

Improvement of college-level reading skills. Previewing, skimming, scanning, rapid reading, critical reading, and study reading. (May not be applied to core, language, or psychology major or minor requirements.) I II (1)

221 The Psychology of Adjustment

Problems in personal adjustment in everyday living. Prerequisite: 101. I II (2)

242 Advanced Statistics and Research Design

A continuation of Statistics 231 and accompanying lab taught by members of the psychology department. Topics include single and multi-factor experimental designs and analyses of variance, multiple aggression, quasi-experiments, surveys, case studies, archival research, small-N research, and non-parametric statistical techniques. Students will learn to use computer programs to carry out statistical analyses, and will have the opportunity to design and conduct their own research study. Lecture and laboratory. Prerequisite: STAT 231 and accompanying lab taught by members of the psychology department or consent of instructor at least two months before the beginning of the semester. (4)

325 Human Sexuality

Study of the psychological, biological, and cultural components of human sexual and emotional behavior. Topics include sexual identity, typical and atypical sexual behavior, reproduction, courtship, and affection. Prerequisite: 101. (4)

340 Human Neuropsychology

The study of brain-behavior relationships. Topics include neuro-anatomical and neuro-physiological 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: 101, 242 (or equivalent); or consent of instructor. (4)

341 Experimental Research Laboratory in Neuropsychology
Experiments and demonstrations related to neuropsychological phenomena. Emphasis on methodology in research on the brain and behavior. Prerequisite: 340 (or concurrent enrollment in 340). a/y (2)

342 Learning: Research and Theory

A critical overview of the research data on human and animal learning, and of the theoretical attempts to understand those data. Prerequisite: 101, 242 (or equivalent); or consent of instructor. (4)

343 Experimental Research Laboratory in Learning

Experiments and demonstrations related to conditioning and learning in humans and animals. Emphasis on methodology in learning research. Prerequisite: 342 (or concurrent enrollment in 342). a/y (2)

346 Perception

The study of our interactions with the physical world and the nature of our understanding of it. Includes such topics as color vision, dark adaptation, hearing music and speech, taste, smell, pain, and sensory physiology. Prerequisites: 101, 242 (or equivalent); or consent of instructor. (4)

347 Experimental Research Laboratory in Perception

Experiments and demonstrations of perceptual events. Emphasis on methodology in perception research. Prerequisite: 346 (or concurrent enrollment in 346). a/y (2)

348 Cognitive Processes

The study of human mental activity. Topics include attention, perception, consciousness, memory, language, conceptual behavior, developmental aspects of cognition, individual differences, and applications. Prerequisites: 101, 242 (or equivalent); or consent of instructor. (4)

349 Experimental Research Laboratory in Cognition

Experiments and demonstrations related to human cognition. Emphasis on methodology in research on cognition. Prerequisite: 348 (or concurrent enrollment in 348). a/y (2)

350 Personality Theories

Strategies for the study of personality theories. Techniques of measurement and implications for counseling and/or psychotherapy. Prerequisite: 101. (4)

352 Development: Infancy to Maturity

Physical, intellectual, social, and emotional growth from infancy through adolescence to maturity. Prerequisite: 101. (4)

354 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 influences are discussed. Prerequisite: 101. (4)

395 Research Laboratory

Experience in evaluating and conducting research in a designated area of psychology; may be offered from time to time as an elective to accompany various 300-level courses. Prerequisite: consent of instructor. (2)

399 Internship

A practicum experience in the community in the clinical, social, and/or experimental areas. Classroom focus on case conceptualization and presentation. Prerequisite: sophomore standing plus one course in psychology and consent of the department. (1-6)

401 Workshop

Selected topics in psychology as announced.

402, 403 Independent Study

A supervised reading, field, or research project of special interest for advanced undergraduate or graduate students. Prerequisite: departmental consent. (1-4)

440 Psychology of Language

The study of language as a means of communication and structured human behavior. Topics include: biological foundations of language, psycholinguistics, speech perception and production, sentence and discourse comprehension, nonverbal communication, language acquisition, bilingualism, language disorders. Prerequisite: 101. (4)

442 Development in Infancy

Psychological development from the prenatal period through the beginning of language acquisition. Prerequisite: 352. (2)

444 Adolescent Psychology

Physical development, mental traits, social characteristics, and interests of adolescents; adjustments in home, school and community. Prerequisite: 352. (2)

450 Psychological Testing

Survey of standardized tests; methods of development, standardization; limitations and interpretations of tests. Prerequisites: 101, STAT 231 (or equivalent); or consent of instructor. (4)

453 Abnormal Psychology

Etiology and treatment of abnormal behavior. Emphasis on treatment in community-based settings and institutions. Prerequisite: 101. (4)

454 Community Psychology

Intervention strategies which focus primarily on communities and social systems. Particular stress on alternatives to traditional clinical styles of promoting the well-being of communities. Prerequisite: 101. (4)

456 Theories and Methods of Counseling and Psychotherapy

Introduction to basic methods of counseling and psychotherapy, and examination of the theories from which these methods derive. Prerequisites: 350, 450, 453, or 454; or consent of instructor. (4)

461 Psychology of Work

Integrating career planning into the study of human behavior in work settings. Application and extension of psychological principles to the individual operating within an organization context—including measuring and facilitating job performance, worker motivation, human factors, and group processes. Prerequisite: 101. (4)

462 Consumer Psychology

Social psychological principles applied to consumer attitude-formation and decision-making—e.g., perception of advertisements, influence of reference groups and opinion leaders, and learning effects upon repeat purchasing. Emphasis on audience, message, and media factors. Prerequisite: 101. (4)

464 Environmental Psychology

Human behavior related to the physical environment. Behavioral basis for designing environments—including territorial behavior; environmental attitudes and perceptions; and stressors. Applications to built and natural settings ranging from rooms to the wilderness. Prerequisite: 101. (4)

471 Psychology and the Law

An introduction to the issues, research, professional and judicial practices generated by the growing mutual influence between the law and psychology. Psychological investigations of juror selection, eyewitness testimony, and the jury process. Expert testimony by psychologists regarding the insanity defense, competence to stand trial, sentencing. Effects of court rulings on the mental health system. Development of psychological career options. Prerequisite: 101. (4)

472 Psychology and Medicine

An introduction to the field of health care psychology. Psychosocial factors influencing health (e.g., stressors, personality, behavior patterns). Psychosocial impact of illness and its treatment. The role of psychologists in the health care system. Prerequisite: 101. (4)

474 Psychology of Women

Exploration of psychological issues pertinent to women. Includes such topics as sex differences; psychological ramifications of menarche, child bearing, menopause, sexual harassment, and rape; women's experiences with work and achievement, love and sexuality, and psychological disorders. Prerequisite: 101. (4)

481 Psychology Research Seminar

An advanced course providing students the opportunity to design and conduct ongoing research and review current research in psychology. Directed toward helping students perform research studies that may be suitable for submission to journals or presentations at conferences. Strongly recommended in the junior year for students with an interest in graduate studies. To maximize the effectiveness of the course, students are encouraged to give advance consideration to areas and designs for possible research. Prerequisites: 101, 242 (or equivalent), and consent of instructor. (2-4)

483 Seminar

Selected topics in psychology as announced. Prerequisite: consent of instructor. (2-4)

493 History and Systems of Psychology

Historical development, contemporary forms, and basic assumptions of the major psychological theories and traditions. Prerequisites: 101; 242 (or equivalent); one of 340, 342, 346, 348; one of 350, 352, 354. (4)

495 Research Laboratory

Experience in evaluating and conducting research in a designated area of psychology; may be offered from time to time as an elective to accompany various 400-level courses. Prerequisite: consent of instructor. (2)

510 Industrial/Organizational Psychology

Human behavior in work settings. Applications or extensions of psychological factors and principles to the problems of individuals operating within an organizational context—including human relations skills, human factors, individual and group differences, and role-related behaviors. (4)

591 Directed Study (1-4)**598 Research Project (4)****599 Thesis (4)**

Publishing and Printing Arts

For nearly twenty years Pacific Lutheran University's Department of English has offered a way to help students translate a "love of books" into an exciting professional career in publishing. One of only a few such programs in the country, this distinctive interdisciplinary curriculum in Publishing and Printing Arts (PPA) is highly respected by employers around the country because it combines preprofessional skills and experience with the solid foundation of a liberal arts education. This six-course minor is designed to give students with talent and interest in writing, graphic design, communications, or business a head start into the world of publishing and a broad variety of related professions.

The Publishing and Printing Arts program is an especially valuable complement to majors concerned with language and the written word, majors such as English, languages, education, public relations, journalism, marketing, and graphic design. But students majoring in a wide spectrum of disciplines — from biology to music to religion — have discovered the value of a publishing and printing arts minor, too. It both helps to connect them to publishing career opportunities in those fields and provides a richer understanding of the complex roles that written communications of all sorts play in our lives and in our modern world.

**PUBLISHING AND PRINTING ARTS MINOR:**

Three core courses are required:

- English/Communication 321 – The Book in Society
- English/Communication 322 – Publishing Procedures
- English/Art 331 – The Art of the Book I

Book in Society is a good place to start; it surveys how the publishing industry works and discusses such aspects of book culture as censorship, bestsellers, and children's books. *Art of the Book I* is a studio course in the aesthetic and creative dimensions of book design and typography. *Publishing Procedures* is a workshop in the fundamental techniques that professional publishers use in selecting, editing, designing, and marketing books. These core courses are cross-listed so that students can choose what kind of credit the course will earn for them.

In addition to this 12-hour core, students take three elective courses (12 hours) selected from at least two of the following categories: writing/editing, marketing/management, and design/production.

Writing/Editing: All English writing courses beyond 101, including 403; approved courses in Communication (283, 384, 480).

Marketing/Management: Approved courses in Business (281, 282, 350, 370, 471, 472, 475) or Communication (381, 385, 390, 438).

Design/Production: Approved courses in English (332), Communication (380), or Art (226, 326, 370, 396, 398, 426, 496).

Up to two courses (8 hours) can be counted toward both a Publishing and Printing Arts minor and other requirements, such as general university requirements, another minor, or a major.

To earn a minor in Publishing and Printing Arts, students must demonstrate word processing computer skills and acquire some form of practical experience in publishing-related work gained outside the classroom.

Religion

Religion is an attempt to understand the meaning of human existence. For Christians meaning is revealed in the love of God in Jesus Christ. The Department of Religion stands within and affirms this Christian context.

In a university setting this means the serious academic study of the Bible, of the history of the Christian tradition, of Christian theology, and of world religious traditions. Critical study calls for open and authentic dialogue with other religious traditions and seeks to understand a common humanity as each tradition adds its unique contribution. It calls for a critical yet constructive interchange with contemporary society. Finally, it calls for a sharing of insights with other disciplines in the university as each sheds light on the human condition.

To these ends the Department of Religion offers a wide range of courses and opportunities. Furthermore it calls students, majors and non-majors alike, to consider questions of meaning, purpose, and value in a society which all too often neglects these questions.

FACULTY: O'Connell Killen, *Chair*; Govig, Haemig, Howell, Ingram, Lundeen, Oakman, Petersen, Pilgrim, Stivers.

UNIVERSITY CORE 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 junior or seniors are required to take 4 semester hours of religion unless presenting 8 transfer hours of religion from other accredited college or universities.

The Core I requirement in Religious Studies (8 hours) specifies that 4 hours must be taken from each of two lines, as follows:

1. Biblical Studies – 111, 112, 211, 212, 330, 331, 332, 333.
2. Christian Thought, History, and Experience – 121, 221, 222, 223, 224, 225, 226, 227, 360, 361, 362, 364, 365, 366, 367, 368, 369.
3. Integrative and Comparative Religious Studies – 131, 132, 133, 231, 232, 233, 234, 237, 390, 391, 392, 393.

Junior and senior transfer students need to complete only one course at PLU (4 hours) from lines 1 or 2.

BACHELOR OF ARTS MAJOR: 30 semester hours with at least 4 hours in each of the three lines plus either 404 or 405. Transfer majors will normally take 18 hours in residence. 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 religion major in consultation with the chair of the department.

MINOR: 16 semester hours with no more than 8 hours in one of the lines listed above. Transfer minors must take at least 8 hours in residence.

Course Offerings

111 Biblical Literature: Old and New Testaments

The Bible as a whole; survey of the story of salvation; selected passages interpreted in contemporary contexts. (4)

112 The Bible and Culture

Opens a window onto the “strange new world” in the Bible. Builds on social scientific studies of the Bible as a document of Mediterranean antiquity; shows the distinctiveness of biblical culture and how a reader’s own culture shapes an understanding of the Bible. (4)

121 The Christian Tradition

The study of selected theological questions and formulations examined in their social and historical contexts. (4)

131 The Religions of South Asia

Hinduism, Buddhism, Jainism, and Sikhism — their origins and development, expansion, and contemporary issues. Emphasis on primary sources in translation. (4)

132 The Religions of East Asia

Confucianism, Taoism, Chinese and Japanese Buddhism, Shinto, and the “new religions” of Japan — their origins, development, and contemporary issues. Emphasis on primary sources in translation. (4)

133 The Religions of the West

Judaism, Christianity, and Islam – their origins and development, expansion, and contemporary issues. Emphasis on primary sources in translation. (4)

211 Religion and Literature of the Old Testament

Literary, historical, and theological dimensions of the Old Testament, including perspectives on contemporary issues. (4)

212 Religion and Literature of the New Testament

Literary, historical, and theological dimensions of the New Testament, including perspectives on contemporary issues. (4)

221 Ancient Church History

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). (4)

222 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. (4)

223 American Church History

Major religious themes in American history through the study of selected topics and periods. Explores religious forces that have shaped American culture and the mutual interaction of social change and religious experience. (4)

224 The Lutheran Heritage

Lutheranism as a movement within the church catholic: its history, doctrine, and worship in the context of today’s pluralistic and secular world. (4)

225 Faith and Spirituality

Reflection on various Christian lifestyles and their expression and understanding of commitment and discipleship. This course centers around the theological question: What does it mean to be a follower of Jesus? (4)

226 Christian Ethics

Introduction to the personal and social ethical dimensions of Christian life and thought with attention to primary theological positions and specific problem areas. (4)

227 Christian Theology

Survey of selected topics or movements in Christian theology designed to introduce the themes and methodologies of the discipline. (4)

231 Myth, Ritual, and Symbol

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)

232 The Buddhist Tradition

Introduction to the history and practice of Buddhist tradition in its South Asian, East Asian, and Western cultural contexts. Emphasis on primary sources in translation. (4)

233 The Religions of China

Introduction to the major religious movements of China: ancestor religion; six Classical Schools; Confucian and Taoist traditions; Chinese Buddhism; Neo-Confucianism; impact of religion on China's encounter with the West. Emphasis on original sources in translation. (4)

234 The Religions of Japan

Introduction to the religious traditions of Japan: ancient, medieval, and modern Shinto; Japanese Buddhism; the "new religions"; role of religion in Japan's encounter with the West. Emphasis on primary sources in translation. (4)

237 Judaism

Historical development of Judaism's faith and commitment from early Biblical times to the present. Includes interpretation of the Hebrew Bible, rabbinic thought, religious observances, medieval and modern movements, and Jewish-Christian dialogue. (4)

330 Old Testament Studies

Major areas of inquiry: the prophets, psalms, wisdom literature, mythology, theology, or biblical archeology. (4)

331 New Testament Studies

Major areas of inquiry: intertestamental, synoptic, Johannine, or Pauline literature, or New Testament theology. (4)

332 The Life of Jesus

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)

333 Biblical Studies

Study of a select Biblical theme, book, or group of books, such as theodicy (Job), apocalyptic (Daniel, Revelation), or methods of interpretation. (2)

360 Studies in Church Ministry

The church in human service: the congregation, the church-related college, contemporary contexts of world mission, and inter-church cooperation. (4)

361 Church History Studies

Selected area of inquiry, such as American-Scandinavian church history, religious experience among American minority communities, and the ecumenical movement. (4)

362 Luther

The man and his times, with major emphasis on his writing and creative theology, such as the radical centrality of the Gospel and faith, the Word and Scripture, the sacraments, church and state. (4)

364 Theological Studies

Selected topic or movement within Christian theology such as understandings of God, the problem of evil, liberation theology, feminist theology, narrative theology, Christology, or inter-religious dialogue. (4)

365 Christian Moral Issues

In-depth exploration from the perspective of Christian ethics of selected moral issues such as peace and violence, the environment, sexuality, political and economic systems, hunger, and poverty. (4)

366 The Arts and Christian Life

Relationship of Christian spirituality to artistic creativity, including literature, architecture, and films in popular culture. (4)

367 Major Religious Thinkers, Texts, and Genres

In-depth study of major figures, texts, or genres in Christian and non-Christian religious traditions, focusing especially on the theology and religious thought of these traditions. Fulfills either line 2 or 3 as appropriate. Prerequisite: consent of instructor. (4)

368 Feminist Theology

Study of major themes and issues in theology examined through questions of gender. Also includes exploration of race, class, and culture in relation to gender questions. (4)

369 Christian Studies

Study of an historical theme, theological problem, or ethical issue, such as salvation by grace, gender questions, world hunger. Cannot be combined with 333 to satisfy the general university core requirement in religion. (2)

390 Studies in History of Religions

Historical study of specific non-Christian religions such as the traditions of India and China, Judaism, and Islam. (4)

391 Sociology of Religion

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. (Cross-referenced with SOCI 391.) (4)

392 God, Magic, and Morals

Anthropology of religion; humanity's concepts of and relationships to the supernatural; examination of personal and group functions that religions fulfill; exploration of rituals, beliefs, and systems of morality in religions both "primitive" and historical; origins of religion; science "versus" religion; the nature of reality. (Cross-referenced with ANTH 392). (4)

393 Religion and the Stages of Life

Selected periods within the life cycle considered from a religious and social scientific viewpoint, e.g., healing and well-being, death and dying. (4)

403 Advanced Seminar in Religion

Selected topics to be announced. For majors, minors, and students who have taken at least three courses in religion. Priority to majors and minors. (4)

404 Reading Seminar in Religion

Survey of significant books in the area of contemporary religious studies, emphasizing recent books in Biblical theology, systematic and historical theology, Christian ethics, and dialogue between Christianity and the world religions. For majors and minors, others with permission of the instructor. (2)

405 Research Seminar in Religion

Faculty-directed research and writing project on a topic chosen by students in one of the methodological disciplines of religious studies such as theology, historical studies, Biblical studies, ethics, history of religions, social scientific studies, or philosophy. For majors and minors, others with permission of the instructor. (2)

491, 492 Independent Study

Intended for religion majors, advanced and graduate students; consent of the department is required. (1-4)

Scandinavian Area Studies

Scandinavian Area Studies is a flexible program which draws on many university departments. It offers a broad perspective on Scandinavia past and present, while developing useful analytical and communicative skills. The program reflects both the Scandinavian heritage of the university and the dynamic profile of Scandinavia within the world community today.

SCANDINAVIAN STUDIES COMMITTEE: Toven, *Chair & Program Director*; M. Benton, Edison, R. Jensen, Lundeen, Ringdahl, Vaught Farner.

Students enrolled in the Scandinavian Area Studies program are expected to demonstrate the equivalent of two years of Norwegian, Swedish, or Danish language instruction (16 hours). To gain a basic understanding of the region, they also take 6 hours in Scandinavian cultural history and 4 hours in Scandinavian literature.

Majors choose additional Scandinavian and cross-disciplinary courses in accordance with personal interests and goals and in consultation with the program director (4 hours in cross-disciplinary course, 2 hours in a senior project, and 8 hours of electives). A total of 40 semester hours is required. With the approval of the Scandinavian Studies director, selected January-term, summer, and experimental courses may be included in the major program. No more than 8 semester hours may be offered to meet both the Scandinavian Area Studies major and general university requirements or requirements for a second major. Such cross-application of courses must be approved by the Scandinavian Studies director.

The cross-disciplinary courses listed below offer an opportunity to view the Scandinavian countries in comparison with other world regions. They are regular departmental offerings in which students enrolled in the Scandinavian Area Studies major focus their reading and work assignments to a significant extent on Scandinavia. Students must consult with the program director concerning registration for these courses.

Students are encouraged, though not required, to study in Scandinavia as part of their program. Study opportunities are available at a variety of institutions in Norway, Sweden, and Denmark. Appropriate coursework completed abroad should be submitted to the Scandinavian Studies director for approval toward the major.

Students interested specifically in Norwegian language study are referred to the description of the Norwegian major under the Department of Languages. All core Scandinavian courses are taught out of this department.

SCANDINAVIAN COURSES

Languages:

- Norwegian 101, 102 – Elementary
- Norwegian 201, 202 – Intermediate
- Norwegian 351 – Conversation and Composition
- Norwegian 352 – Advanced Conversation and Composition

Cultural History:

- Scandinavian 150 – Introduction to Scandinavia
- Scandinavian 322 – Contemporary Scandinavia
- Scandinavian 323 – The Vikings
- Scandinavian 324 – The Emigrants

Literature:

- Scandinavian 250 – Masterpieces of Scandinavian Literature
- Scandinavian 421 – Ibsen and Strindberg
- Scandinavian 422 – Twentieth-Century Scandinavian Literature

CROSS-DISCIPLINARY COURSES SOMETIMES APPLICABLE TO THE SCANDINAVIAN AREA STUDIES

MAJOR: Consult with the program director to determine applicability.

- Anthropology 350 – Women and Men in World Cultures
- Art 381 – Twentieth-Century Design and Architecture
- Economics 331 – International Economics
- Economics 381 – Comparative Economic Systems
- English 331 – The Art of the Book I
- English 364 – Special Topics in Children's Literature
- English 381 – Studies in Medieval Literature
- History 323 – The Middle Ages
- History 325 – Reformation
- History 495 – Seminar: European History
- Philosophy 338 – Kierkegaard and Existentialism
- Political Science 345 – Government and Public Policy
- Political Science 347 – Political Economy
- Religion 223 – American Church History
- Religion 361 – Church History Studies
- Sociology 330 – The Family

Course Offering

495 Senior Project

A research paper, internship, or other approved project. For Scandinavian Area Studies majors. I II (2)

Division of Social Sciences

The faculty within the Division of Social Sciences seek to provide a challenging education in the social sciences that critically analyzes the past and the present social history and structures of human beings, that is vibrant and relevant to the time and world in which we live, and that encourages responsible citizenship for today and tomorrow. Through classroom learning and applied settings such as supervised internships, students in the social sciences acquire an understanding of society while developing the analytical tools with which to provide solutions to a diverse range of social problems.

Specialized programs supported by the Division of Social Sciences build links between students, faculty, and their community. Among these are the following:

The *Center for Social Research*, which supports joining faculty-student research projects on a wide range of multi-disciplinary topics including an annual Pierce County Quality of Life survey, and which is a regional affiliate of the Washington State Census Data Program; and

The *Center for Economic Education* which works to raise the understanding of economic principles among teachers and students in the Pacific Northwest.

The division's *Graduate Programs* offer concentrations in the fields of organizational systems, marriage and family therapy, and individualized study.

The Division of Social Sciences houses two interdisciplinary programs:

Legal Studies, offered as both a major and minor area of study, is a multidisciplinary program designed to study law as a body of knowledge within the context of a liberal arts education;

Global Studies, a complementary major, is a multidisciplinary program that approaches the world as a whole in assessing both problems and solutions arising in this age of transition.

Social Sciences faculty also participate actively in other interdisciplinary programs, including Chinese Studies, Cooperative Education, and Environmental Studies.

In addition, a vital link exists between the *Family and Children's Center* and the Division. Faculty and students in the Marriage and Family Therapy graduate program staff the MFT Counseling Center, housed in the Family and Children's Center. Community-based programs located in the Family and Children's Center provide rich opportunities for student internships, field placements, and volunteer activities.

FACULTY: Smith, *Divisional Dean*; faculty members of the Departments of Anthropology, Economics, History, Political Science, Psychology, Social Work and Marriage and Family Therapy, and Sociology.

As a division within the College of Arts and Sciences, the Division of Social Sciences offers programs in each constituent department leading to the B.A. degree. Additionally, a B.S. degree is offered in psychology. Programs leading to the M.A. degree are also offered. Course offerings and degree requirements are listed under

Anthropolog

Economics

History

Marriage and Family Therapy

Political Science

Psycholog

Social Work

Sociology

See also the sections of this catalog on Legal Studies and International Education.

Course Offerings

502 Social Science Theory

An analysis of social explanation and the social science frame of reference. (4)

505 Social Science Research 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 on understanding and evaluating rather than conducting research. (4)

Social Work

Within a program that is firmly based in the liberal arts, the social work major is designed to prepare students for beginning professional social work practice. The curriculum provides an understanding of the roots and dimensions of social problems as well as the basic skills and knowledge necessary to work toward solving these problems. Social workers are involved in areas that are influenced by political and economic factors as well as social factors. To that end, the program stresses an understanding of social science theories and methods that adds an extra dimension to practical education. The result is a broad theoretical base to complement professional skills.

The social work faculty place a high value on the integration of academic and experiential learning. A major strength of the curriculum is the field experience component, and the program provides numerous opportunities for students to learn in community settings. In addition to field placements for advanced students, freshmen and sophomores are encouraged to test their interests in and aptitudes for social work through experiences in community agencies.

Social work majors are fortunate to have access to a rich variety of social service agencies in Tacoma and Pierce County that provide excellent placements for students. Students work with experienced, caring supervisors who help make placements a valuable learning experience. The Center for Public Service provides social service programs for a variety of age groups and offers particularly convenient placements for students.

Social work majors should consult with a departmental adviser in selecting a minor area of study which supports the social work curriculum. Minors in psychology and sociology are particularly helpful. Students are also encouraged to include philosophy and foreign language courses in their studies as a knowledge of ethical theories and a second language are valuable assets in the social work profession. The faculty encourages students to take advantage of learning opportunities that emphasize multicultural awareness and diversity. In addition to specific courses within the Division of Social Sciences, the Service Learning Program and Study Abroad Programs are beneficial to social work majors.

The social work program is accredited by the Council on Social Work Education.

FACULTY: York, *Chair*; Keller, Storm, Szabo.

BACHELOR OF ARTS MAJOR: 38 semester hours, including 271, 332, 333, 377, 385, 472, 473, 475, 476, and 484. The following courses are prerequisites for entering the social work curriculum and may be taken to fulfill general university core requirements: Psychology 101, Sociology 101, and Biology 111. The Integrated Studies Program (Core II) also satisfies this prerequisite, since content related to the social, biological, and behavioral sciences is built into its interdisciplinary approach. Unless otherwise stated, 271 or the consent of the instructor is a prerequisite for all courses in social work.

Course Offerings

222 Community Services

Designed to provide an opportunity for freshmen and sophomore level students to test their interest in the field of social work through a five to ten-hour 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 core requirements. I II (2-4)

271 Introduction to Social Work

The history, philosophical and value stance, practice methods and "settings" (i.e., services to children and youth, residential treatment, health care, corrections, services to older persons) of professional social work; opportunities for agency/institutional observational experiences. No prerequisites. I II (4)

332 Social Work Values

An examination of the value system that underlies the practice of

social work, such as client self-determination, regard for the worth of individuals, and an appreciation of the distinct characteristics of diverse populations. Students will have the opportunity to clarify their own values during the course.

Prerequisite: 271. I II (2)

333 Interviewing

A laboratory course that provides opportunity to learn basic interviewing skills and techniques through various experiential forms. Open to non-social work majors. Prerequisite for social work majors only: 271 and 332. I II (4)

377 Family and Child Development

An examination of the biological, psychological, social, and environmental influences on human development. Study of family development throughout the life span. Special emphasis on gender, ethnicity, and other aspects of human diversity.

Prerequisite: 271. I (4)

385 Social Policy and Organization

An examination of the impact that cultural values have on social policy and how organizational structures influence the implementation of social policies. Consideration of the influence that economic and political systems have upon social policy and the way in which the values operating in those systems impact social policy. Study of the effect that administrative and organizational structures at various governmental levels have on social policy implementation. The place of social services as an institution in society and the role that the social work profession plays in value formation and influence. Prerequisite: 271 or consent of instructor. I II (4)

399 Internship

A supervised learning experience in an agency setting with emphasis on acquiring an overview of the agency, in contrast to learning specific social work skills. Intended to provide the opportunity to apply and test out knowledge acquired in courses previously taken in the social sciences. Can be a useful complement to 475 and 476, which are more skill-oriented. Prerequisites: 271, 333. I II (1-4)

472 Social Work Practice I

Provision of a theoretical base and requisite skills for direct service in social work. Within a generalist framework the following intervention models will be presented: the systems model, the task-centered model, problem-solving theory, the life model, crisis intervention, and social work practice with families. Prerequisites: 271, 332, 333, 377. I (4)

473 Social Work Practice II

A continuation of 472 with emphasis on social work practice with groups, ethical and value considerations, and skills related to systems change. A study of macropractice intervention strategies at the community and larger system level. Prerequisite: 271, 332, 333, 377, 472. II (4)

475 Field Experience

Supervised field work within an agency or institution; application/integration of knowledge, theory, and understanding; development of techniques common to the social work field. Prerequisite: 271, 332, 333, 377, 385 to be taken concurrently with 472, and consent of instructor. III (4)

476 Field Experience

Continuation of 475. I II (4)

484 Social Research

Principles of research design and assessment of various research methods. Evaluation research will be given special attention. Primary emphasis on understanding and critically examining actual research. Prerequisites: 271, 332, 333, 385. I (4)

491 Independent Study

Prerequisite: departmental consent. I II (1-4)

Sociology

Sociology examines the processes and structures which shape social groups of all sizes, including friends, families, workplaces, and nations. The study of sociology provides students with unique interpretive tools for understanding themselves and others in a changing world. Sociology has broad appeal to those who are interested in developing practical skills and analytical talents. Some of the practical pursuits enabled by sociological training are in the areas of planning, program development, counseling, research, criminal justice, employment and training, and marketing. The academic preparation is valuable to those interested in pursuing further degrees in law, administration, social work, theology, or the social sciences.

The department's curriculum offers a wide variety of courses in sociological analysis while permitting an optional concentration in the specialized areas of family/gender or crime/deviance. The curriculum is deliberately flexible to permit students to study individual subject areas, or to pursue majors or minors in the field. Students majoring in business, nursing, education, and computer science find the sociological minor particularly useful for broadening their understanding of social rules and relationships, programs and solutions, and continuity and change.

The faculty is attentive to the individual needs of students in their efforts to provide academic excellence to a diverse student body. Faculty members have gained recognition for their professional activities at the community, regional, and national levels, and invite student participation in these activities.

FACULTY: McDade, *Chair*; Biblarz, Jobst, Leon-Guerrero, Oberholtzer, Smith.

BACHELOR OF ARTS:

General Major: 40 semester hours, including 101, 240, 330, 396, 397, 499, plus 12 semester hours in sociology approved by the department at the 300 and 400 levels; and Statistics 231.

Major with Concentration in Family/Gender: 40 semester hours including 101, 330, 396, 397, 440, 499; plus 12 semester hours in sociology chosen in consultation with the department; and Statistics 231.

Major with Concentration in Crime/Deviance: 40 semester hours including 101, 336, 396, 397, 413, 499; plus 12 semester hours of sociology chosen in consultation with the department; and Statistics 231.

NOTE: 101 or consent of instructor are prerequisite to all 300 and 400 level courses.

MINOR: 20 semester hours, including 101 and 16 semester hours of sociology chosen in consultation with the department. Statistics 231 may be included in the minor.

BACHELOR OF ARTS IN EDUCATION:

See *School of Education*.

TRANSFER STUDENT POLICY: The department accepts, for transfer credit from another college or university, only those courses equivalent to Sociology 101 (American Society or Introduction to Sociology) and Sociology 240 (Social Problems). If a student wishes to have courses beyond 101 and 240 taken at another institution considered for transfer to either their major

or minor requirements, they must first meet with the department chair. The student should bring to this initial meeting the following:

1. college/university transcripts
2. college catalogs
3. course syllabi and other supporting materials

Declared majors/minors will be required to fill out one student petition per transfer course.

Course Offerings

101 American Society

How does the individual relate to the group? Why do some people "have" power, prestige, or money while others "have not"? What contributes to social stability or social unrest? What is happening in schools, families, and religion? In answering, we turn the sociological eye on American society using concepts like these: life styles, interactions, groups, social structures, values, and change. (4)

202 Social Issues

Analysis of selected social problem and policy areas with emphasis on articulating questions, listening for meaning in what others write and say, seeing ideas and positions in context, arguing, moving to consensus, and living with conflict. Topics vary and will be announced in each semester's time schedule. No prerequisite. (2)

240 Social Problems and Policies

Factual and evaluative considerations in the definition, explanation, and resolution of social problems. Analysis and criticism of current approaches to social problems focusing on logical procedures and fallacies in thinking. Among issues to be included are mental health, poverty, crime, family disorganization, and work alienation. (4)

260 Relationships

A study of the relationships of lovers, friends, enemies, acquaintances, couples, and strangers, with particular attention to patterns and problems of communication, personal identity and growth, and social networks and power. Prerequisite: 101 recommended. (4)

324 The Sociology of Sport

An examination of the institution of sport in North America. Topics include: sport and socialization; sport and politics; violence in sport; the sporting enterprise; role of sport in academic institutions; women in sport; and the business of sport. Prerequisite: 101 or consent of instructor. a/y (4)

326 Delinquency and Juvenile Justice

An examination of juvenile delinquency in relation to family, peer groups, community and institutional structure. Consideration of processing of the delinquent by formal agencies of control. Prerequisite: 101 or consent of instructor. a/y (4)

330 The Family

An examination of the institution of the family from historical, multicultural, and contemporary perspectives including both micro and macro analyses of family life. Conceptualization of the family as a universal institution with varied forms and functions shaped by a variety of social forces such as cultures, religions, governments, and economies. Includes an examination of internal family dynamics and interactions including family relationships, love, conflict, gender issues, communication patterns, authority structures, and acts of intrafamilial abuse and violence. Prerequisite: 101 or PSYC 335 or consent of instructor. (4)

334 Sociology of Youth

An examination of age and social status; analysis of social processes bearing upon the socialization of children and adolescents. The emergence of "youth cultures"; generational succession as a cultural problem. Prerequisite: 101 or consent of instructor. a/y (4)

336 Deviance

A general introduction to a variety of nonconforming, usually secretive, and illegal behavior, such as corporate crime, drug dealing, prostitution, industrial spying, child abuse, and suicide, with emphasis on the conflict of values and life-experiences within a society. Prerequisite: 101 or consent of instructor. (4)

351 Sociology of Law

An examination of the social control of law and legal institutions; the influence of culture and social organization on law, legal change, and the administration of justice. Includes examples of how law functions within the major theoretical models. Prerequisite: 101 or consent of instructor. (4)

380 The Changing Workplace

Approaches work experiences and organizational designs with sociological insights. Emphasis on issues like satisfaction, rewards, decision making, unemployment, and effects on families. Prerequisite: 101 or consent of instructor. (4)

386 Equality and Inequality

Examination of the nature, origins, forms, and consequences of social equalities and inequalities. Focus on material circumstances, lifestyles, and life changes in social classes, including racial groups and other minorities. Prerequisite: 101 or consent of instructor. a/y (4)

391 Sociology of Religion

An investigation of the American religious scene with particular emphasis on the new religious movements featuring insider accounts, along with attention to social settings and processes which these new religions reflect and produce. Prerequisite: 101, one previous religion course, or consent of instructor. (Cross referenced with RELI 391). a/y (4)

396 Major Theories

An analysis of the most famous and influential sociological theories of the 19th and 20th centuries with attention to the classic theories of Marx, Durkheim, and Weber, to the recent multitude of contemporary schools, and to the underlying patterns of thought which both unite and divide the sociological tradition. Required for junior majors. Prerequisite: 101, junior declared major/minor, or consent of instructor. (4)

397 Research Methods

An overview of the techniques sociologists use to collect, organize, and interpret information. A variety of research designs will be discussed including survey, observations, experiments, content analysis, and historical analysis. Students will learn how to conduct their own research and how to be informed consumers of others' research. Required for junior majors. Prerequisite: 101, junior declared major/minor, or consent of instructor. (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 businesses. Placements: criminal justice system, private and public social service organizations, local and state governmental agencies, businesses, and social research. Prerequisite: departmental consent. (1-4)

413 Crime and Society

An examination of criminal behavior in contemporary society in relation to social structure and the criminalization process with particular attention to the issues of race, gender, and class. Prerequisite: 101, 336, or consent of instructor. (4)

416 Quantitative Data Applications

Course emphasis on analysis, interpretation, and presentation of quantitative data. An advanced-level treatment of statistical methods and techniques. Techniques include: tabular analysis, log linear and regression modeling, factor analysis, and related topics. Use of computer statistical packages. Lecture and laboratory prerequisites: Statistics 231, some intermediate knowledge of computer statistical analysis preferred, or consent of instructor. a/y (4)

420 Advanced Research Methods

Course in advanced methodology and techniques. Topics include formulation of research problem, study design, hypotheses, sampling, measurement, data collection, processing, and analysis. Consideration of quantitative and qualitative methods. Students participate in ongoing research project. Lecture and laboratory. Prerequisites: 397, STAT 231, or consent of instructor. a/y (4)

423 Psychoanalysis and Society

A study of psychoanalytic theory and application to the understanding of various aspects of society and social behavior, including sex roles and the family, deviant behavior, social change, art and literature, religion, and power. Prerequisite: 101, or PSYC 101, or consent of instructor. (4)

434 Minority and Ethnic Families

An examination of the character of families and family life outside the dominant mainstream in America, including the realities of black, Hispanic, and Asian families, as well as working class families and families in other societies. Emphasis on similarities and differences among various kinds of families, on the social cause of these characteristics, and on the consequences of different types of family life for both the individual and society as a whole. Prerequisites: 101, 330, or consent of instructor. (4)

440 Sex, Gender, and Society

An examination of the impact of sex and gender on personality formation, intellectual ability and achievement, labor force participation, family roles and responsibilities, and social behavior. Biological, psychological, and sociological perspectives will be used to examine the differences and similarities between women and men in contemporary society. Prerequisites: 101, 330, or consent of instructor. (4)

462 Suicide

An examination of the different aspects of suicide and suicidal behavior. Begins with a cross-cultural and historical overview, looking at variations and changes in attitudes toward suicide. Review of the scope of the problem and careful analysis of theories that attempt to explain why people commit suicide. Examination of the influence of the mass media and the general phenomenon of contagion. Discussions of intervention in suicidal behavioral and the question of the right to suicide. Prerequisites: 101 and consent of instructor. (4)

473 Topics in Sociology

Selected topics as announced by the department. Prerequisite: departmental consent. (1-4)

491 Independent Study

Readings or fieldwork in specific areas or issues of sociology under supervision of a faculty member. Prerequisite: departmental consent. (1-4)

499 Senior Seminar

A recapitulation and integration of themes from previous sociology courses with additional readings and discussion. Students investigate an individual topic, make formal presentations, and complete a substantial research paper. Prerequisite: Senior sociology major or minor and departmental consent. (4)

501 Graduate Workshops

Graduate workshops in special fields or areas for varying periods of time. (1-4)

514 Complex Organizations

Examination of the nature, origins, and structures of organizations and bureaucracies. Classic and contemporary theories of organizations are reviewed and critiqued. The influence, power, and social responsibilities of large organizations are examined from historical as well as contemporary perspectives. (4)

530 Group Dynamics: Theory and Practice

Examination of concepts and principles of human behavior in groups. Topics include membership, leadership, authority, cohesiveness, goals, norms, and processes. The application and use of theory in applied settings are explored. (4)

534 Sociology of Work

Historical and critical examination of theories and issues related to work. Focus on interaction between society, the individual, and the workplace. Exploration of techniques of job enrichment and redesign along with trends for the future workplace. a/y (4)

551 Interventions Practicum I

Application of organizational change theory within an applied setting. Emphasis on identifying work situations for change and developing techniques for implementing change. (2)

552 Interventions Practicum II

Implementation and analysis of actual intervention within an organizational system or laboratory simulation with applied emphasis. Prerequisite: 551. (2)

590 Graduate Seminar

Selected topics as announced. Prerequisite: consent of the instructor. (1-4)

591 Directed Study (1-4)**595 Graduate Readings**

Independent study card required. (4)

598 Research Project (4)**599 Thesis (4)**

Statistics

Statistics, a branch of applied mathematics, studies the methodology for the collection and analysis of data and the use of data to make inferences under conditions of uncertainty. Statistics plays a fundamental role in the social and natural sciences, as well as in business, industry, and government.

Statistical practice includes: collection, exploration, summarization, and display of data; design of experiments and sampling surveys; drawing inferences and making decisions based on data and assessing the uncertainty of such inferences and decisions; and the construction of mathematical models for analysis of random processes. Probability forms the conceptual foundation and mathematical language for the inferential aspects of statistics.

The statistics program is offered cooperatively by the Departments of Economics, Mathematics, Psychology, and Sociology. The program is administered by an Interdisciplinary Statistics Committee headed by the Statistics Program director, who is appointed by the dean of the Division of Social Sciences. The statistics minor is administered by the Department of Mathematics. Students

interested in a statistics minor are encouraged to discuss course selection with a statistics faculty member from any discipline.

FACULTY: Selected faculty from the Departments of Economics, Mathematics, Psychology, and Sociology.

STATISTICS MINOR: A minimum of 16 semester hours to include Statistics 341, at least 8 hours from among the other statistics courses, and Computer Science 110, 220, or 144.

The statistics courses chosen for a statistics minor will vary with the interests of the student. Some typical programs leading to a statistics minor are listed below; a computer science course must be added to each list.

For students interested in mathematics, graduate or professional work in statistics, or an actuarial career:

Statistics 341, 342, 348

For students interested in economics or business:

Statistics 231, 341, 244 or Statistics 341, 342, 244

For students interested in other social sciences:

Statistics 231, 341, 244 or Statistics 231, 341, 348 (Psychology students should take designated sections of Statistics 231.)

For students interested in natural sciences:

Statistics 341, 342, 348 or Statistics 231, 341, 348

Course Offerings

231 Introductory Statistics

Descriptive statistics: measures of central tendency and dispersion. Inferential statistics: generalizations about populations from samples by parametric and nonparametric techniques. Methods covered will include estimation, hypothesis-testing, simple correlation analysis, linear regression and chi square analysis. Includes a required computer lab. Students should register for the lab corresponding to their lecture section. (May not be taken for credit after STAT 341 has been taken.) III (4)

244 Econometrics (ECON 244)

Introduction to the methods and tools of econometrics as the basis for applied research in economics. Specification, estimation, and testing in the classical linear regression model. Extensions of the model and applications to the analysis of economic data. Prerequisite: STAT 231 or equivalent. (4)

341 Introduction to Mathematical Statistics (MATH 341)

Description of data (univariate and bivariate), introduction to probability (axioms, discrete and continuous random variables, expectations), special distributions (binomial, Poisson, normal, gamma), statements of law of large numbers and central limit theorem, elements of experimental design (control, randomization, blocking), sampling distributions, point estimators (bias, efficiency, methods of moments and maximum likelihood), confidence intervals, hypothesis tests, regression (if time permits). Prerequisite: MATH 152. I (4)

342 Probability and Statistical Theory (MATH 342)

Continuation of Math/Stat 341. Topics may include: joint, marginal and conditional distributions, correlations, distributions of functions of random variables, moment generating functions, Chebyshev's inequality, convergence in probability and limiting distributions, introduction to inference in regression and one-way analysis of variance, introduction to Bayesian and non-parametric statistics, power test and likelihood ratio tests. Prerequisite: MATH/STAT 341. a/y II (4)

343 Operations Research (ECON 343)

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

348 Applied Regression and Analysis and Anova (MATH 348)

Linear, multiple and nonlinear regression, regression diagnostics and violations of model assumptions, analysis of variance, experimental design including randomization, and blocking, multiple comparisons, analysis of covariance. Substantial use of a statistical computer package and an emphasis on exploratory analysis of data. Prerequisite: 341 or consent of instructor. a/y II (4)

491 Independent Study (1-4)

500 Applied Statistical Analysis (ECON 500)

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



Women's Studies

The Women's Studies minor is a multidisciplinary program that enriches the traditional liberal arts curriculum by adding new perspectives on women's lives and accomplishments. Based on the study of women in culture, society and history, the minor incorporates gender into other basic categories of analysis including the dynamics of social change, the creation and transmission of culture and the arts, the legacy and cultural construction of our physical and intellectual characteristics, and the origins and nature of current theories and social issues. Women's Studies broadens the education of both male and female students and enhances their career preparation and professional opportunities wherever there is need to understand women and the new roles they are playing in society.

FACULTY: Women's Studies Executive Committee: Howell, Chair; D. Anderson, Ewart, Kraig, MacGinitie, Marek, McDade.

MINOR: 20 semester hours, including two core courses (4 hours) in Women's Studies (WMST 101 and 490); two courses (8 hours) from the approved list of departmental core courses from two different divisions, or the Integrated Studies "Understanding Gender" sequence (8 hours); and two elective courses from two different divisions.

1. *Women's Studies Core Courses (required – 4 hours)*
 - WMST 101 – Introduction to Women's Studies
 - WMST 490 – Seminar in Women's Studies
2. *Departmental Core Courses (8 hours)*

Students choose two courses from the following departmental courses which introduce the study of gender in respective disciplines. Selections must be from two different divisions.

 - Anthropology 350 – Women and Men in World Cultures (4)
 - English 232 – Women's Literature (4)
 - History 359 – History of Women in the United States (4)
 - Psychology 474 – Psychology of Women (4)
 - Religion 368 – Feminist Theology (4)
 - Sociology 440 – Sex, Gender, and Society (4)
3. *Elective Courses (8 hours)*

Students choose two (or more) courses from the following options. Selections must be from two different divisions.

 - a. Additional course from #2 above.
 - b. Courses from an approved list published in each semester's class schedule.
 - c. Courses from any discipline for which part of the course requirements can be fulfilled with a research paper on gender issues. This allows the integration of Women's Studies perspectives into courses which are not explicitly structured around those perspectives. Permission of the Women's Studies Committee and consent of instructor required.



Course Offerings

101 Introduction to Women's Studies

An introduction to Women's Studies as an academic discipline and a way of learning. This interdisciplinary course explores the richness and diversity of women's lives and experiences from a variety of perspectives, including the social sciences, humanities, and arts. Open to all students. Serves as the foundation of the Women's Studies minor. No prerequisites. (2)

490 Seminar in Women's Studies

A seminar for students who will do either an internship or a research project in Women's Studies. Students will discuss assigned readings, prepare class presentations, write summary reports, and interact with guest lecturers. (2)

491 Independent Study: Undergraduate Readings

Reading in specific areas or issues of Women's Studies under the supervision of a faculty member. (1-4)

Graduate Studies

This section contains information about Pacific Lutheran University graduate programs. Course descriptions for graduate courses are included in the undergraduate section of the catalog — within the specific department or school.

The Office of Graduate Studies coordinates and integrates the work of the schools and departments that provide graduate level instruction. The general purpose of graduate education is to further the basic objectives of the university by providing graduate level academic and professional degree programs. Specific objectives are: (1) to increase the breadth and depth of understanding of graduate students in the liberal arts; (2) to increase students' knowledge of research being done in their field of concentration; (3) to develop students' abilities to do independent study and research; and (4) to enhance students' professional abilities.

MASTER'S DEGREES OFFERED

The **Master of Business Administration** program enhances the managerial effectiveness of leaders in business, government, and non-profit organizations. Individuals of all educational and working backgrounds are encouraged to apply.

The **Master of Arts in Computer Applications** program is designed for students from the physical and social sciences or business who would like to pursue advanced study in computer science as it relates to another field.

The **Master of Science in Computer Science** program offers advanced study and experience in computer science for those interested in that field.

The **Master of Arts in Education** meets the needs of educators by offering six concentrations:

1. The *Classroom Teaching* concentration provides advanced preparation in subject matter and professional education for elementary and secondary classroom teachers.
2. *Educational Administration* is designed to prepare professionals to become elementary and secondary school principals and program administrators. The degree is open to qualified professionals not seeking principal's credentials, as well.
3. *Educational Psychology* is designed to provide advanced preparation for teachers and school personnel.
4. The *Literacy Education* concentration prepares educators to encourage literacy acquisition and development appropriate to students' needs and interests. The importance of children's literature, information literacy, and technology are emphasized throughout, in both theory and practice.
5. *Special Education* seeks to expand the qualifications of persons who serve special needs children and youth in a variety of educational or rehabilitative settings. Some of these roles and settings might include self-contained and resource room teachers, special education consultants, support personnel, or coordinators.
6. *Initial Certification* is designed to prepare qualified teachers for service in the K-12 educational system.

The **Master of Science in Nursing** program promotes learning to enhance professional knowledge and skills for nurses in three concentrations:

1. *Nursing Administration* prepares nurses for leadership and administrative positions in the health care delivery system.
2. The *Continuity of Care* specialization prepares nurses to guide

and track clients through a comprehensive array of health, mental health, and social services spanning all levels of intensity of care.

3. The *Nurse Practitioner* concentration prepares nurses as primary care providers. Graduates enter into primary care practice as family, OB/GYN or gerontology nurse practitioners.

The **Master of Physical Education** program is designed to provide teachers with opportunities for continuing certification, to enhance the professional credentials of individuals involved with exercise and fitness programs, and to provide preparation for those who administer sports programs.

The **Master of Arts in Social Sciences** program has three concentrations:

1. *Marriage and Family Therapy* is designed to develop professional skills and clinical competence by means of a systems approach to family therapy with a rigorous practicum component. The program is accredited by AAMFT.
2. *Organizational Systems* is for students who wish to become more effective in dealing with problems facing complex organizations by focusing on a social sciences approach to organizational theory, behavior, and change.
3. *Individualized Study* allows students to increase their knowledge base in several of the social sciences while focusing on a special area of interest.

Admission

Students seeking admission to any graduate program must hold a bachelor's degree from an accredited college or university. A cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale) is required for admission as a regular status graduate student. Those students with an average of less than 3.0 may be granted provisional status and will not be considered for admission to regular status until they have demonstrated their ability to do graduate work by completing a minimum of twelve semester hours of work with a cumulative grade point average of at least 3.0.

All application evaluations are based on scholastic qualifications, a statement of professional goals, letters of recommendation, and preparation in the proposed field of study. Some graduate programs may also require autobiographical statements, personal interviews, standardized tests, or other evidence of professional accomplishment.

Listings for each program detail these additional admission requirements. The dean of graduate studies may deny admission if applicants' scholastic records are undistinguished, if preparation is judged inadequate as a foundation for graduate work, or if the programs are already filled to capacity. Admission decisions are made by the dean of graduate studies upon recommendation by the graduate committee of the respective academic unit.

Students applying for admission to graduate study must submit a completed application form, a statement of goals, a resume, and a non-refundable application fee of \$35.00.

Applicants must request from each previously attended institution of higher learning (undergraduate and graduate) an official transcript to be sent by the institution directly to the Office of Admissions at PLU.

Further supporting evidence in the form of personal recommendations are required from those persons named by the applicant on the application form.

Applicants to all programs except initial certification and Marriage and Family Therapy are encouraged to submit their applications at least three months before the semester in which they wish to enroll. Application deadlines for initial certification and Marriage and Family Therapy are specified below.

Application packets are available from the Office of Admissions, (206)535-7151.

In summary, the following items must be on file in the Office of Admissions before an applicant will be considered for admission:

1. The completed application form.
2. A statement of professional and educational goals.
3. A resume.
4. The \$35.00 non-refundable application fee.
5. An official transcript from each institution of higher learning attended. All transcripts must be sent directly to the Office of Admissions at PLU from the institution providing the transcript.
6. Two recommendations.
7. TOEFL test scores for all international students (see international student section for details).
8. Additionally, specific programs require the following:
 - Master of Business Administration: GMAT score.
 - Master of Arts in Computer Applications and Master of Science in Computer Science: GRE score.
 - Master of Arts in Education: MAT or GRE score; personal interview with program director.
 - Master of Physical Education: GRE score.
 - Master of Arts in Social Sciences: Autobiographical statement for the Marriage and Family Therapy concentration; personal interviews for all concentrations.
 - Master of Science in Nursing: GRE score; personal interview with program director.

Please contact the Counseling and Testing Office at (206) 535-7206 for information on the GMAT, the MAT, and the GRE.

All records become part of the applicant's official file and can be neither returned nor duplicated for any purpose.

An offer of admission is good for one year in most programs. Admitted students who have not enrolled in any coursework for one year after the semester they indicate they intend to begin their program must reapply.

Policies and Standards

INTERVIEWING OF APPLICANTS: Before admission to the graduate program, it is advisable for an applicant to seek an interview with the program director in the subject area of interest. In certain programs, a personal interview is a requirement as part of the application process. See specific program requirements for details.

CLASSIFICATION OF STUDENTS: A student may be admitted to a graduate program with regular, provisional, or conditional student status.

Regular – Those students approved unreservedly for admission to graduate study are granted regular status. An undergraduate grade point average of 3.0 or higher is required for regular status.

Provisional – In some programs, all newly admitted students are assigned provisional status until certain program prerequisites have been met. Students who fail to qualify for regular status because of grade point average or insufficient academic background in their undergraduate work may be granted provisional status.

Conditional – Students who have applied for graduate school before completing their undergraduate work or who have otherwise not yet adequately prepared for graduate study may be granted conditional acceptance. That is, acceptance may be conditional upon successful completion of the bachelor's

degree or upon completion of specific prerequisites. Although the student is accepted into the graduate program, work cannot begin until the conditions of acceptance have been met. Conditional acceptance will not be granted to international students lacking adequate English skills.

Non-matriculated – Students holding the bachelor's degree who wish to pursue course work with no intention of qualifying for an advanced degree at PLU are classified as non-matriculated students.

CHANGE OF STUDENT STATUS: Student status will be changed from *provisional* to *regular* after the following conditions have been met: satisfactory fulfillment of course deficiencies; satisfactory completion of 12 semester hours of graduate work with a cumulative grade point average of 3.0 or higher; or satisfactory completion of departmental or school requirements.

Student status will be changed from *non-matriculated* to *regular/provisional* after the non-matriculated student completes the normal application process and is accepted into a regular degree program. Credit earned during non-matriculated classification may count toward a graduate degree, but only as recommended by the faculty advisory committee and approved by the dean of graduate studies after the student has been admitted to a degree program. No such credit can be counted that carries a grade lower than B-. Student status will be changed from *conditional* to *regular/provisional* after the conditions of acceptance have been met and evidence (transcripts, official test scores, etc.) is in the student's file. In all cases, a letter indicating change of status will be forwarded to the student, with a copy to the adviser and/or program director.

INTERNATIONAL STUDENTS: Students from abroad are subject to all the requirements for admission established by the Office of Admissions.

To allow ample time for visa and other departure procedures, the applicant should have his or her application and all supporting documents on file in the Office of Admissions no less than four months before a proposed date of entry. The following documents are necessary BEFORE an application can be processed.

1. Formal application for admission and statement of goals with the \$35.00 non-refundable application fee (which cannot be waived for any reason).
2. An official transcript from each institution of higher learning attended. All transcripts must be sent directly to the Office of Admissions at PLU from the institution providing the transcript.
3. Two letters of recommendation from school officials or persons of recognized standing. Applicants transferring from an American college or university should request their foreign student adviser to send a recommendation.
4. Demonstrated proficiency in the English language through attaining a minimum score of 550 on the Test of English as a Foreign Language (TOEFL) or a minimum of 85 on the written section and 85 on the oral section of the Michigan Test. Conditional acceptance will not be granted for international students lacking adequate English language skills.
5. Official scores from specific tests as required for certain programs or concentrations. See individual master's programs for particulars.

International students are required to submit a \$200.00 advance payment following an offer of admission. This payment is the student's acknowledgment of acceptance, and is credited to the student's account to be applied toward expenses of the first term of enrollment. If circumstances necessitate cancellation of enrollment and the Office of Graduate Studies is notified in writing thirty days in advance of the anticipated date of enrollment, the \$200.00 will be refunded.

An I-20 form (Certificate of eligibility for Non-immigrant Student Status) will be issued only after all documents have been

received, the application has been reviewed, the student has been offered admission and accepted, a certification of finances has been received, and the \$200.00 advanced payment has been received. Certification from banks and embassies is permissible. A financial statement form is available from the Office of Admissions upon request. The I-20 form should be taken to the U.S. Consulate when requesting a visa to come to the United States for a graduate program. I-20 forms issued by the Office of Graduate Studies are for master's degree programs only and not for intensive English language study.

International students are required by immigration regulations to enroll as full-time students (a minimum of eight credit hours per semester). They are also required to have a physical examination and to submit the appropriate medical forms to the university's Health Service.

Before enrolling for classes, all international students are required to have health and medical insurance, which is obtained through the university after arrival on campus.

International graduate students must also report to the Center For International Programs, (206) 535-7194, upon registration for purposes of immigration and university record-keeping. This must be done at the time of registration (Tingelstad Hall, room 105).

FACULTY ADVISING: Upon admission each student will be assigned a faculty adviser responsible for assisting the student in determining a program of study. When appropriate, the adviser will chair the student's advisory committee. Students are encouraged to meet with their advisers early in their programs.

HOURS REQUIRED FOR THE MASTER'S DEGREE: A minimum of 32 semester hours is required. Individual programs may require more than the minimum number of semester hours, depending upon prior preparation and specific degree requirements. Any prerequisite courses taken during the graduate program shall not count toward fulfillment of graduate degree requirements.

TRANSFER OF CREDIT: Graduate work from another institution may be accepted for transfer upon petition by the student and approval by the program director and dean of graduate studies. Eight semester hours may be transferable to a 32 semester hour program.

In degree programs requiring work beyond 32 semester hours, more than eight semester hours may be transferred. In any case, the student must complete at least 24 semester hours of the degree program at Pacific Lutheran University.

TIME LIMIT: All requirements for the master's degree, including credit earned before admission, must be completed within seven years. The seven-year limit covers all courses applied to the master's degree, credit transferred from another institution, comprehensive examinations, research, and final oral examination. The seven-year limit begins with beginning date of the first course applicable to the graduate degree.

RESIDENCY REQUIREMENT: All candidates for the master's degree must complete 24 semester hours of Pacific Lutheran University courses.

COURSES TAKEN ON A PASS-FAIL BASIS: If a graduate student's program includes a course where students may elect a letter grade or the pass-fail option, graduate students must opt for the letter grade.

COURSES ACCEPTABLE FOR GRADUATE CREDIT: All 500-numbered courses described in this catalog are graduate level. In some graduate programs, a limited number of 300-level and 400-level courses may be accepted for graduate credit. (See *Degree and Course Offerings* for graduate course descriptions.) A maximum of 4 semester hours of continuing education credit

may be accepted toward a master's degree. This applies to continuing education credit taken at PLU or transferred from another university. All courses accepted for the master's degree are subject to the approval of the program director and the dean of graduate studies.

GRADUATE CREDIT FOR SENIORS: If, during the last semester of the senior year, a candidate for a baccalaureate degree finds it possible to complete all degree requirements with a registration of fewer than 16 semester hours of undergraduate credit, registration for graduate credit is permissible. However, the total registration for undergraduate requirements and elective graduate credit shall not exceed 16 semester hours during the semester. A memorandum stating that all baccalaureate requirements are being met during the current semester must be signed by the appropriate department chair or school dean and presented to the dean of graduate studies at the time of such registration. This registration does not apply toward a higher degree unless it is later approved by the student's adviser and/or advisory committee.

PETITIONS: It is the student's responsibility to formally petition the dean of graduate studies for transfer credit, change of program or adviser, or any exception to policy. Petition forms may be obtained from advisers or from the Graduate Program Coordinator in the Provost and Dean of Graduate Studies' Office.

STANDARDS OF WORK: The minimum standard acceptable for the master's degree is a grade point average of 3.0 in all graduate work. Graduate level credit cannot be given for any class in which the grade earned is lower than a C-.

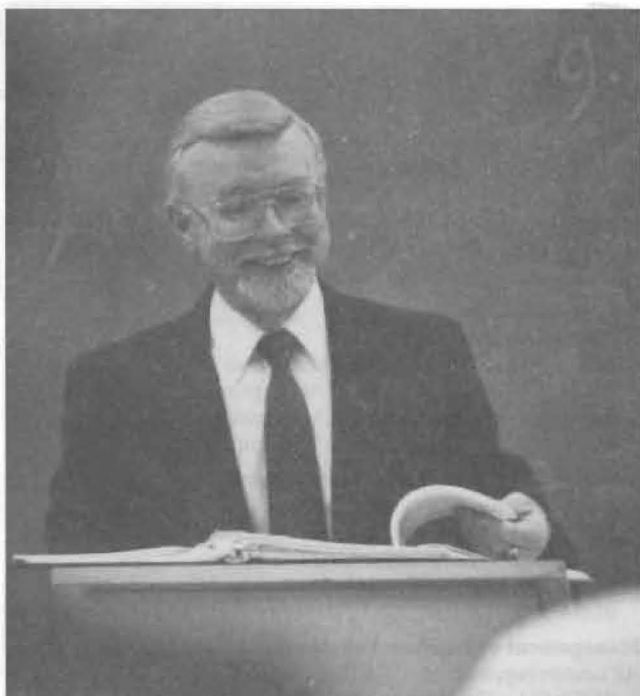
A student whose grade point average falls below 3.0 is subject to dismissal from the program. In such instances, the recommendation for dismissal or continuance is made by the student's advisory committee and acted upon by the dean of graduate studies.

ACADEMIC PROBATION: A student pursuing the master's degree who fails to maintain a cumulative grade point average of 3.0 may be placed on academic probation. When such action is taken, the student will be notified by letter from the Office of the Provost and Dean of Graduate Studies. A graduate student on probation who fails to attain a cumulative grade point average of 3.0 in the next term of enrollment may be dismissed from the program.

THESIS AND RESEARCH REQUIREMENTS: Students are required to present evidence of ability to do independent research. This can be demonstrated in three ways. See each program section for explanation of research options within each graduate program.

The first method is a thesis. Those students writing theses must submit their original theses copies for binding and microfilming by University Microfilms of Ann Arbor, Michigan. In addition, a UMI Dissertation Services publishing form (M-Form) and an abstract of 150 words or less must be submitted with the publishing fee, to the Office of the Provost and Dean of Graduate Studies, no later than three weeks before graduation. Fees for microfilming, publishing abstracts, and binding original theses for the permanent PLU library collection are paid by students (see *Tuition and Fees* section).

The second method is a research paper. If a program requires or students may elect research paper options, one original copy must be submitted to the Office of the Provost and Dean of Graduate Studies with an abstract of 150 words or less. Research papers will be microfilmed at PLU and placed in the PLU library collection. Microfilming fees are paid by students.



Theses and research papers must be in the Office of the Provost and Dean of Graduate Studies not later than three weeks before the end of the semester. All theses and papers presented must be clean, error-free, and follow the APA Style Manual. Details are available from the Office of the Provost and Dean of Graduate Studies.

The third method of fulfilling research requirements in some programs is through paper presentations or culminating projects in specific courses. These courses are designed to integrate the program material while promoting independent research and study.

EXAMINATIONS: Written comprehensive examinations and/or oral examinations are required in all graduate programs except the Master of Business Administration program. Procedures for these examinations vary for the different programs. Where applicable, these examinations over the student's program of studies are conducted under the direction of the major adviser and/or the student's advisory committee and normally will be scheduled no later than 3-6 weeks before commencement. In any case, the final written comprehensive examination must be passed no later than four weeks before commencement. The oral examination over the thesis or research is conducted under the direction of the student's advisory committee and must be completed successfully no later than three weeks before commencement.

GRADUATION: All courses must be completed, examinations passed, and thesis/research requirements fulfilled in order to qualify for graduation. Graduate students must apply for graduation by the beginning of the semester in which they are planning to graduate.

Application forms are available in the Registrar's Office. Students planning to take part in commencement exercises must also fill out an order form for a cap, gown, and hood.

RESPONSIBILITIES AND DEADLINES: It is the responsibility of each graduate student to know and follow the procedures outlined in this catalog and to abide by established deadlines. See individual master's programs and concentrations for specific degree requirements.

- Upon acceptance, meet with the assigned adviser as soon as possible to establish the program of study.

- Register for thesis or research paper as required. Deadline: the last acceptable registration date is the semester in which the student expects to receive his or her degree.
- Apply for graduation. File your application for graduation, and cap, gown, and hood rental forms with either the Registrar's Office or the Office of Graduate Studies.
NOTE: If a student fails to complete the necessary requirements for graduation, the application for graduation will not automatically be forwarded to the next commencement date. The student must make a second application.
- Take comprehensive written and/or oral examination under the direction of the major adviser or advisory committee. Deadline: no later than four weeks before commencement.
- Submit completed thesis or research paper to the Office of the Provost and Dean of Graduate Studies. At this time the binding/microfilming fee must be paid. Deadline: see academic calendar for specific date.
NOTE: The thesis/research paper(s) must be signed by the major adviser and have been read by the entire committee before submission to the Office of the Provost and Dean of Graduate Studies.

Tuition and Fees

Tuition charges for graduate students are determined by the number of semester hours for which a student registers and are based on a semester hour rate.

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| Tuition per semester hour for 1994-95 | \$416.00 |
| Thesis binding/microfilming (subject to change) | \$100.00 |
| Research paper or project microfilming | \$10.00 |
| Graduation fee | \$30.00 |
| Library fee for unenrolled students (per semester) | \$25.00 |

Financial Aid

Financial assistance for graduate students is available in the forms of Perkins and Stafford Student Loans, graduate assistantships, and scholarships. In addition, students may be eligible for a PLUS loan to a maximum of \$3,000. Students must be admitted to a graduate program before a loan can be granted. Applications and loan information may be obtained from the Financial Aid Office, (206) 535-7161.

A limited number of graduate assistantships are available for graduate students. Contact the Office of the Provost and Dean of Graduate Studies for applications and information. Applications for the academic year beginning in September are due no later than March 15.

SCHOOL OF BUSINESS

Master of Business Administration

Joseph E. McCann III, Ph.D., *Dean, School of Business*
 Laura J. Polcyn, Ed.D., *Associate Dean and Director of the M.B.A. Program*

PURPOSE: The M.B.A. program is centered on the skills and knowledge required for professional management, providing a strong foundation for responsible leadership in business, government, and non-profit organizations. *Courses are taught in the evening only in order to serve the working community.* Although the majority of students attend part-time while working, those interested in full-time study are encouraged to apply. The classroom environment is enhanced by a balance of full- and part-time students, as well as students with diverse backgrounds.

ADMISSION: Students who hold bachelor's degrees in any field from accredited universities or colleges and who have demonstrated their ability or potential to do high quality academic work on a consistent basis are encouraged to apply for admission to the Master of Business Administration program.

Consultation about the program is available from the director of the M.B.A. program by calling (206) 535-7250 before filing the application for admission. Following notification of admission, students may begin studies any semester. Applications are accepted for courses beginning September, January, February, June, or July. All applicants are required to submit scores from the Graduate Management Admission Test (GMAT) before taking graduate-level business classes.

To be admitted to the M.B.A. program, a student must meet all three of the following criteria:

1. a 2.75 cumulative grade point average in all college-level coursework before application;
2. a score of at least 470 on the Graduate Management Admission Test (GMAT);
3. a formula score of at least 1,050, computed by multiplying the grade point average by 200 and adding that product to the GMAT score.

NOTE: Exceptions will be evaluated individually, based on a presentation of factors indicating an equivalence to admission standards, a promise of success in graduate school, and potential contributions to the educational mission of graduate study.

THE GRADUATE MANAGEMENT ADMISSION TEST: The Graduate Management Admission Test (GMAT) is a test of aptitude rather than a test of business knowledge per se. The test is offered four times per year and may be taken at PLU. Candidates are examined in three major areas: verbal, mathematical, and analytical writing skills. A score is earned in each area, and candidates receive a total score, which ranges between 200 and 800. The actual required score for an individual depends on the cumulative grade point average (see admission criteria).

Information and advice regarding the GMAT may be obtained from the director of the M.B.A. program in the School of Business (206) 535-7250 or the Counseling and Testing Center (206) 535-7206.

ADVISING: The director of the M.B.A. program advises all M.B.A. students. Upon acceptance to the M.B.A. program, a program completion contract is developed for each student. Initially, the progress chart contains information on courses transferable for core course requirements and graduate courses taken at other institutions, when applicable. The director of the M.B.A. program should be contacted concerning course transfers and assistance in planning the student's remaining course work.

M.B.A. DEGREE REQUIREMENTS: (56 semester hours)

Individuals holding a recent bachelor's degree in business administration or the equivalent would normally have satisfied the preparatory course requirements and generally must take only the ten graduate level courses (40 semester hours). All specific subject requirements must be satisfied regardless of the number of courses taken. The meeting of specific graduate-level requirements by transfer or substitutions is subject to review and approval by the director of the M.B.A. program. The M.B.A. curriculum consists of the following components:

Preparatory Core

All courses required

- ECON 500 – Applied Statistical Analysis (4)
- BUSA 501 – Fundamentals of Accounting and Finance (4)
- BUSA 502 – Fundamentals of Management and Marketing (4)
- BUSA 505 – Management Use of Computers (4)

Analytical and Managerial Environment

All courses required

- ECON 504 – Economic Analysis and Policy Decisions (4)
- ECON 543 – Quantitative Methods (4)
- BUSA 582 – Accounting Information and Control (4)
- BUSA 550 – Organizational Behavior and Environment (4)

Management of Business Functions

All courses required

- BUSA 551 – Operations Management Seminar (4)
- BUSA 564 – Financial Management Seminar (4)
- BUSA 570 – Marketing Management Seminar (4)
- BUSA 555 – Business Strategy and Policy (4)

Elective/Research Alternatives

Select one alternative

- Alternative 1: Completion of two graduate-level elective courses.
- Alternative 2: Completion of a course of study in research methodology (4), and BUSA 593 Thesis (4)

Beginning fall 1995, the current M.B.A. program will be replaced by the following program. Students enrolled in the current program will transfer to the new program, and semester hours and courses taken will count in the new program. The director of the M.B.A. program will develop with each student a new contract for program completion.

M.B.A. DEGREE REQUIREMENTS (effective fall 1995): (48 semester hours)

M.B.A. Core (32 semester hours)

- COMA 500 – Executive Skills I: Effective Communications (2)
- ECON 500 – Executive Skills II: Applied Statistics (2)
- ECON 501 – Analytical Methods for Decision Making (4)
- BUSA 503 – Understanding and Managing Financial Resources (4)
- BUSA 504 – Legal and Ethical Environment of Business (4)
- BUSA 505 – Managing Effective Organizations (4)
- BUSA 506/507 – Managing the Value Creation Process (8)
- BUSA 509 – Business Strategy in a Global Context (4)

M.B.A. Electives (16 semester hours)

Select from the following:

- ECON 501 – Economic Policy Analysis (4)
- ECON 531 – International Economics and Finance (4)
- BUSA 530 – Financing New Ventures (2)
- BUSA 535 – Financial Investments (4)
- BUSA 537 – Decision Models and Strategies for Financial Managers (4)
- BUSA 542 – Management of Change (2)
- BUSA 543 – Designing Reward Systems (2)
- BUSA 545 – Continuous Improvement Strategies (2)

- BUSA 549 – Contemporary Human Resource Management (2)
- BUSA 553 – Transnational Management (2)
- BUSA 558 – New Venture Management (2)
- BUSA 560 – Global Marketing Management (4)
- BUSA 566 – Developing New Products/Services (2)
- BUSA 567 – Assessing Marketing Opportunities (4)
- BUSA 574 – Advanced Service and Manufacturing Delivery Systems (2)
- BUSA 577 – Project Management (2)
- BUSA 590 – Seminar
- BUSA 591 – Independent Study

DEPARTMENT OF COMPUTER SCIENCE

Master of Arts – Computer Applications

Master of Science – Computer Science

Sheri J. Tonn, Ph.D., *Dean, Division of Natural Sciences*
 Larry A. Edison, Ph.D., *Chair, Department of Computer Science,
 and Director of Graduate Program*

PROGRAM OBJECTIVES: The Department of Computer Science offers two graduate programs in computer science, the M.S. in Computer Science and the M.A. in Computer Applications.

The M.S. in Computer Science is designed for students whose interest is computer science or computer engineering. The M.A. in Computer Applications is of special interest to students who wish to develop expertise in computer science as it relates to another field, such as the natural sciences, business, or the social sciences. This degree program allows students to study advanced applications of computers in their chosen field.

Master's candidates may participate in a variety of ongoing research projects with their faculty advisers. Among the areas of research are artificial intelligence systems, computer networking, computational complexity, parallel computing, pattern recognition, computer graphics, software engineering, database management, graph theory, VLSI design and CAD systems, and theory of computing.

Unlike most of the other graduate departments at PLU, the *Department of Computer Science offers its graduate and upper-level courses primarily during the daytime hours and students should plan accordingly.*

The graduate programs in computer science complement the undergraduate B.A. and the accredited B.S. programs in computer science.

FIVE-YEAR BACHELOR/MASTER'S DEGREE PROGRAM:

With careful planning, a student can earn both a bachelor's and a master's degree in a five-year period. A student interested in this option should contact the program director during that student's junior year of study.

FACILITIES: All students have unlimited access to the university Computer Center's user facilities which include a VAX 4700 and an AXP 3400S which are time-shared via the campus fiber optic network to 35 user-room terminals as well as to all student residence hall rooms. The center's user-rooms also contain 40 IBM PC microcomputers, 20 Macintoshes, as well as appropriate printers and other peripherals. The Department of Computer Science also maintains its own laboratory, which contains NeXT workstations, Macintosh computers, SUN workstations, and IBM PCs. All machines are on the ethernet and are accessible through the campus network and have access to INTERNET.

PREREQUISITES AND REQUIREMENTS: Beyond the general admission requirements, the prospective computer science master's student must have adequate preparation in computer science. While most graduate students in computer science have earned their baccalaureate degree in computer science, mathematics, or electrical engineering, students from other academic areas are able to pursue graduate study in computer science, although some additional preparation may be necessary.

The prerequisites for admission to the graduate program consists of the equivalent of the PLU computer science core, which includes courses in Pascal, data structures, assembly language (CSCI 144, 270, 380), and digital electronics (ENGR 346); a minimum of eight semester hours of calculus, and discrete structures (MATH 245). Students lacking some prerequisite(s) may be considered for provisional status. This allows students to finish the prerequisites, which do not count toward the degree, and begin their graduate studies concurrently. The general part of the Graduate Record Exam (GRE) is also required.

The graduate student must complete at least 16 hours in courses numbered 510 or above. For those courses selected and approved in the 330-490 level, a 3.0 or higher grade must be attained in each course applicable for the degree. The cumulative grade point average for all courses for the degree must also be a 3.0 or above. Near the completion of all studies, a two-hour written comprehensive exam and oral defense of the thesis is required of each thesis candidate. The non-thesis candidate must instead take 2 semester hours of CSCI 586 Graduate Seminar and a four-hour written comprehensive exam.

M.S. IN COMPUTER SCIENCE (THESIS OPTION): (32 semester hours)

Required Courses:

- CSCI 544 – Advanced Operating Systems (2)
- CSCI 570 – Mathematics of Computer Science (4)
- CSCI 580 – Microprocessor Development Systems (2)
- CSCI 593 – Thesis (5)

Electives: 18 semester hours to include

1. At least 2 additional semester hours of CSCI courses numbered 510 or above,
2. CSCI 444, Operating Systems, and CSCI 375, Algorithms, unless taken as an undergraduate,
3. Any computer science courses numbered above CSCI 329 (except CSCI 449 and 500-509),
4. At most 6 semester hours from:
 - a. MATH 345, Computational Probability and Statistics, MATH 346, Numerical Analysis;
 - b. Courses in mathematics, engineering, or business numbered above 320 with prior approval by the committee.

Oral defense of thesis and satisfactory performance on a two-hour written comprehensive examination are also required.

M.S. IN COMPUTER SCIENCE (NON-THESIS OPTION): (34 semester hours)

Requirements are the same as for the thesis option except in lieu of the thesis the candidate must take 2 semester hours of CSCI 586 Graduate Design Seminar. The elective credit total is changed from 18 to 24 semester hours with at least 6 of these elective hours in CSCI courses numbered 510 or above. Students must successfully complete a four-hour written comprehensive examination.

M.A. IN COMPUTER APPLICATIONS (THESIS OPTION): (32 semester hours)

Required Courses:

- CSCI 570 – Mathematics of Computer Science (4)
- CSCI 593 – Thesis (6)
- CSCI 544 – Advanced Operating Systems (2) *or*
- CSCI 580 – Microprocessor Development Systems (2)

Electives: 20 semester hours to include

1. CSCI 444 Operating Systems, and CSCI 375 Algorithms, unless taken as an undergraduate,
2. Any computer science courses numbered above CSCI 329 (except CSCI 449 and 500-509),
3. At most 6 semester hours from math courses numbered above 320 with prior approval by the committee,
4. 10 semester hours of elective credit in the field of application with prior approval by the committee.

Oral defense of thesis and satisfactory performance on a two-hour written comprehensive examination are also required. A minimum of 16 semester hours must be in graduate-level courses including any hours in the application area.

M.A. IN COMPUTER APPLICATIONS (NON-THESIS OPTION): (34 semester hours)

Requirements are the same as for the thesis option except in lieu of the thesis the candidate must take 2 semester hours of CSCI 586 Graduate Design Seminar. Twenty-six semester hours of elective credit are required. Of this total at least 16 hours in CSCI courses must be numbered 510 or above. Students must satisfactorily complete a four-hour written comprehensive examination.

SCHOOL OF EDUCATION

Master of Arts in Education

John L. Brickell, Ph.D., *Acting Dean, School of Education*
Leon Reisberg, Ed.D., *Acting Associate Dean, School of Education*

PURPOSE: The purpose of the graduate program in education is to provide qualified persons with opportunities to enhance their background in teaching or to prepare themselves for educational administrative and service positions that require advanced preparation. The major fields of concentration are designed to provide maximum flexibility in an experience-oriented environment. Graduate concentrations are offered in Classroom Teaching, Initial Certification, Educational Administration, Educational Psychology, Literacy Education, and Special Education. Requirements for each concentration are listed separately following this section.

COORDINATING MASTER'S DEGREE AND CONTINUING CERTIFICATION PROGRAMS: Students holding an Initial Certificate may coordinate the Master of Arts in Education degree with the requirements for Continuing Certification. Graduate students pursuing the Continuing Certificate must discuss their programs with the certification adviser in the School of Education. Students intending to work toward a master's degree must complete formal application for admission to the Office of Admissions.

ADMISSION: For regular admission, applicants must have completed a B.A. or B.S. degree from an accredited institution of higher education and must submit recommendations and test scores from appropriate screening tests. Students may be required to have a personal interview with the director of graduate programs before admission. (See individual concentrations for tests and prerequisites specific to the concentration.)

EXAMINATIONS: Students must take a comprehensive written examination over course work. This examination is to be scheduled through the student's adviser no later than two weeks before the examination is given. Comprehensive examinations are usually given on the second Saturday of November, April, and July.

An oral examination over course work and/or research may be scheduled at the discretion of the student's advisory committee no later than three weeks before commencement.

Classroom Teaching (32 semester hours)

FACULTY COORDINATOR: Franklin Olson, Ed.D.

CONCENTRATION OBJECTIVE: This program is designed to provide advanced preparation in subject matter and professional education for elementary and secondary teachers.

PREREQUISITES: Beyond the general prerequisites, applicants must hold a valid teaching certificate and should ordinarily have successfully completed one year of teaching or related professional experience. A grade point average of at least 3.0 and Miller Analogies Test or GRE completed in the past 5 years are required. Students not meeting some of these requirements may be granted provisional status.

GENERAL REQUIREMENTS AND CORE COURSES: (7-9 semester hours)

EDUC 545 – Methods and Techniques of Research (2)
(It is strongly recommended that students complete EDUC 544 Research/Program Evaluations before enrollment in EDUC 545.) (2)

One of the following:

- EDUC 585 – Comparative Education (3)
- EDUC 586 – Sociology of Education (3)
- EDUC 587 – History of Education (3)
- EDUC 589 – Philosophy of Education (3)

One of the following:

- EDUC 598 – Studies in Education (2)
- EDUC 599 – Thesis (3-4)

CONCENTRATION REQUIREMENTS: (10-18 semester hours)

Courses are determined in consultation with the major adviser. All courses accepted for the master's degree are subject to the approval of the candidate's adviser or the candidate's advisory committee. Courses may be selected from the following areas: Education, Educational Psychology, and Special Education.

ACADEMIC SUPPORTING AREA: (8-16 semester hours)

In this concentration, no more than 16 semester hours may be applied from Educational Psychology or Special Education. This requirement assumes a prerequisite background in the supporting area. The courses shall be upper division or graduate level courses. Approval of courses to fulfill this requirement shall be obtained from the student's advisory committee. The student's supporting area may be chosen from one of the following:

- | | |
|------------------------|----------------------------------|
| Art | Language Arts |
| Biology | Mathematics and Computer Science |
| Business | Science |
| Chemistry | Music |
| Communication | Physical Education |
| Earth Sciences | Physics |
| Economics | Political Science |
| Educational Psychology | Psychology |
| English | Social Sciences |
| General Science | Sociology |
| History | Special Education |

Educational Administration (32 semester hours)

FACULTY COORDINATOR: Myra Baughman, Ed.D.

CONCENTRATION OBJECTIVE: This program is designed to prepare elementary and secondary school principals and program administrators.

PREREQUISITES: Beyond the general prerequisites, applicants must hold a valid teaching or E.S.A. certificate and should ordinarily have successfully completed two years of teaching or related experience. A grade point average of at least 3.0 and scores from either the Miller Analogies Test or GRE completed within the past 5 years are required for regular admission.

GENERAL REQUIREMENTS AND CORE COURSES: (7–9 semester hours)

EDUC 545 – Methods and Techniques of Research (2)

One of the following:

EDUC 585 – Comparative Education (3)

EDUC 586 – Sociology of Education (3)

EDUC 587 – History of Education (3)

EDUC 589 – Philosophy of Education (3)

One of the following:

EDUC 598 – Studies in Education (2)

EDUC 599 – Thesis (3-4)

MAJOR AREA OF CONCENTRATION: (23 semester hours)

EDUC 544 – Research and Program Evaluation (2)

EDUC 550 – Educational Administrative Theory (3)

EDUC 551 – School Law (2)

EDUC 552 – School Finance (2)

EDUC 553 – School/Community Relations (3)

EDUC 555 – Curriculum Development (2)

EDUC 558 – Instructional Supervision (2)

EDUC 559 – Personnel Management (3)

EDUC 595 – Internship in Educational Administration (4)

EDUC 596 – Graduate Seminar (2)

PROGRAM OPTIONS IN EDUCATIONAL

ADMINISTRATION: Interdisciplinary program options for applicants seeking differing credentials must be determined at the beginning of the candidate's program in consultation with an adviser. For instance, candidates seeking the M.A. in Educational Administration and principal's credential will take different options from those taken by candidates seeking the degree without the credential. Like wise, those with interests in business management or in administering and coordinating special programs may choose options to their course of studies which will enhance their professional development interests. In all cases, the courses must be chosen and agreed upon in consultation with the candidate's adviser, and must meet the credit hour requirement.

Educational Psychology (32 semester hours)

FACULTY COORDINATOR: Leon E. Reisberg, Ed.D.

CONCENTRATION OBJECTIVE: This program is designed to provide advanced preparation for teachers and school personnel. Its goal is to develop skills necessary to address contemporary issues facing students, families, and the educational community.

PREREQUISITES: Beyond the general prerequisites, applicants must submit test scores from the Miller Analogies test or a GRE completed within the past 5 years, and must have completed one year of successful experience in schools. An interview with the faculty coordinator is also required.

GENERAL REQUIREMENTS AND CORE COURSES:

(7–9 semester hours)

EDUC 545 – Methods and Techniques of Research (2)

One of the following:

EDUC 585 – Comparative Education (3)

EDUC 586 – Sociology of Education (3)

EDUC 587 – History of Education (3)

EDUC 589 – Philosophy of Education (3)

One of the following:

EDUC 598 – Studies in Education (2)

EDUC 599 – Thesis (3-4)

CONCENTRATION REQUIREMENTS: (18 semester hours)

Required Courses (10 hours):

EPSY 512 – Group Process and the Individual (2)

EPSY 535 – Foundations in Guidance (4)

EPSY 578 – Behavioral Problems (4)

Electives (8 hours):

Electives are to be selected from graduate-level courses in educational psychology in consultation with the major adviser. All courses accepted for the master's degree are subject to the approval of the student's advisory committee.

ACADEMIC SUPPORTING AREA: (8 semester hours)

A minimum of 8 semester hours in a supporting area is required. This requirement assumes a prerequisite background in the supporting area. The courses shall be upper division or graduate level courses. Approval of courses to fulfill the requirement shall be obtained from the student's advisory committee. Educational Psychology may not serve as the supporting area. The student's supporting area may be chosen from one of the following:

| | |
|------------------------|--------------------------|
| Art | Language Arts |
| Biology | Mathematics and Computer |
| Business | Science |
| Chemistry | Music |
| Communication | Physical Education |
| Earth Sciences | Physics |
| Economics | Political Science |
| Educational Psychology | Psychology |
| English | Social Sciences |
| General Science | Sociology |
| History | Special Education |

Literacy Education (35 Semester Hours)

FACULTY COORDINATOR: Jan Lewis, Ph.D.

CONCENTRATION OBJECTIVE: The literacy education program reflects current thought and practice where language and literacy are viewed as tools for learning across the curriculum. The principal goal is to prepare educators—specifically classroom teachers, school librarians, and reading specialist—to encourage literacy acquisition and development appropriate to students' needs and interests. The importance of children's literature, information literacy, and technology within literacy tasks is emphasized throughout both theory and practice. The collaboration among classroom teachers, school librarians, and reading specialists emphasized within this program is integral to the underlying philosophy.

PREREQUISITES: Beyond the general prerequisites, applicants must have completed undergraduate education courses in the teaching of reading and the teaching of language arts. A grade point average of 3.0 and submission of test scores on the Miller Analogies Test or a GRE completed within the past five years are required for regular admission. Students not meeting these requirements may be granted provisional status.

GENERAL REQUIREMENTS AND CORE COURSES:

(13–15 semester hours)

- EDUC 505 – Issues in Literacy Education (2)
 EDUC 544 – Research and Program Evaluation (2)
 EDUC 545 – Methods and Techniques of Research (2)
 EDUC 555 – Curriculum Development (2)

One of the following:

- EDUC 585 – Comparative Education (3)
 EDUC 586 – Sociology of Education (3)
 EDUC 587 – History of Education (3)
 EDUC 589 – Philosophy of Education (3)

One of the following:

- EDUC 598 – Studies in Education (2)
 EDUC 599 – Thesis (3-4)

CHILDREN'S/ADOLESCENT LITERATURE**REQUIREMENTS:** (4 semester hours)EDUC 528 – Children's Literature in K-8 Curriculum (2), *and**One of the following:*

- EDUC 456 – Storytelling (2)
 EDUC 529 – Adolescent Literature in the Secondary Curriculum (2)

INFORMATION AND LITERACY:**Option 1: School Library Media/LLRS Endorsement**

(12 semester hours)

- EDUC 506 – Foundations of School Library Media Center Management (2)
 EDUC 507 – Principles of Information Organization, Retrieval, and Service (2)
 EDUC 508 – Principles of Bibliographic Analysis and Control (2)
 EDUC 509 – Foundations of Collection Development (2)
 EDUC 537 – Media and Technology for School Library Media Specialists (2)
 EDUC 538 – Strategies for Whole Literacy Instruction (K-12) (2)

or **Option 2: Language and Literacy (Reading Endorsement)**

(12 semester hours)

- EDUC 510 – The Acquisition and Development of Language and Literacy (2)
 EDUC 511 – Strategies for Language/Literacy Development in Classrooms (2)
 EDUC 538 – Strategies for Whole Literacy Instruction (K-12) (2)
 EDUC 530 – Children's Writing (2)
 EDUC/SPED 513 – Language/Literacy Development: Assessment and Instruction (4)

or **Option 3: Language and Literacy (Classroom Option)**

(12 semester hours)

- EDUC 510 – The Acquisition and Development of Language and Literacy (2)
 EDUC 538 – Strategies for Whole Literacy Instruction (K-12) (2)
 EDUC/SPED 513 – Language/Literacy Development: Assessment and Instruction (4)

Plus: A minimum of 4 semester hours from education course offerings decided in consultation with the major adviser.**ACADEMIC SUPPORTING AREA:**

(minimum of 6 semester hours)

Electives decided in consultation with adviser to support literacy education. These electives may include but are not limited to courses from:

- | | |
|-------------------|------------------------|
| Anthropology | English |
| Communication | Computers in Education |
| Special Education | Psychology |

Special Education (32 semester hours)**FACULTY COORDINATOR:** Helmi C. Owens, Ed.D.**CONCENTRATION OBJECTIVE:** The graduate concentration in special education is designed to provide advanced preparation for persons who serve children and youth with special needs in educational and rehabilitative settings. Two separate areas of specialization are offered: K-12 and early childhood special education. Both concentrations contain a core of required courses and electives that allow individualization of content and focus.**PREREQUISITES:** Beyond the general prerequisites, applicants must meet the following requirements:

1. Have one successful year of teaching or related professional experience with special needs individuals. Students not meeting this requirement must complete an approved graduate-level field experience in addition to the required area of concentration.
2. Have a grade point average of at least 3.0 and submit test scores on Miller Analogies Test or GRE completed within the past 5 years as required for regular admission. Students not meeting these requirements may be granted provisional status.
3. Have completed a minimum of 12 semester hours of approved course work in special education with a grade point average of at least 3.0.
4. Complete an interview with the faculty coordinators.

CORE COURSES AND RESEARCH REQUIREMENTS:

(7–9 semester hours)

EDUC 545 – Methods and Techniques of Research (2)

One of the following:

- EDUC 585 – Comparative Education (3)
 EDUC 586 – Sociology of Education (3)
 EDUC 587 – History of Education (3)
 EDUC 589 – Philosophy of Education (3)

One of the following research options:

- EDUC 598 – Studies in Education (2)
 EDUC 599 – Thesis (3-4)

CONCENTRATION REQUIREMENTS:

(minimum of 18 semester hours)

K-12 Special Education

SPED 530 – Current Issues in Assessment Procedures (2)

Three of the following:

- SPED 533 – Current Issues in Developmental Disabilities (2)
 SPED 534 – Current Issues in Behavior Disorders (2)
 SPED 535 – Current Issues in Learning Disabilities (2)
 SPED 537 – Current Issues in Language Disorders (2)
 SPED 538 – Current Issues in Early Childhood Special Education (2)

A minimum of 10 semester hours of electives are to be selected from appropriate Special Education courses in consultation with major adviser.

Early Childhood Special Education P-3

SPED 492 – Methods of teaching Early Childhood Special Education (2)

SPED 538 – Current Issues in Early Childhood Special Education (2)

SPED 540 – Early Intervention Programs (2)

SPED 541 – Assessment of Infants and Preschoolers (2)

A minimum of 10 semester hours of electives in Early Childhood/ Special Education may be chosen from the following:

- SPED 490 – Early Learning Experiences for Special Needs Children (2)
 SPED 501 – Workshops in Education/Special Education (2)
 SPED 537 – Current Issues in Language Disorders (2)
 SPED 539 – Administration of Early Childhood Special Education Programs (2)
 SPED 595 – Internship (4)

Other appropriate electives are to be selected in consultation with major adviser.

ACADEMIC SUPPORTING AREA: (8–16 semester hours)
Students must take 8 hours from a supporting area. Courses must be upper division or graduate level. Special Education majors frequently select supporting areas from the following:

| | |
|------------------------|--------------------|
| Art | Mathematics |
| Communication | Music |
| Education | Physical Education |
| Educational Psychology | Psychology |
| English | Social Sciences |
| Language Arts | Sociology |

Other supporting areas are available.

Initial Certification

FACULTY COORDINATOR: C. Douglas Lamoreaux, Ph.D.

This program is designed for qualified candidates who possess a baccalaureate degree and wish to teach in elementary, secondary, or special education programs. Full-time students entering the program may expect to complete all requirements in 15 months (full-time student load). The program is distinguished by active and early involvement in the schools and by membership with a cohort group of peers. Students entering the program in the same term will progress through courses and practica together, sharing insights and experiences. Because of the involvement in K-12 school programs, students should be able to take courses and participate in practica during the day.

CONCENTRATION OBJECTIVE: The objective of this program is to prepare qualified teachers for service in the K-12 educational system. Students completing this program will earn a Washington State Teaching Certificate in one of four areas of concentration.

THE FOUR AREAS OFFERED INCLUDE:

1. *Elementary Education* – This concentration leads to an endorsement in K-8 education. This program requires a minimum of 46 semester hours of study and internship.
2. *Secondary Education* – This concentration leads to an endorsement in a subject matter area recognized by the state. Endorsements allow teachers to teach in that subject area in fourth through twelfth grade classrooms. The area of endorsement is dependent on the student's undergraduate major and must be determined with an adviser. This program requires a minimum of 40 semester hours of study and internship and may increase depending on the student's subject area endorsement. Students should meet with an adviser to determine any additional course requirements in the endorsement.
3. *Special Education* – This concentration leads to an endorsement in K-12 special education and must be completed with a support area in either elementary or secondary education. This program requires a minimum of 52 semester hours of study and internship.
4. *Early Childhood Special Education* – This concentration leads to an endorsement in preschool through third grade early childhood special education. This program requires a minimum of 50 semester hours of study and internship.

PREREQUISITES AND ADMISSION: For regular admission, applicants must have completed a baccalaureate degree from a regionally accredited institution of higher education. A minimum grade point average of 3.0 and official Miller Analogies Test (MAT) or Graduate Record Exam (GRE) scores are required. Students must make application to the Pacific Lutheran University Graduate Studies Program. Applications are available from the Office of Admissions. Students may be expected to have an interview with the director of graduate programs before admission (not mandatory).

REQUIRED COURSES FOR ALL STUDENTS:

EDUC 562 – School and Society (3)
EPSY 566 – Cognition, Development and Learning (3)
EDUC 563 – Integrating Seminar (1-4)
EDUC 510 – Language Acquisition (2)
SPED 520 or 521 – Teaching Special Needs Students (2)
EDUC 544C – Research and Program Evaluation (2)
EDUC 568 *or* SPED 568 – Internship (6)
EDUC 598C* *or* SPED 598C – Research Paper (2)
EDUC 590C *or* SPED 590C – Research Seminar (2)

* Course number subject to change

REQUIRED COURSES FOR ELEMENTARY:

EDUC 400 – Topic: Issues and Strategies (3)
EDUC 401 – Practicum (1)
EDUC 406 – Math (3)
EDUC 410 – Science and Health (3)
EDUC 412 – Social Studies (3)
EDUC 503 – Art/Music (2)
EDUC 411 – Literacy (2)
EDUC 538 – K-12 Literacy (2)
PHED 322 – PE (2)

REQUIRED COURSES FOR SECONDARY:

EDUC 538 – K-12 Literacy (2-3)
EPSY 560 – Communication in the Schools (3)
EDUC 461 – General Methods (3)
EDUC 560 – Secondary School Practica (1)
EDUC 440 to 449 – Content Methods (3)
CSCI 322 – MicroComputers in the Classroom (2)

REQUIRED COURSES FOR SPECIAL EDUCATION:

Elementary Support

SPED 525 – Behavior Disorders (3)
SPED 523 – Learning Disabilities
or SPED 524 – Developmental Disabilities (3)
EDUC 406 – Math (3)
EDUC 511 – Literacy (2)
SPED 407 – Curriculum and Instruction (4)
SPED 398 – Assessment (3)
EDUC 400 – General Methods (3)
EDUC 401 – Practicum (1)
SPED 494 – Computers in Education (2)
SPED 526 – Practica (2)

Secondary Support

SPED 523 – Learning Disabilities (3)
SPED 524 – Developmental Disabilities
or SPED 525 – Behavior Disorders (3)
EDUC 461 – Methods (3)
EDUC 560 – Secondary School Practicum (1)
EDUC 440 to 449 – Content Methods (3)
SPED 407 – Curriculum and Instruction (4)
SPED 398 – Assessment (3)
SPED 494 – Computers in Education (2)
SPED 526 – Practica (2)

Early Childhood

SPED 538 – Curriculum in Early Childhood (2)
SPED 541 – Infant Assessment (2)
EDUC/SPED Elective (2)
SPED 490 – Early Learning Experiences
SPED 492 – Methods of Early Childhood (2)
SPED 523 – Learning Disabilities (3)
SPED 494 – Computers in Education (2)
SPED 524 – Developmental Disabilities
or SPED 525 – Behavior Disorders (3)
SPED 526 – Practica (2)
SPED 539 – Administration of Early Childhood Programs (2)

SCHOOL OF NURSING

Master of Science in Nursing

Dorothy Detlor Langan, Ph.D., R.N., *Dean, School of Nursing*
Cleo Massicotte Pass, D.S.N., R.N., *Associate Dean, Graduate*
Nursing Education

PURPOSE: The purpose of the graduate program in nursing is to prepare professional nurses as advanced practitioners, leaders, and scholars. The curriculum consists of a common core and Continuity of Care, Nursing Administration, and Nurse Practitioner Concentrations. The Nurse Practitioner concentration has three pathways leading to preparation as a Family Nurse Practitioner, OB/GYN Nurse Practitioner, or Gerontology Nurse Practitioner. The graduate program is designed to facilitate part-time or full-time study, to the greatest extent possible. *Courses are scheduled in late afternoon and evening hours to accommodate nurses who are employed.*

PREREQUISITES: A basic course in descriptive and inferential statistics is prerequisite to formal admission. Completion of the statistics course is required before enrollment in NURS 527. If students do not have fundamental computer skills, a course in basic computer use is recommended. A minimum of one year of clinical practice, within the last three years, as a registered nurse is strongly advised. A refresher course is required if the applicant has not practiced nursing within the last five years.

ADMISSION: Applicants for admission to the Master of Science in Nursing programs will: (1) hold (or be eligible for and in the process of obtaining) a current license to practice as a registered nurse in the State of Washington; (2) hold a baccalaureate nursing degree from a National League for Nursing accredited program; (3) submit evidence of a minimum cumulative undergraduate grade point average of 3.0 (on a 4.0 scale) and official transcripts for all college/university courses/programs completed; (4) submit acceptable scores from the Graduate Record Examination (GRE), taken within five years of application for admission; and (5) complete a preadmission interview with the associate dean of the graduate program and/or faculty member(s) as designated, (6) complete Washington State Patrol clearance form.

NOTE: *Exceptions to the above criteria are based on assessment of an individual's file for demonstration of equivalence to admission requirements, and/or a potential for successful completion of graduate study.*

ADVISING: The associate dean of graduate nursing education or an appointed faculty member will serve as adviser to all students. Information regarding program planning and transfer credit will be provided. When a thesis chair is selected, program guidance will be assumed by that faculty member.

PROGRAM REQUIREMENTS: Granting an exemption from one or more program requirements is unusual. Students requesting such exemption assume responsibility for submitting a file for review by the School of Nursing Graduate Program Committee that clearly documents equivalence of the course offered by the School.

Before enrollment in clinical practica, students must provide evidence of:

1. Current immunization and health status as required by the School of Nursing (in addition to the general university requirement)
2. Current CPR certification
3. Current professional liability insurance in specified amounts
4. Current personal health insurance in effect
5. Washington State Patrol clearance

M.S.N. Core Requirements

(9 semester hours)

CORE REQUIREMENTS: Students are required to complete a common core of nursing courses for a total of 9 semester hours. The core courses provide the base for continuing study of advanced nursing practice in the concentration areas.

Required Core Courses (9 semester hours)

NURS 525 – Models and Theories of Nursing (3)

NURS 526 – Nursing Leadership and Management (3)

NURS 527 – Nursing Research (3)

AREAS OF CONCENTRATION: Required courses for each area of concentration are listed below. Before enrollment in clinical practica in the Continuity of Care and Nurse Practitioner areas of concentration, initial health assessment skills must be demonstrated or verified.

**Continuity of Care Concentration**

(23 semester hours)

As students progress through this process-oriented curriculum, they gain skills as nurse specialists to assume leadership roles in providing care, and developing program models to facilitate clients' transitions through and among health care systems. Graduates occupy positions in primary, secondary, tertiary, and ambulatory health care systems.

NURS 530 – Continuity of Care Nurse Specialist Role (2)

NURS 531 – Theoretical Foundations for Continuity of Care (3)

NURS 532 – Focused Study in Clinical Specialization (3)

NURS 533 – Continuity of Care Practicum (3)

NURS 534 – Program Development for Continuity of Care (3)

Elective/Support Course(s) (4)

NURS 597 – Computer Applications in Nursing (1)

NURS 598 – Scholarly Inquiry in Nursing Practice (4)

or NURS 599 – Thesis (4)

Nursing Administration Concentration

(23 semester hours)

Students are prepared for leadership and administrative positions in the health care delivery system. Required nursing and support courses in this concentration area are based on program changes to be implemented in the 1994–1995 and 1995–1996 academic years.

- NURS 550 – Complex Organization Systems Management (4)
- NURS 556 – Financial Management for Health Care Providers (3)
- NURS 559 – Nursing Administration Practicum (5)
- BUSA 542 – Management of Change (2)
- BUSA 545 – Continuous Improvement Strategies (2)
- Elective/Support Course(s) (2)
- Nurs 597 – Computer Applications in Nursing (1)
- Nurs 598 – Scholarly Inquiry in Nursing Practice (4)
- or NURS 599 – Thesis (4)

Nurse Practitioner Concentration

(27 semester hours)

Students gain skills essential for functioning in the role of primary care provider through successful completion of one of three pathways. Graduates will be prepared to enter into primary care practice as Family, OB/GYN, or Gerontology Nurse Practitioners.

FOUNDATION SEQUENCE: (13 semester hours)

- NURS 580 – Advanced Pathophysiology (3)
- NURS 581 – Primary Care (2)
- NURS 582 – Advanced Family Health Assessment (5)
- NURS 583 – Clinical Pharmacotherapeutics (2)
- NURS 590 – Role of the Nurse Practitioner (1)

Family Nurse Practitioner: (14 semester hours)

- NURS 584 – Family Nurse Practitioner I (6)
- NURS 585 – Family Nurse Practitioner II (8)

OB/GYN Nurse Practitioner: (14 semester hours)

- NURS 586 – OB/GYN Nurse Practitioner I (6)
- NURS 587 – OB/GYN Nurse Practitioner II (8)

Gerontology Nurse Practitioner: (14 semester hours)

- NURS 588 – Gerontology Nurse Practitioner I (6)
- NURS 589 – Gerontology Nurse Practitioner II (8)

cumulative grade point average of 3.0. A maximum of 4 hours in courses titled “workshop” or “continuing education” may be accepted. To be accepted into the Master of Physical Education program, an applicant must meet all of the following criteria:

1. A minimum 3.0 cumulative undergraduate grade point average is required for regular acceptance into the program. Students with a grade point average lower than 3.0 may be considered for provisional status under the following conditions:
 - a. Satisfactory completion of up to 12 semester hours of course work with a minimum 3.0 grade point average.
 - b. Review by a screening committee who will then make final recommendations for or against acceptance into the program with regular status.
2. Applicants must have completed an undergraduate degree in physical education. If the undergraduate degree has been awarded in another area, the program director will evaluate and propose any needed prerequisite courses. Such students may be considered for provisional status. This allows students to finish the prerequisites, which do not count toward the degree, and begin their graduate studies concurrently.
3. Results of the applicant's score on the general examination section of the GRE must be on file in the Office of Admissions.

One year of teaching or related professional experience is recommended.

ADVISING: The director of graduate programs in physical education will be the primary adviser for all graduate students in the program. Other faculty will act as secondary advisers and research project advisers.

GENERAL REQUIREMENTS: (34 semester hours minimum)

This is a non-thesis program. Research experience will be achieved specifically in PHED 560 and in other courses.

Core Courses: (12 semester hours)

These courses or their equivalents will be required by all students in this program.

- PHED 510 – Ethics in Physical Education and Athletics (3)
- PHED 520 – Research Design (3)
- PHED 530 – Contemporary Issues in Physical Education (3)
- PHED 560 – Project/Seminar (3)

Electives: (22 semester hours)

Selected from the following with adviser's approval. Graduate courses in education, business, or communication may also be selected with graduate director's approval.

- PHED 501 – Workshops in Physical Education and Coaching (1-4)
- PHED 512 – Management of Sports Programs (3)
- PHED 514 – Sports Promotion (3)
- PHED 515 – Advanced Studies in Athletic Training (3)
- PHED 516 – Advanced Adapted Physical Education in the Public Schools (3)
- PHED 522 – Psychology of Sport I (3)
- PHED 523 – Psychology of Sport II (3)
- PHED 535 – Health and Fitness in Contemporary Society (3)
- PHED 536 – Health and Fitness Management (3)
- PHED 540 – The Scientific Basis for Physical Activity (3)
- PHED 545 – Motor Development and Learning (3)
- PHED 561 – Professional Practicum (1-2)
- PHED 565 – Analysis of Human Movement (3)
- PHED 570 – Sociology of Sport (3)
- PHED 591 – Independent Study (1-4)
- PHED 599 – Internship (4-8)
- HEED 501 – Health Courses (2-8)

Specific courses in other disciplines may be recommended by the graduate director to insure preparation in appropriate areas. These will be selected with approval and cooperation of other

SCHOOL OF PHYSICAL EDUCATION

Master of Physical Education

David M. Olson, Ph.D., *Dean, School of Physical Education*

Anthony J. Evans, Ph.D., *Director of Graduate Programs*

PURPOSE: The purposes of the graduate program in physical education are three-fold:

1. to provide opportunities for continuing certification for teachers;
2. to enhance the preparation of those involved with exercise and fitness programs in various settings;
3. to provide for the preparation of those administering sports programs.

To serve the working community, courses are taught in the evening and during the summer.

ADMISSION: Beyond the general admission standards for graduate education at PLU it is expected that the applicant will have an undergraduate degree in physical education or a related field. If the degree is outside this discipline, each transcript will be evaluated by the program director who will propose courses to alleviate deficiencies. No more than 8 semester hours of transferable graduate credit will be accepted toward the required 34 credits of the master's program, and those credits must have a

units and may include, but not be limited to:

- BUSA 501 – Fundamentals of Accounting and Finance (4)
- BUSA 502 – Fundamentals of Management and Marketing (4)
- BUSA 505 – Management Use of Computers (4)
- BUSA 550 – Organizational Behavior and Environment (4)
- BUSA 554 – Planned Organizational Change (4)
- BUSA 570 – Marketing Management Seminar (4)
- COMA 435 – Organizational Communications (4)
- COMA 450 – Workshop in Effective Public Speaking (2)
- ECON 500 – Applied Statistical Analysis (4)

DIVISION OF SOCIAL SCIENCES

Master of Arts

- Individualized Study
- Marriage & Family Therapy
- Organizational Systems

Earl Smith, Ph.D., *Dean, Division of Social Sciences*

PURPOSE: The Division of Social Sciences, which includes the disciplines of anthropology, economics, history, marriage and family therapy, political science, psychology, social work, and sociology, offers the Master of Arts in Social Sciences with concentrations in Marriage and Family Therapy, Organizational Systems, and Individualized Study.

The concentrations in the Master of Arts in Social Sciences program emphasize multidisciplinary approaches to learning and direct applications to public and professional life. Courses provide concepts and skills that may be applied in a variety of public and private-sector settings.

Courses are scheduled late afternoon and evening in order to serve the working community.

ADMISSIONS: Applications for admission into the program will be evaluated according to the following criteria: undergraduate academic performance during the last two years of the student's baccalaureate program, work experience pertinent to the student's competence for the specialized program the student seeks to pursue, a statement of educational and professional goals, and two letters of recommendation that are pertinent to the student's area of interest and academic abilities. A personal interview is required for all applicants. Special information regarding admission requirements is listed under each concentration's prerequisites.

GENERAL PREREQUISITES: Applicants must have completed a B.A. or B.S. degree with at least 20 semester hours of credit in the social sciences, which must include the specific prerequisites listed for the concentration the applicant wishes to pursue.

ADVISING: Upon admission, each student is assigned an adviser with whom the student plans a graduate program. Before beginning the research project or thesis, the student shall request the faculty coordinator of the concentration in which he or she is enrolled to appoint an advisory committee of three faculty members, one of whom is the student's regular adviser. The student consults with the advisory committee during research and submits the results of research to the committee, which will evaluate the student's work.

REQUIREMENTS: In the Organizational Systems and Individualized Study concentrations, SSCI 502 Social Science Theory and SSCI 505 Social Science Research Methods must be among the first five courses completed, exclusive of prerequisite requirements. These students must complete a candidacy proposal upon completion of 20 semester hours of course work. The candidacy proposal requires a student to demonstrate the ability to synthesize the theoretical and methodological knowledge acquired in the core courses by the preparation of a formal research project or thesis proposal. The research project or thesis proposal will examine a substantive topic appropriate to the student's degree program.

Marriage and Family Therapy students follow a specified course of study listed in that concentration's section. Students who elect to write a thesis are subject to candidacy proposal requirements.

Individualized Study

(36 semester hours)

FACULTY COORDINATOR: Earl Smith, Ph.D.

CONCENTRATION OBJECTIVE: The Individualized Study program in the social sciences is designed for individuals who want to pursue their own personal educational goals, prepare for further graduate study, or prepare for careers or career advancement in a variety of fields, ranging from public service to social science research.

In addition to disciplinary study, students may also design interdisciplinary programs in concert with available faculty interests and expertise. Current interdisciplinary areas include international studies, legal studies, liberal studies, and women's studies.

PREREQUISITES: The student's program committee will assess whether the 20 semester hours in social science provide the necessary background for the individual theme the student wishes to pursue.

CORE COURSES AND RESEARCH REQUIREMENT:

(12 semester hours)

- SSCI 501 – Social Science Theory (4)
- SSCI 505 – Social Science Research Methods (4)
- SSCI 598 – Research Project (4)
- or* SSCI 599 – Thesis (4)

CONCENTRATION REQUIREMENTS: (24 semester hours)

Courses will be chosen in consultation with the adviser. A program must include a least eight semester hours in each of two separate social science disciplines. Upon approval of the adviser, a student may take up to eight semester hours in a field or fields outside the social sciences.

Marriage and Family Therapy

(45 semester hours)

FACULTY COORDINATOR: Cheryl L. Storm, Ph.D.

CONCENTRATION OBJECTIVE: The primary objective of the Marriage and Family Therapy concentration is to train individuals to be competent in the scholarship and clinical practice of marriage and family therapy. The concentration emphasizes academic study, rigorous evaluation, and direct supervision of one's clinical competence.

ACCREDITATION – AAMFT: The program is fully accredited by the Commission on Accreditation for Marriage and Family Therapy Education of the American Association of Marriage and Family Therapy (AAMFT) and also complies with Washington State certification requirements for marriage and family therapists.

PREREQUISITES: Beyond the general prerequisites for all social sciences graduate programs, the following courses or course equivalents are required before admission as a regular status student:

- Abnormal Psychology
- Counseling Methods/Interviewing
- Human Development
- Theories of Therapy/Personality Theories

A personal interview with the program faculty is required. A comprehensive autobiographical statement (maximum eight double spaced types pages) must accompany the application in place of the required goals statement. The statement should address the following questions:

1. What significant life events have most influenced your present development and your desire to be a family therapist?
2. What are your professional career goals after completing your degree?
3. What are your strengths that will help you achieve your professional goals?
4. What do you consider to be areas for personal growth that may need the most attention during your training as a therapist at Pacific Lutheran University?

APPLICATION DEADLINES: *For Fall*

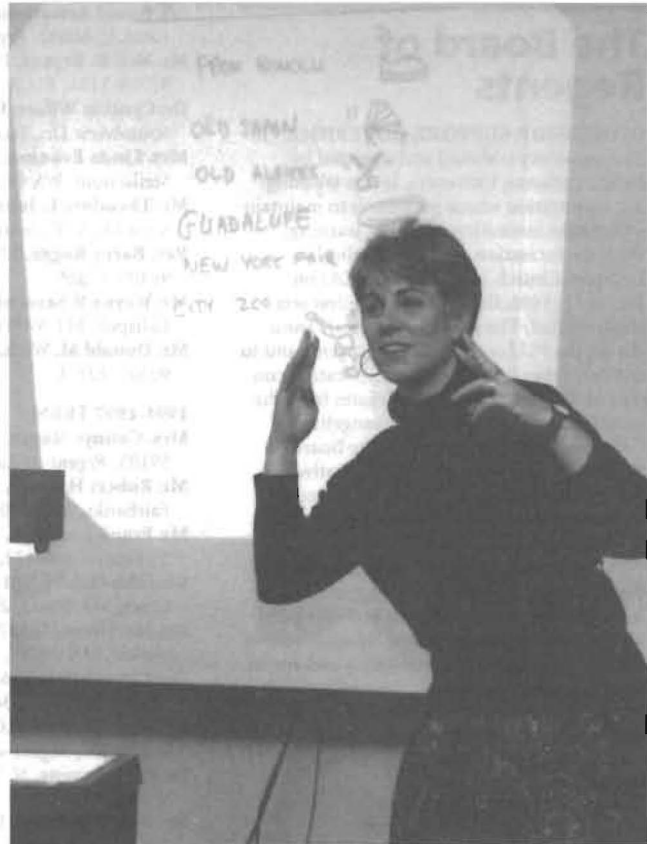
- Application file completed in Office of Admissions: January 10
- Interview Notification: February 5
- Tentative Interview date: To be Announced

CONCENTRATION REQUIREMENTS: (45 semester hours)

- SSCI 505 – Research Methods (4)
- MFTH 500 – Human Development (4)
- MFTH 503 – Systems Approach to Marriage and Family Therapy (4)
- MFTH 504 – Family Development (4)
- MFTH 507 – Comparative Marriage and Family Therapy (4)
- MFTH 510 – Human Sexuality and Sex Therapy (2)
- MFTH 511 – Psychosocial Pathology: Relationship to Marriage and Family Therapy (4)
- MFTH 512 – Professional Studies in Marriage and Family Therapy (3)
- MFTH 519 – Practicum I (2)
- MFTH 520 – Theory I (2)
- MFTH 521 – Practicum II (2)
- MFTH 522 – Theory II (2)
- MFTH 523 – Practicum III (2)
- MFTH 524 – Theory III (2)
- MFTH 525 – Practicum IV (4)

Elective:

- MFTH 599 – Thesis (4)



Organizational Systems

(40 semester hours)

FACULTY COORDINATOR: Earl Smith, Ph.D.

CONCENTRATION OBJECTIVE: The Organizational Systems concentration emphasizes organizational theory, behavior, and change, as well as how individuals function and behave in organizational settings. The program enables students to become more effective professionally in applying social science approaches to issues of organizational effectiveness and the problems facing complex organizations.

CORE COURSES AND RESEARCH REQUIREMENTS:

(12 semester hours)

- SSCI 502 – Social Science Theory (4)
- SSCI 505 – Social Science Research Methods (4)
- SSCI 598 – Research Project (4)
- or* SSCI 599 – Thesis (4)

CONCENTRATION REQUIREMENTS: (28 semester hours)

- PSYC 510 – Industrial/Organizational Psychology (4)
- BUSA 550 – Organizational Behavior and Environment (4)
- BUSA 554 – Planned Organizational Change (4)
- SOCI 514 – Complex Organizations (4)
- SOCI 530 – Group Dynamics: Theory and Practice (4)
- SOCI 534 – Sociology of Work (4)
- SOCI 551 – Interventions Practicum I (2)
- SOCI 552 – Interventions Practicum II (2)

The Board of Regents

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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. With the formation of the Evangelical Lutheran Church in America (ELCA) on January 1, 1988, the PLU Corporation was reconstituted. The corporation meets annually on the PLU campus to elect regents and to conduct other business. The corporation consists of 37 regents and 125 delegates from the six synods of Region I of the Evangelical Lutheran Church in America. The Board of Regents includes eighteen representatives from the Alumni Association, six bishops from the synods of Region I, and the university president.

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 student body and the faculty have non-voting representatives who meet with the board.

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Lisa Upchurch, Coordinator, Student
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Seiichi Adachi, 1967–, *Associate Professor of Psychology; Counselor, Counseling and Testing Services*; B.A., Jamestown College, 1946; B.D., McCormick Seminary, 1951; M.A., Columbia University-Union Theological Seminary, New York, 1957; Ed.D., Teachers College, Columbia University, 1960.

* **Barbara Ahna**, 1987–, *Assistant Professor of Business*; B.A., University of Oklahoma, 1967; J.D., University of Puget Sound School of Law, 1978.

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Merrily J. Allen, 1982–1988, 1991–, *Associate Professor of Nursing*; B.S.N., M.N., University of Washington, 1959, 1984; D.N.S., University of San Diego, 1990.

Dana D. Anderson, 1984–, *Associate Professor of Psychology*; B.A., Antioch College, 1971; M.A., Ph.D., Ohio State University, 1974, 1981.

George E. Arbaugh, 1959–, *Professor of Philosophy, Regency Professor, 1979–80*; B.A., Augustana College, Rock Island, 1955; M.A., Ph.D., University of Iowa, 1958, 1959.

David M. Atkinson, 1976–, *Associate Professor of Political Science*; B.A., University of Puget Sound, 1965; Ph.D., University of Maryland, 1972.

* **Brian N.R. Baird**, 1986–87, 1988–, *Associate Professor of Psychology*; B.S., University of Utah, 1977; M.S., Ph.D., University of Wyoming, 1980, 1984.

D. Stuart Bancroft, 1967–68, 1971–, *Professor of Business*; B.S., M.B.A., Arizona State University, 1963, 1965; M.A., Ph.D., University of Pennsylvania, 1971, 1973.

Stephen E. Barndt, 1978–, *Professor of Business*; B.S., Washington State University, 1957; M.B.A., Ph.D., Ohio State University, 1967, 1971.

J. Thaddeus Barnowe, 1977–, *Professor of Business*; B.A., University of San Francisco, 1966; M.A., Ph.D., University of Michigan, 1971, 1973.

Michael D. Bartanen, 1979–, *Professor of Communication; Acting Dean, School of the Arts*; B.A., M.A., Western Washington University, 1974, 1976; Ph.D., University of Southern California, 1981.

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John E. Beaulieu, 1985–, *Associate Professor of Computer Science*; B.A., Loretto Heights College, 1975; M.A., University of Colorado, 1976; Ph.D., University of Oregon, 1985.

William Becvar, 1973–, *Professor of Theatre*; B.A., University of Northern Iowa, 1961; M.A., State University of South Dakota, 1964; Ph.D., University of Kansas, 1975.

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James E. Brink, 1970–, *Professor of Computer Science*; A.B., Hope College, 1965; M.S., Ph.D., Iowa State University, 1967, 1970.

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* **Roberta S. Brown**, 1979–, *Associate Professor of Languages (French)*; B.A., Stanford University, 1967; M.A., University of Oregon, 1969; Ph.D., University of California, Los Angeles, 1981.

† **Christopher R. Browning**, 1974–, *Professor of History*; A.B., Oberlin College, 1967; M.A., Ph.D., University of Wisconsin, Madison, 1968, 1975.

Stanley L. Brue, 1971–, *Professor of Economics*; B.A., Augustana College, Sioux Falls, 1967; Ph.D., University of Nebraska, 1971.

* **Elizabath E. Brusco**, 1988–, *Associate Professor of Anthropology*; B.A., Boston University, 1974; M.A., Hunter College, 1982; Ph.D., City University of New York, 1986.

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Jack Cady, 1987–, *Adjunct Professor of English*; B.S., University of Louisville, 1961.

Thomas J. Campbell, 1984–, *Associate Professor of English*; B.S., Ph.D., University of Oregon, 1968, 1981; M.A., Portland State University, 1976.

Cheryl C. Cardwell, 1994–, *Clinical Assistant Professor of Nursing*; B.S.N., University of Pennsylvania, 1970; M.S.N., Pacific Lutheran University, 1993.

* **John T. Carlson**, 1975–, *Professor of Biology*; B.A., Carleton College, 1966; Ph.D., University of Minnesota, 1976.

Susan Brown Carlton, 1991–, *Assistant Professor of English*; B.A., Mount Holyoke College, 1971; M.A., Butler University, 1982; Ph.D., Purdue University, 1991.

E. Wayne Carp, 1986–, *Associate Professor of History*; B.A., M.A., Ph.D., University of California, Berkeley, 1972, 1973, 1981.

Judith W. Carr, 1979–, *Dean for Special Academic Programs and Summer Studies*; B.S., Pacific Lutheran University, 1970; Ph.D., University of Washington, 1974.

Gary A. Chase, 1970–, *Associate Professor of Physical Education*; B.S., M.S., Washington State University, 1962, 1964.

Marie Churney, 1974–, *Associate Professor of Education*; B.A., B.S., Western Washington University, 1961, 1964; M.Ed., Ed.D., University of Florida, 1966, 1970.

Edwin G. Clausen, 1983–, *Associate Professor of History*; B.A., University of California, Riverside, 1970; M.A., Ph.D., University of California, Santa Barbara, 1972, 1979.

Keith J. Cooper, 1984–, *Associate Professor of Philosophy*; B.A., Gordon College, 1976; M.T.S., Gordon-Conwell Theological Seminary, 1979; M.A., Ph.D., University of Wisconsin, Madison, 1981, 1988.

Dennis L. Cox, 1972–, *Associate Professor of Art*; B.A., Pacific Lutheran University, 1967; M.F.A., Washington State University, 1972.

Michele A. Crayton, 1977–, *Professor of Biology*; B.S., M.S., University of Missouri, Kansas City, 1967, 1969; Ph.D., Oregon State University, 1974.

David P. Dahl, 1969–, *Professor of Music*; B.A., Pacific Lutheran University, 1960; Associationship, American Guild of Organists, 1961; M.A., University of Washington, 1962.

Patricia L. Dolan, 1994–, *Assistant Professor of Biology*; B.A., M.A., State University of New York at Buffalo, 1976, 1982; Ph.D., Kent State University, 1990.

* **Michael B. Dollinger**, 1981–, *Professor of Mathematics*; B.A., University of Rochester, 1963; M.S., Ph.D., University of Illinois, 1965, 1968.

Bryan C. Dorner, 1980–, *Associate Professor of Mathematics*; B.S. (Physics), B.S. (Mathematics), Oregon State University, 1966, 1969; M.S., Ph.D., University of Oregon, 1971, 1977.

Celine A. Dorner, 1984–, *Assistant Professor of Computer Science and Mathematics*; M.S., University of Oregon, 1974.

- Susan Dwyer-Shick**, 1984–, *Associate Professor of Legal Studies*; B.A., Western Michigan University, 1967; A.M., Ph.D., University of Pennsylvania, 1969, 1979; J.D., University of Puget Sound School of Law, 1986.
- Larry A. Edison**, 1982–, *Professor of Computer Science*; B.A., Whitman College, 1958; Ph.D., M.S., Stanford University, 1965, 1982.
- Gail L. Egbers**, 1992–, *Reference/Bibliographic Instruction Librarian*; B.A., Midland Lutheran College, 1973; M.A.L.S., University of Denver, 1973.
- Nancy Ellis**, 1992–, *Clinical Assistant Professor of Nursing*; B.S.N., Northern Illinois University, 1979; M.S., University of Illinois, Chicago, 1982.
- Anthony J. Evans**, 1988–, *Associate Professor of Physical Education*; B.S., M.S., Ph.D., University of Oregon, 1968, 1969, 1972.
- Jojean Ewart**, 1990–, *Assistant Professor of Communication*; B.S., University of South Dakota, 1973; M.A., Purdue University, 1980; Ph.D., University of Minnesota, 1985.
- Audrey S. Eyster**, 1981–, *Associate Professor of English*; B.A., Houghton College, 1964; M.A., Alfred University, 1968; Ph.D., University of Minnesota, 1978.
- Kathleen A. Vaught Farner**, 1978–, *Associate Professor of Music*; B.M., Temple University, 1968; M.M., New England Conservatory of Music, 1971.
- Richard A. Farner**, 1976–, *Associate Professor of Music*; B.M., Oberlin College, 1968; M.M., University of Michigan, 1974.
- Louise Sand Faye**, 1969–, *Professor of Languages (Spanish)*; B.A., M.A., Florida State University, 1949, 1951; Ph.D., University of North Carolina, 1958.
- Bruce W. Finnie**, 1989–, *Assistant Professor of Business*; B.S., Augustana College, Sioux Falls, 1970; Ph.D., University of Nebraska, 1975.
- Leslee A. Fisher**, 1992–, *Assistant Professor of Physical Education*; B.S., M.S., University of Michigan, 1980, 1982; Ph.D., University of California, Berkeley, 1992.
- Shannon Fitzgerald**, 1992–, *Clinical Assistant Professor of Nursing*; B.S.N., University of Portland, 1976; M.S.N., Yale University, 1980.
- Duncan Foley**, 1986–, *Associate Professor of Earth Sciences*; B.A., Antioch college, 1971; M.S., Ph.D., Ohio State University, 1973, 1978.
- Teresa L. Ford**, 1993–, *Assistant Professor of Education*; B.A., Whitman College, 1983; M.Ed., Ph.D., Washington State University, 1988, 1993.
- William V. Frame**, 1993–, *Vice President for Finance and Operations*; B.A., M.A., University of Hawaii, 1962, 1964; Ph.D., University of Washington, 1969.
- Mira J. Frohnmayer**, 1980–, *Associate Professor of Music*; B.A., University of Oregon, 1960; M.M., New England Conservatory of Music, 1963.
- Craig B. Fryhle**, 1986–, *Associate Professor of Chemistry*; B.A., Gettysburg College, 1979; Ph.D., Brown University, 1985.
- Sarah Fuelling**, 1994–, *Visiting Assistant Professor of Psychology*; B.A., Mississippi State University, 1986; M.S., Ph.D., Auburn University, 1989, 1993.
- Roger Gard**, 1974–, *Associate Professor of Music*; B.A., Luther College, 1962; M.M., University of Wisconsin, Milwaukee, 1972.
- Veeda Gargano-Ray**, 1985–87, 1994–, *Visiting Assistant Professor of Anthropology*; B.A., California State University, Bakersfield, 1975; M.A., Ph.D., University of California, Santa Barbara, 1977, 1985.
- Patricia H. Gaspar**, 1987–88, 1991–, *Clinical Assistant Professor of Nursing*; B.S.N., M.N., Emory University, 1975, 1978.
- Arthur Gee**, 1968–, *Professor of Biology*; B.S., M.S., Ph.D., Purdue University, 1962, 1964, 1970.
- Beatrice Geller**, 1984–, *Associate Professor of Art*; B.F.A., New York University, 1974, M.F.A., Rochester Institute of Technology, 1979.
- Kent P. Gerlach**, 1980–, *Professor of Education*; B.S., University of Nebraska, 1967; M.A., University of South Dakota, 1972; Ed.D., University of Nevada, Las Vegas, 1980.
- Linda K. Gibson**, 1989–, *Assistant Professor of Business*; B.A., Texas Christian University, 1967; M.A., Ph.D., University of Missouri, 1985, 1989.
- William P. Giddings**, 1962–, *Professor of Chemistry*; B.A., DePauw University, 1954; A.M., Ph.D., Harvard University, 1956, 1959.
- Virginia K. Gilmore**, 1988–, *Media Services Librarian*; B.S., University of Florida, 1958; M.L.S., University of Maryland, 1976.
- Eilene K. Glasgow**, 1990–, *Assistant Professor of Education*; B.A., B.Mus., Ph.D. cand., University of Washington, 1976, 1990; M.Ed., Western Washington University, 1982.
- Lawrence B. Gold**, 1984–, *Associate Professor of Art*; B.A., Northeastern Illinois University, 1971; M.F.A., University of Wisconsin, Madison, 1976.
- Sheila D. Goodwin**, 1987–, *Assistant Professor of Nursing*; B.S.N., University of Michigan, 1983; M.S.N., Wayne State University, 1987.
- Fern A. Gough**, 1971–, *Associate Professor of Nursing*; B.S.N., Wheaton College, 1956; M.N., University of Washington, 1961.
- Stewart D. Govig**, 1958–60, 1961–, *Professor of Religion*; B.A., St. Olaf College, 1948; M.Div., Luther Theological Seminary, 1952; M.Th., Princeton Theological Seminary, 1954; Ph.D., New York University, 1966.
- William G. Greenwood**, 1981–, *Professor of Physics*; B.S., University of Washington, 1972; M.S., Ph.D., Oregon State University, 1974, 1978.
- Kate Grieshaber**, 1984–, *Associate Professor of Music*; B.A., University of Minnesota, 1968; M.A., Ph.D., University of Washington, 1971, 1990.
- Gregory E. Guldin**, 1979–, *Professor of Anthropology*; B.A., Brooklyn College, City University of New York, 1971; M.A., Ph.D., University of Wisconsin, Madison, 1973, 1977.
- Robert L. Gutmann**, 1984–87, 1992–, *Associate Professor of Engineering*; B.S., M.S., Ph.D., Iowa State University, 1970, 1972, 1976.
- Colleen M. Hacker**, 1979–, *Associate Professor of Physical Education*; B.S., Lock Haven State College, 1978; M.S., University of Arizona, 1979; Ph.D., University of Oregon, 1992.
- Mary Jane Haemig**, 1993–, *Assistant Professor of Religion*; B.A., University of Minnesota, 1977; J.D., Harvard Law School, 1981; M.T.S., Th.D. cand., Harvard Divinity School, 1981.
- John S. Hallam**, 1990–, *Associate Professor of Art*; B.A., Seattle University, 1970; M.A., Ph.D., University of Washington, 1974, 1980.
- David H. Hansen**, 1974–, *Professor of Biology*; B.S., Oregon State University, 1968; M.S., University of Utah, 1970; Ph.D., University of California, Irvine, 1974.
- Vernon R. Hanson**, 1970–, *Associate Professor of Social Work*; B.A., Pacific Lutheran University, 1955; B.D., Luther Theological Seminary, 1962; A.M., University of Chicago, 1970.
- Christine L. Hansvick**, 1979–, *Associate Professor of Psychology*; B.A., Southwest State University, 1971; M.A., Ph.D., University of Windsor, 1975, 1977.
- Diane M. Harney**, 1992–, *Assistant Professor of Communication*; B.S., Indiana University, 1984; M.S., Florida State University, 1987; Ph.D., Purdue University, 1992.
- Donald C. Hauelsen**, 1977–87, 1990–, *Professor of Engineering*; B.A., College of Wooster, 1967; Ph.D., Cornell University, 1972; M.S.E.E., University of Washington, 1986.
- George Hauser, Jr.**, 1987–, *Associate Professor of Computer Science*; B.S. (Physics), B.S. (Computer Science), Washington State University, 1971, 1972; M.S., University of Oregon, 1980; Ph.D., University of Rochester, 1988.
- Luella V. Hefty**, 1973–, *Assistant Professor of Nursing*; B.S.N., Pacific Lutheran University, 1969; M.A., University of Washington, 1973.
- Larry P. Hegstad**, 1979–, *Associate Professor Business*; B.A., The College of Idaho, 1963; M.B.A., Washington State University, 1965; Ph.D., University of Washington, 1978.
- Janet L. Herman-Bertsch**, 1984–, *Assistant Professor of Nursing*; B.S.N., University of California, San Francisco, 1975; M.S.N., University of Washington, 1981.
- John O. Herzog**, 1967–, *Professor of Mathematics*; B.A., Concordia College, Moorhead, 1957; M.A., Ph.D., University of Nebraska, 1959, 1963.
- Margaret Herzog**, 1980–, *Adjunct Professor of Mathematics*; B.A., William Jewell College, 1957; M.A., University of Nebraska, 1959.
- 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, 1970.
- Anne M. Hirsch**, 1983–, *Associate Professor of Nursing*; B.S.N., Washington State University, 1974; M.N., University of Washington, 1978; D.N.S., Indiana University, 1983.
- David L. Hoffman**, 1975–, *Associate Professor of Music*; B.M., Northwestern University, 1967; M.M.A., Yale University School of Music, 1971.
- Paul E. Hoseth**, 1968–, *Professor of Health and Physical Education*; B.A., Concordia College, Moorhead, 1966; M.S., South Dakota State University, 1967; Ed.D., University of Oregon, 1977.
- Nancy R. Howell**, 1990–, *Assistant Professor of Religion*; B.S., College of William and Mary, 1975; M.Div., Th.M., Southeastern Baptist Theological Seminary, 1982, 1984; M.A., Ph.D., Claremont Graduate School, 1986, 1990.
- Wei Hua**, 1988–, *Associate Professor of Languages (Chinese)*; B.A., National Taiwan University, 1977; M.A., Ph.D., University of California, Berkeley, 1980, 1991.
- David R. Huelsbeck**, 1989–, *Associate Professor of Anthropology*; B.A., University of Wisconsin, Madison, 1974; M.A., Ph.D., Washington State University, 1980, 1983.

- Laurence D. Huestis**, 1961–, *Professor of Chemistry*; B.S., University of California, Berkeley, 1956; Ph.D., University of California, Davis, 1960.
- Patricia Hughes**, 1992–, *Assistant Professor of Nursing*; B.S.N., University of Alabama, Birmingham, 1974; M.S.N., University of Texas, San Antonio, 1980; Ed.D., University of Georgia, 1992.
- Edward S. Inch**, 1986–, *Associate Professor of Communication*; B.A., Western Washington University, 1982; M.S., University of Oregon, 1984; Ph.D., University of Washington, 1992.
- Paul O. Ingram**, 1975–, *Professor of Religion*; B.A., Chapman College, 1961; Th.M., School of Theology at Claremont, 1964; Ph.D., Claremont Graduate School, 1968.
- Sharon L. Jansen**, 1980–, *Professor of English*; B.A., California Lutheran University, 1972; M.A., Ph.D., University of Washington, 1973, 1980.
- Jo Ann S. Jensen**, 1967–, *Professor of Biology*; A.B., M.A., Pacific Lutheran University, 1954, 1977; M.A., University of Southern California, 1957; Ph.D., Iowa State University, 1961.
- Mark K. Jensen**, 1989–, *Assistant Professor of Languages (French)*; B.A., Princeton University, 1974; M.A., Ph.D., University of California, Berkeley, 1983, 1989.
- Robert J. Jensen**, 1968–, *Associate Professor of Economics*; B.A., Dana College, 1964; M.A., University of Nebraska, 1967.
- Richard J. Jobst**, 1967–, *Associate Professor of Sociology*; B.A., University of San Francisco, 1964; M.A., University of California, Davis, 1967.
- Richard P. Jones**, 1969–, *Associate Professor of English*; B.A., Harvard University, 1964; M.A., M.F.A., University of Massachusetts, 1969.
- John D. Kawula**, 1994–, *Reference Librarian*; B.A., Trent University, 1974; M.L., Emory University, 1975.
- Ann Kelleher**, 1981–, *Associate Professor of Political Science*; B.A., Hope College, 1964; M.A., Northeastern University, 1966; Ph.D., University of Denver, 1973.
- JoDee G. Keller**, 1989–, *Assistant Professor of Social Work and Marriage and Family Therapy*; B.A., Hope College, 1974; A.M., University of Chicago, 1976; Ph.D., University of Illinois, Chicago, 1987.
- David T. Keyes**, 1969–, *Professor of Art*; B.F.A., University of Arizona, 1964; M.A., Ohio State University, 1966.
- Richard E. Kibbey**, 1988–, *Assistant Professor of Business*; B.S., M.A., Ohio State University, 1965, 1968; M.S., Ph.D., Portland State University, 1987, 1993.
- Patricia O'Connell Killen**, 1989–, *Associate Professor of Religion*; B.A., Gonzaga University, 1974; M.A., Ph.D., Stanford University, 1976, 1987.
- Marta S. Kirk**, 1992–, *Assistant Professor of Music*; B.M., Peabody Conservatory of Music, 1987; M.M., University of Massachusetts, 1992.
- Laura F. Klein**, 1979–, *Professor of Anthropology*; B.A., M.A., Ph.D., New York University, 1968, 1970, 1975.
- Mary Lou Klisch**, 1986–, *Assistant Professor of Nursing*; B.S.N., M.S.N., The Catholic University of America, 1966, 1976.
- Mary Ann Kluge**, 1985–, *Assistant Professor of Physical Education*; B.S., University of Rhode Island, 1977; M.S., University of Oregon, 1978.
- Calvin H. Knapp**, 1959–, *Professor of Music*; B.S., M.S., Juillard School of Music, 1949, 1950; Ed.D., Teachers College, Columbia University, 1973.
- Jerry Kracht**, 1967–68, 1969–, *Professor of Music*; B.M., M.A., M.F.A., D.M.A., University of Iowa, 1963, 1965, 1967, 1974.
- Beth M. Kraig**, 1989–, *Associate Professor of History*; B.A., San Francisco State University, 1979; M.A., Western Washington University, 1981; A.M., University of Chicago, 1984; Ph.D., University of Washington, 1987.
- C. Douglas Lamoreaux**, 1994–, *Associate Professor of Education*; B.A., M.Ed., Linfield College, 1969, 1978; Ph.D., University of Oregon, 1993.
- Renee M. Lang**, 1994–, *Visiting Assistant Professor of Physics*; B.S., M.S., Montana State University, 1982, 1985; D.Sci., Darmstadt Technical University, Germany, 1992.
- Dorothy M. Langan**, 1989–, *Professor of Nursing; Dean, School of Nursing*; B.S., Whitworth College, 1961; M.S., University of Maryland, 1973; Ph.D., Gonzaga University, 1984.
- Douglas W. Lee**, 1992–, *Associate Professor of History*; B.A., Lewis and Clark College, 1967; M.A., University of Michigan, 1969; Ph.D., University of California, Santa Barbara, 1979; J.D., Northwestern School of Law, 1988.
- Paula H. Leitz**, 1989–1990, 1994–, *Visiting Assistant Professor of Education*; B.A., University of California, Davis, 1971; M.A., California State University, Sacramento, 1976; Ph.D., University of Washington, 1988.
- Jerome P. Le Jeune**, 1972–, *Associate Professor of Psychology*; B.A., Gonzaga University, 1964; M.A., Ph.D., University of Victoria, 1970, 1974.
- Anna Y. Leon-Guerrero**, 1993–, *Assistant Professor of Sociology*; B.A., Pacific University, 1983; M.A., Ph.D. cand., University of California, Los Angeles, 1988.
- Jerrold Lerum**, 1973–, *Professor of Biology*; B.A., Luther College, 1963; M.S., University of Wisconsin, Madison, 1965; Ph.D., Northwestern University, 1973.
- Marilyn A. Levinsohn**, 1992–, *Associate Professor of Nursing*; B.S.N., M.P.H., University of Minnesota, 1968, 1978.
- Jan Patricia Lewis**, 1989–, *Assistant Professor of Education*; B.A., Oregon State University, 1976; M.A.T., Lewis and Clark College, 1979; Ph.D., University of Oregon, 1989.
- John A. Lindbo**, 1994–, *Assistant Professor of Biology*; B.S., Pacific Lutheran University, 1986; Ph.D., Oregon State University, 1993.
- Brian E. Lowes**, 1968–, *Professor of Earth Sciences*; B.S., University of London, 1957; M.S., Queens University, 1963; Ph.D., University of Washington, 1972.
- Lyman T. Lundeen**, 1988–89, 1990–, *Professor of Religion*; B.A., Augustana College, Rock Island, 1952; M.Div., Augustana Theological Seminary (Lutheran School of Theology at Chicago), 1960; S.T.M., Ph.D., Union Theological Seminary, New York, 1961, 1969.
- Diane B. MacDonald**, 1987–, *Associate Professor of Business*; B.A., M.B.A., Loyola University, Chicago, 1970, 1974; J.D., John Marshall Law School, 1980.
- Laura A. Mac Ginitie**, 1993–, *Assistant Professor of Engineering*; B.S., M.S., Ph.D., Massachusetts Institute of Technology, 1980, 1982, 1988.
- Cynthia Mahoney**, 1981–, *Director of Continuing Nursing Education*; B.S.N., Simmons College, 1958; M.Ed., Ed.D., Seattle University, 1973, 1985.
- John L. Main**, 1971–, *Professor of Biology*; B.S.Ed., M.S.Ed., Chacron State College, 1965, 1966; Ph.D., University of Washington, 1970.
- Patsy L. Maloney**, 1994–, *Assistant Professor of Nursing; Director, Center for Continued Nursing Learning*; B.S.N., University of Maryland, 1974; M.A., M.S.N., Catholic University of America, 1984; Ed.D., University of Southern California, 1994.
- Jayne E. Marek**, 1988–, *Assistant Professor of English*; B.A., St. Olaf College, 1976; M.A., Washington State University, 1980; Ph.D., University of Wisconsin, Madison, 1991.
- Dennis J. Martin**, 1975–, *Professor of Biology*; B.S., Illinois State University, 1969; M.S., University of New Mexico, 1971; Ph.D., Utah State University, 1975.
- Dennis M. Martin**, 1976–, *Associate Professor of English*; B.S., Edinboro State College, 1964; M.A., Purdue University, 1966; Ph.D., University of California, Los Angeles, 1973.
- Arthur D. Martinson**, 1966–, *Professor of History*; B.A., Pacific Lutheran University, 1957; M.A., Ph.D., Washington State University, 1961, 1966.
- Marjorie I. Mathers**, 1964–66, 1968–, *Associate Professor of Education*; B.A., M.A., Central Washington University, 1953, 1961; M.A., Pacific Lutheran University, 1974; Ed.D., Seattle University, 1980.
- Dixie Matthias**, 1975–, *Adjunct Professor of Biology*; B.S., Pacific Lutheran University, 1962; M.S., University of Washington, 1965.
- Shannon K. Mayer**, 1993–, *Assistant Professor of Physics*; B.S., Pacific Lutheran University, 1987; M.S., Oregon State University, 1989.
- Joseph E. McCann, III**, 1992–, *Professor of Business; Dean, School of Business*; B.A., M.B.A., University of Washington, 1968, 1975; M.A., Ph.D., The Wharton School, University of Pennsylvania, 1980.
- Katherine M. McDade**, 1989–, *Assistant Professor of Sociology*; B.S., Duquesne University, 1966; M.S., Ph.D., University of Oregon, 1978, 1985.
- Susan J. McDonald**, 1975–, *Supervisor of Library Reference Services*; B.A., M.L.S., University of Washington, 1969, 1970.
- Richard McGinnis**, 1972–, *Professor of Biology*; B.S., Pacific Lutheran University, 1963; Ph.D., University of Southern California, 1974.
- Erin McKenna**, 1992–, *Assistant Professor of Philosophy*; B.A., Claremont McKenna College, 1987; M.A., Ph.D., Purdue University, 1990, 1992.
- David E. McNabb**, 1979–, *Professor of Business*; B.A., California State University, Fullerton, 1965; M.A., University of Washington, 1968; Ph.D., Oregon State University, 1981.
- Paul T. Menzel**, 1971–, *Professor of Philosophy; Interim Provost and Dean of Graduate Studies*; B.A., College of Wooster, 1964; B.D., Yale University, 1967; Ph.D., Vanderbilt University, 1971.
- N. Christian Meyer, Jr.**, 1970–, *Professor of Mathematics*; B.A., Reed College, 1966; M.A., Ph.D., University of Oregon, 1967, 1970.
- Chip E. Miller**, 1991–, *Assistant Professor of Business*; B.A., M.B.A., M.A., University of Kansas, 1976, 1980, 1987; Ph.D., University of Washington, 1990.

- Marlen F. Miller**, 1970–, *Professor of Economics*; B.S., M.S., Ph.D., University of Minnesota, 1962, 1965, 1967.
- Sue P. Minahan**, 1992–, *Clinical Assistant Professor of Nursing*; B.S.N., Texas Women's University, 1962; M.N., University of Washington, 1974.
- Gary L. Minetti**, 1970–, *Associate Professor of Education, Director of Counseling and Testing Services*; B.S., Washington State University, 1960; M.A., Pacific Lutheran University, 1967; Ph.D., University of Washington, 1976.
- * **Richard D. Moe**, 1965–, *Professor of Education*; B.A., Concordia College, Moorhead, 1951; M.Ed., Ed.D., University of Colorado, 1953, 1962.
- Christine Moon**, 1989–, *Associate Professor of Psychology*; B.A., Whitman College, 1971; M.A., Ph.D., Columbia University, 1983, 1985.
- Bradford L. Moore**, 1980–, *Associate Professor of Physical Education*; B.S., Portland State University, 1974; M.S., University of Oregon, 1978.
- John N. Moritsugu**, 1975–, *Associate Professor of Psychology*; B.A., University of Hawaii, 1971; M.A., Ph.D., University of Rochester, 1974, 1977.
- Darlean A. Mosher**, 1984–, *Associate Professor of Education*; B.S., Indiana Central University, 1966; M.S., Eastern Illinois University, 1981; Ph.D., Southern Illinois University, Carbondale, 1984.
- Robert L. Mulder**, 1987–, *Professor of Education*; B.A., Calvin College, 1969; M.A., Ph.D., Michigan State University, 1972, 1983.
- Gerald M. Myers**, 1982–, *Associate Professor of Business*; B.S., University of Massachusetts, 1965; M.S., University of Missouri, Columbia, 1975; Ph.D., University of Iowa, 1983.
- L. Richard Nance**, 1992–, *Assistant Professor of Music*; B.M.E., M.A., West Texas State University, 1977, 1982; D.M.A., Arizona State University, 1992.
- Charles T. Nelson**, 1967–, *Registrar*; B.S., Dakota State College, 1963; M.A., Adams State College, 1964.
- Eric D. Nelson**, 1994–, *Visiting Assistant Professor of Languages (Classics)*; B.A., Pacific Lutheran University, 1982; M.A., Ph.D., University of Washington, 1984, 1992.
- Gregory D. Nelson**, 1992–, *Assistant Professor of Education*; B.A., Rice University, 1973; M.A., Ph.D., University of Washington, 1987, 1991.
- * **Burton L. Nessel**, 1967–, *Associate Professor of Chemistry*; B.A., St. Olaf College, 1957; M.S., Ph.D., Purdue University, 1960, 1962.
- Jesse D. Nolph**, 1968–, *Associate Professor of Psychology*; B.A., George Washington University, 1964; Ph.D., Cornell University, 1971.
- Jon J. Nordby**, 1977–, *Associate Professor of Philosophy*; B.A., St. Olaf College, 1970; M.A., Ph.D., University of Massachusetts, 1975, 1977.
- Philip A. Nordquist**, 1963–, *Professor of History*; B.A., Pacific Lutheran University, 1956; M.A., Ph.D., University of Washington, 1960, 1964.
- Rachel A. Nugent**, 1991–, *Assistant Professor of Economics*; B.A., University of Wisconsin, Madison, 1978; M.Phil., George Washington University, 1986.
- Douglas E. Oakman**, 1988–, *Associate Professor of Religion*; B.A., University of Iowa, 1975; M.Div., Christ Seminary-Seminex, 1979; Ph.D., Graduate Theological Union, Berkeley, 1986.
- W. Dwight Oberholtzer**, 1969–, *Professor of Sociology*; A.B., Wittenberg University, 1961; M.Div., Lutheran School of Theology at Chicago, 1965; Ph.D., Graduate Theological Union, Berkeley, 1969.
- Sara A. Officer**, 1967–, *Professor of Physical Education*; B.S., Oregon State University, 1958; M.S., Indiana University, 1965; Ph.D., University of New Mexico, 1981.
- David M. Olson**, 1968–, *Professor of Physical Education; Dean, School of Physical Education; Director of Athletics*; B.A., Concordia College, Moorhead, 1956; M.A., University of Minnesota, 1957; Ph.D., University of Iowa, 1966.
- Franklin C. Olson**, 1971–, *Professor of Education*; B.S., University of South Dakota, 1958; M.S., Oregon State University, 1964; Ed.D., University of Nebraska, 1971.
- * **Linda N. Olson**, 1967–, *Professor of Nursing*; B.S.N., M.N., Ph.D., University of Washington, 1959, 1964, 1986.
- Dick W. Olufs**, 1982–, *Associate Professor of Political Science*; B.A., University of Washington, 1974; M.A., Ph.D., Pennsylvania State University, 1976, 1979.
- Helmi Owens**, 1985–, *Professor of Education*; B.A., M.A., Ed.D., University of Northern Colorado, 1972, 1973, 1975.
- William E. Parker**, 1970–, *Professor of Theatre*; B.S., Memphis State University, 1966; M.S., Ph.D., Southern Illinois University, Carbondale, 1968, 1974.
- Cleo M. Pass**, 1990–, *Associate Professor of Nursing*; B.S., Pace University, 1975; M.A., M.Ed., Teachers College, Columbia University, 1976, 1977; D.S.N., University of Alabama, 1983.
- John E. Petersen**, 1967–, *Professor of Religion; Dean, Division of Humanities*; B.A., St. Olaf College, 1958; B.D., Luther Theological Seminary, 1963; M.A., Ph.D., New York University, 1965, 1970.
- Gary D. Peterson**, 1967–, *Professor of Mathematics*; B.S., Iowa State University, 1960; M.S., Western Washington University, 1967; Ph.D., University of Kansas, 1973.
- Norris A. Peterson**, 1981–, *Associate Professor of Economics*; B.A., Pacific Lutheran University, 1975; Ph.D., University of Minnesota, 1981.
- Lisa Philichi**, 1991–, *Clinical Assistant Professor of Nursing*; B.S.N., University of Washington, 1983; M.N., University of California, Los Angeles, 1987.
- Walter E. Pilgrim**, 1971–, *Professor of Religion*; B.A., Wartburg College, 1956; B.D., Wartburg Theological Seminary, 1960; Th.M., Ph.D., Princeton Theological Seminary, 1966, 1971.
- Laura J. Polcyn**, 1975–, *Associate Dean and Director, M.B.A. Program, School of Business*; B.B.A., M.B.A., Pacific Lutheran University, 1974, 1979; Ed.D., Seattle University, 1986.
- ** **Barbara Pouloschock**, 1976–, *Assistant Professor of Music*; B.M., Pacific Lutheran University, 1977.
- James R. Predmore**, 1977–, *Associate Professor of Language (Spanish)*; B.A., Swarthmore College, 1967; M.A., Middlebury College, 1969; Ph.D., University of Washington, 1977.
- Suzanne Rahn**, 1981–, *Associate Professor of English*; B.A., Scripps College, 1966; Ph.D., University of Washington, 1985.
- Judith Ramaglia**, 1982–, *Assistant Professor of Business*; A.B., Smith College, 1966; M.A., University of Colorado, 1968; Ph.D., University of Washington, 1982.
- Maria Ramon-LaCabe**, 1992–, *Visiting Assistant Professor Languages (Spanish)*; B.A., M.A., Ph.D., cand., University of Washington, 1982, 1984.
- Mark A. Reiman**, 1988–, *Associate Professor of Economics*; B.A., Pacific Lutheran University, 1979; Ph.D., University of Washington, 1988.
- Leon E. Reisberg**, 1981–, *Associate Professor of Education*; B.S. Ed., University of Texas, 1971; M.Ed., University of Arkansas, 1972; Ed.D., University of Kansas, 1981.
- Eric H. Reitan**, 1993–, *Visiting Assistant Professor of Philosophy*; B.A., University of Rochester, 1988; Ph.D., State University of New York at Buffalo, 1993.
- Michelle T. Renaud**, 1994–, *Clinical Assistant Professor of Nursing*; B.S., University of Connecticut, 1972; M.S., University of Colorado, 1984.
- Karl R. Rickabaugh**, 1975–, *Professor of Education*; B.S., Montana State University, 1963; M.S., Ph.D., University of Utah, 1970, 1975.
- David P. Robbins**, 1969–, *Professor of Music*; B.M., M.M., University of Michigan, 1968, 1969.
- Marylou V. Robinson**, 1993–, *Clinical Assistant Professor of Nursing*; B.S.N., University of Maryland, 1974; M.S.N., Catholic University of America, 1981.
- Moshe Rosenfeld**, 1986–, *Professor of Computer Science*; M.Sc., Ph.D., Hebrew University of Jerusalem, 1963, 1967.
- Clifford G. Rowe**, 1980–, *Professor of Communication*; B.A., Pacific University, 1958; M.S.J., Northwestern University, 1963.
- Carolyn W. Schultz**, 1974–79, 1982–, *Professor of Nursing*; B.S.N., University of Illinois, 1968; M.A., Pacific Lutheran University, 1974; Ed.D., Seattle University, 1982.
- John T. Scruggs**, 1993–, *Visiting Assistant Professor of Business*; B.S., United States Naval Academy, 1983; M.B.A., Ph.D. cand., University of Washington, 1993.
- David O. Seal**, 1977–, *Associate Professor of English*; B.A., St. Olaf College, 1968; A.M., Ph.D., University of Chicago, 1969, 1977.
- Maureen E. McGill Seal**, 1977–, *Associate Professor of Physical Education*; B.F.A., University of Utah, 1974; M.A., Western Washington University, 1977.
- Richard A. Seeger**, 1973–, *Director, Academic Advising*; B.A., M.A., Ph.D., University of Washington, 1966, 1968, 1974.
- F. Thomas Sepic**, 1979–, *Professor of Business*; B.S.B.A., Denver University, 1964; M.B.A., Seattle University, 1972; Ph.D., University of Washington, 1979.
- S. Erving Severtson**, 1966–83, 1986–, *Vice President and Dean for Student Life, 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; Diplomate in Clinical Psychology, American Board of Professional Psychology, 1977.
- Earl Smith**, 1992–, *Professor of Sociology; Dean, Division of Social Sciences*; B.A., State University of New York, 1972; M.A., Ph.D., University of Connecticut, 1974, 1984.

- * **Rochelle E. Snee**, 1981–, *Associate Professor of Languages (Classics)*; B.A., University of Maryland, 1969; M.A., Ph.D., University of Washington, 1972, 1981.
- Bruce O. Solheim**, 1994–, *Visiting Assistant Professor of History*; B.S., Campbell University, 1985; M.A., Pacific Lutheran University, 1988; Ph.D., Bowling Green State University, 1993.
- Richard A. Sparks**, 1983–, *Associate Professor of Music*; B.M., M.A., University of Washington, 1976, 1980.
- Wallace H. Spencer**, 1974–, *Assistant Professor of Political Science*; B.A., M.A., University of Arizona, 1963, 1968; Ph.D., University of Washington, 1977.
- Christopher H. Spicer**, 1978–, *Professor of Communication*; B.A., University of Virginia, 1970; M.A., Ph.D., University of Texas, 1975, 1978.
- Richard J. Spillman**, 1981–, *Professor of Computer Science and Engineering*; B.A., Western Washington University, 1971; M.A., University of Utah, 1975; Ph.D., Utah State University, 1978.
- Steven P. Starkovich**, 1994–, *Visiting Assistant Professor of Physics*; B.A., Oregon State University, 1976; M.S., University of Oregon, 1985; Ph.D., University of Victoria, 1992.
- Sharon L. Stewart**, 1993–, *Clinical Assistant Professor of Nursing*; B.S.N., M.S.N., California State University, Los Angeles, 1985, 1993.
- * **Robert L. Stivers**, 1973–, *Professor of Religion*; B.A., Yale University, 1962; M.Div., Union Theological Seminary, New York, 1969; Ph.D., Columbia University, 1973.
- Cheryl Lee Storm**, 1985–, *Associate Professor of Social Work and Marriage and Family Therapy*; B.A., University of Minnesota, 1972; M.A. in Ed., College of St. Thomas, 1977; Ph.D., Purdue University, 1982.
- Jeanie G. Sumner**, 1989–, *Assistant Professor of Business*; B.S., M.B.A., M.T., Ph.D., Portland State University, 1976, 1977, 1986, 1989.
- Duane D. Swank**, 1970–, *Professor of Chemistry*; B.S., Washington State University, 1964; Ph.D., Montana State University, 1969; M.B.A., Pacific Lutheran University, 1982.
- Rodney N. Swenson**, 1968–, *Professor of Languages (German)*; B.A., Bemidji State College, 1952; M.A., Ph.D., University of Minnesota, 1956, 1967.
- Alexander G. Szabo**, 1994–, *Assistant Professor of Social Work*; B.A., St. John's University, 1963; M.S.W., Hunter College, City University of New York, 1968; M.Ed., Ed.D., Columbia University Teachers College, 1989, 1990.
- Kwong-Tin Tang**, 1967–, *Professor of Physics*; B.S., M.A., University of Washington, 1958, 1959; Ph.D., Columbia University, 1965.
- Barbara Temple-Thurston**, 1990–, *Associate Professor of English*; B.A., University of Witwatersrand, 1971; M.S.Ed., Ph.D., Southern Illinois University, 1979, 1985.
- Steven D. Thrasher**, 1980–, *Professor of Business*; B.B.A., M.B.A., University of Michigan, 1963, 1964; Ph.D., Northwestern University, 1974.
- Walter L. Tomsic**, 1970–, *Associate Professor of Art*; B.S.E., Arkansas State University, 1965; M.F.A., University of Colorado, 1967.
- Sheri J. Tonn**, 1979–, *Professor of Chemistry; Dean, Division of Natural Sciences*; B.S., Oregon State University, 1971; Ph.D., Northwestern University, 1976.
- Audun T. Toven**, 1967–, *Associate Professor of Languages (Norwegian)*; B.A., University of Oslo, 1964; M.A., University of Washington, 1967.
- Joseph W. Upton, II**, 1988–, *Associate Professor of Engineering*; B.S., Princeton University, 1958; Ph.D., University of California, Berkeley, 1969.
- Margaret A. Vancini**, 1991–, *Associate Professor of Nursing*; B.S., M.S., University of Colorado, 1966; Ph.D., University of Texas, Austin, 1991.
- Glenn A. Van Wyhe**, 1979–, *Associate Professor of Business*; B.A., University of South Dakota, 1968; M.Div., Westminster Theological Seminary, 1974; M.A., University of Iowa, 1977; Ph.D., University of Washington, 1991.
- David L. Vinje**, 1970–, *Professor of Economics*; B.S., North Dakota State University, 1962; M.S., Ph.D., University of Wisconsin, 1964, 1970.
- Dean A. Waldow**, 1992–, *Assistant Professor of Chemistry*; B.A., Augustana College, Sioux Falls, 1984; Ph.D., University of Wisconsin, Madison, 1989.
- Paul M. Webster**, 1969–, *Associate Professor of Languages (German)*; B.A., M.A., University of California, Los Angeles, 1964, 1967.
- * **Donald R. Wentworth**, 1972–, *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–, *Professor of Physical Education*; B.S., University of Nebraska, Omaha, 1952; A.M., Ed.D., University of Northern Colorado, 1960, 1966.
- Jill M. Whitman**, 1988–, *Associate Professor of Earth Sciences*; B.A., Middlebury College, 1978; M.S., University of Miami, 1981; Ph.D., University of California, San Diego, 1989.
- Gregory J. Williams**, 1985–, *Associate Professor of Education*; B.A., University of Puget Sound, 1969; M.Ed., Western Washington University, 1979; Ph.D., University of Washington, 1985.
- Tamara R. Williams**, 1994–, *Associate Professor of Languages (Spanish)*; B.A., Queen's University, 1979; M.A., Pennsylvania State University, 1981; Ph.D., University of Michigan, 1989.
- Gary B. Wilson**, 1975–, *Professor of Communication*; B.S., Central Michigan University, 1960; M.A., California State University, Long Beach, 1966; Ph.D., Michigan State University, 1971.
- Sylvia H. Wood**, 1993–, *Assistant Professor of Nursing*; B.S.N., Murray State University, 1972; M.S.N., University of Kentucky, 1978.
- Dane W. Wu**, 1994–, *Visiting Assistant Professor of Mathematics*; B.S., M.S., Xiamen University (China), 1982, 1985; M.S., John Carroll University, 1991; Ph.D., University of Wisconsin, Milwaukee, 1994.
- Weihe Xu**, 1994–, *Visiting Assistant Professor of Languages (Chinese)*; B.A., Nanjing Normal University (China), 1978; M.A. (English and American Literature), M.A. (Chinese and Comparative Literature), Ph.D. cand., Washington University, 1989, 1990.
- * **William F. Yager**, 1987–, *Associate Professor of Business*; B.S.M.E., University of California, Berkeley, 1961; M.B.A., Harvard University, 1963; Ph.D., University of Oregon, 1991.
- David C. Yagow**, 1976–, *Associate Provost*; B.A., Concordia Senior College, Fort Wayne, 1965; M.Div., Concordia Seminary, St. Louis, 1969.
- * **Cathleen L. Yetter**, 1986–, *Assistant Professor of Education*; A.B., M.L.S., Indiana University, 1967, 1969.
- Chang-Li Yiu**, 1973–, *Professor of Mathematics and Physics*; B.S., Tunghai University, 1962; M.S., Tsinghua University, 1965; Ph.D., Columbia University, 1972.
- * **Charles D. York**, 1981–, *Associate Professor of Social Work and Marriage and Family Therapy*; B.A., Washington State University, 1966; M.S.W., California State University, Fresno, 1968; Ph.D., Purdue University, 1980.
- Gregory L. Youtz**, 1984–, *Associate Professor of Music*; B.A., B.M., University of Washington, 1980; M.M., D.M.A., University of Michigan, 1982, 1986.
- ** **Dwight J. Zulauf**, 1949–53, 1959–85, 1990–, *Professor of Business; 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.

* Sabbatical Leave, 1994–95

** Phased Retirement Program

† Leave of Absence, 1994–95

HONORARY FACULTY

- Donald A. Clinton**, 1994–, *Campus Pastor*; B.A., Wittenberg University, 1949; M.Div., Trinity (Hamma) Theological Seminary, 1952.
- Daniel W. Erlander**, 1986–, *Campus Pastor*; B.A., Pacific Lutheran University, 1962; M.Div., Lutheran School of Theology at Chicago, 1966.
- Joanna Neuberger Robinson**, 1994–, *Campus Pastor*; B.A., Pacific Lutheran University, 1983; M.Div., Luther Northwestern Theological Seminary, 1987; M.Ed., University of Puget Sound, 1994.

ADMINISTRATIVE FACULTY ASSOCIATES

- Ione S. Crandall**, 1993–, *Director, Center for Public Service*; B.A., Smith College, 1964; M.A., Columbia University, 1968.
- Cristina del Rosario**, 1978–, *Director of Multi-Ethnic Resource Center*; B.A., M.A., Pacific Lutheran University, 1975, 1986.
- Camille Eliason**, 1982–, *Associate Dean of Admissions*; B.A.E., M.A. in Ed., Pacific Lutheran University, 1959, 1968.
- Lauralee Hagen**, 1978–, *Director of Alumni and Parent Relations*; B.A.E., M.A. in Ed., Pacific Lutheran University, 1975, 1978.
- Kirk Isakson**, 1977–, *Director of Television Services*; B.A., Washington State University, 1974.
- Jeff Jordan**, 1989–, *Director for Residential Life and Auxiliary Services*; B.A., Houghton College, 1983; M.S., State University of New York at Buffalo, 1985.
- Alene L. Klein**, 1978–, *Associate Director, Counseling and Testing Services*; B.S.N., M.A. in Ed., Pacific Lutheran University, 1975, 1978; Ed.D., Seattle University, 1987.
- Roberta J. Marsh**, 1979–, *Assistant to the President*; B.A., Pacific Lutheran University, 1985.

Martin J. Neeb, 1981–, *Gene al Manager, KPLU-FM*; B.A., M.Div., Concordia Seminary, St. Louis, 1955, 1958; M.A., St. Louis University, 1959; Ph.D., Northwestern University, 1967.

Larry W. Nelson, 1988–, *Director of Institutional Research and Planning*; B.A. in Ed., M.Ed., Western Washington University, 1968, 1973.

Mary L. Picper, 1971–, *Director of Personnel*; B.E., University of Wisconsin, Whitewater, 1963; M.A., Pacific Lutheran University, 1978.

Patricia E. Roundy, 1986–, *Director, AURA Program*; B.A., Bucknell, University, 1972; M.A., Ph.D., University of Pittsburgh, 1974, 1979.

Janet L. Rutledge, 1982–, *Director of Budget and Fiscal Affairs*; B.B.A., M.B.A., Pacific Lutheran University, 1982, 1991.

Nancy Steinberg, 1988–, *Assistant Registrar*; B.A., University of the Pacific, 1966

Wanda M. Wentworth, 1980–, *Director, Academic Assistance Program*; B.A., University of Minnesota, 1973; M.A., Pacific Lutheran University, 1979.

EMERITI

Harry S. Adams, 1947–93, *Physics*

Charles D. Anderson, 1959–91, *Chemistry*

Luther W. Bekemeier, 1976–92, *Vice President for Development*

Miriam Ruth Beckman, 1964–73, *Reference Librarian*

W. Harold Bexton, 1965–76, *Psychology*

Grace Blomquist, 1939–76, *English*

Roy E. Carlson, 1962–83, *Physical Education*

Kenneth E. Christopherson, 1958–91, *Religion*

Irene O. Creso, 1955–71, *Biology*

J.E. Danielson, 1960–69, *Director of Admissions*

Carrol E. DeBower, 1964–68, 1970–91, *Education*

Emmet E. Eklund, 1964–82, *Religion*

Loleta G. Espeseth, 1964–89, *Associate Registrar*

Donald R. Farner, 1955–91, *Political Science*

M. Josephine Fletcher, 1963–91, *Education*

Ralph D. Gehrke, 1975–90, *Religion*

Gordon O. Gilbertson, 195–84, *Music*

William H. Gilbertson, 1968–91, *Social Work*

Lucille Giroux, 1960–92, *President's Executive Associate*

Marlis M. Hanson, 1971–91, *Education*

Perry B. Hendricks, Jr., 1973–87, *Vice President for Finance and Operations*

Curtis E. Huber, 1964–91, *Philosophy*

Lucille M. Johnson, 1953–89, *English*

Kenneth A. Johnston, 1964–93, *Education*

Richard P. Jungkuntz, 1970–89, *Religion; Provost*

Gundar J. King, 1960–91, *Business Administration*

Lars E. Kittleson, 1956–91, *Art*

David R. Knutson, 1979–91, *Religion*

Anthony J. Lauer, 1969–91, *Business Administration*

Gene C. Lundgaard, 1958–91, *Physical Education*

Gunnar Johannes Malmin, 1937–69, *Music, Latin, and Norwegian*

D. Moira Mansell, 1982–94, *Nursing*

Lawrence J. Meyer, 1969–94, *Music*

Katharine Monroe, 1967–75, *French*

Gunnulf Myrbo, 1970–93, *Philosophy*

Alice J. Napjus, 1963–75, *Education*

Harvey J. Neufeld, 1965–94, *Vice President for Church Relations*

Eric Nordholm, 1955–91, *Communication and Theatre*

Sherman Nornes, 1959–61, 1965–91, *Physics*

Burton T. Ostenson, 1947–77, *Earth Sciences*

Arne K. Pederson, 1956–89, *Education*

Paul M. Reigstad, 1947–48, 1958–90, *English*

Lois F. Rhoades, 1980–91, *Nursing*

William O. Rieke, 1975–92, *President*

Kelmer Nelson Roe, 1947–67, *Religion and Greek*

Eldon L. Schafer, 1974–91, *Business Administration*

John A. Schiller, 1958–91, *Sociology/Social Work*

Ernst C. Schwidder, 1967–91, *Art*

Maurice Skones, 1964–83, 1992, *Music*

Lynn S. Stein, 1961–81, *Education*

Joan D. Stiggelbout, 1973–91, *Nursing*

Doris G. Stucke, 1967–83, *Nursing*

Frederick L. Tobiasson, 1966–91, *Chemistry*

Ann K. Tremaine, 1972–91, *Music*

Lenora B. Weirick, 1973–80, 1982–87, *Nursing*

Margaret Wickstrom, 1951–78, *Religion, Director, Foreign Students and Special Programs*

Jane Williamson, 1964–90, *Education*

Rhoda Hokenstad Young, 1939–68, *Physical Education*

Yukie Yumibe, 1980–92, *Nursing*

PART-TIME LECTURERS 1994–95

Division of Humanities

English

Judy Doenges

James Koss

Eric Nelson

Languages

Ashley Chang

G. Leon Curtis

Sumiko Maeno Gill

Chanda Groves

Katherine Hanson

Philosophy

Fred Korn

Richard McClelland

Religion

Philip Barcliff

Lora Gross

Gregory Love

Ambrose Moyo

Division of Natural Sciences

Chemistry

Charles Anderson

Earth Sciences

David Torchia

Engineering

Walt Huston

Mathematics

Robert Fowler

Kathryn Waldow

Physics

Edwin Ford

Roya Sabeti

Steven Starkovich

History

William Kanges

Division of Social Sciences

Anthropology

George Stoner

Economics

Thomas Phelps

Political Science

J. Arnold Bricker

Salvadora Mungia

Psychology

Roger Allen

Sarah Fuelling

Social Work & Marriage and Family Therapy

Gary Hiam

Ted Johnstone

Ronald Lewis

Sociology

John Schiller

School of the Arts

Art

Marit Berg

Joshua Doyle

Mark Gulsrud

Communication and Theatre

Jody Brannon

Deborah Dahrling

Robert Holden

Music

Betty Agent

Berith Ballard

Diane Beck

Bryan Boughten

Lee Anne Campos

Gary Crooks

Hilary Field

Kathryn Habedank

Ove Hanson

David Harkness

Robert Harrold

Jane Harty

Jeannie Hill

James Holloway

Jeanne Huston

Mark Ivester

Barry Johnson

Ned Kirk

Sandra Knapp

School of Business

Wayne Borkowski

Jon Christopherson

Jack Daniel

Sheri Flies

School of Education

Ann Botkin

Diane Breene

Carrol DeBower

Jim Ellingson

Gwen Fletcher

Becky Frehse

June Fulkerson

Richard Hamlin

LeRoy Johnson

Kenneth Keener

Alene Klein

Donna Knudson

School of Physical Education

Sei Adachi

John Amidon

Jim Applegate

Gene Boggs

Steve Fox

Margarete Freitag

Tim Jacobson

Jeff Kawaguchi

Edwin Keener

Charles Lyons

Craig McCord

S. Douglas Nugent

Laura Majovski

Teresa McDowell

Robert Vincent

Susan Watts

Kathryn Wold

Kirk Isakson

Niki Poppen

Douglas Miller

Suzanne Montgomery

Douglas Nicrman

Francine Peterson

Gordon Porth

Normand Poulshock

Richard Pressley

Richard Reed

Bernard Shapiro

Linda Strandberg

Marian Sussman

Rae Terpenning

Wayne Timmerman

Rex Turner

Stephen Wall

John Wetherington

Bruce Wilson

Nancy Zilstra

C. Frederick Matthaeci

Carol Ptak

Edryce Reynolds

Kenneth Sylvester

Mary Kralik

Cliff Laycock

Evelyn McNeal

Gary Minetti

E. Jane Petersen

Wendy Ramsaur

Elaine Urich

Ralph Vedros

Janet Weiss

Barbara Wills

William Young

Gary Nicholson

David Patterson

Jerry Poppen

Li-Li Qin

Mike Rice

Donald Ryan

Jennifer Smith

Jerry Weible

Scott Westering

Susan Westering

Guidelines

FAMILY EDUCATION RIGHTS AND PRIVACY ACT

Pacific Lutheran University complies with the Family Education Rights and Privacy Act of 1974. Inquiries concerning the application of this act and published regulations to this university may be referred to the Administrative Associate to the Vice President and Dean for Student Life, Room 130, Hauge Administration Building, Pacific Lutheran University, telephone 535-7191, or the Family Education Rights and Privacy Office, Department of Education, 330 Independence Avenue S.E., Washington D.C., 20201 (telephone (202) 245-0233).

An important aspect of the FERPA law is Pacific Lutheran University's definition of "directory information": student's name, address, telephone listing, date and place of birth, major



fields of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received and/or to be received, and most recent previous educational agency or institution attended. Pacific Lutheran University may disclose directory information unless an "eligible student" (18 years or over) or a parent (if the student is under 18 years of age) gives notice on the appropriate PLU form to the Office of the Vice President and Dean for Student Life restricting the disclosure of the directory information, as it pertains to said student, by the last day of registration for any given academic term at this university.

POLICY ON NON-DISCRIMINATION

Pacific Lutheran University does not discriminate on the basis of sex, race, creed, color, national origin, age, or disabling condition in the educational 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 VI and Title VII of the Civil Rights Act of 1964, and by Section 504 of the Rehabilitation Act of 1973 not to discriminate in such manner. The requirements not to discriminate in educational programs and activities extends to employment therein and to admission thereto.

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

1. The Director of Personnel, Pacific Lutheran University, telephone 535-7185, for matters relating to employment policies and practices, promotions, fringe benefits, training, and grievance procedures for staff employed by the university.
2. The Associate Provost, Room 104, Hauge Administration Building, Pacific Lutheran University, telephone 535-7126, for matters relating to student admissions, curriculum, and financial aid.
3. The Student Life Office, Room 130, Hauge Administration Building, Pacific Lutheran University, telephone 535-7191, for matters regarding administrative policies relating to students and student services.
4. The Director of Counseling and Testing Services, Room 106, Ramstad Hall, Pacific Lutheran University, telephone 535-7206, for matters relating to the application of Section 504 of the Rehabilitation Act.
5. The Director of the Multi-Ethnic Resource Center, University Center, Pacific Lutheran University, telephone 535-7195, for matters relating to the student grievance procedure.
6. Or the Assistant Secretary for Civil Rights, U.S. Department of Education, Switzer Building, 330 C Street S.W., Washington, D.C. 20202.

POLICY ON RACIAL HARASSMENT

In keeping with its Statement of Objectives, Pacific Lutheran University will not tolerate any conduct by faculty, staff, or students that constitutes racial harassment or discrimination.

Pacific Lutheran University is an educational community where strong emphasis is placed on self-awareness and consideration for the well-being and feelings of others. While there exists an atmosphere for freedom of expression, it must always be in conjunction with a responsibility to observe the rights of one another. In such a setting, there is no place for conduct that diminishes, uses, or abuses another person. For these reasons, harassment of any kind is unacceptable at the university. Wherever and whenever racist or insensitive remarks are heard or inappropriate action witnessed, we should each deem it our duty to protest and to inform the offender about the reasons for our disapproval.

Filing A Grievance

While every effort will be made to resolve problems on an informal basis, formal grievance procedures exist which allow both parties an opportunity to pursue a resolution should the informal procedure prove unsuccessful. Copies of formal procedures are available in the offices of the university grievance facilitators.

Anyone who believes he/she has been the object of racial harassment or any other form of racial discrimination, or any person who has observed behavior or conduct he/she believes to be racial harassment or discrimination, should so advise one of the university grievance facilitators: Cristina del Rosario (Multi-Ethnic Resource Center, Ext. 7195), or Mary Pieper (Personnel Office, Ext. 7185), within 30 calendar days of the alleged occurrence(s). If you cannot reach a facilitator, please call 535-7186 or extension 7186 and leave a message. Your discussion or call will be strictly confidential and does not commit you to further action. Failure to report incident(s) and file grievances inhibits the university's ability to enforce its policy.

Disciplinary Action

Behavior or conduct which interferes with the delivery of educational or other services and which is emotionally or physically debilitating to the victim can result in disciplinary action including the possibility of suspension or termination of employment or expulsion from PLU. Any form of reprisal, actual or implied, whether academic or related to employment, is an aggravation of the prohibited behavior and will be construed as evidence of culpability.

Examples of behavior or conduct which may be construed as racial harassment are:

- *Overt racism* – racially motivated aggressions, or the use of racist symbols such as the swastika or burning crosses, intended to single out, threaten, and provoke conflict or a confrontation with an individual or a group of individuals on campus.
- *Discrimination* – any act which interferes with the delivery of normal services to students, staff, or faculty members on the basis of their race or ethnic/cultural background.
- *Disparaging comments* – inappropriate labels, jokes, or innuendo which unfairly classify or criticize others on the basis of their race, color, national and ethnic origin and which are intended to and/or have the effect of inflicting emotional injury on an individual or group of individuals.
- *Fighting words* – used in a face-to-face encounter among individuals, “fighting words” have been defined by the United States Supreme Court in a case called *Chaplinsky v. New Hampshire* as the words “which by their very utterance inflict injury or tend to incite an immediate breach of the peace.” Under certain circumstances, racial and ethnic epithets, slurs, and insults might fall within this definition of “fighting words” and may be subject to sanction.

Some of the above examples may be arguably protected speech under the First Amendment, which guarantees freedom of speech; nevertheless, the PLU community is such that these and other similarly inappropriate conduct or behavior will not be tolerated on our campus.

POLICY ON SEXUAL HARASSMENT

In keeping with its Statement of Objectives and in compliance with federal law, Pacific Lutheran University explicitly forbids and will not tolerate any practice or behavior by faculty, staff, or students that constitutes sexual harassment/discrimination.

Sexual harassment/discrimination is defined as unwelcome sexual advances, requests, and other verbal or physical conduct of a sexual nature, where submission to or rejection of such conduct has the purpose or effect of unreasonably interfering with an individual’s performance, or creating an intimidating, hostile, or offensive employment, educational, or campus environment. Sexual harassment/discrimination has occurred when an individual submits to such conduct as an implicit or explicit term or condition of his/her employment or education, or when submission to or rejection of such conduct is used as a basis for employment or educational decisions affecting such individuals.

PLU is an educational community where strong emphasis is placed on self-awareness and consideration for the lives and feelings of others. While there exists an atmosphere of freedom of expression, it must always be in conjunction with a responsibility to observe the rights of one another. In such a setting, there is no place for conduct that diminishes, uses, or abuses another person. For these reasons, harassment or discrimination of any kind is unacceptable at the university.

Primary responsibility for maintaining high standards of conduct resides especially with faculty and supervisors, since they exercise significant authority and power over others. A faculty member who enters into an amorous relationship with a student (or a supervisor with an employee) where a professional power differential exists, must realize that if a charge of sexual harassment is subsequently lodged, it will be exceedingly difficult to establish a defense of mutual consent.

Any violation of this policy shall result in disciplinary action including the possibility of suspension, termination of employment, or expulsion from PLU. Any form of reprisal, actual or implied, whether academic or related to employment, is an aggravation of the prohibited behavior and will be construed as evidence of culpability.

Anyone who believes he/she has been the object of gender discrimination or sexual harassment, or any person who has observed behavior or conduct he/she believes to be gender discrimination or sexual harassment should so advise one of the university grievance facilitators, Cristina del Rosario (Multi-Ethnic Resource Center), or Mary Pieper (Personnel Office, Ext. 7185) within 30 calendar days of the alleged occurrence(s). If you cannot reach a facilitator, please call 335-7186 or extension 7186 and leave a message. Your discussion or call will be strictly confidential and does not commit you to further action. Failure to report incident(s) and file grievances inhibits the university’s ability to enforce its policy.

Every effort will be made to resolve problems on an informal basis outside the formal grievance procedure. If informal procedures are unsuccessful, formal procedures exist which allow both parties an opportunity to pursue a resolution. Copies of procedures are available in the offices of the university grievance facilitators.

STUDENT RIGHT-TO-KNOW AND CAMPUS SECURITY ACT

The Student Right-To-Know and Campus Security Act, Public Law 101-542, provides that institutions of higher education disclose information about campus safety policies and procedures to current and prospective students and employees. Pursuant to that requirement, Pacific Lutheran University has developed a Campus Safety & Crime Prevention Guide that reports institutional security policies and crime statistics. Current copies of the report are available to interested persons through the Office of Admissions and Office of Student Life.

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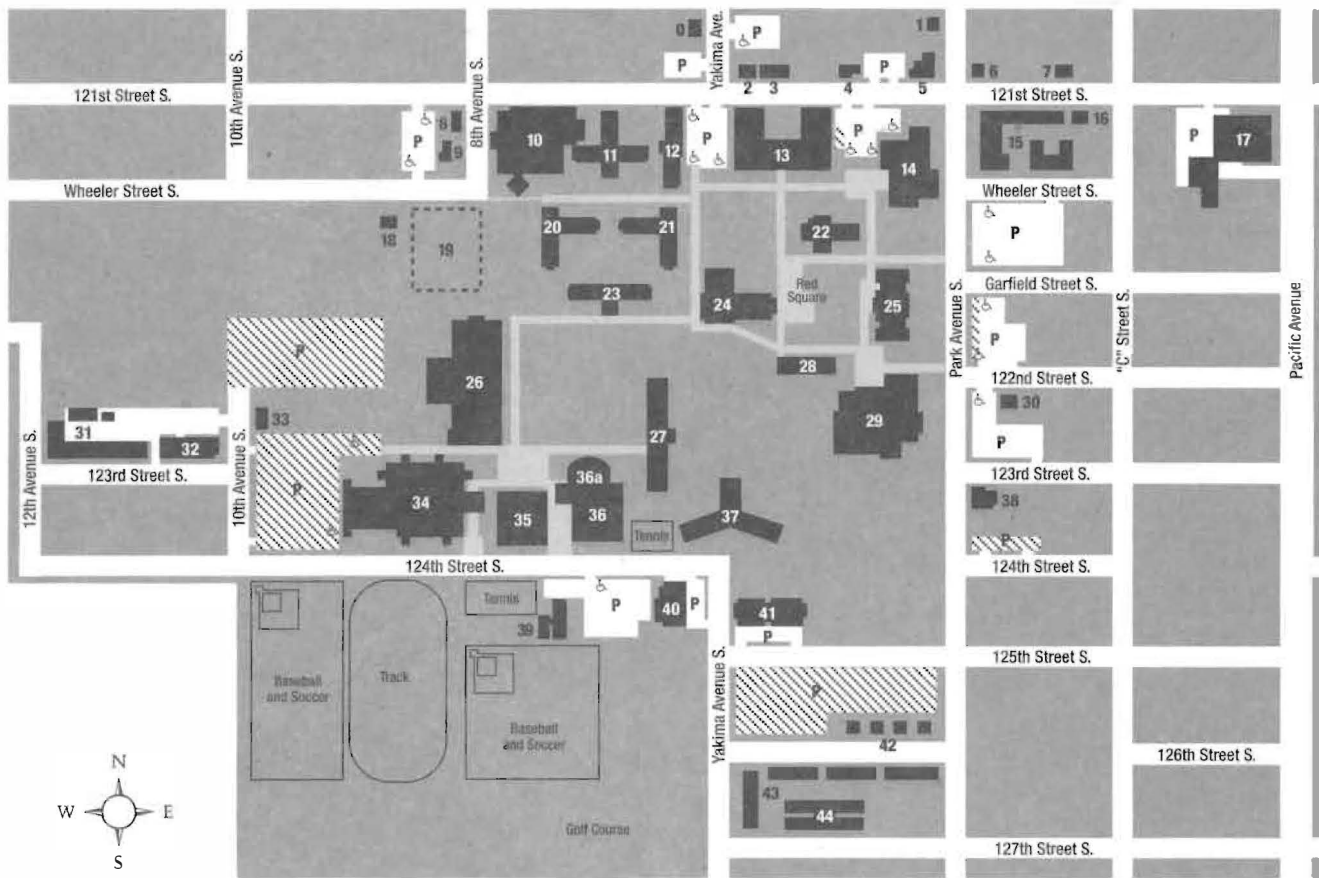
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
Campus Map

Building Legend

| | |
|---------------------------------------|----|
| Administration Building | 13 |
| Blomquist House | 2 |
| Columbia Center | 40 |
| Delta Hall | 43 |
| East Campus | 17 |
| Eastvold Chapel/Auditorium | 24 |
| Evergreen Court | 44 |
| Faculty House | 3 |
| Family Student Housing | 42 |
| Foss Hall | 27 |
| Haavik House | 8 |
| Hauge Administration Building | 13 |
| Health Center | 5 |
| Hinderlie Hall | 23 |
| Hong Hall | 21 |
| Ingram Hall | 10 |
| Knorr House | 4 |
| Kreidler Hall | 20 |
| Lee House | 6 |
| Mailroom | 32 |
| Mary Baker Russell Music Center | 19 |
| Math Building | 39 |

| | |
|------------------------------------|-----|
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| Memorial Gymnasium | 36 |
| Mortvedt Library | 14 |
| Names Fitness Center | 36a |
| Nesvig Alumni Center | 38 |
| Olson Auditorium | 34 |
| Ordal Hall | 11 |
| Park Avenue House | 1 |
| Personnel | 30 |
| Plueger Hall | 37 |
| Physical Plant | 31 |
| Piano House | 33 |
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| Ramstad Hall | 28 |
| Rieke Science Center | 26 |
| Rosso House | 18 |
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| Swimming Pool | 35 |
| Tingelstad Hall | 41 |
| Trinity House | 16 |
| Trinity Lutheran Church | 15 |
| University Center | 29 |
| Warehouse | 32 |
| Xavier Hall | 22 |

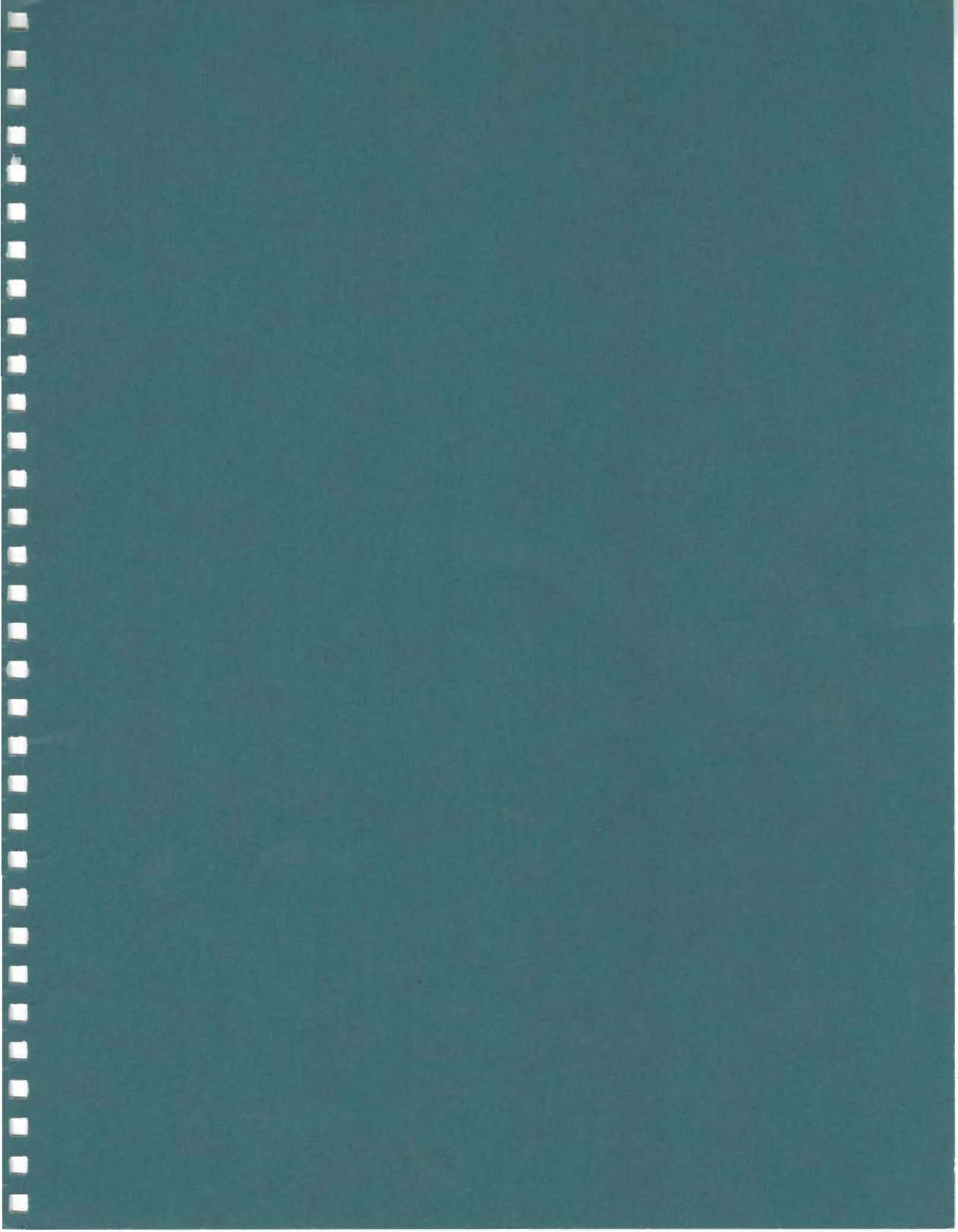
Parking

-  Staff/Student Parking
-  Visitor Parking
-  Handicap Parking

Regular visitor parking is indicated on the map. Reserved parking slots may be used by visitors during non-working hours (5pm-7am), and on weekends (some 24 hr. exceptions are indicated by signs). If you plan an extended visit, you may obtain a temporary permit from Campus Safety (Harstad Hall).



Campus Map
 North
 South





PACIFIC LUTHERAN UNIVERSITY

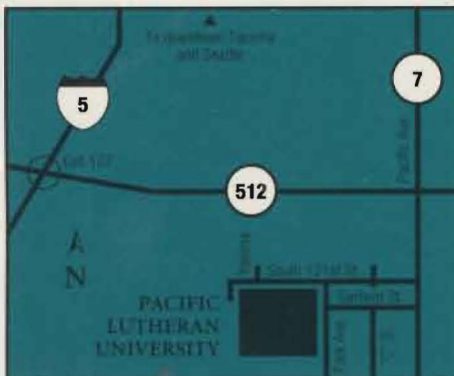
Tacoma, WA 98447-0003

Office of Admissions

1-800-274-6758

206/535-7151

Fax: 206/535-8320



TO LOCATE PLU

Pacific Lutheran University is located 7 miles south of downtown Tacoma, Washington. Take exit 127 off Interstate 5 and head east on Highway 512. Continue on 512 for approximately two miles to Pacific Avenue (Parkland-Spanaway exit). Turn right (south) on Pacific Avenue to 121st Street. Turn right on 121st. The Admissions Office is in Hauge Administration Building near the intersection of 121st and Yakima.