



College of  
Arts & Sciences  
2001-2002



# Contact Information

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# Accreditation & Memberships

## ACCREDITATIONS

Pacific University is accredited by the Commission on Colleges of the Northwest Association of Schools and Colleges. In addition, selected programs have received specialized accreditation from:

### **Optometry**

Council on Optometric Education

### **Music**

National Association of  
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### **Physical Therapy**

Commission on Accreditation in  
Physical Therapy Education of the  
American Physical Therapy Association

### **Occupational Therapy**

Accreditation Council for Occupational  
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### **Professional Psychology**

Clinical (Psy.D.): Committee on  
Accreditation of the American  
Psychological Association

Counseling (M.A.): Oregon Board of  
Counselors and Therapists meeting  
educational standards for becoming a  
Licensed Professional Counselor

### **Education**

Teacher Standards and Practices  
Commission of the State of Oregon

### **Physician Assistant Studies**

Accreditation Review Committee on  
Education for the Physician Assistant, Inc.

## MEMBERSHIPS

Pacific is a member of the National Association of Independent Colleges and Universities, the Oregon Independent Colleges Foundation, the Oregon Independent Colleges Association, the American Association of University Women, the Council for Higher Education of the United Church of Christ, the College Scholarship Service, the Northwest Conference of Independent Colleges, the National Collegiate Athletics Association and the Association of Independent Liberal Arts Colleges for Teacher Education.

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# Introduction

## MISSION OF PACIFIC UNIVERSITY

The mission of Pacific University is to provide an education of exceptional quality in liberal arts and sciences, and in selected professional programs to prepare students for service to a changing community, nation and world.

In addition to our mission, Pacific University values

- A community of faculty, staff, and students dedicated to high academic standards, integrity, lifelong learning, and service to the community and the integration of liberal arts and professional education;
- A community that embraces creativity, flexibility and change and that honors diversity of viewpoints;
- A community that respects our traditions, our environment and our relationships beyond the campus.

## PACIFIC: AN OVERVIEW

Pacific University, founded in 1849, is an independent, comprehensive university recognized nationally for its exemplary programs and as one of the best values in higher education west of the Mississippi. With an enrollment of almost 2,000, Pacific is pioneering new developments in the delivery of higher education. We are creating a dynamic, new learning community that will prepare our students for competitive and compassionate professional lives.

Pacific's curriculum is a distinct model of education that links theory with practice. Our undergraduate liberal arts programs connect classroom education with professional preparation through internships, practica and research programs.

Our graduate programs in education and the health and human service professions emphasize the principles of liberal learning. Pacific's history is richly steeped in a tradition of community service. To build upon our legacy, we have identified the above mission and values as those we fully embrace in all of our programs and initiatives.

Pacific University offers exceptional academic value. Independent analyses of the university's educational quality, cost and the ready availability of financial aid have determined that Pacific is among the best educational values in the nation. Emphasizing quality, keeping costs in check and offering additional opportunities for financial assistance are top priorities.

Pacific provides a caring community where friendships are a priority and faculty are committed to helping students succeed. The university is small enough that opportunities abound for students to get involved, but big enough that students working together can have a meaningful impact.

The 55-acre Forest Grove campus contains 18 major buildings in a picturesque setting of green lawns and tall shade trees. Architecture at Pacific is a pleasant blend of the old and new, represented at one end of the spectrum by historic Old College Hall (1850), the first permanent structure of Pacific University, and at the other by the University's new science, music and professional buildings. It also includes the 90,000 square foot Pacific Athletic Center and the Tom Reynolds Soccer Field.

In addition to its Forest Grove campus, the University has a satellite campus located in Eugene that serves the needs of the School of Education, and operates facilities in Portland that support the academic and clinical programs of the College of Optometry and the School of Professional Psychology.

## A HISTORY OF PACIFIC UNIVERSITY

Pacific University was established by the Legislative Assembly of the Territory of Oregon in 1849, but traces its beginnings to an orphan school established in 1842 by the Reverend and Mrs. Harvey Clarke, Congregational missionaries who came to the Northwest from Chester, Vermont. With the help of Alvin T. Smith, they built a log cabin for a school on a the corner of what are now 15th and Elm Streets in Forest Grove, Oregon.

In 1847, Mrs. Tabitha Moffett Brown reached Oregon by wagon train and visited the Clarkes. She became interested in their work and assisted in teaching the children. Inspired by her assistance, Rev. Clarke and Mr. Smith made arrangements for the children to be taught in a log church that they built on what is now the campus of Pacific University.

In the summer of 1848, Reverend George H. Atkinson arrived in Oregon. Reverend Atkinson was commissioned by the Home Missionary Society of Boston to “found an academy that shall grow into a college.” Reverend Clarke and several others drew up plans for the new institution.

On September 26, 1849, the Territorial Legislature granted a charter establishing Tuality Academy, and in 1854, a new charter was issued granting full privileges to “Tualatin Academy and Pacific University.” Thirty acres of land were donated as a building site by Reverend Clarke and Elkanah Walker. Dr. Atkinson secured The Reverend Sidney Harper Marsh of Union Theological Seminary of New York to serve as the first president of the new school. Mr. Marsh was the son of the president of the University of Vermont, and grandson of the first president of Dartmouth College. Sidney Harper Marsh served as president from 1853 to 1879.

Pacific University has evolved into a comprehensive, independent University that provides both undergraduate and professional graduate programs. At the heart of the University is the College of Arts and Sciences, offering a broad curriculum in the liberal arts and sciences. Surrounding the College are the School of Education and a select cluster of graduate schools in the health and human service professions, including Occupational Therapy, Optometry, Physical Therapy, Physician Assistant Studies, and Professional Psychology.

## COLLEGE OF ARTS AND SCIENCES

### Mission

The College of Arts and Sciences, through effective teaching built on close faculty/student relationships, provides, in a residential setting, a broad liberal arts education with a strong emphasis on service and application of knowledge that produces graduates with the intellectual capabilities and personal qualities that enable them to participate in rewarding careers and to contribute to their communities.

Pacific’s base in the liberal arts is clearly reflected in the more than 25 different programs in the College of Arts and Sciences. This College is the largest unit and the core of the University. As such, it provides a broad spectrum of opportunities to match individual interests and career plans.

The College of Arts and Sciences has a curriculum which affirms in practice that a broad educational experience is both an end in itself and a means to set personal and professional directions. Within the divisions of Arts, Humanities, Natural Sciences, and Social Sciences, the College offers a carefully constructed range of courses with breadth and depth in basic fields. Student studies are supported by a strong advising program, which covers academic development through career counseling and placement. The College is essentially residential, which provides the kind of living and learning experiences that characterizes the better, smaller, independent liberal arts colleges.

In a world which increasingly asks not what you know but how quickly can you learn, Pacific prepares its students, no matter what their pre-professional orientation, to communicate clearly, to analyze problems, to synthesize information and to understand people, systems and cultures.

The College has traditionally encouraged off-campus learning. Pacific undergraduates may study abroad, pursue independent research projects, and may undertake career internships which earn credit toward graduation.

The College offers a Bachelor of Arts and a Bachelor of Science degree. In addition to the regular program, the College offers three intensive four week summer terms. A variety of summer classes are available which apply to undergraduate degree

requirements. Summer term provides an affordable option for earning additional credits or accelerating degree completion. The Summer Session catalog is available in mid-March and may be obtained from the Registrar's Office.

## GRADUATE SCHOOLS AND COLLEGES

### School of Education

For over ninety years teacher education has been an integral part of Pacific University. Today the School of Education continues this long tradition with comprehensive and innovative programs designed to meet the needs of those seeking professional education coursework, at both the undergraduate and graduate level. At campuses in Forest Grove and Eugene, courses of study include undergraduate and graduate degree programs leading to initial licensure for teachers in regular and special education classrooms and for school counselors. In addition, the School offers a continuing teaching license program for in-service teachers, and a special masters program for optometrists. Non-degree programs for teachers who wish to add endorsements and/or authorizations are also provided.

An outstanding faculty is the key to the excellence of Pacific's educational programs. Representing a wide range of teaching and academic expertise, the majority of the faculty hold earned doctorates and have had significant experience teaching in public school classrooms. Pacific's faculty members demonstrate a commitment to education as a lifelong process.

As a complement to providing an educational environment that fosters the development of intellectual independence and high ethical standards, the School of Education has a strong relationship with surrounding school districts and communities. This allows students to fulfill the field-based components of their programs in a variety of settings, which serve as laboratories for all aspects of the teacher education program.

A final factor critical to the success of School of Education programs is the quality of its students. The student

population is a balance of traditional students in their early twenties and of older students seeking new careers. Those students accepted to our programs have demonstrated superior academic, professional, and interpersonal abilities. As graduates of the School of Education, they are well prepared for service to a changing community, nation, and world.

### School of Occupational Therapy

The School of Occupational Therapy at Pacific University offers a 29 month entry-level Masters of Occupational Therapy (MOT) degree to educate and prepare future occupational therapists for the challenges of the next century.

Occupational Therapy focuses on day-to-day activities (occupations) in which people engage on a daily basis. Through successful engagement in meaningful and valued daily occupations, an individual experiences a sense of competency, self-fulfillment and subsequent health and well-being.

The School of Occupational Therapy holds firmly to the founding philosophy of the profession: engagement in meaningful and purposeful day-to-day activities leads to health and well-being. Fieldwork, involving partnerships with community practitioners and organizations, is integrated throughout the curriculum. Fieldwork experiences provide students the opportunity to study and engage in a variety of settings where people across the age span maintain, promote or regain occupational function, health, and well-being.

The Occupational Therapy curriculum focuses on the study of occupational function/dysfunction and its impact on health. This emphasis, along with a commitment to facilitate critical thinkers and problem solvers, prepares graduates for a future in community based practices. Consistent with the philosophy of Pacific University, the School of Occupational Therapy seeks to promote values of leadership, quality and service. Graduating therapists from Pacific University's School of Occupational Therapy are well qualified to utilize occupation as a powerful medium for facilitating health in our communities.

## College of Optometry

The College of Optometry offers a four-year Doctor of Optometry degree, and a Masters of Science in Clinical Optometry degree. Offering quality learning opportunities within a supportive environment is of highest priority at Pacific. Its Optometry programs are distinctive, and they emphasize service to both profession and community.

In addition to maintaining a full service clinic on campus, the College operates four fully-staffed clinics in the Portland area. Students regularly complete professional preceptorships in Alaska, Arizona, California, Colorado, Florida, Hawaii, Montana, Minnesota, New Mexico, North Dakota, South Dakota, Washington, Germany, and Guam.

The Masters of Science in Clinical Optometry degree program is designed to prepare individuals for careers in optometric education, research and specialty practice. It usually requires a minimum of 21 months to complete.

Residency programs leading to a certificate in Primary Eye Care Optometry, Geriatric Optometry, Ocular Disease/Refractive and Ocular Surgery, or Cornea and Contact Lenses are available through the College. The Cornea and Contact Lens residency is provided directly by Pacific University. The Ocular Disease/Refractive and Ocular Surgery residency is provided through a joint program with Eye Care Associates of Nevada. Other programs are provided through affiliations with the Veterans Administration Medical Centers.

## School of Physical Therapy

The School of Physical Therapy offers a three-year Doctor of Physical Therapy degree. Pacific University's location in Forest Grove, Oregon offers physical therapy students the values associated with a small town environment, as well as some of the excitement of a larger city—Portland. The campus itself has many cultural, sports, and social events and opportunities.

The students of the School of Physical Therapy are bright, enthusiastic and committed to the profession which results in a very high retention rate. Over the years, graduates have made many

important contributions to the health care of Oregon and the surrounding states.

The School of Physical Therapy has a strong and caring faculty dedicated to providing a quality educational experience to its students. Special faculty strengths are in geriatrics, motor control, stroke treatment, biomechanics, research and orthopedic physical therapy. Many of the faculty have gained regional or national recognition for their clinical skills and research contributions.

In addition to the professional program, the School of Physical Therapy offers a Masters of Science in Health Sciences degree for practicing physical therapists as well as several continuing education programs for the professional community annually. These programs are staffed by the School's faculty and by other authorities in the field. The School has also developed a Doctor of Physical therapy degree for physical therapist clinicians. This program will begin in the Fall, 2001

## School of Physician Assistant Studies

The School of Physician Assistant Studies strives to prepare students for service in a changing healthcare environment through an education based in primary care medicine with a focus on critical thinking. The 27-month masters degree curriculum is designed to provide the student with the didactic and clinical skills needed to assist in the practice of medicine while stressing the importance of understanding and valuing the diversity of cultures, peoples and lifestyles. Students are provided a foundation of medical knowledge from which to begin lifelong learning to meet the needs and challenges of a changing healthcare system.

The Faculty of the School of Physician Assistant Studies includes physicians, physician assistants, psychologists, pharmacists, nurses, physical therapists, other health care providers along with basic scientists in anatomy and physiology. Through this team approach to education, the physician assistant student learns to value the roles of other members of the team.

The program is proud to acknowledge the active participation of the medical community in all aspects of the program.

Community providers are involved in the advisory and admissions committees and serve as lecturers and preceptors. The program has affiliations with hospitals, managed care organizations, medical groups, community clinics, nursing homes and private practice physicians throughout Oregon and surrounding states. The Physician Assistant (PA) is a respected member of the health care team who works with his or her supervising physician to provide diagnostic and therapeutic patient care in a variety of medical settings. The physician assistant is ranked as one of the top careers in growth potential by the U.S. Department of Labor. Positions are available in both primary and specialty care at a variety of practice settings such as community clinics, private practice, medical groups, hospitals, managed care organizations, prisons and other government agencies. In addition to clinical practice, physician assistants may advance into positions in research, academics, public health and health care administration.

### School of Professional Psychology

The School of Professional Psychology at Pacific offers doctoral studies in Clinical Psychology, leading to the Doctor of Psychology (Psy.D.) degree with an emphasis on preparing graduates for service careers as professional psychologists. The School also offers the Master of Arts in Counseling Psychology from its location in downtown Portland. Specialty tracks in Behavior Analysis and Organizational Behavior develop skills in current practice areas. Emphasis on community involvement and practical applications of theoretical and scientific psychology make the school unique in the Pacific Northwest. Graduates will have met the Oregon educational requirements for Licensed Professional Counselor. Graduates have been employed in a variety of mental health and organizational roles.

The School maintains a Psychological Service Center, located in downtown Portland. This clinic offers psychological services to the community while providing supervised training experiences to its practicum and internship students.

The School of Professional Psychology provides a comprehensive and integrated

educational experience. This experience grounds the development of clinical competence in the knowledge base and methods of inquiry of scientific psychology. The program also fosters an appreciation of human functioning, as it occurs in natural settings, including awareness of personal, interpersonal, and societal influences operating within those settings. The School orients students to scholarship which contributes to an understanding of human nature, to research that informs the clinical endeavor, and to services to a variety of populations.

In addition, the School recognizes that the person and values of the practitioner are central to effective and socially responsible practice. It strives to promote the development and integration of both professional competence and humanitarian values. The School seeks to be responsive to the real needs of the many diverse peoples in a rapidly changing society, and works to maintain a close connection with the community which it serves.

The School's curriculum provides students with a solid foundation for both professional practice and continuing professional growth. Doctoral graduates of the School possess the knowledge and skills to provide psychological services to individuals, groups and the community in a variety of contexts, including the traditional areas of professional psychology: psychological assessment, psychotherapy, and applied research. They are encouraged to seek out new and innovative professional roles. Training is structured to prepare graduates to enter the postdoctoral licensing process.

Professional psychology complements and strengthens the other health profession programs among Pacific's graduate offerings.

## OTHER ACADEMIC PROGRAMS AND RESOURCES

### Continuing Education

Pacific University offers continuing education credits to practitioners and other licensed professionals in the health care fields served by Pacific University's professional programs in Occupational Therapy, Optometry, Physical Therapy, Physician Assistant Studies and Professional Psychology.

Programs are held both on campus and in various communities across the U.S. and Canada. Certification courses are also offered which may allow for expanded license privileges for some professions. Programs range from one-hour lectures to week-long conferences. Some continuing education offerings are available by videotape study and some via internet. Information about currently scheduled educationals may be obtained by contacting the individual college or program.

Pacific University also administers the Community School program, which offers non-credit classes for personal and professional growth.

### English Language Institute

Pacific's English Language Institute offers an intensive language study program for foreign students learning English. The ELI has in residence approximately 40 students from Asia, Europe and Latin America. ELI students live with American roommates in the residence halls and may take regular university classes as soon as their English skills allow. The ELI also provides special summer study programs. The ELI is a division within the School of Education.

### Harvey W. Scott Memorial Library

The Library at Pacific offers a welcoming atmosphere and a variety of information and research resources. Library faculty and staff work regularly with students and faculty to assist them in locating, evaluating and using today's world of information—both traditional and electronic. The Library's collections include books, periodicals, and databases as well as government documents, videos, and sound recordings. The Library is also the home of the Margaret McChesney Scott Music Library and the University archives.

While the Library strives to build strong, core collections, it also participates in area library consortia to meet the considerable research needs of our students and faculty. Through courier services and interlibrary loans, students and faculty can efficiently tap the substantial research resources of our region and beyond. For additional information about the Library and its services, please visit the University's web site at [www.pacificu.edu](http://www.pacificu.edu).

# Entering the University

## ADMISSION AS A FRESHMAN

We seek to admit students who demonstrate the necessary skills to be successful in a rigorous academic environment. In selecting students for the freshman class, Pacific gives primary consideration to academic preparation and potential for successful study at the college level. Preparation is assessed by evaluating the high school transcript of college preparatory work, counselor recommendation, standardized test scores, a written essay and other information submitted by the applicant.

Pacific will not consider an individual for admission unless one of the following three criteria has been achieved: 1) a high school diploma or its equivalent 2) a passing grade on the General Education Development (GED) examination, or 3) a passing score on an independently administered, federally approved ability to benefit test.

Applications may be obtained by writing the Office of Admissions, Pacific University, 2043 College Way, Forest Grove, Oregon 97116-1797, or by calling 503-359-2218 or 1-800-677-6712. Applications are also available on-line at [www.pacificu.edu](http://www.pacificu.edu).

Preferred application deadline is February 15. Notification of decision will be made on a rolling basis beginning November 15.

## ADMISSION AS A TRANSFER STUDENT

Pacific considers transfer applicants based on their academic record and level of preparation, as well as academic recommendations. Based upon evaluation by the Registrar's Office, transfer students from accredited institutions may receive full or

partial credit for arts and sciences courses at the baccalaureate level. These courses must be completed with a grade of "C-" or higher. Academic departments decide which transfer courses satisfy requirements for majors and minors at Pacific. Students should consult the department chair in their major field. Students who transfer from an unaccredited college or university must successfully complete 30 hours of work at Pacific before consideration will be given to granting credit for course work completed at the previous institution. In computing transfer credit, 1.5 quarter hours is equal to 1 semester hour.

## APPLICATION PROCEDURES FOR FRESHMEN AND TRANSFER STUDENTS

1. Forward completed application form and the nonrefundable \$30 application fee to the Admissions Office.
2. Give recommendation form to counselor or appropriate faculty member to be completed and returned to Pacific University Admissions Office.
3. Request that official transcripts for all academic work be forwarded to the Admissions Office. Transfer students with less than 30 semester or 45 quarter hours of transferable credits should submit their final high school transcript, standardized test scores and all college transcripts.
4. Submit SAT I or ACT scores. Transfer students are waived from this requirement if 30 semester hours or 45 quarter hours have been completed by the time of application.

## INTERNATIONAL STUDENTS

Pacific University welcomes international students. Admission is based on academic preparation and proficiency in English. International students must submit:

1. An Application Form, available from the Admissions Office.
2. The application fee of \$30.
3. Complete official academic records (with official English translation) covering all work taken at the secondary and university level (such as secondary school records, certificates of education, final government examinations, college, university, and technical school records)
4. Certification of Finances Form stating that sufficient financial resources exist to pay for all educational and personal expenses. (e.g., letter from bank, etc.)
5. An official score report of the Test of English as a Foreign Language (TOEFL) for those students for whom English is a second language. Results must come directly from the Educational Testing Service. No student copies will be accepted.

To enroll as an undergraduate student, an applicant must earn a TOEFL score of 550 or higher. Students whose academic qualifications are sufficient but who need further language training may attend the English Language Institute prior to entering the undergraduate or graduate programs. All students who enter the United States on a student visa are required to carry at least 12 semester hours of course work in each semester.

## DEPOSIT POLICY

All degree seeking students who are admitted by the Admissions Office are required to post a \$200 deposit no later than the Uniform Candidate Reply Date of May 1, to secure their place in the incoming class on a space-available basis. The deposit will be credited to the student's tuition payment charges for the first semester. New students may receive a refund of the \$200 deposit if requested before May 1. It is not refundable after that date.

## CAMPUS VISITS

A visit to campus is the best way to learn about Pacific. Students are encouraged to make arrangements through the Admissions Office to attend classes, meet with students and faculty, talk with an admission counselor, tour the campus, dine in the university commons, and spend an evening in one of our residence halls. Accommodations for overnight visits are available Sunday through Thursday. Priority will be given to high school seniors.

## READMISSION

To apply for readmission after an absence of one semester or more, a student must complete a brief Application for Readmission form, and submit official transcripts from all colleges attended during a student's absence from Pacific to the Dean of the College of Arts and Sciences.

## COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Each department or school will decide whether a specific CLEP examination may substitute for a specific course or entrance requirement. Credit may be granted for both subject and general CLEP examinations.

## LIMITED ENROLLMENT FOR HIGH SCHOOL STUDENTS

Academically talented high school students may enroll as non-admitted students through the registrar's office for one course per semester with approval of the high school principal and the Pacific University course instructor. These students may apply for admission upon meeting requirements for degree seeking students.

# Tuition & Fees

## SCHEDULE OF FEES AND COSTS FOR ACADEMIC YEAR 2001/2002

### Tuition

Annual (two 14-week terms)* Tuition for students for the academic year.....	\$18,000
Semester (one 14-week term)* Tuition for students for the semester .....	\$9,000
Part-time, per semester hour (1 through 11 credit hours) .....	\$750
Summer, per semester hour .....	\$325

### Fees

#### Student Government/Activities\*\*

Annual.....	\$120
Semester .....	\$60

#### Health service \*\*

Annual.....	\$140
Fall or Spring Semester .....	\$70

#### Technology \*\*

Fall or Spring Semester .....	\$100
Summer Term.....	\$35
Annual (Fall, Spring & Summer) .....	\$235

#### Recreational \*\*

Annual.....	\$50
Semester .....	\$25

#### Medical insurance

August 23, 2001 to August 22, 2002 (U.S. citizen) .....	\$462
August 23, 2001 to August 22, 2002 (International) .....	\$621

#### Music

One half-hour lesson per week (14 sessions, 0.5 credits) .....	\$180
Organ practice rental per semester .....	\$50

\* **Overloads:** There is a credit plateau from 12-18 hours where tuition charges remain at the 12-credit level. Students enrolled for more than 18 credit hours are charged full-time tuition, plus the part-time semester hour charge for each credit hour above 18 hours.

\*\* Applies to all students enrolled in 6 or more credits for the term.

**Note:** Students whose accounts are in delinquent status will not be eligible to register for the following semester.

## 2001/2002 ROOM/BOARD

### Room Rates

ROOM RATES	ACADEMIC YEAR	SEMESTER
Double, Triple or Quad.....	\$ 2,478	....\$ 1,239
Single .....	\$ 2,826	....\$ 1,413
Double Suite/Triple Suite .....	\$ 2,940	....\$ 1,470
Double/Single (Double Room-one occupant) or Quad w/2 persons.....	\$ 3,162	....\$ 1,581
Single Suite .....	\$3,266	....\$ 1,633
Vandervelden Studio.....	\$ 3,424	....\$ 1,712
Vandervelden Suite .....	\$ 3,990	....\$ 1,995

### Board Rates

	LEVEL A	LEVEL B	LEVEL C	LEVEL D
Semester .....	\$1,057..	\$1,198...	\$1,337	.\$1,474
Winter Term.....	\$217.....	\$249.....	\$282	....\$314
Annual.....	\$2,331..	\$2,645...	\$2,956	.\$3,262

The meal plan is a combination of a traditional board plan and "dining dollars." The traditional board plan includes all dinners and the weekend brunches (nine meals per week) in an all-you-can-eat style. "Dining Dollars" can then be utilized for weekday breakfasts and lunches with an ala carte pricing. This allows students to pay for only what they want for the breakfasts and lunches.

**Level A**

\$250 dining dollars per semester;  
\$40 dining dollars for Winter term

**Level B**

\$375 dining dollars per semester;  
\$70 dining dollars for Winter term

**Level C**

\$500 dining dollars per semester;  
\$100 dining dollars for Winter term

**Level D**

\$625 dining dollars per semester;  
\$130 dining dollars for Winter term

Students may change their meal plan level before the end of the second week of the fall and spring semesters. The account balance will be carried over from fall semester to winter term, and then to spring semester, but not transferred to the next year's fall semester. There is no refund of dining dollars at the end of the spring semester. However, bulk buying of food items will be available for students to use up any remaining declining balance at the end of the spring semester.

## TUITION AND FEE PAYMENT OPTION

**I. Semester Plan**

This plan allows you to pay "in full" before the beginning of each semester. Due dates for the 2001-2002 Academic Year are:

SEMESTER	TOTAL PAYMENT DUE DATE
Fall/Winter .....	August 15, 2001
Winter .....	January 5, 2002*
<i>(for students entering Winter Term)</i>	
Spring .....	January 15, 2002
Summer .....	May 15, 2002

\*Students entering the University during the Winter Term will pay the tuition and fees prior to registration. If the student is enrolled full-time during the Spring Semester, the spring invoice will reflect a credit in the amount of the Winter Term tuition and fees. If you do not make the payment according to schedule, a late fee of \$50 will be assessed to your account for each month that the payment is past due. The University will assess a return check charge in the amount of \$25 for checks returned to the University for non-payment.

**II. Monthly Payment Plan**

This plan allows you to pay tuition and fees in four installments each semester. For the fall term, payments begin on August 15, 2001 with additional payments due the 15th of each month. For spring term, payments begin on December 15, 2001; for summer term, April 15, 2002. There is an annual set-up fee of \$55 for choosing this option. If you sign up for this payment option after the first payment due date, it will be necessary to make up the payments from the previous months in order to become current on the payment plan. If you do not make the payment according to schedule, a late fee of \$50 will be assessed to your account for each month that the payment is past due. The University will assess a charge of \$25 for checks returned to the University for non-payment.

**Note:** *(the following information is applicable to both the Semester Payment Plan and the Monthly Payment Plan)*

Disbursement of Federal Direct Stafford Loan (subsidized and unsubsidized), Federal Perkins Loan and Health Profession Student Loan cannot occur until the borrower completes a promissory note and entrance interview. Disbursement of Federal Direct Parent Loan for Undergraduate Students and alternative loans such as CitiAssist occur only after credit approval of the loan application.

Anticipated disbursements of accepted and approved loans may be considered when calculating payment of student accounts. Student employment (Federal Work-study and Pacific Work-study) earnings are paid directly to the student and should not be considered in determining student account payment.

All checks to be credited to the student's account, including outside scholarship checks, Pacific University checks, and all other sources of payment must be endorsed and credited to the student's account in advance of the semester or as soon as they are available or received for the semester in order to avoid late fees.

## BUSINESS POLICIES ON TUITION AND FEES

The University strives to maintain high educational standards at the lowest reasonable cost. Contributions from individual alumni, parents and friends of the University, and support from foundations and corporations help to reduce costs to students and their families through the University's development and fund raising programs.

The Board of Trustees reserves the right to adjust costs after giving students due notice. The University reserves the right to modify or terminate the academic program in which the student is enrolled.

Students should make the necessary arrangements for the payment of all fees and charges in accordance with one of the University's payment options. **All payments must be made in United States funds.**

### Admissions Expenses

When a student applies for admission to the University, an "application fee" as determined by the College must accompany the application.

When a student is admitted to the University, a non-refundable advance payment deposit is required to complete the admission process. The deposit will reserve the student's place in the incoming class on a space available basis and will be credited to the student's tuition payment charges for the first semester.

### Business Office Policies

Students enrolling at Pacific University have a Business Office account opened in their name. Timely payment of the account is the responsibility of the student. A student's registration in a new semester will not be complete until the previous semester's financial obligations have been satisfied.

Pacific University's philosophy on payment reflects the educational element of assuming and meeting one's fiduciary obligations carefully and completely. Payment due dates are established, depending on the tuition payment plan agreed to between the student and the

University. Students receiving financial aid of any kind – including Pacific funds, loan funds, and/or outside scholarship funds – must be certain that all funds intended for their account have been processed and delivered to the University Business Office and credited to the student's account. This covers endorsement of all checks to be credited to the student's account.

Please visit our website at [nellie.pacificu.edu/finance/bo/](http://nellie.pacificu.edu/finance/bo/) or email us at [cashiering@pacificu.edu](mailto:cashiering@pacificu.edu).

### Student Information Worksheet

Each student must complete a student information worksheet with the Business Office at the beginning of each academic year they are enrolled at Pacific University. This worksheet will provide the student's name, ID number, and authorization for information and payment plan selected. This form must be completed and signed by the student in order to be valid. Without a completed form on file the Business Office will not release information to any person other than the student.

### Insurance

Medical insurance coverage is required for all students enrolled in at least six credits in their first semester of their academic year. Students with their own personal medical insurance coverage are exempt from participation in the University's group plan if they properly complete and **file a waiver form for each academic year within two weeks from the first day of their academic year.**

Group medical coverage is available both for dependents of insured students and during summer vacation. Contact the local insurance agent, Waltz Sheridan Crawford, at (503) 357-3154 for premium rates and applications.

Personal property insurance is recommended. If parents' insurance policies do not already cover students in school, several low-cost policies are available from local insurance companies. The University is not responsible for the property of students or employees and thus cannot be held accountable for any losses.

## Past due Accounts

The University reserves the right to deny access to class, to withhold transcript of record or diploma, or to withhold registration for a subsequent term until all university charges and appropriate loans have been paid and a student's account has been cleared.

## Withdrawal and Refund Policy

Students who completely withdraw from all classes may be eligible for a refund of all or a portion of their University charges. Students must contact the Dean of Students' Office to formally withdraw from the University.

The policy of refunding University charges reflects the formula, prescribed in Federal law, that governs the return of Federal funds to the appropriate financial aid programs. Refunds on all charges will be prorated on a *per diem* basis up to the 60% point in the semester. Students who withdraw on or before the first day of classes will be refunded 100% of their charges; students who withdraw after the 60% point in the semester will not be eligible for a refund. A copy of the refund schedule is available from the Financial Aid Office.

A hall presence fee of \$25 per day may be assessed against the student account for additional time residing in the University Housing or participating in the University Meal Plan.

**Note:** *If a cash disbursement is issued to a student as a result of excess financial aid and the student subsequently withdraws from the University, the student may be required to repay the cash disbursement to Pacific in order to return funds to the applicable financial aid programs.*

## Change in Credit Hours

When a student modifies their schedule to change from an overload to full-time standing or from a full-time to a part-time standing, but does not completely withdraw from all classes, the following will apply:

- If the changes are completed **prior to the last day** of the add/drop period the appropriate refund will be given.
- If the changes are completed after the stated add/drop period no refund will be given for the reduction in courses. The student will forfeit all tuition refund resulting from the change in standing.

## Short-term Loans

Short-term loans are available to full-time students of the University who are in temporary need of financial assistance. In order to qualify for this loan, students cannot be delinquent or be in default on their Business Office account, and must be able to demonstrate a means of repaying the loan within 120 days. Loans are available for up to \$500. Interest is charged at an annual rate of 5%, beginning 30 days after the issue date.

Students may borrow more than one loan, but may not have more than \$500 outstanding at any time. Failure to repay the loan on the agreed upon repayment schedule will cancel the student's privilege to borrow further from the Short-Term Loan or Emergency Loan programs for the remainder of the academic year.

Academic transcripts and/or diplomas will not be released for students who are delinquent on their loan at the time they are requesting the transcript or leaving the University. Students who terminate their enrollment at the University will have their loan due date changed to reflect their last day of enrollment.

Applications for the loan can be made through the Business Office. The loan application fee is \$10.

# Financial Aid

The goal of Pacific University's financial aid process is to make a Pacific University education affordable. To that end, we offer a variety of merit-based scholarships and need-based grants, loans, and employment opportunities. Funds for these awards come from institutional, state, and federal sources.

**We strongly encourage all families to apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA). The FAFSA should be completed as soon as possible after January 1st each year,** either electronically at ([www.fafsa.ed.gov](http://www.fafsa.ed.gov)) or by completing a paper version. While this application is not required for merit-based aid consideration, it is necessary to determine a family's "need" and then provide applicants with a complete package of financial assistance.

It is also a good idea to look for outside scholarships. High school counseling offices, civic organizations, churches, and businesses may have scholarships to award to local students. The Financial Aid Information Page at [www.finaid.org](http://www.finaid.org) contains links to several national scholarship search databases that might also be useful. Outside scholarships are considered resources that meet a family's "need" and may affect the student's receipt of other financial aid; in most cases, receipt of outside scholarships decreases the amount that students must borrow.

## ELIGIBILITY CONSIDERATIONS

Students must be admitted to Pacific University to have their eligibility for financial aid determined. Students who are accepted under a "special" status, and students who are not candidates for a degree are not eligible for financial aid.

Students must maintain compliance with the Pacific University satisfactory academic progress policy as outlined in the Academic Regulations section of this catalog to receive financial aid. Students who are in a "warning" or "probation" status may continue to receive financial aid for the semesters they are placed in that status.

Students are eligible for institutional and state financial aid for up to four academic years. Students may receive federal financial aid for up to six academic years.

Students must be U.S. citizens or nationals, permanent residents, or resident aliens to be eligible for federal financial aid. In addition, students must demonstrate federally defined "need" to qualify for federal grants, work-study, and need-based loans. "Need" is defined as the difference between the student's Cost of Attendance (COA) for an academic year and the Expected Family Contribution (EFC) that results from calculations completed based on the student's FAFSA information. Students must be Oregon residents, and meet state defined "need" criteria, to be eligible for state funds.

Students must attend full-time (12 or more credits per semester) to receive institutional, state, and most federal financial aid. Students must attend at least half-time (6 to 11 credits per semester) to receive certain federal loans. A very limited number of students who attend less than half-time may be eligible for certain federal grants. Students who drop credits after they receive their financial aid may have their aid reduced or canceled.

## FINANCIAL AID PROGRAMS

### Scholarships

**Academic Scholarships** – Honors, Presidential, Trustee, and University Scholarships are awarded on the basis of academic merit as indicated by such measures as the student's grade point average and standardized test scores. Awards range from \$3,000 to \$8,000 per year and are renewable for up to four academic years.

**Pacific Pacesetter Scholarships** – these scholarships are awarded to entering students who participate successfully in the Pacific Pacesetter Scholarship Competition held in the spring of the year they begin their attendance at Pacific. Winners receive up to \$3,000 per year for up to four academic years.

**Endowed and Restricted Scholarships** – these scholarships are made available through the generous donations of friends of Pacific and are awarded to students who meet certain academic and other criteria specified by the donors of the funds. Amounts available vary annually, and separate application is not required. Awards are typically for one academic year only. A list of these scholarships is available in the Financial Aid Office.

**UCC Tuition Scholarships** – these scholarships are awarded to entering students who are dependents of United Church of Christ clergy members. Award amounts can be up to the equivalent of 50% of tuition. Students who receive these awards are not considered for academic scholarships.

**UCC Matching Scholarships** – these scholarships are awarded to students who receive a scholarship from the United Church of Christ. Students who demonstrate federally defined "need" receive up to \$1,500 in matching funds; students who do not demonstrate need receive up to \$500 in matching funds.

**Phi Theta Kappa Scholarships** – a limited number of these \$1,500 scholarships are awarded to transfer students who are members of Phi Theta Kappa. To be considered for these funds, students must have completed at least 30 semester hours or 45 quarter hours (accepted by Pacific), and have maintained at least a 3.5 cumulative grade point average.

### Grants

**Pacific Grants** – institutional awards made on the basis of "need". Award amounts vary annually, and are renewable for up to four years as long as the student maintains sufficient need.

**Talent Awards** – institutional awards made on the basis of outstanding talent and participation in music and forensics. Award amounts vary annually and are renewable for up to four academic years.

**Federal Pell Grants** – grants available to students who demonstrate eligibility according to federally defined criteria. Award amounts in 2001-2002 are \$3,750 to \$400 for the academic year.

**Federal Supplemental Educational Opportunity Grants** – these awards are given to the most needy Federal Pell Grant recipients, subject to fund availability. Award amounts in 2001-2002 are \$500 to \$1,500 for the academic year.

**Oregon Opportunity Grants** – available to Oregon residents who meet state defined eligibility criteria. Award amounts in 2001-2002 are \$1,800 for the academic year.

**Oregon State Grant Supplemental Awards** – available to Oregon residents attending independent colleges and universities who meet state defined eligibility criteria. Award amounts in 2001-2002 are \$1,316 for the academic year.

### Employment

**Federal Work-Study** – awards made on the basis of federally defined need and fund availability. Award amounts vary annually. Recipients are eligible to work on-campus or in community service positions off-campus. Students may not work more than 20 hours per week when classes are in session, and may not work during hours when they are scheduled to be in class.

**Pacific Work-Study** – awards made to students who do not show federally defined need but who could benefit from employment. Recipients are eligible to work on-campus. Students may not work more than 20 hours per week when classes are in session, and may not work during hours when they are scheduled to be in class. These awards are renewable for up to four academic years.

## Loans

**Federal Perkins Loans** – loans awarded on the basis of federally defined need and fund availability. Award amounts vary annually and cannot exceed \$4,000 per academic year. Repayment begins nine months after the borrower graduates or maintains less than half-time enrollment. Loans begin to accrue interest at a fixed rate of 5% after the nine-month grace period ends.

**Federal Direct Stafford Loans** – loans awarded up to federally established annual and cumulative maximum amounts based on the student's need, cost of attendance, dependency status, and class standing. Loans are subsidized if they meet the student's federally defined need, and unsubsidized if they exceed need. Dependent students are eligible for up to the following amounts per academic year in subsidized loan, unsubsidized loan, or some combination of the two: freshmen - \$2,625, sophomores - \$3,500, juniors and seniors - \$5,500. Independent students may borrow up to an additional \$4,000 as freshmen or sophomores, \$5,000 as juniors or seniors, in unsubsidized loan. Repayment begins six months after the borrow graduates or maintains less than half-time enrollment. Subsidized loans begin to accrue interest at a variable rate, not to exceed 8.25%, after the six-month grace period ends; unsubsidized loans begin to accrue interest when funds are disbursed.

**Federal Direct Parent Loans for Undergraduate Students (PLUS)** – loans available to credit-worthy parents of dependent students. Parents can borrow up to the student's entire Cost of Attendance minus the financial aid for which the student is eligible. Repayment begins 60 days after the loan is fully disbursed for the academic year. Loans begin to accrue interest at a variable rate, not to exceed 9%, when the funds are disbursed.

# Degree Requirements

## Curricular Goals

Every graduate of the College of Arts and Sciences shall have a command of the basic tools of thought and language:

- Inquiry, critical thinking, and critical analysis;
- Modeling, abstract thinking, and structural thinking;
- Quantitative reasoning;
- Creativity; and
- Written and oral language so that ideas, knowledge, emotions, and experiences can be clearly articulated, persuasively defended, and imaginatively conveyed.

Every graduate shall be prepared for a life of educated engagement, such that he or she will be able to:

- Interpret and experience with an historical consciousness;
- Cultivate creative means of expression and comprehension;
- Develop and reflect on his/her own set of values;
- Understand multicultural, diverse, and global perspectives;
- Access and evaluate information necessary to make informed decisions;
- Participate as an informed person and citizen in the arts, business, fitness and health, politics, and the sciences;
- Engage in the practices of a discipline with knowledge of the discipline and an understanding of how such knowledge is constructed and used; and
- Progress toward a productive and meaningful professional life.

The Faculty of the College of Arts and Sciences has established the College's degree requirements in order to ensure that each student accomplishes these curricular goals.

## BACHELOR OF ARTS DEGREE REQUIREMENTS

### I. Credit Hours

124 semester hours are required for graduation

### II. College Core Requirements

All students are expected to undertake a broad course of study by completing with at least a "C-" each of the requirements listed below. No course can be counted for more than one requirement.

#### A. MATHEMATICS (3 semester hours)

All Math courses numbered 165 or higher, Psych 350 (Behavioral Statistics), Soc 301 (Social Statistics), or equivalent statistics courses.

#### B. WRITING (3 semester hours)

English 201 Expository Writing

Those students who achieve less than 35 on the TSWE are required to take Eng 101 in their first semester.

#### C. FOREIGN LANGUAGE

(6 semester hours or proficiency)

A proficiency in a language other than English must be demonstrated by the successful completion of a 102-level course or its equivalent.

A student may satisfy this requirement by passing a proficiency test administered by the World Languages department.

Students who have two years of high school study in a single language will be advised to take the 102-level course. The instructor for the 102-level course can approve a shift to a 101-level course, if required to meet the best educational achievement.

A student whose native tongue is not English can be exempted from the Foreign Language Core requirement by obtaining approval from his/her advisor, and the Chair of the World

Languages and Literatures department.  
The advisor shall notify the Registrar.

D. **FIRST YEAR SEMINAR ON ORIGINS, IDENTITY, AND MEANING: (4 semester hours)**

All freshmen must take Humanities 100 in the fall semester. Transfer students need to substitute six semester hours in literature, history, philosophy, or humanities.

E. **CROSS CULTURAL STUDIES: (3 semester hours)**

All students must take three semester hours in courses designated by a "CC" in the Schedule of Classes or catalog. The courses that qualify are those on the culture of Asia, Africa, Latin America, or aspects of American culture that draws upon these areas or the culture of the indigenous peoples of North America, including foreign language instruction.

F. **THE ARTS (3 semester hours)**

Three semester hours in Art, Music, or Theatre.

G. **THE SOCIAL SCIENCES (6 semester hours)**

Two courses from two different disciplines chosen from Anthropology, Economics, Political Science, Psychology, Sociology, Social Sciences.

H. **THE HUMANITIES (6 semester hours)**

Two courses from two different disciplines chosen from Literature, including interactive courses in Chinese, French, German, Japanese and Spanish. History, Media Arts (MedA 111, 112, 120, 121, 401 only), Philosophy, Humanities.

I. **THE NATURAL SCIENCES (6 semester hours)**

Two courses from two different disciplines chosen from Biology, Chemistry, Environmental Science, Exercise Sciences, Physics, Science or two courses with laboratory in the same discipline. Biol 190 and Exsc 190 cannot be used to satisfy this requirement.

J. **SENIOR CAPSTONE (2 or more semester hours)**

A senior project, internship (with a presentation), or performance/show in the major.

### III. Major

Majors require at least 24 hours, including 16 upper division hours (exclusive of courses numbered 475, 478). Major requirements are listed under the appropriate department.

### IV. Grade Point Average of 2.0.

A minimum grade point average of 2.0 in all coursework earned at Pacific. In addition, a 2.0 GPA is required in all majors and minors; check major and minor requirements because some departments may have adopted a higher minimum than 2.0. All courses required for the bachelor's degree and major must be included in the 124 hours presented for graduation. Only grades of "C-" or higher will transfer as credit toward the degree.

### V. Upper Division Hours

40 hours of upper-division courses (numbered 300 and above), with no more than 10 hours of courses numbered 475 or 478 counting toward this forty-hour requirement.

All Study Abroad coursework through Pacific University or affiliates will be counted as upper-division. The first 31 credits of study abroad course work earned through Pacific University will count as Pacific University credit; the remainder of study abroad credit will be treated as transfer work and evaluated accordingly.

### VI. Residency

- A. Students must complete at least 6 credits from Pacific University in upper division courses in their major and 6 credits from Pacific University in upper division courses for any minor. Individual departments may require a greater number of credits be completed at Pacific University. For these requirements, consult the list of requirements for each major or minor.
- B. Students must complete 30 of the last 40 hours counted towards their degree at Pacific University.

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

### I. Core and Other Requirements

Candidates must meet all requirements for the Bachelor of Arts degree.

### II. Major Declaration

Satisfy requirements for a major or a minor from the Division of Natural Sciences, or a major in Psychology with two additional science laboratory courses.

Students may earn only one Bachelor's Degree at the College of Arts and Sciences.

## DEGREE POLICIES

### Declaration of Majors and Minors

1. Major requirements are listed elsewhere in the catalog under the appropriate departmental headings. The minimum requirement is 24 hours of which 16 hours must be upper division.
2. A Minor may be earned by meeting the requirements listed by a department. The minimum requirement is 15 hours of which 6 hours must be upper-division.

Every student must have a declared major, with a schedule approved by a faculty advisor in the major department, by the end of the sophomore year. Students are urged to plan wisely for a major program well before that time, in consultation with the faculty advisor.

Minors must be declared by the end of the junior year, and must be approved by a faculty member in the minor subject. Minors may be combined with majors to satisfy interests and more effectively prepare for a profession.

Forms for declaration of majors and minors are available from the Dean's office in Bates House, from the Registrar's Office or from Division Assistants.

Degree requirements for students preparing to teach are listed in the Education section.

### Waiver of Departmental Requirements and Prerequisites

Upon application, academic departments may waive requirements for a major or minor, if faculty are satisfied that the student has already achieved the knowledge expected. Similarly, prerequisites may be waived at the discretion of the instructor. Course waivers do not reduce the number of credits needed for any requirement.

### 48-Hour Rule

A maximum of 48 hours in a single department, with the exception of departments that include more than one discipline (Business and Economics, World Languages and Literature, and Mathematical Sciences), where students may take up to 60 hours but no more than 48 in a single discipline, and Music, where students may take up to 60 hours.

A program of more than 48 hours which includes an internship may be approved by the Dean of Arts and Sciences upon petition.

### Activity Courses

A maximum of 4 hours in 1-hour activity courses are allowed. Music courses for students pursuing a Bachelor of Arts degree with a major in music are exempt from this activity hour limitation. Activity courses are: HPER 150, MUS 150, MUS 151, MUS 158, MUS 153, MUS 163, MUS 165 and MUS 167.

### Internships

A maximum of 17 hours of internship credit will count towards graduation of which no more than 14 credits can be taken in any one semester. A maximum of 10 hours may count toward upper division.

## Changes in Requirements

Students must meet the requirements for the Core and majors and minors from the catalog from their year of original matriculation or a subsequent year. If more than ten years has elapsed since a student's original matriculation, then the original date of matriculation will be replaced by the date of re-entry in the implementation of this policy.

A student may choose different catalogs to satisfy the Core and majors and minors requirements.

The Oregon Teacher Standards and Practices Commission set requirements for prospective teachers. Students expecting to teach must satisfy those rules in effect at the time of graduation.

## Student Status

Students who register for fewer than 12 credits by the end of the add/drop period will be considered part-time students. Part-time status can adversely affect financial aid awards and athletic eligibility.

## Petitions

Students may seek exceptions to college requirements in extraordinary circumstances upon consultation with their advisors by petitioning the Faculty Standards and Advising Committee. Information on the process may be obtained from the Associate Dean of the College of Arts and Sciences whose office is located in Bates House.

## Graduation/Persistence Data

In accordance with the Student Right To Know Act DCL of August, 1991, Pacific University is required to publish graduation and persistence rates of the cohort of first time freshmen. While most students graduate in four years, the six-year graduation rate for the entering class of 1993 is calculated to be 58%.

## Advancement to Candidacy for Degrees

Pacific University offers three degree conferment dates during the academic year: fall, winter and spring. Formal commencement is held in spring only. All degree candidates must submit an Application for Degree form to the Registrar's Office by January 15 for spring; June 15 for summer; or October 15 for winter graduation. Students who are not graduating in spring but who wish to march in commencement must submit an Application for Degree as above.

## Graduation with Honors

Students receiving an Arts and Sciences baccalaureate degree will be designated cum laude if they achieve a cumulative grade point average of 3.50 to 3.69; magna cum laude if they achieve 3.70 to 3.90; and summa cum laude if they achieve 3.91 to 4.00. Students receiving the Doctor of Optometry or Masters of Physical Therapy, Occupational Therapy, or Physician Assistant Studies degrees will be designated with distinction if they achieve a cumulative grade point average of 3.50 or above.

## Time Limit for Completion of Graduate Degrees

Unless otherwise noted within specific programs, all work for graduate degrees (including transferred credits, dissertation and examination) must be completed within a period of seven calendar years.

# Academic Programs

The College of Arts and Sciences is organized in four academic divisions and offers the Bachelor of Arts and Bachelor of Science degrees. Students can obtain an Oregon teaching license through the School of Education. Students interested in a teaching career should consult with the School of Education as early as

possible. Education programs are available at both the undergraduate and graduate level. Students must apply for admission to the School of Education separately from their admissions to the College of Arts and Sciences. Undergraduates typically apply for admission to the School of Education during the sophomore year.

## DIVISIONS, DEPARTMENTS AND MAJORS

### Arts Division

DEPARTMENTS	MAJORS
<b>Art</b>	Art
<b>Music</b>	<i>Music with emphases in:</i> <ul style="list-style-type: none"> <li>• Music</li> <li>• Performance</li> <li>• Music Education</li> </ul>
<b>Theatre</b>	Theatre

### Humanities Division

DEPARTMENTS	MAJORS
	Coordinated Studies in Humanities
<b>Media Arts &amp; Communications</b>	Film Production Integrated Media Journalism Media Arts Video Production
<b>English</b>	Creative Writing Literature
<b>World Languages &amp; Literatures</b>	Chinese Studies French Studies German Studies Japanese Spanish Modern Languages: <ul style="list-style-type: none"> <li>• Chinese, French,</li> <li>• German, Japanese,</li> <li>• Spanish</li> </ul>
<b>Philosophy</b>	<i>Philosophy with emphases in:</i> <ul style="list-style-type: none"> <li>• Philosophy</li> <li>• Bioethics</li> </ul>

### Natural Sciences Division

DEPARTMENTS	MAJORS
	Applied Science Bioinformatics
<b>Biology</b>	<i>Biology with emphases in:</i> <ul style="list-style-type: none"> <li>• Ecology and Evolution</li> <li>• Molecular and Cellular</li> </ul>
<b>Chemistry</b>	<i>Chemistry with emphases in:</i> <ul style="list-style-type: none"> <li>• Chemistry</li> <li>• Biological Chemistry</li> <li>• Chemical Physics Chemistry</li> </ul>
<b>Environmental Science</b>	<i>Environmental Science with emphases in:</i> <ul style="list-style-type: none"> <li>• Biology</li> <li>• Chemistry</li> </ul>
<b>Exercise Science</b>	<i>Exercise Sci with emphases in:</i> <ul style="list-style-type: none"> <li>• Exercise Science</li> <li>• Human Performance</li> <li>• Sports Medicine</li> </ul>
<b>Mathematical Sciences</b>	Computer Science Mathematics
<b>Physics</b>	Physics
<b>Social Sciences Division</b>	
DEPARTMENTS	MAJORS
	International Studies
<b>Business &amp; Economics</b>	<i>Business &amp; Economics with concentration in:</i> <ul style="list-style-type: none"> <li>• Accounting/Finance</li> <li>• Economics</li> </ul>
<b>History</b>	History
<b>Politics &amp; Government</b>	Political Science
<b>Psychology</b>	Psychology
<b>Sociology &amp; Anthropology</b>	Anthropology & Sociology <ul style="list-style-type: none"> <li>• Sociology</li> <li>• Social Work</li> </ul>

# APPLIED SCIENCE

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The Applied Science program leads to a well-rounded cross-disciplinary degree in science. It is well-suited for students seeking technical employment in areas where a cross-disciplinary background in science is desirable. It is also appropriate for students interested in a career in the high-tech industry, those planning further work in a specialty via a joint B.S./M.S. (particularly in engineering) or those transferring into programs in the health sciences. Students interested in teaching science via the integrated science norm or those interested in cross-disciplinary areas such as environmental science may choose this program.

In most cases, cooperative programs have additional requirements beyond those of the Applied Science major. Any student interested in such a program should carefully review its requirements and consult with members of the Department of Physics.

## Requirements

1. All requirements for two minors within the Division of Natural Sciences. For students choosing physics as one of the two minors, the requirements for the Applied Physics minor must be completed.
2. Sci 285, Applied Science Seminar
3. CS 150, Introduction to Computer Science I or CS 230, Advanced Software Tools
4. 28 upper-division hours within the Division of Natural Sciences selected to meet specific career or interdisciplinary objectives. These courses must be approved by a faculty advisor in science. Courses in engineering or other approved science-related professional programs may be counted in this total, but no more than 7 hours of internship may be counted here.
5. Seven hours of internship or one year of course work in an approved science-related professional program (e.g. engineering, etc.).

## DEPARTMENT OF ART

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**Jan Shield**, *Chair, Professor of Art*

**Patricia Cheyne**, *Associate Professor of Art*

**Terry O'Day**, *Assistant Professor of Art*

**Jim Flory**, *Instructor, Photography\**

**Steve O'Day**, *Instructor, Computer Graphics\**

**Jacquelin Ehlis**, *Instructor of Art\**

**Ann Wetherell**, *Assistant Professor of Art History\**

*\*adjunct faculty*

### ART

In today's world the well-rounded liberally-educated individual is becoming increasingly in demand. The truly educated person is one with a broad background. The Art program at Pacific University is equipped to provide students with a strong conceptual base, expressive direction, and instruction in artistic processes and techniques. Through the visual and tactile nature of Art the faculty tries to integrate the consciousness of personal expression into every liberal arts and professional student. The Art program offers the opportunity for a major or minor concentrating in either a two- or three-dimensional emphasis for the working artist. Other opportunities include certification in teaching art at the secondary level, an integral Fine Arts curriculum, or a focus in Graphic Arts and Media Arts by the availability of a double major or major/minor in the two departments. Pacific University also offers specialized classes through a cooperative program with Oregon School of Arts and Crafts. For further information please contact the Art Department.

The Art faculty plant the seeds of artistic growth for all students through their offerings of concentrated singular and sequence course work. Students are expected to use the studio facilities on their own for at least two hours for every one hour of class instruction. In addition, advanced art students can work on directed study under individualized contracts where

creative projects in the studio and internships are developed.

Expanding the human dimensions in Art continues to lead our graduates into various careers in art, as arts directors, teachers, or in preparation for graduate school. The program also seeks to provide art experience for application to problem solving, use of leisure time, and therapy. We look forward to your participation in our program.

Students planning to prepare to teach in public schools should consult subject matter and professional requirements listed under the Division of Education.

The Art Department at Pacific University seeks to prepare students for:

- lifelong interest, appreciation and understanding of art;
- a life of creative involvement in expressive and technical artistic processes;
- being functionally literate in the language of art – reading, writing, speaking related to the expressive processes and terminology;
- Expanding ability to critique creative projects and artistic works by one's self and others;
- Broadening the awareness of Art history and cultural heritage;
- Using artistic technologies related to one's areas of interest;
- Increasing the nature of human perception, motivation and creation as a necessity for personal growth and well-being;
- Doing independent and collaborative artistic research and projects;
- Discovering the relationships between the arts and other academic disciplines and the world;
- Graduate study in art with a focus on two- and/or three-dimensional artistic work;
- Pursuing expressive directions for individual creative growth as well as careers in art.

## MAJOR IN ART

In addition to meeting the University core requirements, the major in Art must complete the courses listed below with a 3.0 average, with no grade below a "C-".

### Requirements

Art 105	Understanding Art OR	.....3
Art 201	Seeing: Adventures in Art.....	.....3
Art 110	Basic Design	.....3
Art 210	Drawing I	.....3
Art 270-272	History of Western Art I, II, OR III.....	.....3
Art 270-280	Art History.....	.....3
Art 495	Senior Show.....	.....3

Additional courses in Art, including a concentration of upper-division courses in two-dimensional and/or three-dimensional creative work, Independent Studies, as approved by the student's advisor

.....24  
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42 \*

\* **Note:** A minimum of 16 upper-division hours must be included.

## MINOR IN ART

This minor can be structured to enhance a number of academic majors and provide creative options to both the liberal arts and professional programs of study.

### Requirements

Art 105	Understanding Art OR	
Art 201	Seeing: Adventures in Art	. 3
Art 110	Basic Design	.....3
Art 270-280	Art History.....	.....3
Electives:	Selected additional arts courses, two of which must be upper-division	12

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## COURSE DESCRIPTIONS

### Art 105 Understanding Art

This course will introduce various basic art media (both academically and artistically) to enhance understanding of the artistic process. The course will also present an art historical survey to help students appreciate how the media previously discussed were used in different cultural contexts to create art. Strongly recommended as an introduction to other art history courses. No prerequisites. Meets arts core requirement. 3 hours. Cheyne

### Art 110 Basic Design

Introduction to the basic elements of design through a concentrated study of its theory and application and by assignments in two- and three-dimensional mediums. The course is open to all students. 3 hours. Staff.

### Art 201 Seeing: Adventures in Art

This course will survey the dynamics of visual expression with respect to the historical traditions and influences of Art in the 20th century. Emphasis is placed on awareness, understanding, and appreciation of artistic style, content, and expressive direction from the basis of modern art into the age of the electronic image. No prerequisite. 3 hours. Shield or Staff.

### Art 210 Drawing I

General studio instruction in drawing covering work in pencil, conte crayon, charcoal, pen and ink, and brush and ink. Design, composition, the rendering of light, and perspective are explored, as well as working from the human figure. 3 hours. Shield/Cheyne/T O'Day.

### Art 217 Computer Graphics Image Design

Studio work introducing the computer as a creative tool. Software applications related to design and painting will be explored. The student will be expected to complete a portfolio of computer generated images. No prerequisite. 3 hours. S O'Day.

### Art 218 Computer Graphics Illustration

Studio work introducing the computer as a creative tool. Software applications related to drawing and illustration will be explored. The student will be expected to complete a portfolio of computer generated images. No prerequisite. 3 hours. S O'Day.

**Art 219 Painting : Watercolor**

Studio course in expressive and illustrative watercolor painting techniques. Students explore and develop handling and control of watercolor processes and learn numerous painting techniques as well as the analysis of various papers and working surfaces. 3 hours. Shield.

**Art 220 Painting I: Oil/Acrylic**

Studio work investigating methods and techniques related to acrylic, polymer, and/or oil-base paints. Each student generates a series of studies and original painting. Readings and discussion explore the essence of painting. 3 hours. Shield.

**Art 225 Sculpture I**

Developing a working understanding of sculptural form, working with various mediums. Through reading, discussion, critique, and individual sculpting projects the student explores geometric, abstract and organic form. 3 hours. Shield.

**Art 226 Photography I**

A thorough nuts and bolts course to teach students basic camera handling operations as well as introductory photography concepts. The "great themes" of photography are introduced to provide a historical perspective. This course is intended for Art majors and non-majors. A 35mm SLR camera is a requirement for the course. 3 hours. Flory.

**Art 230 Printmaking I: Relief and Silk-screen Printmaking**

This course will explore relief printmaking processes including but not limited to stamp prints, linoleum block prints, and woodcut prints. In addition, it will teach the basics of one color silk-screen techniques. The history of printmaking and traditions of the multiples will also be discussed. Offered concurrently with Art 330. 3 hours. Cheyne.

**Art 233 Printmaking I: Collagraphs and Non-Toxic Intaglio Printmaking**

This class is designed to introduce the students to the basic techniques of intaglio printing including, but not limited to collagraphs, etching, and image-on intaglio. Monoprints will also be taught. All methods will be taught with non-toxic methods. The history of printmaking and tradition of multiples will also be discussed. Offered concurrently with Art 333.

**Art 235 Illustration I**

An introduction to illustration, including drawing techniques, type/fonts, compositional reduction, structural studies, various transfer and printing processes. Emphasis is placed on acquiring skills in, and for use in a wide variety of artistic, commercial and occupational areas. 3 hours. Shield.

**Art 238 Papermaking**

This course is an introduction to the creation of handmade paper as an art form. Sheet formation and decoration will be introduced. The processing of natural and recycled materials to create paper will also be taught. Uses of handmade paper in art forms such as sculpture and the artist book will be explored. The goal in offering this course is to enable students to explore handmade paper as a fine art media. 3 hours. Cheyne.

**Art 240 Ceramics I**

Introduction to clay with an emphasis on handbuilding techniques and an exploration of historical and contemporary directions. Included are discussions of how surface embellishment and firing processes affect both the function and aesthetics of the ceramic object. 3 hours. T O'Day. Offered fall semester.

**Art 250 Stained Glass**

Designed to acquaint the student with three basic areas in the study and construction of stained glass; history, design concepts, and the acquisition of skills in cutting, soldering, and fitting glass. 3 hours. T O'Day. Offered Winter III.

**Art 260 Jewelry/ Metals Fabrication I**

Introduction to non-ferrous metals fabrication techniques as applied to jewelry making and metalsmithing. Learn to solder, saw and form metal, as well as basic stonemasonry techniques. Historical overview of the meaning and use of jeweled and metal objects and their relationship to various cultures. 3 hours. T O'Day. Offered fall semester.

**Art 265 Jewelry/Casting I**

Introduction to the lost wax casting process as applied to jewelry making and metalsmithing. Learn wax carving and mold-making procedures to produce models for casting. Historical overview of the meaning and use of jeweled and metal objects and their relationship to various cultures. 3 hours. T O'Day. Offered spring semester.

**Art 270 History of Western Art I:  
Paleolithic through  
Late Medieval**

This class covers the major monuments in art of western civilizations, beginning with the earliest paintings and sculptures of the Paleolithic period and continuing through the architecture, sculpture, and painting of the late Medieval period. Social, political, and cultural context for the art are a major focus. 3 hours. Wetherell.

**Art 271 History of Western Art II:  
Renaissance through  
Impressionism**

This class examines the development and proliferation of the arts from the proto-Renaissance in Italy in the 13th century and through the French Impressionists of the 19th century. Painting, sculpture, and architecture will be discussed in relation to style and how they reflect the social, political, economic, and religious values of the culture. 3 hours. Wetherell.

**Art 272 History of Western Art III:  
Post-Impressionism  
through Twentieth Century**

This course examines the development and diversity of art in the late 19th and 20th centuries. The pluralism of society and culture, and the development of science and technology are reflected in the variety of visual arts. The social, political, and technological context of the art is a major focus. 3 hours. Wetherell.

**Art 273 Art and Architecture  
of China**

This survey of the arts of China concentrates on painting, sculpture, metalwork, and ceramics from the Neolithic period through the 18th century. Major examples of architecture are also considered briefly. Emphasis is given to the development of Chinese landscape painting from the Tang dynasty up through the Qing period. The important philosophical and religious movements of Daoism, Confucianism, Buddhism and Chan (Zen) Buddhism are discussed in relation to Chinese art and society. Works of art are presented in their social and historical context so that students emerge with an appreciation for Chinese art and a general understanding of the culture of historical China as well. Meets cross-cultural core requirement. 3 hours. Wetherell.

**Art 274 Art and Architecture  
of Japan**

This class covers sculpture, painting, printmaking, ceramics, architecture, and landscape architecture from the Neolithic age through the great Ukiyo-e printmakers of the Edo period. The interrelationship of literature, philosophy, religion, and the arts is emphasized. Students emerge with an understanding of Japanese art in the cultural and historical context of Japanese society. Meets cross-cultural core requirement. 3 hours. Wetherell.

**Art 275 Art and Architecture  
of India**

This class surveys the sculpture, architecture, and painting of India, starting with the ancient Indus Valley civilization and Vedic period and ending with the art and architecture of the Shah Jahan era (mid 17th century). It covers indigenous art of the Buddhist and Hindu periods, and Indo-Islamic architecture and painting. A basic introduction to Buddhist, Hindu, and Islamic religion is included. Meets cross-cultural core requirement. 3 hours. Wetherell.

**Art 280 Women in Art**

This course is designed to explore the place of women in art. The course investigates both the image of women in art and women as artists. The class investigates how women have been portrayed in the art at different times and in different cultures. The goal of the class is to shine a light on material that has often been overlooked by the traditional art history canon. No prerequisites – Feminist Theory class desirable. Meets Feminist study minor requirement. 3 hours. Cheyne.

**Art 300 Art Education:  
Class and Practicum**

This class is designed to teach methods of art instruction to the prospective elementary school teacher. Topics covered are creativity, developmental levels, Discipline Based Art Education, state and national standards, and lesson plan creation. There are hands-on experiences with different art media. In addition, Pacific students have the opportunity to work with children ages 4-12 in an after-school Art Workshop. No prerequisite. 4 hours. Cheyne

**Art 310 Drawing II: Advanced Drawing**  
An advanced drawing class that challenges students to expand on the skills learned in Drawing I. Prerequisite: Art 110, Art 210 or consent of instructor. 3 hours. Shield/Cheyne/T O'Day.

**Art 317: Computer Graphics II: Advanced Image Design**  
Designed for the student to further explore the processes taught in 217. Portfolio will contain more advanced work. Prerequisite for 317: Art 217 or consent of instructor. O'Day, S.

**Art 318 Computer Graphics II: Advanced Illustration**  
Art 318 is designed for the student to further explore the processes taught in 218. Portfolio will contain more advanced work. Prerequisite: Art 218 or consent of instructor. O'Day, S.

**Art 320 Painting II : Oil/Acrylic.**  
Continuation of Art 220. Further study of the processes involved in painting using oil and acrylic colors and mediums. Emphasis on creation of original advanced works. Prerequisite: Art 220. 3 hours. Shield.

**Art 325 Sculpture II**  
Advanced concepts and techniques of sculpting are explored, including the expressive and structural elements of man-made form. Emphasis on the expressive potential to be found in sculpting. Prerequisite: Art 110, 210, or 225, or consent of the instructor. 3 hours. Shield.

**Art 326 Photography II**  
This course is intended for those students who have completed Photography I. The major emphasis is to give students a solid foundation for black and white photography. Film processing, printing, and darkroom use are a major part of the course. The course takes an artistic approach and is intended for Art majors and/or non-majors. Historical aspects of American photographers working in black and white are introduced. Prerequisite: Art 226. Offered Yearly. 3 hours. Flory.

**Art 330 Printmaking II: Advanced Relief and Silk-screen**  
This class involves the more advanced printmaking student in further exploring the processes taught in 230. It also challenges the students to explore their own artistic voice through the relief and silk-screen processes. Prerequisite: Art 230. 3 hours. Cheyne.

**Art 333 Printmaking II: Advanced Collagraph and Non-toxic Printmaking**  
This class challenges the advanced printmaking students to develop their own personal artistic voice in the mediums taught in 233. Prerequisite: 233. 3 hours. Cheyne.

**Art 335 Illustration II**  
Continuation of Art 235. Further development of illustration skills, and advanced techniques related to professional illustration. Student prepare a portfolio of illustrations related to their discipline. Prerequisite: Art 235. 3 hours. Shield.

**Art 338 Advanced Papermaking/Bookmaking**  
This course is designed to further explore the creation of handmade paper as an art form. Taking the basic skills learned in Art 238 the students will use the media of papermaking to express their own personal artistic voice. An extensive investigation into the artist book will also be a part of this class. The goal in offering this course is to have students become more sophisticated in their understanding of papermaking and book creation. 3 hours. Cheyne.

**Art 340 Ceramics II**  
Continued study of ceramic media with an emphasis on wheelworking techniques. Study of firing techniques, glaze application and formulation to further an understanding of how surface decoration can enhance form. Students are challenged to use this information to express their creativity. Prerequisite: Art 240 or consent of instructor. 3 hours. T O'Day. Offered spring semester.

**Art 350 Stained Glass II**  
This course is designed to encourage experimentation with glass through slump molds, fusion and three-dimensional construction application. Prerequisite: Art 250 or consent of instructor. 3 hours. T O'Day. Offered Winter III.

**Art 356 Color Photography**  
A comprehensive advanced course covering all aspects of color photography. From the technical aspects of film emulsions, exposure to the artistic potential of color, composition, light, and subject matter. Color transparency printing will be covered in the lab. Students will be encouraged to investigate their own emotional response to color. Prerequisite: Art 226, and 326. 3 hours. Flory.

**Art 360 Jewelry/  
Metals Fabrication II**

*Continued study of the techniques learned in Fabrication I with a more complex application of skills. The emphasis is on the use of acquired skills to produce objects that become a personal expression. Prerequisite: Fabrication I or consent of instructor. 3 hours. T O'Day. Offered fall semester.*

**Art 365 Jewelry/Casting II**

*A continuation of the study of the techniques learned in Casting I with a more complex application of skills. Emphasis on the use of learned techniques to produce objects that communicate a personal interpretation of the ideas and theory presented in class. 3 hours. T O'Day. Offered spring semester.*

**Art 426 Photography III**

*This upper-level course deals with several advanced areas of photography. Students will work with medium and large format cameras, studio lighting techniques for portraiture and still-life, and use Polaroid films in a variety of photography related activities. Prerequisite: Art 226 and Art 326. 3 hours. Flory.*

**Art 485 Individualized Study/  
Seminar**

*This course is designed for the advanced art student who wants to pursue intensive in-depth study developing a body of individualized projects in one area of art. Students study under an instructor's supervision, and in addition the student will be required to participate in Seminar. Seminar is designed to create an artistic community for the advanced art student. Prerequisite: Junior or Senior standing, art major or minor, or instructor consent. It is strongly recommended that all art majors take Art 485 in the fall of their senior year. 4 hours. Shield/Cheyne/T O'Day/Flory/Wetherell.*

**Art 495 Senior Show**

*This class is the capstone experience for art majors. It gives the senior art major an opportunity for concentrated study to prepare a body of art work to be displayed in a senior show. A portfolio to document that show will also be required. Each student will also present a thesis presentation on Senior Project Day. In addition, the student will be required to participate in Seminar, designed to create an artistic community for the advanced art student. 3 credits. Staff.*

## ATHLETICS

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The athletic program's primary purpose is to provide a wide range of athletic opportunities for students and members of the broader community. These opportunities include participation in physical conditioning, athletic competition and support or spectatorship at levels appropriate to the individual's own development and interests. The program is designed to complement the student's academic pursuits as co-curricular activities and enrich their overall experience at Pacific University.

In the spirit of the pursuit of excellence through the joy of sports, Pacific offers 16 intercollegiate sports, fielding men's and women's teams in basketball, cross country, golf, soccer, tennis, track and field. We offer men's teams in baseball and wrestling and women's teams in softball and volleyball. Club teams offered include handball and men's volleyball. Over one third of the undergraduate student body participates in sports at the intercollegiate level. Pacific is a member of the Northwest Conference, one of the best athletic conferences in the nation, and is affiliated with the NCAA Division III.

The Pacific Athletic complex, commonly referred to as "The PAC," is the home for athletic activities at Pacific. It is a newly remodeled and spacious athletic center which houses a gymnasium with three activity areas; a state of the art fitness center; a field house with an indoor softball/baseball facility including two batting cages, four volleyball courts, two basketball courts, two tennis courts, and an indoor walking track. There are three handball/racquetball courts, saunas, dance studio, and wrestling room. The sports medicine/training room is equipped with whirlpools, electric stimulation unit, ultra sound, hydroculturator, Cybex and other state of the art equipment.

The outdoor facilities include four tennis courts, practice soccer fields, and a soccer game field near the heart of campus. Baseball and softball

are played in Lincoln Park which is located adjacent to the Pacific Athletic Center.

Pacific's athletic programs have achieved excellence on and off the court or field of play. In the 1990's, Pacific teams won 11 conference championships, five district or regional titles, and participated in national championship competitions 23 times. Pacific's athletes also excel in the classroom, holding a combined grade point average of 3.15.

**Judy Sherman, M.Ed.,** *Athletic Director*

**Ken Schumann, M.Ed.,** *Associate Athletic Director*

**Jeff Grundon, B.S.,** *Assistant Athletic Director*

**Linda McIntosh, M.S., ATC-R,** *Head Athletic Trainer*

**Richard Rutt, Ph.D.,** *Athletic Trainer*

**Vicki McGee,** *Athletic Secretary*

**Jean Rix, M.Ed.,** *Assistant to the Athletic Director, Faculty Athletic Representative*

## INTERCOLLEGIATE PROGRAM

**Greg Bradley,** *Baseball Coach*

**Jim Brazeau,** *Men's Soccer Coach*

**Tim Copeland,** *Women's Soccer Coach*

**Frank Johnson,** *Wrestling Coach*

**Bradley Jones,** *Volleyball Coach*

**Melissa Jones,** *Softball Coach*

**LeeAnn Kriegh,** *Women's Basketball Coach*

**Jim Pyle,** *Director of Tennis*

**Ken Schumann,** *Men's Basketball Coach*

**Ron Tabb,** *Cross Country Coach and Track and Field Coach*

**Richard Warren,** *Golf Coach*

## CLUB SPORTS

**Jason Morgenthaler,** *Men's Volleyball*

**Dr. Mike Steele,** *Handball*

## INTRAMURAL SPORTS

Providing quality participatory experiences for the entire student body, the Intramural Program at Pacific offers several activities for men and women throughout the academic year. Flag football, volleyball and 3-on-3 basketball are offered in the fall, 5-on-5 basketball in the winter, and softball in the spring. Additional activities will be announced on a yearly basis.

## ACTIVITY COURSES

### **Hper 150 Activity Courses**

A number of aerobic and anaerobic activities are included under this heading and are announced each term in the class schedule. (e.g. Weight Training, Aerobics, Yoga, Tai Chi, Tai Kwon Do, Walking, Handball) Graded P/NP. 1 hour. May be repeated\*. Staff.

\*Only four activity courses may count toward the 124 credits required for graduation.

# BIOINFORMATICS

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Michelle Hribar, *Assistant Professor, Computer Science*

Douglas J. Ryan, *Professor, Computer Science*

Lisa M. Sardinia, *Associate Professor, Biology*

Jon Schnorr, *Assistant Professor, Biology*

Bioinformatics is the science of storing, extracting, organizing, analyzing, interpreting and utilizing information. The approaches to the discipline of bioinformatics incorporate expertise from the biological sciences, computer science and mathematics. The major in bioinformatics is designed for students interested in molecular biology and genetics, information technologies and computer science. Bioinformaticists are involved in the analysis of the human genome, identification of targets for drug discovery, development of new algorithms and analysis methods, the study of structural and functional relationships, and molecular evolution.

## GOALS FOR THE MAJOR

In successfully completing a major in Bioinformatics, students must demonstrate:

- knowledge and awareness of the basic principles and concepts of biology, computer science and mathematics.
- the ability to effectively apply existing software to extract information from large databases and use this information in computer modeling.
- problem solving skills, including the ability to develop new algorithms and analysis methods.
- understanding of the intersection of life and information sciences, the core of shared concepts, language and skills.
- the ability to speak the language of structure-function relationships, information theory, gene expression, and database query.

# MAJOR IN BIOINFORMATICS

## Requirements

Biol 202: General Biology I .....	4
Biol 204: General Biology II.....	4
Biol 304: Experimental Design, Analysis & Writing .....	4
Two of the following: .....	8
Biol 320: Cell Biology	
Biol 330: Genetics	
Biol 400: Molecular Biology	
Chem 220: General Chemistry I.....	4
Chem 230: General Chemistry II .....	4
Organic Chemistry .....	4-8
Chem 240/241: Survey of Organic Chemistry OR	
Chem 310/311 & 320/321 Organic Chemistry I & II	
Chem 380: Biochemistry .....	3
CS 150: Introduction to Computer Science I.....	4
CS 250: Introduction to Computer Science II .....	3
CS 300: Data Structures.....	3
CS 360: Databases .....	3
Math 207: General Elementary Statistics .....	3
Math 240: Discrete Mathematics .....	3
BINF 290: Introduction to Bioinformatics .....	1
BINF 490: Capstone Internship.....	3

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Students majoring in Bioinformatics are encouraged to take a course in ethics as part of their College core requirements.

## COURSE DESCRIPTIONS

### **BINF 290 Introduction to Bioinformatics**

*An introductory course for students interested in bioinformatics. This course provides a survey of the major issues in bioinformatics and the way these issues are being addressed by bioinformaticists. Faculty and outside speakers from industry and academia will make presentations and lead discussions. Prerequisites: Sophomore standing and Biol 202 with a "C-" or better or CS 150 with a "C-" or better.*

### **BINF 490 Capstone Internship**

*An internship consisting of a field experience in an industrial or academic setting. Application of theories is emphasized. Arrangements for the course must be completed at least two weeks prior to the term in which the course is taken. The internship is a capstone experience and must be taken during the senior year. Prerequisites: Instructor's consent, BINF 190, and completion of 16 hours of Biology and 10 hours of Computer Science (all with grades of "C-" or better). Graded P/N.*

# BIOLOGY

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Edmond Alkaslassy, *Assistant Professor*

Pamela T. Lopez, *Associate Professor and Thomas J. and Joyce Holce Professorship in Science*

Marlene Martinez, *Assistant Professor*

Lori Rynd, *Professor*

Lisa Sardinia, *Associate Professor*

Jon Schnorr, *Assistant Professor*

Robert E. Stockhouse II, *Distinguished University Professor*

The Biology Department provides unique educational experiences for students in biology and related fields. The faculty in the department has particular expertise in ecology, botany, molecular biology, genetics, physiology, developmental biology, anatomy, invertebrate zoology, vertebrate zoology, marine biology, animal behavior, immunology and microbiology. Field courses provide direct experience through field trips to Henry Blodgett Arboretum, Malheur Field Station, and other habitats throughout Oregon. Faculty have contacts at Oregon Health Sciences University and the Oregon Regional Primate Center and students can arrange to do laboratory research at those institutions.

The courses in biology are designed to provide the basic knowledge, skills, and training necessary for students who intend to pursue professional study in the health sciences, graduate study in biological sciences, or professional employment in some field of biology. All students will have independently designed research experiences in upper division classes designated by the symbol (R).

The Biology Department encourages students to obtain additional experience in the specialized area of their choice, through career internships or through independent research projects. Students also choose to complete one of three options: the Biology major, the Biology major with an emphasis in Ecology and Evolution, or the Biology major with an emphasis in Molecular and Cellular Biology.

The Biology Department sponsors the Omicron Xi Chapter of Beta Beta Beta, a national biological honor society, whose purpose is to promote student interest and participation in research. The Department also sponsors the Biology Club to promote student interest in biology and provide biology students with opportunities to socialize outside of class.

## GOALS FOR THE MAJOR

In successfully completing a major in biology, students must demonstrate:

- an understanding of the basic principles and concepts of biology
- an in-depth knowledge of three areas of biology:
  1. cell/molecular/genetics
  2. structure/function/systematics
  3. ecology/evolution/behavior
- the ability to think critically and synthesize information from a variety of different sources
- the ability to communicate effectively in the discipline both orally and in writing
- the ability to design and conduct biological research

**The Biology Department offers three options for a Biology major. While a student may take courses in any area of biology, students may only choose one option in the Biology Department.**

**Restrictions:** In order to receive a Biology degree from Pacific University a student must complete Biol 304 Experimental Design, Analysis & Writing; Biol 490 Senior Capstone Experience; and at least two additional upper-division Biology courses on campus. Students can not receive a degree in both Biology and Environmental Science with a Biology emphasis.

Though not a requirement for a Biology major, it is strongly recommended that Biology majors planning graduate work include a statistics course and independent research.

## MAJOR IN BIOLOGY

## Requirements

Biol 190	Biology Passport .....	1
Biol 202	General Biology I .....	4
Biol 204	General Biology II.....	4
Biol 304	Experimental Design, Analysis & Writing .....	4
Biol 490	Senior Capstone Experience .....	2
Biol	One upper division course from Group I.....	4
Biol	One upper division course from Group II .....	4
Biol	One upper division course from Group III.....	4
Biol	Two additional upper division Biology courses excluding Biol 490. Up to 5 hours of Biol 495 may be used toward elective hours. Up to 4 hours of Chem 380 or ES 301 may be used toward elective hours.....	7-8
Chem 220	General Chemistry I .....	4
Chem 230	General Chemistry II.....	4
Chem 240/241 (Or Chem 310/311 & 320/321) .....		4-8
CS 130	Introduction to Software Tools.....	2
<b>One of the following 2-course clusters: .... 7-8</b>		
CS 150	Introduction to Computer Science I	
CS 250	Introduction to Computer Science II OR	
Math 226	Calculus I	
Math 301	Mathematical Modeling OR	
Phy 202	Introduction to Physics I	
Phy 204	Introduction to Physics II OR	
Phy 232	General Physics I	
Phy 242	General Physics II	

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MAJOR IN BIOLOGY WITH AN  
EMPHASIS IN ECOLOGY  
AND EVOLUTION

## Requirements

Biol 190	Biology Passport .....	1
Biol 202	General Biology I .....	4
Biol 204	General Biology II.....	4
Biol 304	Experimental Design, Analysis & Writing .....	4
Biol 490	Senior Capstone Experience .....	2
Biol	One upper division course from Group I.....	4
Biol	Three upper division courses from Group II .....	12
Biol	One upper division course from:	
Biol 305	Ecology	
Biol 444	Evolution.....	3-4
Biol	One additional upper division course from Group III .....	4
Chem 220	General Chemistry I .....	4
Chem 230	General Chemistry II.....	4
Chem 240/241 (Or Chem 310/311 & 320/321) .....		4-8
CS 130	Introduction to Software Tools .....	2
<b>One of the following 2-course clusters: .... 7-8</b>		
CS 150	Introduction to Computer Science I	
CS 250	Introduction to Computer Science II OR	
Math 226	Calculus I	
Math 301	Mathematical Modeling OR	
Phy 202	Introduction to Physics I	
Phy 204	Introduction to Physics II OR	
Phy 232	General Physics I	
Phy 242	General Physics II	

59-65

Notes: 3-4 credits of Biol 495 with an approved project that focuses on Ecology and/or Evolution may be used to satisfy 3-4 credits of Groups II or III. It is strongly recommended that students take 3 courses with extensive field experiences (see designations within Groups).

## MAJOR IN BIOLOGY WITH AN EMPHASIS IN MOLECULAR AND CELLULAR BIOLOGY

### Requirements

Biol 190	Biology Passport .....	1
Biol 202	General Biology I .....	4
Biol 204	General Biology II.....	4
Biol 304	Experimental Design, Analysis & Writing .....	4
Biol 490	Senior Capstone Experience 2	
Biol: One upper division course from Group I.....		4
Biol: One upper division course from Group III.....		4
Biol: One upper division course from: ....		4
Biol 350: Principles of Development		
Biol 470: Animal Physiology		
Biol: Two additional upper division courses from: .....		7-8
Biol 308: Microbiology		
Biol 320: Cell Biology		
Biol 330: Genetics		
Biol 405: Immunology		
Biol 400: Molecular Biology		
Biol 480: Advanced Methods in Cell Biology		
Biol 495: Research (approved project)		
Chem 380: Biochemistry		
Chem 220: General Chemistry I.....		4
Chem 230: General Chemistry II .....		4
Chem 310/311: Organic Chemistry I .....		4
Chem 320/321: Organic Chemistry II.....		4
CS 130: Introduction to Software Tools ...		2

### One of the following

2-course clusters:..... 7-8

CS 150: Introduction to Computer Science I
CS 250: Introduction to Computer Science II
OR
Math 226: Calculus I
Math 301: Mathematical Modeling
OR
Phy 202: Introduction to Physics I
Phy 204: Introduction to Physics II
OR
Phy 232: General Physics I
Phy 242: General Physics II

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59 - 61 credits

Courses designated with (R) include an independent research experience.

Courses designated with (F) include extensive field experiences.

### Group I: Cell/Molecular/Genetics

Biol 308	Microbiology (R)
Biol 320	Cell Biology (R)
Biol 330	Genetics
Biol 405	Immunology
Biol 400	Molecular Biology

### Group II: Structure/Function/Systematics

Biol 316	General Botany
Biol 350	Principles of Development (R)
Biol 410	Invertebrate Zoology (F)
Biol 420	Vertebrate Zoology (F)
Biol 430	Plant Systematics (R) (F)
Biol 460	Comparative Vertebrate Anatomy
Biol 470	Animal Physiology

### Group III: Ecology/Evolution/Behavior

Biol 305	General Ecology (R) (F)
Biol 340	Animal Behavior (R) (F)
Biol 345	Marine Biology (R) (F)
Biol 444	Evolution
Biol 450	Tropical Rainforest Biology (R) (F)

## MINOR IN BIOLOGY

### Requirements

Biol 202	General Biology I .....	4
Biol 204	General Biology II.....	4
Biol 304	Experimental Design, Analysis and Writing .....	4
Chem 220	General Chemistry I .....	4
Chem 230	General Chemistry II.....	4
Biology electives:	.....	7-8
Two additional upper-division Biology classes excluding Biol 490 and 495.		

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27-28

**Restrictions:** In order to receive a Biology minor from Pacific University a student must complete Biol 304 Experimental Design, Analysis and Writing and two additional upper-division Biology courses on campus.

Any student interested in a Biology minor should consult with a faculty member in the Biology Department.

## COURSE DESCRIPTIONS

### Biology (Biol)

Courses designated with the symbol R include an independent research experience. Courses designated with the symbol F include extensive field experiences.

#### **Biol 105**     **Biology is Life**

*This course provides non-science majors with an introduction to four fundamental aspects of biology: the scientific method, genetics, evolution, and environmental issues. There are no prerequisites. (Does not count toward a Biology major or minor.) 3 hours. Staff.*

#### **Biol 110**     **Human Biology**

*An introduction to basic anatomy and physiology of the human organism. This course is designed for non-science majors. Laboratory is integrated with lecture. There are no prerequisites. (Students cannot receive credit for Biol 110 and any combination of Biol 224, 240, 300 or 302.) (Does not count toward Biology major or minor.) 4 hours. Staff.*

#### **Biol 115**     **Microbiology for Nonscience Majors**

*An introductory biology course to meet the Natural Science core requirement. This course stresses the history of microbiology and the diversity within the microbial world. It includes some aspects of medical, ecological and industrial microbiology. (Does not count toward Biology major or minor.) 3 hours. Staff.*

#### **Biol 145**     **Marine Biology for Nonscience Majors**

*This course is designed to acquaint students with the spectrum of marine organisms inhabiting the littoral waters of the coast. Organismal adaptations and interactions of organisms with the environment are stressed. Some weekend field trips required. Additional fee required. (Does not count toward Biology major or minor.) 3 hours. Martinez.*

#### **Biol 170**     **Human Genetics**

*This course introduces students to the study of inheritance in all of its manifestations, from the distribution of human traits in a family pedigree to the biochemistry of the genetic material in our chromosomes, DNA. The course examines the inheritance of traits in individuals and families, how traits evolve and are maintained in human populations, the molecular basis for those traits, and the Human Genome Project. (Does not count toward Biology major or minor). 3 hours. Sardinia.*

#### **Biol 180**     **Biology of Human Reproduction**

*A study of the biology of human reproduction, designed primarily for the non-science major. This course emphasizes the anatomy, development and physiology of human reproduction. Some aspects of psychology and sociology are introduced as they relate to birth control, venereal disease, and control of reproduction. (Does not count toward Biology major or minor.) 3 hours. Rynd.*

#### **Biol 190**     **Biology Passport**

*An introductory course for students interested in the biological sciences as a major or minor. Activities and faculty/guest speakers will introduce students to the biology program at Pacific University and to the diversity of possible biological careers. Open only to freshmen. 1 hour. Staff.*

**Biol 202      General Biology I**

A survey of ecology, evolution, the diversity of life on earth, and the structure of plants and animals. Laboratory is integrated with lecture. (NOTE: there are no prerequisites for this course. However, Biol 204 has prerequisites of Chem 220, Chem 230, and Biol 202 – all with grades of “C-” or better.) 4 hours. Staff.

**Biol 204      General Biology II**

Basic principles of cell and molecular biology for both prokaryotes and eukaryotes. The course includes cell structures and functions, metabolism, classical genetics, and molecular genetics. Laboratory experiences are integrated in the course. Prerequisite: Biol 202, Chem 220, and Chem 230 – all with grades of “C-” or better. 4 hours. Staff.

**Biol 224      Human Anatomy**

An examination of gross and histological structure of the systems of the human body. Laboratory is an integrated part of the course. (Students cannot receive credit for both Biol 110 Human Biology and Biol 224 Human Anatomy.) Prerequisite: Biol 202 (with a grade of “C-” or better.) 4 hours. Alkaslassy.

**Biol 240      Human Physiology**

A study of the physiological phenomena of the human body from the molecular level of cellular metabolic functions to the operation of primary and specialized organ systems. Laboratory experiences are integrated in the course. (Students can not receive credit for both Biol 110 Human Biology and Biol 240 Human Physiology.) Prerequisite: Biol 224 (with a grade of “C-” or better). 4 hours. Staff.

**Biol 304      Experimental Design,  
Analysis, and Writing (R)**

This course utilizes a hands-on, application-oriented approach to enhance student understanding of: framing scientific questions based on primary scientific literature; designing appropriate experiments; analyzing data statistically and graphically; writing technical reports; and presenting seminars. Course culminates in a student proposed, designed, and conducted independent research project. Prerequisite: Biol 204 (with a grade of “C-” or better). 4 hours. Staff.

**Biol 305      Ecology (R)(F)**

An introduction to the basic principles and fundamentals influencing interactions between plants and animals and their environment. Includes laboratory and field experiences. Includes a required four day field trip to Malheur National Wildlife Refuge. Additional fee required. Prerequisite: Biol 304 (with a grade of “C-” or better). 4 hours. Stockhouse. (G)

**Biol 308      Microbiology (R)**

A survey of microorganisms with emphasis on bacterial and viral forms. Basic concepts in micro structure, physiology, genetics and classification will be covered. Laboratory involves the development of techniques specific to the area of microbiology as well as morphological and biochemical analysis of bacterial species. Prerequisite: Biol 304 (with a grade of “C-” or better). 4 hours. Sardinia.

**Biol 316      General Botany (R)**

Fundamental principles of plant biology with emphasis on morphology, anatomy, taxonomy, physiology and evolution of algae, fungi, non-vascular and vascular plants. Includes laboratory and field experiences. Prerequisite: Biol 304 (with a grade of “C-” or better). 4 hours. Stockhouse. (G)

**Biol 320      Cell Biology (R)**

A study of the functions of biological systems from the molecular to the tissue level. The molecular biology of cells and the regulatory mechanisms for physiological processes are emphasized. Laboratory experiences are integrated in the course. Prerequisite: Biol 304 and organic chemistry (Chem 240/241 or Chem 320/321) all with grades of “C-” or better. 4 hours. Rynd. (G)

**Biol 330      Genetics**

A study of the principles of heredity with emphasis upon transmission genetics, quantitative inheritance, the molecular basis of inheritance, and population genetics. Laboratory experiences are integrated in the course. Prerequisite: Biol 304 (with a grade of “C-” or better). 4 hours. Staff. (G)

**Biol 340 Animal Behavior (R)(F)**

A study of the ecology and evolution of animal behavior, including such topics as foraging strategies, predator-prey interactions, mating systems, sexual selection and communication. Mechanisms of animal behavior (such as endocrinology, genetics and neurobiology) are also discussed. Includes laboratory and field experiences which are integrated into the course. Prerequisite: Biol 304 (with a grade of "C-" or better). 4 hours. Lopez. (G)

**Biol 345 Marine Biology (R) (F)**

This course is designed to acquaint students with the spectrum of marine organisms inhabiting the littoral waters of the coast. Organismal adaptations and interactions of organisms with the environment are stressed, with field trips to the marine intertidal zones. Some weekend field trips required. Laboratory experiences are integrated in the course. Additional fee required. Prerequisite: Biol 304 (with a grade of "C-" or better). 4 hours. Martinez.

**Biol 350 Principles of Development (R)**

A study of molecular and cellular aspects of development and embryological differentiation of selected species. Laboratory experiences are integrated in the course. Prerequisite: Biol 304 (with a grade of "C-" or better). 4 hours. Rynd. (G)

**Biol 400 Molecular Biology**

A laboratory-intensive course focusing on nucleic acid biology, recombinant DNA and biotechnology. Prerequisite: Biol 304 and organic chemistry (Chem 240/241 or Chem 320/321) – all with grades of "C-" or better. 4 hours. Sardinia. (G)

**Biol 405 Immunology**

A study of the mammalian immune system covering the molecules and mechanisms used to fight infection. The development of B and T cells and their role in the human immune response will be emphasized. The relationship of the immune system to human biology will also be covered, for example, infectious disease, vaccines, allergies, and autoimmune disorders. The laboratory exercises will focus on immunological concepts and techniques including immunofluorescence and Western blotting. Prerequisite: Biol 304 (with a grade of "C-" or better). 4 hours. Schnorr

**Biol 410 Invertebrate Zoology (F)**

A study of invertebrate organisms including their systematics, morphology and ecology. Laboratory experiences are integrated in the course. Some weekend field trips required. Additional fee required. Prerequisite: Biol 304 (with a grade of "C-" or better). 4 hours. Martinez. (G)

**Biol 420 Vertebrate Zoology (F)**

A study of vertebrate organisms, including their systematics, life histories, morphological and physiological adaptations, and behavior. Includes laboratory and field experiences with a four day required field trip to Malheur National Wildlife Refuge. Additional fee required. Prerequisite: Biol 304 (with a grade of "C-" or better). 4 hours. Lopez. (G)

**Biol 430 Plant Systematics (R) (F)**

Identification and classification of the vascular plants represented in the flora of the Pacific Northwest. Includes laboratory and field experiences. Some weekend field trips required. Additional fee required. Prerequisite: Biol 304 (with a grade of "C-" or better). 4 hours. Stockhouse. (G)

**Biol 444 Evolution**

An introduction to the history, methods, and current questions in evolutionary biology. This course will examine the evidence for evolution beginning with Darwin and ending with our current understanding of the human genome. The course will cover the theory of natural selection, the basis of heredity and variation, population structures and genetics, and the mechanisms of speciation. Special topics include human evolution, molecular evolution, and the relationship of evolution to society, philosophy and religion. Prerequisite: Biol 304 (with a grade of "C-" or better). 3 hours. Schnorr

**Biol 450 Tropical Rainforest Biology (R) (F)**

A study of tropical rainforest ecology and natural history, and current biological research in tropical rainforests. The course meets once a week during the fall semester, during which students gain the background required for the field component of the course held in Costa Rica during January. Course grades will be assigned at the end of January and will include work completed during both terms. Additional fee required. Prerequisite: Biol 304 (with a grade of "C-" or better) and consent of instructor. Alternate years. 4 hours. Lopez/Alkaslassy.

**Biol 460 Comparative Vertebrate Anatomy**

A comparative study of the functional anatomy of the vertebrates, including their skin, skeleton, muscles, digestive systems, respiratory systems, circulatory systems, urogenital systems, nervous systems, sensory systems and endocrine systems. In lab, students will dissect and conduct experiments on a variety of vertebrates, which may include the dogfish shark, the mudpuppy, the bullfrog, the pigeon and the cat. Prerequisite: Biol 304 (with a grade of "C-" or better). 4 hours. Staff. (G)

**Biol 470 Animal Physiology (R)**

The study of physiological function (molecular, cellular, and organ systems) in animals. The focus will be on the diversity of mechanisms used by animals for : water and solute regulation, gas exchange and transport, temperature regulation and tolerance, circulation, feeding and digestion, metabolism, excretion, neural control and integration, senses, and locomotion. Laboratory experiences are integrated in the course. Prerequisite: Biol 304 and organic chemistry (Chem 240/241 or Chem 320/321) – all with grades of "C-" or better. 4 hours. Gundersen. (G)

**Biol 480 Advanced Methods in Cell Biology (R)**

This course is a laboratory course designed to introduce the student to a variety of cellular and biochemical techniques for investigating the behavior and function of living cells. Students will be required to understand the concepts of the techniques used, as well as to demonstrate hands-on competence in the laboratory. This course is strongly recommended for those students interested in undergraduate research projects, graduate school, or employment as a laboratory technician. Prerequisite: grade of "C-" or better in Biol 308, Biol 320 or Biol 400. Junior standing recommended. 3 credits. Staff. (G)

**Biol 490 Senior Capstone Experience**

Designed to allow students to expand on research projects from upper-division biology courses by more thoroughly examining the primary literature, reanalyzing data, writing an annotated bibliography, and presenting in a public forum. Prerequisite: Senior standing and an approved data set. 2 hours. Staff.

**Biol 495 Research**

Faculty supervised, student-conducted, individual research project. Prerequisite: Biol 304 (with a grade of "C-" or better) and consent of instructor. 1-6 hours. (G)

# BUSINESS AND ECONOMICS

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**Charles O'Connor**, *Chair, Professor of Accounting/Finance*

**Michelle Baron**, *Assistant Professor of Business Administration*

**Jamie R. Haag**, *Assistant Professor of Economics*

**Philip J. Ruder**, *Associate Professor of Economics*

**John Suroviak**, *Associate Professor of Accounting/Finance*

A major within the Department of Business and Economics is designed to prepare students to enter business or government as a beginning professional or to enter a graduate program in business administration or in economics. The department attempts to develop a broadly educated individual who is flexible, well versed in problem-solving methods, and responsive to the pressures and challenges of the modern world.

The department offers a major in business administration and a major in economics. Students majoring in business have the option of taking a concentration in accounting/finance.

The major students will plan electives in consultation with their advisor in order to improve skills in speech and writing, develop the strongest possible background in their area of interest, and achieve a well-rounded liberal arts education. Off-campus internships are available for responsible students who have identified specific career goals. The off-campus experience is intended to provide an opportunity for the student to be involved in the practical application of classroom concepts. Generally internships are not available until the second semester of the junior year. Normally, students are required to obtain an overall grade point average of 3.0 or higher to be eligible for an internship.

## GOALS FOR BUSINESS AND ECONOMICS MAJORS

A successful graduate of the department will be able to:

- read and understand standard textbooks and general publications covering topics in business and economics.
- write essays, short papers or major research papers in a clear and concise fashion with emphasis on content, style, and analytical ability.
- organize and present ideas and information orally in small group settings, and as a sole presenter.
- use data and statistics in order to understand and analyze relevant problems.
- use contemporary information technology effectively including the library, the internet, and computer software applications.
- design and carry out independent and collaborative projects.

## MAJOR IN BUSINESS ADMINISTRATION

The Business and Economics Department offers a major in Business Administration with the option of concentrating in accounting/finance. Each major in Business Administration must complete at least 43 hours (of which 18 hours of upper level courses must be taken at Pacific) in departmental courses and 6 hours in statistics and computer science. A minimum 2.0 grade point average is required in all business and economics courses; only grades "C-" or above may be used to satisfy department requirements, including Math 207 and CS120. Normally, majors are required to complete satisfactorily BA 203, 204, Econ 101, 102, Math 207 and CS120 prior to taking any of the upper division major requirements. The department chair must approve exceptions to this rule. Students who are planning to attend graduate school are encouraged to take a year of calculus. Students planning a career as a Certified Public Accountant must complete 150 semester hours of college course work, which is the equivalent of five years of college, prior to taking the CPA exam.

**Core Requirements**

Econ 101	Principles of Macroeconomics .....	3
Econ 102	Principles of Microeconomics .....	3
Econ 300+	Upper-division economics elective.....	3
BA 203	The Accounting Process and MS Excel .....	1
BA 204	Accounting Principles.....	4
BA 303	Advanced MS Excel and MS Access .....	1
BA 305	Business Finance .....	3
BA 309	Marketing .....	3
BA 340	Quantitative Analysis for Business Decisions OR .....	3/4
BA 350	Operations Management	
BA 360	Organizational Behavior....	4
Math 207	General Elementary Statistics .....	3
CS 120	The Information Era .....	3
		34/35

**Areas of Interest**

Many career-oriented areas of focus within the business major are possible. Each student works with an academic advisor in the department to design the major that best fits the interests of the student.

Students with an interest in accounting or finance will likely pursue a concentration in this area. The business majors without a concentration can design a program tailored to prepare them for careers in areas such as international business, marketing, production and services management, human resources management, or management of technology and information systems.

Each student intending to major in business will work with an advisor in the department to develop a plan of study that meets the standards of the department while preparing the student for the career of choice. The upper-division elective requirements of the major will generally be met by study within the business and economics department;

however, a course from another area of the college may be included in the degree plan when such a course supports the students' major focus. An internship that is closely integrated with a student's major focus might satisfy some of the elective credit for the major in business.

**MAJOR WITH NO CONCENTRATION**

**Business Administration Core Requirements 34/35**

BA 405	Business Policy.....	4
Electives	Approved by the department .....	12
		50/51

**MAJOR WITH CONCENTRATION  
IN ACCOUNTING/FINANCE**

**Business Administration Requirement 34/35**

BA 313	Intermediate Accounting...3	
BA 357	Income Tax Accounting .....3	
BA 435	Seminar in Accounting and Finance .....	3
Electives	Approved by the department .....	6
		49/50

**MINOR IN BUSINESS  
ADMINISTRATION**

The Business and Economics Department offers a minor in Business Administration which requires completion of 22 hours of departmental courses. A minimum 2.0 grade point average is required. Any student interested in a Business Administration minor should consult with a faculty member in the Business and Economics Department.

**Requirements**

Econ 101	Principles of Macroeconomics .....	3
Econ 102	Principles of Microeconomics .....	3
BA 203	The Accounting Process and MS Excel .....	1
BA 204	Accounting Principles.....	4
BA 303	Advanced MS Excel and MS Access.....	1
BA 305	Business Finance .....	3
BA 360	Organizational Behavior....	4
BA 300+	Business Administrative Elective .....	22

**MAJOR IN ECONOMICS**

The major in economics requires completion of 30 hours in economics courses, 5 hours in accounting, 3 hours in statistics and 2-3 hours in computer science. Principles of Microeconomics and Macroeconomics are the basic prerequisites for all department courses. Elementary Statistics, Math 207, must be completed prior to enrolling in Econometrics, Econ 321. Pre-Calculus, Math 125, is a prerequisite for Microeconomic Theory, Econ 327. A minimum 2.0 grade point average is required in all major courses; only grades "C-" or above may be used to satisfy department requirements, including Math 207.

The department advises that students intending to do graduate work in economics should complete the calculus sequence and other selected math courses.

**Requirements**

Econ 101	Principles of Macroeconomics .....	3
Econ 102	Principles of Microeconomics .....	3
B.A. 203	The Accounting Process and MS Excel .....	1
B.A. 204	Accounting Principles.....	4
Mat 207	General Elementary Statistics .....	3
Econ 321	Introduction to Econometrics .....	3
Econ 327	Microeconomic Theory .....	3
Econ 328	Macroeconomic Theory .....	3
Econ 300+	Economics Electives .....	15
One of the following .....		2-3
CS 120	The Information Era	
CS 130	Introduction to Software Tools	
CS 230	Introduction to Advanced Software Tools	

40-41

*Note: One of the electives may be selected from outside economics with departmental approval.*

**MINOR IN ECONOMICS**

The Business and Economics Department offers a minor in Economics that requires completion of 18 hours of departmental courses including 9 hours of electives. A minimum 2.0 grade point average is required. Any student interested in an Economics minor should consult with a faculty member in the Business and Economics Department.

**Requirements**

Econ 101	Principles of Macroeconomics.....	3
Econ 102	Principles of Microeconomics .....	3
Econ 327	Microeconomic Theory .....	3
Econ 328	Macroeconomic Theory .....	3
Econ 300+	Economics Electives .....	9

21

## COURSE DESCRIPTIONS

### Economics

#### **Econ 101 Principles of Macroeconomics**

An introduction to the U.S. economic system with emphasis on understanding the forces that cause economic problems and the policies that can be used to solve them. The causes and effects of inflation and unemployment, the role of money and banks in the economy and the causes and consequences of economic growth. No prerequisites. 3 hours.

#### **Econ 102 Principles of Microeconomics**

An introduction to the economics of choice in a private enterprise economy. How individuals and firms make decisions in a world of scarce resources. The limitations of the market in dealing with problems such as pollution, monopoly power, and income distribution. The role of government in correcting market failure. An examination of the international economy including balance of payments and exchange rates. No prerequisites. 3 hours.

#### **Econ 180 Contemporary Economic Problems**

Seminar in current economic conditions and problems, analysis of economic policies and practices affecting such problems; contribution of the social sciences toward understanding and providing solutions to such problems. Prerequisites: Econ 101, or 102. 1-3 hours. This course may be graded Pass/No Pass at the discretion of the instructor.

#### **Econ 321 Introduction to Econometrics**

Statistical techniques used in measurement of relationships among economic variables, emphasizing practical applications; estimation of econometric models, prediction, and hypothesis-testing; extensive use of computer. Prerequisites: Econ 101 and 102, Math 207. 3 hours.

#### **Econ 327 Microeconomic Theory**

Principles of price and resource allocation theory in a decentralized economy; theory of consumer choice; price determination under different market situations; effects on economic efficiency. Prerequisites: Econ 101 and 102, and Math 125. 3 hours.

#### **Econ 328 Macroeconomic Theory**

The economics of national income and employment. An analysis of measures of national income and the factors determining levels of income and employment. Prerequisites: Econ 101 and 102. 3 hours.

#### **Econ 329 International Economics**

The economic analysis of the determinants of the international exchange of goods, services and financial assets. International trade topics include the effect of trade policy on national income level and distribution. International finance topics will include the balance of payments, foreign exchange rate regimes, and the flow of foreign investment. Special attention will be paid to examples relevant to U.S.-Europe, and North-South economic relations. Prerequisites: Econ 101 and 102. 4 hours.

#### **Econ 330 Industry Studies**

An applied field of economics that deals with the problems of explaining the behavior of markets for goods and services. The emphasis is upon the market structure, conduct, and performance of selected industries, the problems of ownership and control, competitive behavior and pricing policy, technology and obsolescence, entry and size; the implications of trade practices for public policy. Prerequisites: Econ 101 and Econ 102. 3 hours.

#### **Econ 331 Money and Banking**

Analysis of the nature and functions of money and effects of changes in the money supply; operation of commercial banks, the Federal Reserve System, and the Treasury that affect the United States' monetary system; monetary theory; critique of various monetary policies. Prerequisites: Econ 101 and 102. 3 hours.

#### **Econ 333 Environmental Economics**

Environmental economics studies the role of environmental amenities such as clean air and clear water in the economic system. The course analyzes the problems of market outcomes when such amenities are not priced. The problems associated with estimating economic costs and benefits are also carefully examined. Throughout the course, the connection between economic understanding and improved public policy is emphasized. The course will include a lab section which will be devoted in large measure to experiences in the field.

**Econ 340 The Asian Economies**

An examination of the performance of the East and Southeast Asian economies, addressing problems associated with economic growth, state intervention, industrialization, agricultural development, trade, and foreign investment; recent economic reforms in China; rise of the newly-industrializing countries; transferability of the Japanese experience to other economies; impact of the Asian economies on the United States. Prerequisites: Econ 101 or 102. 3 hours. Meets cross cultural requirement.

**Econ 490 Senior Research Seminar**

This seminar enables each student to apply the concepts and tools of economic analysis in the exploration of current policy issues, and to undertake a research project on a topic of particular interest. Normally students will have at least a 3.3 GPA to be eligible for the seminar. Emphasis will be placed on student-led discussion, with active participation of faculty members. Prerequisites: Senior standing in Economics and consent of instructor. 3 hours.

**Econ 495 Independent Research**

Student-conducted individual research/theoretical project. Faculty supervised.

**ACCOUNTING AND FINANCE****BA 203 The Accounting Process and Basic Excel**

Detailed coverage of the accounting cycle and introduction to MS Excel. The Excel part of the course will focus on solving accounting and finance problems using Excel. Corequisite: BA 204. 1 hour.

**BA 204 Accounting Principles**

Introduction to accounting concepts and application of these concepts; financial statement preparation; accounting systems and controls; accounting for assets and liabilities; partnerships and corporations; cash flow analysis and financial statement analysis; cost terminology, behavior and systems design; the planning and control process; using cost data in decision making. Prerequisite: Sophomore standing. Corequisite: BA203. 4 hours.

**BA 303 Advanced MS Excel and Basic MS Access**

Advanced MS Excel applications in accounting and finance to make students proficient as they enter the business world. An introduction to MS Access to familiarize students with electronic databases. Corequisite: BA 305. 1 hour.

**BA 305 Business Finance**

A study of the financial principles applicable to the business organization. Financial management of assets and the need for funds, sources and cost of obtaining short-term and long-term funds, capital budgeting. Prerequisite: BA204. Corequisite: BA303. 3 hours.

**BA 313-314 Intermediate Accounting**

Financial accounting statement interpretation, presentation, and disclosure including coverage of functions and basic theory; asset recognition and measurement; liability recognition and measurement; stockholders' equity, dilutive securities, and investments; issues related to income measurement; and preparation and interpretation of financial statements. Prerequisites: BA204. BA 313 is a prerequisite to BA 314. 3 hours per semester.

**BA 316 Cost Accounting**

Discussion of the nature, objectives and procedures of cost accounting and cost control; job costing and process costing; theory and practice of accounting for manufacturing overhead; cost budgeting and control; cost reports, joint product and by-product costing; distribution costs; standard costs; differential cost analysis; profit volume relationships and break-even analysis. Prerequisite: BA204. 3 hours.

**BA 334 Real Estate Principles**

An introductory course in real estate. The following areas are emphasized: the real estate industry and the economy; real estate brokerage; real estate finance; real property appraising; title examination, title insurance and closing; land-use planning and zoning. Prerequisite: junior standing. 3 hours.

**BA 352 Investments**

To gain an understanding of investing in marketable securities. To develop a vocabulary and knowledge of types of securities including common stocks, bonds and other types of investments. To understand and use fundamental and technical security analysis. To incorporate current financial events with reading materials and projects. Prerequisites: BA204, junior standing. 3 hours.

**BA 357      Income Tax Accounting**

A study of the structure of federal tax laws and some of the motivating forces and policies shaping tax laws and concepts; determination of taxable income and the income tax liability as they relate to individuals; overview of the taxation of corporations and other entities; and an overview of Oregon income tax laws. Prerequisites: BA204 and junior standing. 3 hours.

**BA 415      Auditing**

Studies both the theory and practice of auditing through the consideration of the auditing environment, standards, ethics, and liability and consideration of internal control techniques, audit evidence and working paper techniques, and methods of auditing procedures and types of reports. Prerequisites: BA 313, Math 207. 3 hours.

**BA 425      Advanced Accounting**

Accounting for corporate business combinations using both the pooling of interests method and the purchase method, preparation of consolidated financial statements, and accounting for foreign operations. Prerequisites: BA 314. 3 hours

**BA 430      Financial Accounting Topics**

Coverage of financial accounting topics not covered in BA 313-314 and BA 425. Topics will vary; however, the course will focus on current financial accounting topics and will require students to solve accounting and business cases. Prerequisite: BA 313. 3 hours.

**BA 435 - Seminar in Accounting and Finance**

A capstone, discussion-based course for accounting/finance concentration that uses cases to explore realistic accounting and finance issues. Students will be faced with unstructured problems and be required to provide analyses and recommendations. Prerequisite: BA313, BA357, and Senior standing. 3 hours.

**MANAGEMENT AND ADMINISTRATION (B.A.)****BA 302      Small Business Management**

Development of the students' understanding of the economic and social environment in which small businesses function. The processes involved in initiating new ventures are discussed. The course focuses on the areas of marketing and financial management and the legal and governmental relations of the small firm. A detailed treatment of the problems involved in managing specific fields of small business such as a retail store, a franchise, a service firm, and a production plant. Prerequisite: junior standing. 3 hours.

**BA 306      Business Law**

Introduction to the structure and functions of the American legal system followed by an overview of specific topics that are applicable to business. Topics include: contracts, sales, negotiable instruments, bankruptcy, suretyship, agency, partnerships, corporations, federal securities law, accountants, legal liability, employer and employee relationships, property, trusts and estates. Prerequisite: junior standing. 3 hours.

**BA 312      International Business**

Survey course covering recent and important issues in international business, trade and investment. Topics might include the International Business environment, the government and regulatory environment, international comparative environments, international monetary environment, international marketing, international finance, management strategies, and the future of international business. Prerequisites: Econ 101, Econ 102, B. A. 300. B.A. 309. 3 hours.

**BA 320      Human Resource Management**

Functions of the personnel department in a business organization. Contributions of research in the social sciences to personnel administration. Operation and techniques of a personnel department including job evaluation, employee recruiting and selection, psychological testing, employment counseling, wage administration, labor management relations and other personnel programs. Prerequisite: junior standing. 3 hours.

**BA340 Quantitative Analysis for Business Decisions**

An introduction to formalized methods used in managerial decision making and problem solving. The focus is on the development and use of decision models in a range of managerial applications. Techniques include decision analysis, linear programming, simulation, forecasting and project management. Development of computer-based decision models will be an integral part of the course. Prerequisite: junior standing. 4 hours.

**BA 350 Operations Management**

Study of key concepts, quantitative techniques, and practices used in the management of the production of goods and services. Includes examination of product and process design, process analysis, total quality management, project management, materials management, capacity planning, work design, facility layout and operational scheduling. Prerequisites: Econ 101 and 102, junior standing. 3 hours.

**BA 351 Services Management**

An exploration of key concepts and strategies for effectively managing service operations. Involves the study and application of appropriate frameworks, practices, and analysis tools for designing, evaluating, managing, and improving service operations. A multidisciplinary approach to understanding services is adopted. 3 hours.

**BA 360 Organizational Behavior and Management**

An introduction to the functions of management and to the theory of human behavior in organizations. Management history, attitudes, skills, and managerial processes as well as an investigation of the theories of human behavior, motivation, communication, decision making, group and social processes, organizational culture, power, and leadership are addressed. Prerequisite: junior standing. 4 hours.

**BA 405 Business Policy**

This course serves as a capstone course for students of business administration without an accounting/finance concentration. It demands the integration of knowledge from all functional area business disciplines to make effective strategic decisions from an organization-wide perspective. The case study method of teaching combined with the dynamic application of course tools to real and simulated business situations are used. Prerequisite: BA 305, B.A. 309, BA360 and senior standing. 3 hours.

**MARKETING****BA 309 Marketing**

Introduction to marketing concepts and application of these concepts to the marketing of products, services, ideas, organizations, and people in both profit-oriented and nonprofit business environments. Topics include: marketing's role in society and within the firm; environmental evaluation; consumer buying behavior; market segmentation and target market selection; management of marketing mix variables (product, price, placement, promotion). Students gain experience in problem solving and communication through case analyses and presentations. Prerequisites: Econ 101 and 102 and junior standing. 3 hours.

**BA 333 Consumer Behavior**

Identification and analysis of environmental and individual factors which influence behavior in the consumer market, emphasizing consumer decision processes and market responses. Course includes case analysis, presentation, and individual semester projects. Prerequisite: B.A. 309

**BA 410 Marketing Research**

Application of research techniques and statistical analysis to the consumer market through case analyses and individual research project. Each student works with a local business to design research, administer survey, conduct appropriate statistical analysis, and present findings (with operational recommendations) to management. Prerequisites: Math 207, B.A. 309, senior standing. 3 hours.

**BA 443 Special Topics in Marketing**

A course focusing on topics of special interest to students and faculty, such as Services Marketing, Internet Marketing, Public Policy and Marketing, and Sports Marketing. Prerequisites: B.A. 309, junior standing. 3 hours.

# CHEMISTRY

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**Richard V. Whiteley, Jr.,** *Professor and Chair*

**James O. Currie, Jr.,** *Distinguished University Professor*

**Kevin E. Johnson,** *Associate Professor*

**William T. Jordan,** *Professor*

**Jere M. Marrs,** *Visiting Professor*

**Jodi M. Paar,** *Assistant Professor*

Chemistry plays a central role in the sciences because the goal of chemical study is understanding natural processes on an atomic and molecular level. Thus, chemistry majors should experience the excitement of relating molecular properties to the order they observe in nature. Our challenge is to emphasize the connections between the molecular level structure and properties and the behavior of macroscopic matter. Majors should be prepared for immediate industrial employment, for entry into programs of professional study such as medicine or engineering, or for graduate study in chemistry or a related field. This mission suggests the following outcomes for our educational process. At the end of their studies, graduating majors should:

- have a working knowledge of the basic areas of chemistry (inorganic, organic, physical, and analytical chemistry). A working knowledge is demonstrated by understanding the language of chemistry and the ability to apply formal knowledge in a problem-solving environment.
- understand the relationships between microscopic structure and macroscopic properties, energy relationships, chemical and physical transformations, acid-base theory, and solution chemistry and be proficient in basic laboratory skills (e.g., preparing solutions, chemical and instrumental analysis, laboratory safety).
- have an understanding of principles and applications of modern instrumentation, computation, experimental design, and data analysis.

- have the ability to formulate and carry out strategies for solving scientific problems.
- develop experience working with others as part of a team to solve scientific problems.
- develop good scientific communication including writing, oral communication and presentation skills and the ability to access, read, understand and use scientific literature.
- have had the opportunity to gain experience with an individual research project within the university or in another appropriate setting.

## MAJOR IN CHEMISTRY

### Requirements

Chem 220-230	General Chemistry I-II..8
Chem 310-311	Organic Chemistry I.....4
Chem 320-321	Organic Chemistry II .....4
Chem 340-341	Quantitative Analysis ...4
Chem 410-411	Thermodynamics and Kinetics.....4
Chem 430	Advanced Inorganic Chemistry .....3
Chem 485	Seminar .....1
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	28

Math 226-227    Calculus I-II.....8  
(Math 228 strongly recommended)

**Physics – One year with laboratory**  
(Phys 232-242 recommended) .....8

At least one of the following emphases must be fulfilled:

### Chemistry

Biol 202 & 204    General Biology I-II.....8  
Two upper-division chemistry electives (with lab if available, except Chem 385)..... 6-8

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58-60

**Note:** For students planning to work as chemists or attend graduate school in chemistry the following courses should be included:

Chem 350-351	Instrumental Analysis...4
Chem 420-421	Quantum Chemistry and Spectroscopy .....4
Chem 440	Advanced Organic Laboratory or Chem. 498/499 Thesis ..... 3-4

### Chemical Physics

Chem 420-421	Quantum Chemistry and Spectroscopy .....4
Phys 320-321	Modern Physics .....4
One upper-division Physics course from the following (Phys 364, 376, 380, 420, 460)..... 3-4	
OR	
One additional upper-division course in Chem., Physics, or Math ..... 3-4	

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58-60

### Biochemistry

Biol 202, 204	General Biology I and II.....8
Chem 380	Biochemistry I .....3
Chem 480	Biochemistry II .....4
Chem 481	Biochemistry Lab .....4

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At least six credits of upper-division chemistry, including at least one credit of chemistry laboratory must be taken at Pacific University. A course in computer science (CS 150 or 230) is also recommended.

## MINOR IN CHEMISTRY

### Requirements

Chem 220-230	General Chemistry I-II.8
Chem 310-311	Organic Chemistry I.....4
Chem 320-321	Organic Chemistry II.....4
Chem 340-341	Quantitative Analysis ...4
Chem 385	Seminar .....1

### Elective:

**Choose one of the following ..... 3-4**

Chem 350-351	Instrumental Analysis
Chem 380	Biochemistry
Chem 410-411	Thermodynamics and Kinetics
Chem 420-421	Quantum Chemistry and Spectroscopy
Chem 430	Advanced Inorganic Chemistry

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24-25

At least one credit of upper -division chemistry laboratory, must be taken at Pacific University. Any student interested in a Chemistry minor should consult with a faculty member in the Chemistry Department.

## COURSE DESCRIPTIONS

### Chemistry (Chem)

#### Chem 110 Chemistry for Nonscientists.

An introductory chemistry course for students who do not plan to take additional chemistry. Basic principles of chemistry are developed and used to explain phenomena of significance to our lives. Topics may include the structure and function of selected biological molecules, atmospheric chemistry, chemical sources of energy, and foods. 3 hours. Staff

#### Chem 220 General Chemistry I

The first of a two semester sequence which introduces the basic concepts of chemistry by addressing: atomic and molecular structure, properties of materials, nomenclature, equilibrium, kinetics, thermodynamics, and electrochemistry. These topics are studied in the context of inorganic and organic chemistry. In addition to three lectures per week, the class meets three hours weekly for a laboratory or activity session. Prerequisite: Math 122 or equivalent. 4 hours. Staff.

#### Chem 230 General Chemistry II

The second of a two semester sequence continuing from Chem 220. In addition to three lectures per week, the class meets three hours weekly for a laboratory or activity session. Prerequisite: Chem 220 (with a grade of "C-" or higher) and Math 125 or equivalent. 4 hours. Staff.

**Chem 240 Survey of Organic Chemistry**

An introduction to the chemistry of the hydrocarbons and their principal derivatives. Meets physical therapy, optometry and nursing requirements. Prerequisite: Chem 230. 3 hours. Jordan.

**Chem 241 Survey of Organic Chemistry Laboratory**

Laboratory experience in the preparation and properties of organic molecules. Prerequisite: Chem 230. Co-requisite: Chem 240. 1 hour. Jordan.

**Chem 295 Independent Project**

Work in chemistry and introduction to chemistry research on a topic of mutual interest to the student and a faculty member. This course may be repeated for credit or continued as Chem 495, consent of instructor required. 1-3 hours. Staff.

**Chem 310 Organic Chemistry I**

An integrated study of aliphatic and aromatic chemistry. Emphasis is placed on the mechanistic approach to understanding organic reactions. Prerequisite: Chem 230. 3 hours. Currie.

**Chem 311 Organic Chemistry Laboratory I**

A laboratory course in organic chemistry concerned with the synthesis, isolation and purification of characteristic organic compounds including an introduction to the qualitative identification of unknown compounds. Prerequisite: Chem 230. Co-requisite: Chem 310. 1 hour. Currie.

**Chem 320 Organic Chemistry II**

A continuation of Chem 310, which is a prerequisite with a "C-" or better, 3 hours. Currie.

**Chem 321 Organic Chemistry Laboratory II**

A continuation of Chem 311, which is a prerequisite. Co-requisite: Chem 320. 1 hour. Currie.

**Chem 340 Quantitative Analysis**

An introduction to the theory and principles of volumetric, gravimetric, and colorimetric methods of analysis. Prerequisite: Chem 230 with a "C-" or better. 2 hours. Whiteley.

**Chem 341 Quantitative Analysis Laboratory**

A laboratory course to accompany and give practical illustration to the principles covered in Chem 340, which is a co-requisite. 2 hours. Whiteley.

**Chem 350 Instrumental Analysis**

An introduction to the theory and principles of instrumental methods of chemical analysis. Included are spectrophotometric, electrometric, and chromatographic methods. Prerequisite: with a "C-" or better, Chem 340 and Phys 204 or 242. 3 hours. Whiteley.

**Chem 351 Instrumental Analysis Laboratory**

Laboratory experiences to augment and illustrate Chem 350, which is a co-requisite. Prerequisite: Chem 341 with a "C-" or better. 1 hour. Whiteley.

**Chem 380 Biochemistry I**

A general biochemistry course including the structure and function of biological molecules in metabolism, bioenergetics, and enzyme action. Prerequisite: Chem 240 or 320; Biol 204 strongly recommended. 3 hours. Paar.

**Chem 385 Seminar**

Participation in discussions about recent advances in the field of chemistry. May be taken twice for credit. P/NP. 1 hour. Currie.

**Chem 410 Thermodynamics and Kinetics**

Presentation, discussion, and application of the laws of thermodynamics, including gas behavior, equations of state, phase transformations, chemical equilibria and kinetics. Prerequisite: Chem 230, Math 227 and Physics 204 or 242 all with "C-" or better. 3 hours. Johnson.

**Chem 411 Thermodynamics and Kinetics Laboratory**

A laboratory course to accompany Chem 410, which is a co-requisite. 1 hour. Johnson. Alternate years 2000-01.

**Chem 420 Quantum Chemistry and Spectroscopy**

An introduction to quantum mechanics and its applications to chemistry including atomic structure, the chemical bond and spectroscopy. Prerequisite: Chem 230, Math 227 and Physics 204 or 242 all with "C-" or better. 3 hours. Marrs. Alternate years. 2001-02.

**Chem 421 Quantum Chemistry and Spectroscopy Laboratory**

A laboratory course designed to accompany Chem 420, which is a co-requisite. 1 hour. Marrs. Alternate years. 2001-02.

**Chem 430 Advanced Inorganic Chemistry**

An introduction to inorganic chemistry at an advanced level. Topics include atomic and molecular structure, symmetry, bonding theory, periodic correlations, acid-base theory, and the theory of metal-ligand interactions. Prerequisite: Chem 230. 3 hours. Jordan. Alternate years. 2001-02.

**Chem 440 Advanced Organic Laboratory**

An advanced laboratory for majors and serious pre-professional students who require more practical laboratory experience than can be given in the introductory course sequence, Chem 311 and 321. Prerequisite: Chem 321. 3 hours. Currie. Alternate years. 2001-02.

**Chem 445 Reactivity Modeling**

Practical application of computer modeling software to the determination of molecular properties and reactivity. Topics include both classical and quantum mechanical approaches. Prerequisite: Chem 310 or 240 (one semester of organic chemistry). 1 hour. Staff. 2002-03

**Chem 450 Analytical Topics, Lecture**

A non-laboratory treatment of a single analytical technique such as electrochemistry, nuclear magnetic resonance, or mass spectrometry. May be repeated for credit in different techniques. 1 hour.

**Chem 451 Analytical Topics, Laboratory**

Lecture and laboratory work in a single, analytical technique such as gas chromatography, electrochemistry, liquid chromatography, or atomic absorption spectroscopy. May be repeated for different techniques. 1 hour.

**Chem 480 Biochemistry II**

Biochemistry II is designed to further explore the structure and function of biological molecules. The course may include some of the following topics: integration of metabolism, nucleic acid-protein interactions, cancer biochemistry, immunological biochemistry, biochemistry of neurotransmission, pharmaceutical drug design, and special topics in biophysics and biomolecular structure. Prerequisite: Chem 380. 3 hours. Paar. Alternate Spring 2002.

**Chem 481 Biochemistry Lab**

This course will emphasize experimental design, development of biochemical laboratory techniques, data acquisition and interpretation development of theoretical models. Important biochemical techniques that students may develop proficiencies include protein purification, execution of enzyme assays, development of spectroscopic and chromatographic methods, and cell culture methods. Corequisite: Chem 480, 1 credit. Paar. Alternate years, Spring 2002.

**Chem 485 Seminar**

Designed to acquaint the science major with recent advances in chemistry and related fields as well as to provide experience in the preparation and oral presentation of science topics. May be taken twice for credit. 1 hour. Currie.

**Chem 495 Research**

Independent laboratory studies or theoretical studies on projects of mutual interest to the student and faculty. This may be repeated for continuing or new projects. Consent of faculty required. 1-3 hours.

**Chem 498/499 Thesis**

Students electing to do a thesis will engage in a substantial research project that will involve an investigation of the scientific literature and original research on a current topic in chemistry. The work will culminate in a written thesis and oral presentation. 2 hours each semester. Currie.

**GEOLOGY COURSES****Science (Sci)****Sci 140 Physical Geology**

An introduction to the structure of the earth and dynamic earth-shaping processes including plate tectonics, rocks and minerals and the origin and evolution of landforms through volcanic activity, folding, faulting and erosion. Co- or prerequisite: Sci 141. 3 hours. Jordan

**Sci 141 Geology Laboratory**

Laboratory experience to accompany Sci 140 and Sci 150, one of which must be taken concurrently. 1 hour. Jordan

**Sci 150 Physical Geology**

An introduction to the history of the earth beginning with the origin of the solar system and including the evolution of the continents, the evolution of life, geologic time and stratigraphy. Co- or prerequisite: Sci 141. 3 hours. Jordan

# EDUCATION

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(See the Graduate and Professional Programs Catalog for listing of faculty and description of programs.)

The undergraduate program allows a student to complete a bachelor's degree while simultaneously completing the requirements for an Oregon teaching license. Students are provided solid foundations in theory and content, as well as extended field experiences. They are prepared to nurture young peoples' intellectual, social, and moral growth and to appreciate diversity of cultures.

The program prepares students for an Oregon Initial Teaching License with authorizations at any of four levels: Early Childhood Education (age 3 to grade 4), Elementary Education (grades 3-8), Middle School Education (grades 5-10), and High School Education (grades 7-12). Students are strongly encouraged to qualify for two adjacent authorization levels. Students who wish to qualify for the Early Childhood and Elementary authorizations will complete the Education and Learning major. Those who plan to teach at the Middle School or High School level will major in the subject area in which they wish to teach and complete the professional sequence of courses in the School of Education.

## EARLY CHILDHOOD & ELEMENTARY EDUCATION

### Education & Learning Major

The Education and Learning major is a joint offering of the College of Arts and Sciences and the School of Education. It is designed to provide students with a deep understanding of the psychological, developmental, and curricular foundations of education. This major builds a strong foundation for careers working with children and in various educational programs, including classroom teaching

The Education and Learning major is recommended for students interested in pursuing a license for teaching in early childhood or elementary classrooms as a

part of their undergraduate education at Pacific University. To obtain the Initial Oregon Teaching License as an undergraduate a student must apply for admission to the School of Education. The application for admission to the School of Education should be submitted at the end of the freshman year or at the beginning of the sophomore year. The application process may be accomplished as a part of the EDUC 260 class. Licensure requires an additional 32 credits of professional coursework beyond the requirements of the major. Students interested in licensure should complete the recommended subject area coursework in writing, literature, science, mathematics, social science, and the arts as part of the core requirements or electives.

For those who do not want to obtain a teaching license as a part of their undergraduate education, a minor in a complementary subject area is recommended.

### Education and Learning Major

- Phil 101 Knowledge and Reality .....3
- Psy 150 Introduction to Psychology3

#### Social Foundations

**one of the following.....3**

- Anth 101 Introduction to Anthropology
- Soc 102 Social Problems
- PolS 101 Power & Community

#### Development

**one of the following.....3**

- Psy 180 Lifespan Human Development
- Psy 318 Applied Human Development

#### Cognition

**one of the following.....3**

- Psy 225 Human Learning & Motivation
- Psy 248 Mind, Theory & Method
- Psy 315 Cognitive Neuroscience
- Psy 352 Physiological Psychology

**Education****one of the following**

Educ 260	Foundations of Education ...2
Educ 300	Introduction to Early Childhood Education.....4
Educ 305	Learning Communities .....3
Educ 361	Foundations of Human Development & Psychology .....3
Educ 370	School and Society.....2
Educ 397	Field Experience.....2
Educ 420	Normal Language Development .....2
Educ 427	Psychology of Reading Instruction.....2

**Required capstone experience: one of the following**

Educ 490	Integrating Seminar.....6
Educ 475	Student Teaching .....12

**Required Professional Courses for Early Childhood & Elementary School Authorizations**

The following courses are required to qualify for the Oregon Initial Teaching License with authorizations for Early Childhood Education or Elementary Education. Some of these courses will also fulfill requirements for the Education and Learning major.

Educ 305	Learning Communities: Personal Awareness and Diversity.....3
Educ 370	School and Society.....2
Educ 361	Foundations of Human Development and Psychology.....3
Educ 436	Technology across the Curriculum .....2
Educ 431	Integrated Methods I: General Methods .....3
Educ 408	Integrated Methods II: Reading and Language Arts in Early Childhood Education .....4 OR
Educ 444	Integrated Methods II: Reading and Language Arts in Elementary Education ...4

Educ 409	Integrated Methods IIIa: Math in Early Childhood Education .....2 OR
Educ 343	Integrated Methods IIIa: Math in Elementary Education .....2
Educ 328	Integrated Methods IIIb: Science and Health in Early Childhood Education.....2 OR
Educ 329	Integrated Methods IIIb: Science and Health in Elementary Education.....2
Educ 410	Integrated Methods IV: Expressive Arts in Early Childhood Education.....2 OR
Educ 445	Integrated Methods IV: Thematic Teaching through SS and the Arts.....2
Educ 397	Field Experience.....1
Educ 459	Preparing the Work Sample .....2
Educ 477	Minor Authorization Practicum .....3
Educ 476	Learning Communities III: Reflection and Practice.....2
Educ 475	Student Teaching .....12

**Middle School and High School Authorizations**

Students who plan to complete the requirements for the Middle School and High School authorizations should major in the content area in which they wish to teach, complete the required coursework in professional education, and successfully meet the requirements of student teaching.

Students will have the opportunity to qualify for both Middle School and High School authorizations. While qualification for both is not required, students will be encouraged to do so. Those preparing to be teachers of art, music, and physical education will be required to qualify for two levels of authorization consistent with OARs 584-060-0030. To obtain the Initial Oregon Teaching License as an undergraduate student must apply for admission to the School of Education. The application for admission to the School of Education should be submitted at the end

of the freshman year or at the beginning of the sophomore year. The application process may be accomplished as a part of the EDUC 260 class.

Programs are available to enable students to meet the requirements for the following subject area teaching endorsements: Art, Foreign Languages (French, German, Japanese, and Spanish), Language Arts, Mathematics (Middle School and Advanced), Music, Physical Education, Science (Biology, Chemistry, Integrated Science, and Physics), and Social Studies.

Following are the requirements that students seeking a subject area endorsement in the Middle School and High School authorizations must meet outside of the education sequence offered by the School of Education:

- Art (Must meet the requirements for two levels of authorization): A major in art. A Computer Graphics or Illustration course is recommended.
- Biology: A major in Biology, including Human Anatomy, Human Physiology, and Invertebrate Zoology.
- Chemistry: A major in Chemistry.
- Foreign Languages: A major in Foreign Language. Primary language must be selected from French, German, Japanese, or Spanish. Successful completion of Methods of Teaching Foreign Languages.
- Integrated Science: Students who are interested in this endorsement will complete a major from the Natural Science Division and work with their advisor in Education to develop a program that includes broad basic coursework in Biology, Chemistry, and Physics as well as Geology, Astronomy, and Meteorology.
- Language Arts: A major in Literature or Creative Writing including a Shakespeare course, a course on the theory of literature, a course in Linguistics, and two courses in Oral Expression.
- Mathematics, Middle School: Students will take sufficient courses to pass the appropriate PRAXIS test. Suggest taking the mathematics sequence through Calculus I, including Statistics and a computer programming course.

- Mathematics, Advanced: A major in Mathematics including courses in Probability, Higher Geometry, and Abstract Algebra.
- Music (Must meet the requirements for two levels of authorization): A major in Music Education.
- Physical Education (Must meet the requirements for two levels of authorization): A major in Exercise Science with an emphasis in Human Performance.
- Physics: A major in Physics including courses in Thermodynamics and Geometric Optics.
- Social Studies: A major in a social science, including history. Students interested in this endorsement area will work with their Education advisor to develop a program that provides the breadth of knowledge necessary to teach social studies at the secondary level. This would include at least 3 courses of non-U.S. history, political science, sociology, psychology or anthropology; 3 courses in U.S. History; 2 courses in Politics and Government; 2 courses in Economics; Cultural Geography; and one course in contemporary issues.

#### Required Professional Courses for Middle School & High School Authorizations

Educ 305	Learning Communities: Personal Awareness and Diversity.....	3
Educ 370	School and Society.....	2
Educ 361	Foundations of Human Development and Psychology.....	3
Educ 436	Technology across the Curriculum .....	2
Educ 327	Teaching and Assessment in the Middle School.....	2
	OR	
Educ 326	Teaching and Assessment in the High School.....	2
Educ 314	Reading and Writing Across the Curriculum.....	2

**Special Methods (in appropriate content area).....3**

Educ 302	Teaching Art in the Middle and High School	
Educ 303	Teaching Music in the Middle and High School	
Educ 338	Teaching Science in the Middle and High School	
Educ 339	Teaching PE in the Middle and High School	
Educ 349	Teaching Math in the Middle and High School	
Educ 447	Teaching Foreign Language in the Middle and High School	
Educ 451	Teaching Social Studies in the Middle and High School	
Educ 452	Teaching Language Arts in the Middle and High School	
Educ 397	Field Experience.....	1
Educ 459	Preparing the Work Sample .....	2
Educ 477	Minor Authorization Placement.....	3
Educ 476	Learning Communities III: Reflection and Practice.....	2
Educ 475	Student Teaching .....	12

**Admission**

Prior to taking coursework necessary for teacher licensure, students must be admitted to the School of Education. Students who wish to enter a teaching career should consult with the Coordinator of the Undergraduate Education Program early in the freshman year, and should take the introductory education course, EDUC 260, Foundations of Education, by fall of the sophomore year. Application to the School of Education may be accomplished as a part of the Educ 260 class.

**Admission requirements include:**

- 2.75 minimum GPA (cumulative and endorsement)
- Passing score on one of the following: California Basic Educational Skills Test (CBEST), PRAXIS Pre-Professional Skills Test (PPST), or PRAXIS Computer-Based Academic Skills Assessment (CBT)
- Academic and pre-professional recommendations
- Personal interview and writing sample to be completed at time of interview

**Continuation in the program**

Students must maintain a 2.75 minimum GPA in all professional education and endorsement area coursework with no grade lower than a "C"; a "C-" is not acceptable.

Students must complete all required coursework before student teaching.

Students must pass all required tests before student teaching.

**Requirements for program completion**

Students must complete all coursework with satisfactory grades.

Students must complete field experience, required practica, and student teaching with a grade of Pass.

Students must complete requirements for two work samples. Requirements include preparation, teaching, and a satisfactory evaluation.

Students must pass all applicable tests required for licensure.

# ENGINEERING

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## 3-2 ENGINEERING, COOPERATIVE PROGRAM

Contact Dr. Fehrs or Dr. Wiener

Pacific currently has a formal cooperative program with Washington University in St. Louis, and informal programs with other schools including Oregon State University, Washington State University, and Portland State University. A complete range of engineering specialties is available through these schools including aeronautical, chemical, civil, electrical, mechanical, and nuclear engineering. Requirements for admission to these programs are unique to each school, but admission will usually be assured for those students who maintain a "B" average and who are recommended by the Division of Natural Sciences. Program details for the various engineering schools are available from professors Dr. Fehrs or Dr. Wiener.

The program is designed as a 3-2 transfer program in which the student spends three years at Pacific obtaining the necessary background in science and mathematics and then transfers to the engineering school for the final two years of professional training. In addition, the program provides for an appropriate breadth in humanities and social sciences which is desirable for scientists in industry. Upon completion, the student receives a B.S. from Pacific and a B.S. in engineering from the engineering school. One of the primary advantages that engineering schools see for the 3-2 package is that students who come into engineering from a liberal arts background frequently have a broader perspective than the average engineering student.

### Requirements

In addition to Pacific's core requirements, students planning on a cooperative program are advised to complete the courses listed below. However, specific requirements may depend upon the particular institution to which the student transfers. They must also complete all other

requirements for a B.S. degree with a major of their choice. Normally this major will be Applied Science because of its obvious overlap with a professional engineering program. However, with careful planning, other majors are possible, particularly physics or mathematics. With prior approval, select professional courses may be used to meet some major requirements.

Chem 220-230	General Chemistry I-II...8
C.S. 150	Introduction to Computer Science I .....4
Math 226-228	Calculus I-III .....12
Math 204	Discrete Math .....3
Math 311	Differential Equations....3
Phy 232-242	General (Workshop) Physics I-II .....8
Phy 322	Modern Physics with Health Applications .....4
Phy 332	Waves and Optics.....4
Phy 380	Classical Mechanics in Dynamics .....4
Phy 376	Engineering Mechanics: Statics .....3
OR Phy 364	Electronics ..... 3/4
	<hr/> 53 OR 54

The student must also successfully complete 30 semester credits in engineering courses taken in an accredited engineering program, which may be transferred back to Pacific University. At least 20 of these credits must be at the upper-division level.

## COOPERATIVE PROGRAMS WITH OGI

There is a formal cooperative arrangement between OGI (Oregon Graduate Institute of Science and Technology) and Pacific University which allows for free interchange of students and faculty as well as use of facilities. Specifically, Pacific students are encouraged to take courses, attend seminars, and participate in

research at OGI. Courses such as Applied Mathematics, Chemical Group Theory, Solid State Physics and Complex Analysis might be taken by interested advanced undergraduates. In addition there are three cooperative advanced-degree programs with OGI in Electrical and Computer Engineering, Computer Science and Engineering, and Environmental Science and Engineering. These are all five year programs in which the student earns both B.S. and M.S. degrees. During the fourth year, students are enrolled as full-time students at OGI.

## ELECTRICAL ENGINEERING COOPERATIVE PROGRAM

Contact Dr. Fehrs OR Dr. Wiener

This is a five-year program involving four years at Pacific and one year at the Oregon Graduate Institute for Science and Technology (OGI). The student will normally receive a baccalaureate degree in physics from Pacific at the end of the fourth year and a Master of Science degree in Electrical Engineering from OGI at the end of the fifth year. A few courses may be taken at OGI while the student is still enrolled at Pacific.

While at Pacific the student will complete all required courses for the physics major as well as the pre-engineering requirements listed above. Within the electives in the physics major program, it is recommended that the student complete Physics 384 (Thermodynamics). Physics 364 (Electronics) must be completed as part of the pre-engineering requirements.

The requirements for the M.S.E.E. are listed on the OGI web page (<http://www.ogi.edu>) and can be completed in a nine-month academic year.

### Course Descriptions

#### Sci 285 Pre-Engineering and Applied Science Seminar

*An introduction to the fields of engineering and applied science, with an emphasis on the methods of problems solving and the nature of employment in these fields. Course activities include presentations, discussions, guest lectures, field trips, and problem-solving exercises. 1 hour. Fehrs, Wiener.*

## ENGLISH

Doyle W. Walls, *Chair, Associate Professor*

Pauline Beard, *Associate Professor*

Lorelle Browning, *Associate Professor*

Theresa Love, *Instructor \**

Perrin Kerns, *Assistant Professor*

Darlene Pagán, *Assistant Professor*

Kathlene Postma, *Assistant Professor*

Steve Smith, *Instructor, Director of Resource Center, Coordinator of First Year Seminar*

Michael R. Steele, *Executive Director Oregon Holocaust Research Center*

Tim Thompson, *Assistant Professor*

*\*Indicates part time*

The English Department offers the general student guidance in acquiring and developing the skills for critical thinking and clear writing. For students choosing to specialize in Literature or Creative Writing, the curriculum offers the opportunity to engage the literary tradition of British and American writing, as well as world literatures, and to enter into the theory and practice of literature itself. The general student is also welcome to explore the world of letters in any courses the department offers, provided he or she has fulfilled departmental prerequisites.

In particular, the English Department seeks to teach students the following:

- to develop skills that allow them to engage in reflective critical reading;
- to understand and engage the principles of literary analysis and the evolving tradition of literature and writing in English;
- to articulate their responses, ideas, and analyses clearly and powerfully;
- to cultivate speaking skills in both formal and informal settings;
- to recognize the various contexts that shape texts and our responses to them;

- to examine how meaning is constructed in various genres, traditions, periods, and cultures;
- to consider the ethical questions that confront the writer and reader as creators and consumers of texts and as members of society.

The faculty of the English Department brings to its teaching a wide range of experience, training, and perspectives; students benefit from exposure to a variety of teaching styles and approaches to the reading, writing, and enjoyment of literature. Each member of the department brings his or her passions into the classroom: we all write creatively – and remain active in the larger community of writers and scholars – presenting or publishing scholarship, poetry, fiction, drama, or essays.

Students may choose to major or minor in Creative Writing or Literature. Both emphases encourage students to do interdisciplinary work, to recognize the connections between the study of literature and the work they do in other fields as they seek a liberal arts education. Creative Writing majors and minors are required to take part in editing and publishing the Pacific Review, the University literary magazine sponsored by the department. Literature majors and minors, as well as general students, are encouraged to take advantage of this opportunity to “produce” literature as well. (In addition to offering the community the work of resident writers, the department also presents readings and lectures by noted visiting poets and writers.) Our majors go on to graduate school; teach in high schools and colleges; and use their thinking and writing skills in television, publications, technical writing, insurance, administration, law, library science, special education, and social work. They also go on to give readings of their own.

## MAJOR IN CREATIVE WRITING

### Requirements

**One course from:**..... 3-4

- Engw 201 Expository Writing (Some sections focus on a particular theme.)
- Engw 301 Advanced Expository Writing

**Two courses from:**.....6

- Engw 206 Introduction to Creative Writing, Poetry
- Engw 207 Introduction to Creative Writing, Mixed Genre
- Engw 208 Introduction to Creative Writing, Fiction

**One course from:**.....3

- Engl 200 Introduction to Literature
- Engl 220 Literature and Human Concerns (Topics Vary)
- Engl 227 Introduction to World Literature
- Engl 229 Introduction to American Literature
- Engl 232 Introduction to British Literature
- Engl 255 (Topics Vary)

**Two courses from:**.....8

- Engw 306 Advanced Poetry Writing
- Engw 308 Advanced Fiction Writing
- Engw 310 Advanced Drama Writing

**Two courses from:**..... 6-8

- Engl 340 Studies in Drama
- Engl 341 Studies in Poetry
- Engl 342 Studies in Fiction

**Two courses from:**..... 6-8

- Engl 323 Shakespeare
- Engl 416 British Literature, Beowulf to 1660
- Engl 418 British Literature: 1660c1790
- Engl 421 The Romantic Period
- Engl 422 The Victorian Period
- Engl 423 Nineteenth Century American Literature

Engl 425	Twentieth Century Literature	
Engl 430	Major Writers (Specific Authors Vary)	
Engl 455	(Topics Vary)	
WorL	World Languages & Literatures (Upper-division course in a world language; only one course can be used for this requirement)*	
Engw 497/498	Senior Seminar in Creative Writing.....	4
Engw 465	Editing Pacific Review (Pass/No Pass).....	2
		38-43

\*Requires world language proficiency.

At least one course (3 hours) from the above requirements must be in American literature.

**Recommended courses  
for Major in Creative Writing:**

Art 218/318	Computer Graphics.....	3
Art 235	Illustration .....	3
Engl 343	Studies in Criticism and Theory.....	3
Hist. 300+	An upper-division history course .....	3
Phil 101 or Phil 110	Knowledge and Reality .....	3
	Religion and the Quest for Meaning .....	3
OR Phil 214	Philosophy of Art.....	3
WorL 101-202	World Languages Study.....	3-12
		18-27

**Admission Procedures for the Creative Writing Major:** Students desiring to pursue a Creative Writing Major may apply for admission after completing the following prerequisite coursework: English 201 and two 200-level introductory creative writing workshops. To apply, students must submit a creative manuscript to the faculty; the manuscript can be fiction, poetry, personal essay, and/or drama, and should be no more than ten pages in length. It should be accompanied

by a 250-word statement of purpose. Students are encouraged to apply for admission to the Major between the second half of their sophomore year and the first half of their junior year. Students interested in Creative Writing should consult Professors Postma or Walls.

**MAJOR IN LITERATURE**

**Requirements**

**One course from:..... 3-4**

Engw 201 Expository Writing (Some sections focus on a particular theme.)

Engw 301 Advanced Expository Writing

**One course from:.....3**

Engw 206 Introduction to Creative Writing, Poetry

Engw 207 Introduction to Creative Writing, Mixed Genres

Engw 208 Introduction to Creative Writing, Fiction

**Two courses from:..... 6-7**

Engl 200 Introduction to Literature

Engl 220 Literature and Human Concerns (Topics Vary)

Engl 227 Introduction to World Literature

Engl 229 Introduction to American Literature

Engl 232 Introduction to British Literature

Engl 255 (Topics Vary)

Engl 323 Shakespeare

**Two courses from:..... 6-8**

Engl 416 British Literature, Beowulf to 1660

Engl 418 British Literature: 1660-1790

Engl 421 The Romantic Period

Engl 422 The Victorian Period

Engl 423 Nineteenth Century American Literature

Engl 425 Twentieth Century Literature

Engl 430 Major Writers (specific authors vary)

Engl 455 (topics vary)

<b>Two courses from:</b> .....	<b>6-8</b>
Engl 340	Studies in Drama
Engl 341	Studies in Poetry
Engl 342	Studies in Fiction
Engl 343	Studies in Criticism and Theory
WorL	Upper-division course in a world language (only one course can be used for this requirement)*
PACS 411	Literature About War
Engl 495/496	Senior Seminar in Literature.....
	<b>4</b>
One upper-division history course	.....
	<b>3-4</b>
One course chosen from:	
Phil 101, 110, 205, 206, 207, 208, 214, 303, 309**, or 403**	.....
	<b>3-4</b>
	<hr/>
	<b>34-42</b>

\* requires world language proficiency

\*\*check prerequisites

At least one course (3 hours) from the above requirements must be in American literature.

## MINOR IN CREATIVE WRITING

### Requirements

**One course from:**..... **3-4**

Engw 201 Expository Writing (Some sections focus on a particular theme.)

Engw 301 Advanced Expository Writing

**Two courses from:**.....**6**

Engw 206 Introduction to Creative Writing, Poetry

Engw 207 Introduction to Creative Writing, Mixed Genres

Engw 208 Introduction to Creative Writing, Fiction

**One course from:**..... **3-4**

Engl 200 Introduction to Literature

Engl 220 Literature and Human Concerns (Topics Vary)

Engl 227 Introduction to World Literature

Engl 229 Introduction to American Literature

Engl 232 Introduction to British Literature

Engl 255 (Topics Vary)

Engl 323 Shakespeare

**One course from:**.....**4**

Engw 306 Advanced Poetry Writing

Engw 308 Advanced Fiction Writing

Engw 310 Advanced Drama Writing

**One course from:**..... **3-4**

Engl 340 Studies in Drama

Engl 341 Studies in Poetry

Engl 342 Studies in Fiction

Engw 465 Editing Pacific Review (Pass/No Pass).....

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**1**  
**20-23**

Students interested in Creative Writing should consult Professors Postma or Walls.

## MINOR IN LITERATURE

### Requirements

**One course from:**..... **3-4**

Engw 201 Expository Writing (Some sections focus on a particular theme.)

Engw 301 Advanced Expository Writing

**Two courses from:**.....**6**

Engl 200 Introduction to Literature

Engl 220 Literature and Human Concerns (Topics Vary)

Engl 227 Introduction to World Literature

Engl 229 Introduction to American Literature

Engl 232 Introduction to British Literature

Engl 255 (Topics Vary)

**Three courses from:..... 9-12**

Engl 323	Shakespeare
Engl 340	Studies in Drama
Engl 341	Studies in Poetry
Engl 342	Studies in Fiction
Engl 343	Studies in Criticism and Theory
Engl 416	British Literature, Beowulf to 1660
Engl 418	British Literature: 1660-1790
Engl 421	The Romantic Period
Engl 422	The Victorian Period
Engl 423	Nineteenth Century American Literature
Engl 425	Twentieth Century Literature
Engl 430	Major Writers (Specific Authors Vary)
Engl 455	(Topics Vary)
PACS 411	Literature About War

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 18-22
**COURSE DESCRIPTIONS****Writing (Engw)**

Only Engw 201 and Engw 301 satisfy the writing skills core requirement.

**Engw 101 Basic Expository Writing**

A course devoted to basic writing skills and principles – punctuation, sentence structure, and grammar – and to developing short essays. Graded P/NP. 3 hours.

**Engw 150 Basic Expository Writing II**

A course designed to refine basic writing skills and develop organizational skills for longer essays. 3 hours.

**Engw 201 Expository Writing**

An expository writing course in which various topics and genres are used to help students develop and evidence critical thinking skills, understand rhetorical methods, and shape effective prose styles. Students will be writing expository essays and a research paper. Some sections focus on a particular theme. 3 hours. Staff.

**Engw 206 Introduction to Creative Writing, Poetry**

An introduction to writing poetry. Prerequisite: College writing skills core requirement met. 3 hours. Walls.

**Engw 207 Introduction to Creative Writing, Mixed Genres**

An introduction to writing in two or more of the following genres: short fiction, drama, poetry, and the personal essay. Prerequisite: College writing skills core requirement met. 3 hours. Pagán, Postma, Steele, Walls.

**Engw 208 Introduction to Creative Writing, Fiction**

An introduction to writing fiction. Prerequisite: College writing skills core requirement met. 3 hours. Postma.

**Engw 301 Advanced Expository Writing**

An upper-level course providing an overview of the history and theory of rhetoric from Aristotle to James Berlin, and of selected classics of the essay genre from Seneca to Annie Dillard. Engw 301 also gives students the opportunity to articulate their own mature ideas and to refine their higher-level writing skills. May be repeated once for credit with permission of the department. Prerequisite: Engw 201 and consent of instructor. 4 hours. Beard, Thompson. (G)

Note: 300-level advanced creative writing workshops require demonstrated experience and ability in creative writing and are designed for Creative Writing majors and minors. Thus, the following prerequisites apply to all advanced creative writing workshops:

**Satisfactory completion of two lower-division creative writing courses and faculty consent.**

We also recommend that students be of Junior standing when they enroll in these courses. Other students interested in taking these courses should consult the individual instructor but cannot be guaranteed admission to the course.

**Engw 306 Advanced Poetry Writing**

A workshop for writing and discussing poetry. May be repeated. Prerequisite: College writing skills core requirement met, two courses from Engw 206, 207, or 208, and faculty approval. 4 hours. Walls. (G)

**Engw 308 Advanced Fiction Writing**

A workshop for writing and discussing fiction. May be repeated. Prerequisite: College writing skills core requirement met, two courses from Engw 206, 207, or 208, and faculty approval. 4 hours. Postma. (G)

**Engw 310 Advanced Drama Writing**  
A workshop for writing and discussing drama. May be repeated. Prerequisite: College writing skills core requirement met, two courses from Engw 206, 207, or 208, and faculty approval. 4 hours. Staff. (G)

**Engw 465 Editing Pacific Review**  
A course in which students assist the student editor-in-chief in selecting, editing, and laying out examples of community writing. Graded P/NP. May be repeated. 1 hour. Postma, Walls.

**Engw 497/498 Senior Seminar: Creative Writing**  
Students in this capstone experience for creative writing majors will discuss the historical experience of the creative writer, and the condition, role, and production of literature in contemporary society as they prepare and revise a reflective essay on the creative process and finally compose a significant manuscript of original work in poetry, fiction, personal essay, or drama; all students will present their manuscripts in a public reading. Prerequisite: Senior standing and one upper-division course from 306, 308, or 310. 2 hours per semester. Postma, Walls.

## Literature (Engl)

**Engl 200 Introduction to Literature**  
An introduction to the study of literature by examining fiction, poetry, drama, and essays from various periods and countries. 3 hours. Staff.

**Engl 220 Literature and Human Concerns**  
A study of important ideas and problems as they are reflected in the world's literature. War, racism, death, censorship, film, civil disobedience, minority literature, and the Holocaust are examples of characteristic topics. May be repeated more than once when content varies. 3 hours. Staff.

**Engl 227 Introduction to World Literature**  
An introduction to literature drawn from Western and non-Western cultures, organized around a theme, a literary problem, or the examination of a political condition. Ordinarily, the reading lists will include several genres. 3 hours. Pagán.

**Engl 229 Introduction to American Literature**  
An introduction to selected American authors and themes. 3 hours. Thompson.

**Engl 232 Introduction to British Literature**  
An introduction to selected British writers and themes. 3 hours. Beard, Steele.

**NOTE:** 300-level courses demand that students have familiarity with the close analysis of literature; **one lower-division literature course is prerequisite**, and we recommend that students be of Junior standing when they enroll for these courses. All upper-division literature courses are offered at 3 or 4 hours of credit, depending upon instructor's choice; note minimum course and hour requirements for majors and minors within the department.

**Engl 323 Shakespeare**  
An analysis of Shakespeare's major plays with emphasis on both literary and theatrical qualities. Prerequisite: one lower-division literature course. 3 or 4 hours. Beard, Browning, Steele. (G)

**Engl 332 Introduction to Linguistics**  
An introduction to the principles, methods, and basic vocabulary of modern linguistic theory, with emphasis on the elements of phonology, morphology, and modern grammatical theory. Provides a basic introduction to the history and structure of English, but examples are drawn from a variety of languages. No previous language training necessary. 3 hours. Fujita. Offered every year.

**Engl 340 Studies in Drama**  
The reading and analysis of chief European and American playwrights from the authors of the morality plays to the present, with some consideration of the dramaturgy involved in the production of the plays. Prerequisite: one lower-division literature course. 3 or 4 hours. Beard, Browning, Thompson. (G)

**Engl 341 Studies in Poetry**  
An upper level introduction to reading poetry, with an emphasis on structure, traditional models, periods, and interpretation. Prerequisite: one lower-division literature course. 3 or 4 hours. Walls. (G)

**Engl 342 Studies in Fiction**

A study of the development of the short story and novel, with an emphasis on exploring interpretive models. Prerequisite: one lower division literature course. 3 or 4 hours. Beard, Postma. (G)

**Engl 343 Studies in Criticism and Theory**

A study and application of some of the critical and theoretical approaches used in the study of literature. Prerequisite: one lower-division literature course. 3 or 4 hours. Pagán, Steele. (G)

Note: 400-level courses are the most advanced courses offered by the Department: they are designed for juniors and seniors. Two literature courses are prerequisite, and we recommend that students have completed at least one 300-level literature course. All upper-division literature courses are offered at 3 or 4 hours of credit, depending upon instructor's choice; note minimum course and hour requirements for majors and minors within the department.

**Engl 416 British Literature: Beowulf to 1660**

Intensive studies in the period to include such figures as the author of *Beowulf*, Chaucer, Shakespeare, Spenser, Milton, Donne, Marvell, Congreve. The focus changes from time to time to include drama or prose or lyric poetry. Prerequisite: two literature courses and Junior standing. 3 or 4 hours. Browning. Offered alternate years. (G)

**Engl 418 British Literature: 1660-1790**

Investigates major works of the Restoration and eighteenth century and is focused to explore central philosophical, intellectual, or cultural themes of the period. Prerequisite: two literature courses and Junior standing. 3 or 4 hours. Browning. Offered alternate years. (G)

**Engl 421 The Romantic Period**

An advanced study of the poetry and poetics and prose of the Romantic Period of British Literature, with special emphasis on the affects on a variety of poets of the emerging Industrial Revolution, the French Revolution and its aftermath, and new paradigms of thought in the way people perceived nature and gender roles, among other topics. 3 hours. Steele. Offered alternate years.

**Engl 422 The Victorian Period**

An advanced study of several literary genres during the Victorian Period of British Literature (1837-1901), with special emphasis on the affects on authors of the triumph of the Industrial Revolution, the rise of Darwin's theories, the challenges to religious and social orthodoxies, and changes in aesthetics, among other topics. Authors to be studied could include such figures as Austen, Dickens, Eliot, Tennyson, the Rossetts, Arnold, Swinburne, Hopkins, Ruskin, Shaw, Gissing, the Brownings, Mill, and others. 3 hours. Steele. Offered alternate years.

**Engl 423 Nineteenth Century American Literature**

Intensive study in the period to include such writers as Irving, Poe, Hawthorne, Emerson, Thoreau, Dickinson, Whitman, Gilman and the literature of slavery and abolition. Prerequisite: two literature courses and Junior standing. 3 or 4 hours. Thompson. (G)

**Engl 425 Studies in Twentieth Century Literature**

Intensive studies in major writers of the period. Prerequisite: two literature courses and Junior standing. 3 or 4 hours. Beard, Pagán, Postma, Steele, Walls. (G)

**Engl 430 Major Writers**

A detailed study of the works of selected writers: for example, Chaucer, Milton, Dickens, Blake, Yeats, Thoreau, Woolf. Prerequisite: two literature courses and Junior standing. May be repeated once for credit when content varies. 3 or 4 hours. Staff. Offered intermittently.

**Engl 495/496 Senior Seminar: Literature**

Students in this capstone experience for literature majors will discuss the state of literature, criticism, and writers in contemporary society, reflecting on the tradition of literature and literary study, and develop, present, and critique original critical work. Students will produce a 20-30 page thesis, with annotated bibliography, and present their work publicly. Prerequisite: Senior standing. 2 hours per semester. Beard, Browning, Pagán, Steele, Thompson.

**Note:** In addition, PACS 411 may be counted toward the major and minor in Literature.

# ENVIRONMENTAL STUDIES PROGRAM

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**Deke Gundersen**, *Director, Assistant Professor*

**Edmond Alkaslassy**, *Assistant Professor*

**Pamela Lopez**, *Associate Professor*

**Jodi Paar**, *Assistant Professor*

**Philip J. Ruder**, *Associate Professor*

**Lisa Sardinia**, *Associate Professor*

**Robert E. Stockhouse II**, *Professor*

**Robert Van Dyk**, *Associate Professor*

The Environmental Studies Program in the College of Arts and Sciences provides students with modern environmental science degrees in the context of a liberal arts and sciences curriculum. In these programs, students and faculty have an opportunity to pursue varied interests in this broad and multidisciplinary field. The faculty guiding the program are in the traditional disciplines of biology, chemistry, and environmental science but who choose to apply their knowledge to environmental problems that cross-disciplinary boundaries.

The Environmental Studies Program offers a degree in Environmental Science with an emphasis in either Biology or Chemistry. The Environmental Biology emphasis focuses on field and laboratory approaches to understanding environmental and ecological problems. The principal uniqueness of the environmental biology emphasis can be found in the integration of interdisciplinary core courses with a mission oriented, problem-solving methodology. Pacific University students majoring in Environmental science with an emphasis in Biology study in the unique surroundings of the Tualitin River Basin, Pacific's John Blodgett Arboretum, the Columbia River and Tillamook Estuaries, and Fernhill Wetlands (300 acres), which is located in Forest Grove. Students completing this major have the analytical skills and technical background necessary to compete in the job

market for environmental biology positions, or to continue with advanced studies in a graduate program.

The Environmental Chemistry emphasis couples a core study in Chemistry with specific environmental science and policy courses. The core courses provide a theoretical background for understanding the chemical processes that control the distribution of contaminants in the environment. The program emphasizes an understanding of atmospheric, groundwater and aquatic chemistry and includes the analytical and statistical methods to study them. Field activities in a variety of nearby study areas are included. Students graduating with this major are well qualified to directly enter the job market and will have excellent credentials for entry into various related graduate programs.

Visit the Environmental Studies Website at <http://www.envsci.pacificu.edu/> or through the main website at <http://www.pacificu.edu>.

## GOALS FOR THE MAJOR

By successfully completing a major in environmental science, students will be able to:

- Demonstrate conceptual understanding of fundamental environmental principles.
- Communicate effectively in the discipline in oral and in written form.
- Be able to think critically and synthesize information from a variety of different sources.
- Consider social, political, and economic views when dealing with environmental problem solving.
- Conduct independent research or work successfully in a technical position.

## MAJOR IN ENVIRONMENTAL SCIENCE

### Biology emphasis

#### Requirements

Ensc 100	Environmental Studies Seminar .....	1
Ensc 200	Our Global Environment...	4
Ensc 301	Environmental Toxicology	4
Ensc 490	Environmental Science Capstone .....	2
Pols 224	Environmental Politics.....	3
Econ 102	Principles of Microeconomics .....	3
Econ 333	Environmental Economics	3
Biol 202	General Biology I .....	4
Biol 204	General Biology II.....	4
Biol 304	Experimental Design, Analysis & Writing .....	4
Biol 305	Ecology.....	4
Biol 470	Animal Physiology.....	4
Chem 220	General Chemistry I .....	4
Chem 230	General Chemistry II.....	4
Organic Chemistry		
Either Chem 310-311, 320-321		
	OR Chem 240-241 .....	4-8

Students must also take one course from each of the following two groups (I and II):

Group I	.....	4
Ensc 310	Environmental Chemistry	
Biol 308	Microbiology	
Biol 320	Cell Biology	
Biol 330	Genetics	
Biol 400	Molecular Biology	
Chem 380	Biochemistry	
Group II	.....	4
Ensc 210	Tropical Environmental Biology	
Biol 316	General Botany	
Biol 345	Marine Biology	
Biol 420	Vertebrate Biology	
Biol 450	Tropical Rainforest Biology	
Biol 410	Invertebrate Zoology	
Biol 430	Plant Systematics	

*Restrictions: In order to receive an Environmental Science degree with an emphasis in Biology from Pacific University a student must complete Ensc 490 Capstone Experience, Ensc 301 Environmental Toxicology, and at least 3 upper division courses. Students cannot receive a degree in both Environmental Science (biology emphasis) and Biology.*

#### Recommended:

Introductory Physics or General Physics  
An introductory statistics course  
Calculus I and II

### Chemistry Emphasis

#### Requirements

Ensc 100	Environmental Studies Seminar .....	1
Ensc 200	Our Global Environment...	4
Ensc 310	Environmental Chemistry...	4
Ensc 490	Environmental Science Capstone .....	2
Pols 224	Environmental Politics.....	3
Econ 102	Principles of Microeconomics .....	3
Econ 333	Environmental Economics	3
Chem 220-230	General Chemistry I-II .....	8
Chem 310-311		
Chem 320-321	Organic Chemistry I-II.....	8
Chem 340-341	Quantitative Analysis .....	4
Chem 350-351	Instrumental Analysis .....	4
Either Physics 202-204		
OR		
Physics 232-242	.....	8
Math 226	Calculus I .....	4
Biol 202-204	General Biology I-II.....	8

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*Restrictions: In order to receive an Environmental Science degree with an emphasis in Chemistry from Pacific University a student must complete Ensc 490 Capstone Experience, Ensc 310 Environmental Chemistry, and at least 3 upper division courses.*

#### Recommended:

Environmental Toxicology  
Thermodynamics and Kinetics  
Advanced Inorganic Chemistry  
Biochemistry  
Calculus II  
Molecular Biology

## MINOR IN ENVIRONMENTAL SCIENCE

The minor in environmental science is designed to expose students to the interdisciplinary nature of environmental issues, with emphasis on the current scientific methods used to study these issues. This minor is intended to provide students with a firm foundation in the language, concepts, and methods of Environmental Science as well as perspectives on current issues concerning the environment. While this minor emphasizes the fundamentals of natural and applied environmental science, this minor also incorporates 3-7 credit hours outside of these areas to help students gain a better appreciation for the interdependent nature of human behavior and environmental health.

Any student who is interested in the relationship between humans and their environment is encouraged to participate. Students from a wide-range of primary disciplines, from the sciences to the social science, humanities, business, and arts, may benefit from this minor area of specialization.

### Requirements:

Ensc 100	Environmental Science Seminar .....	1
Ensc 200	Global Environment .....	4

### Electives:

Choose one course from the electives in environmental policy and two courses from the electives in environmental science. Note, two of these courses must be at the 300 level or above.

## Environmental Policy

Pols 224	Environmental Politics.....	3
Econ 333	Environmental Economics	4

(Prerequisite: Econ 102; 3 credits)

## Environmental Science

Ensc 310	Environmental Chemistry .4 (Prerequisites: Chem 220/221, Chem 230/231, Chem 240/241 or Chem 320/321; 12 credits)	
Ensc 301	Environmental Toxicology 4 (Prerequisites: Chem 220/221, Chem 230/231, Bio 202; 12 credits)	
Ensc 210	Tropical Environmental Biology .....	4
Phy 322	Modern Physics with Health Applications .....	4

(Prerequisites: Phy 202 or 232, Phy 204 or 242, Math 226 & 227; 16 credits)

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## COURSE DESCRIPTIONS

### Environmental Science (Ensc)

#### Ensc 100 Environmental Studies Seminar

The study of the environment encompasses a broad field that links theory from many disciplines to applications in human society. This course provides a survey of both the major issues in environmental science and the environmental professions that address these issues. Faculty and outside speakers from government and private industry will make presentations and lead discussions. The structure of environmental regulation and management in the U.S. will be described. 1 hour. Gundersen.

#### Ensc 200 Our Global Environment

Human activities have changed the types and rates of processes occurring throughout the planet. Understanding the near-term and long-term effects of these actions on the quality of the environment requires a broad view of how earth functions without human intervention, and how society has changed these functions to support itself. Consent of instructor. 4 hours. Gundersen.

#### Ensc 210 Tropical Environmental Biology

A study of the effects of human activity on natural environments associated with Third World, developing countries (ie. Belize and Guatemala, Central America). A variety of ecosystems and areas will be studied, including lowland savannas, tropical seasonal forests, limestone caves, coastal lagoons, mangrove swamps, sea-grass flats, coral reefs and urban and rural societies. The course meets during the spring, in order to present lectures and background materials, which will prepare students for activities in Belize and Guatemala in May. Additional fee required. Prerequisite: consent of instructor and sophomore standing. Alternate years. 4 hours. Gundersen

#### Ensc 301 Environmental Toxicology

Pollutants impact the structure and function of ecological systems at all levels of biological organization. This course will focus on the effects of toxicants on ecological structures, from the molecular to the individual organism to the community and the ecosystem. Field and laboratory experiences are integrated into the course and will involve standard toxicity testing, use of biomarkers, tissue, water and soil analyses, and molecular techniques. Prerequisite: Biology 204, and one semester of organic chemistry, both with a "C-" or better, and consent of instructor. 4 hours. Gundersen

#### Ensc 310 Environmental Chemistry

Changes in the environment, whether they involve degradation or restoration, are ultimately the result of chemical processes. This course studies the state of and theoretical basis for change in the atmosphere, groundwater, and various aquatic environments. Methodology for monitoring and modeling these systems will be included. Prerequisites: Chem 240 or Chem 310, ES200, Bio204, with a "C-" or better. 4 hours. Paar.

#### Ensc 490 Capstone Experience

Designed to allow students to expand on research projects or internships by more thoroughly examining the primary literature, reanalyzing data, writing an annotated bibliography, and presenting in a public forum. Prerequisite: Senior standing and approved project. 2 hours. Gundersen.

#### Ensc 495 Research

Faculty supervised, student-conducted, individual research project. Prerequisite: consent of instructor. 1-6 hours. Staff.

# EXERCISE SCIENCE

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**Shawn Henry**, *Chair, Associate Professor of Exercise Science*

**Linda McIntosh**, *Director of Sports Medicine*

**Jean Rix**, *Instructor\**

**Richard Rutt**, *Associate Professor of Physical Therapy\**

**Sheryl Sanders**, *Assistant Professor of Physical Therapy\**

**Philip Schot**, *Associate Professor of Exercise Science*

**Ken Schumann**, *Instructor and Associate Director of Athletics*

**Judith Sherman**, *Professor and Director of Athletics*

*\*adjunct faculty*

The Department of Exercise Science offers a major in Exercise Science with emphasis areas in Human Performance and Sports Medicine and minors in Coaching and Exercise Science.

Graduates with this major are prepared for graduate study in physical therapy, occupational therapy, exercise physiology and related fields of medicine. Majors with a Human Performance emphasis are prepared for careers in recreation, fitness centers and with the appropriate licensure, teaching physical education in the public schools. The major with a Sports Medicine emphasis helps prepare students to take the test for National Athletic Training Association (NATA) certification.

## MAJOR IN EXERCISE SCIENCE

The Department of Exercise Science is dedicated to the development of competent professionals within the field of Exercise Science. The department offers courses that provide the knowledge and skills necessary for successful performance in entry-level positions or graduate school.

# EXERCISE SCIENCE

A student who successfully completes the major in Exercise Science will be able to:

- Understand and appreciate motor and health-related fitness from a scientific perspective, including muscular strength, muscular endurance, cardio-respiratory fitness, flexibility, body composition, speed, agility, power, balance and coordination.
- Understand form and function of the human body during exercise and the adaptations that occur in response to exercise.
- Understand and apply scientific principles necessary to enhance human performance; optimize the injury rehabilitation process; and maintain health, fitness, and wellness in the general population – quantitatively and qualitatively improving quality of life.
- Clearly articulate the application of biomechanical principles to human movement.
- Demonstrate the ability to use the scientific method when analyzing problems and synthesizing information.

## Requirements

Biol 202	General Biology I and Lab....4
Biol 204	General Biology II and Lab ..4
Biol 224	Human Anatomy and Lab...4
Biol 240	Human Physiology and Lab 4
Chem 220	General Chemistry I and Lab ...4
Chem 230	General Chemistry II and Lab.....4
Phy 202	Intro to Physics I and Lab.....4
Spmcd 204	Athletic Training .....2
Exsc 230	Nutrition .....3 (may substitute Exsc 355)
Exsc 380	Biomechanics and Lab .....4
Exsc 414	Perceptual Motor Learning3
Exsc 475	Internship.....3
Exsc 480	Physiology of Exercise and Lab .....4
<b>Choose two of the following ..... 7-8</b>	
Hper 330	Adult Fitness
Exsc 430	Advanced Biomechanics
Exsc 400	Adv Gross Anatomy and Lab
Exsc 490	Adv Phys of Exercise and Lab

## EXERCISE SCIENCE WITH AN EMPHASIS IN HUMAN PERFORMANCE

A student who successfully completes the major in Exercise Science with an emphasis in Human Performance will be able to:

- Plan a scope and sequence of physical education instruction for grades PK-12 that promotes an appreciation of lifelong learning and participation in physical activity.
- Plan and implement a program of instruction consistent with the National Standards for Physical Education.
- Teach the systematic progression of movement for team sports, individual sports and fitness activities in educational and recreational settings.
- Distinguish between qualitative and quantitative approaches for analyzing human movement and be able to detect and correct movement errors.
- Demonstrate the ability to communicate clearly and effectively with exercise participants in groups and individually.
- Clearly articulate and implement the components that create and maintain a safe learning environment.
- Evaluate student progress using outcome goals, standards and benchmarks.
- Demonstrate a knowledge of techniques for the accommodation of varied skill levels and special populations within the same class or activity group.

## Requirements

Biol 202	General Biology and Lab ...	4
Biol 224	Human Anatomy and Lab .....	4
Biol 240	Human Physiology and Lab .....	4
Phy 110/111	Physics of Everyday and Lab.....	4 (May substitute Phys 202)
Exsc 230	Nutrition .....	3
Exsc 380	Biomechanics and Lab .....	4
Exsc 414	Perceptual Motor Learning	3
Spmcd 204	Athletic Training .....	2
Hper 105	First Aid .....	1
Hper 170	Techniques of Recreational Games, Personal Defense, Gymnastics, Fitness, Pickleball, Handball, Racquetball .....	3
Hper 305	Measure and Eval in Physical Education .....	1
Hper 270	Techniques of Aquatics, Rhythms, Badminton, Tennis, Track.....	3
Hper 315	Adaptive Physical Education .....	3
Hper 316	Teaching Health and Physical Education in the Elementary School.....	3
Hper 321	Elementary Human Performance Practicum .....	1
Hper 323	Secondary Human Performance Practicum .....	1
Hper 331	Adult Fitness Practicum .....	1
Hper 370	Techniques of Softball, Basketball, Flag Football, Soccer, Volleyball, Archery, Golf .....	3
Hper 421	Principles and Administration of Physical Education and Athletic Programs.....	3
Hper 480	Exercise Physiology for Human Perf .....	4
<b>Choose one of the following:</b> .....		<b>3-4</b>
Hper 330	Adult Fitness	
Exsc 430	Advanced Biomechanics	
Exsc 400	Adv Gross Anatomy and Lab	
Exsc 490	Adv Phys of Exercise and Lab	

## EXERCISE SCIENCE WITH AN EMPHASIS IN SPORTS MEDICINE

A student who successfully completes the major of Exercise Science with an emphasis in Sports Medicine will be able to:

- Recognize and evaluate common athletic injuries and demonstrate knowledge in the prevention of those injuries.
- Provide emergency care for acute athletic injuries and long-term care for chronic injuries.
- Apply protective strapping, bracing and taping.
- Demonstrate the proper use of manual therapy techniques and the proper application of a variety of therapeutic modalities.
- Prescribe and implement rehabilitation programs for athletic injuries.
- Show familiarity with the administration of an athletic training program and manage a treatment facility for athletes.

### Requirements

Biol 202	General Biology I and Lab.....	4
Biol 204	General Biology II and Lab.....	4
Biol 224	Human Anatomy and Lab.....	4
Biol 240	Human Physiology and Lab.....	4
Chem 220	General Chemistry I and Lab.....	4
Chem 230	General Chemistry II and Lab.....	4
Phy 110/110	Physics of Everyday and Lab..... (May substitute Phys 202)	4
Exsc 230	Nutrition .....	3 (may substitute Exsc 355)
Exsc 380	Biomechanics and Lab .....	4
Exsc 400	Adv Gross Anatomy and Lab.....	4
Exsc 414	Perceptual Motor Learning .....	3
Exsc 475	Internship.....	3
Exsc 480	Physiology of Exercise and Lab .....	4
Exsc 490	Adv Phys of	

	Exercise and Lab .....	4
Spmd 204	Athletic Training .....	2
Spmd 302	Athletic Training Room Procedures .....	1
Spmd 303	Athletic Training Coverage of Collegiate Practices & Games.....	1
Spmd 304	Treatment and Evaluation of Athletic Injury .....	3
Spmd 404	Advanced Principles of Athletic Training .....	3
Hper 103	Personal Health.....	3
Hper 305	Measure and Eval in Physical Education .....	1
Hper 315	Adaptive Physical Education .....	3
		<hr/> 70

Students may become eligible to test for National Athletic Trainers Association (NATA) certification by completing at least 1500 hours of athletic training experience under direct supervision of a NATA certified athletic trainer. The hours must be attained over a minimum of two years and not more than five years. Students must complete all requirements for eligibility no later than December 31, 2003 after which time this option ceases to exist.

## COACHING MINOR

This minor is available for those students interested in obtaining a coaching position in the public/private schools or in youth or adult programs.

Hper 105	First Aid .....	1
Hper 311	Coaching Methods.....	2
Hper 320	Sport and Society .....	3
Hper 322	Sport Psychology .....	3
Hper 371	Principles and Techniques of Coaching.....	3
Hper 421	Principles and Administration of Physical Education and Athletic Programs .....	3
Spmd 204	Athletic Training .....	2
		<hr/> 16

## EXERCISE SCIENCE MINOR

This minor is available for those students who, with the appropriate major, seek entry into graduate schools (e.g., physical therapy) or are interested in careers in the sports and fitness industry.

Biol 202	General Biology I and Lab...4
Biol 224	Human Anatomy and Lab...4
Biol 240	Human Physiology and Lab.....4
Spmd 204	Athletic Training .....2
Exsc 230	Nutrition .....3
Exsc 380	Kinesiology and Lab .....4
Exsc 480	Physiology of Exercise and Lab.....4

(May substitute Hper 480/481)

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## COURSE DESCRIPTIONS

### Exercise Science (Exsc)

#### Exsc 190 Exercise Science Passport

An introductory course for students interested in exercise science as a major or minor. Activities and faculty/guest speakers will introduce students to the exercise science program at Pacific and to the wide array of careers related to exercise science. 1 hour. Henry.

#### Exsc 230 Nutrition

An in-depth study of the relationship between nutrition and total individual health through the life-span. Emphasis will be placed on the essential nutrient chemical conversions during digestion, absorption and metabolism and their contribution to optimal health. Individual nutritional analysis and a personalized diet plan will be required. 3 hours. Henry.

#### Exsc 355 Principles of Nutrition

Advanced study of nutrition, including physiological function and metabolic fate of carbohydrates, lipids, proteins, vitamins, minerals, and water. Individual nutritional analysis and a personalized diet plan will be required. Prerequisite (or current enrollment): Biol 240 Human Physiology or Organic Chemistry. 3 hours. Henry

#### Exsc 380 Biomechanics and Laboratory

Study of the structure and functioning of the human body via the methods of classical mechanics. Prerequisite: Biol 224, Phys 110/111 or Phys 202. 4 Hours. Schot.

#### Exsc 400 Gross Human Anatomy and Laboratory

Advanced study of gross and histological structure of the human body. Introduction into musculoskeletal, nervous and cardiopulmonary systems. Prerequisite: Biol 224. 4 hours. Sanders.

#### Exsc 414 Perceptual Motor Learning

An in-depth study of learning theories, acquisition of skill, perception and motor control as they apply to the learning of a motor skill. Prerequisite: Biol 202. Recommended Biol 224. 3 hours. Schot.

#### Exsc 430 Advanced Biomechanics

Advanced study of physical laws and mechanical aspects governing human motor functioning; analytical processes emphasized. Prerequisite: Phy 110/111 or 202 (Math 125 is a prerequisite for Phy 204) and Exsc 380. 3 hours. Schot.

#### Exsc 475 Internship

An internship consists of a field experience in a student's specific career choice. Application of theories is emphasized. Arrangements for the course must be completed two weeks prior to the term in which the course is being taken. The internship is a capstone experience recommended to be taken during the senior year. Instructor's consent is required. Prerequisite: 12 hours of Exercise Science/Human Performance/Sports Medicine. Graded P/N. Course may be repeated once for credit. 1-14 hours. Schot.

#### Exsc 480 Physiology of Exercise and Laboratory

The branch of physiology that deals with function of the body during exercise and adaptations that occur in response to exercise. Knowledge and application of scientific principles are necessary to develop peak performance in athletes and to maintain health and fitness in the general population - quantitatively and qualitatively improving life. Prerequisite: Biol 204 and 240. 4 hours. Henry.

#### Exsc 490 Advanced Physiology of Exercise & Laboratory

Advanced study and application of principles of exercise physiology. Emphasis on exercise testing and prescription, current topics in exercise science, and research projects students design, original research questions, develop research projects, carry out the actual research, engage in discovery learning and participate in peer teaching. Prerequisite: Successful completion of Exsc 480. 4 hours. Henry.

## **Human Performance (Hper)**

### **Hper 103 Personal Health**

The study of physical, mental, intellectual and social well being for effective functioning, both within the individual and by the individual, within the environment. 3 hours. Staff.

### **Hper 105 First Aid**

The study of basic anatomy and physiology of body systems as they relate to the prevention and care of injury and safety. More advanced than a standard first aid class outlined by the American Red Cross. 1 hour. Boyd.

### **Hper 170 Techniques of Fitness, Gymnastics, Recreational Games, Handball, Self Defense, Racquetball, Pickleball**

Personal skill development, methods and materials for teaching and evaluating in the areas of gymnastics, recreational games, handball, self defense, racquetball, pickleball, and fitness parameters. 3 hours. Fall. Alternate years. Rix/Staff.

### **Hper 204 Methods of Officiating**

The study of officials' duties for various sports; general officiating diagnosis to discover methods and techniques used for better officiating. 3 hours. Staff.

### **Hper 305 Measurement and Evaluation in Physical Education**

Contemporary theories and techniques of research design, data acquisition, processing, and analysis of measurements in physical education, sports medicine, and human performance. The course integrates the use of information technology and the application of statistical concepts toward evaluation and presentation of findings. Prerequisite: Spmd 204, Math 207, upper-division standing or consent of instructor. 1 hour. Schot.

### **Hper 270 Techniques of Swimming, Badminton, Tennis, Rhythms, Track**

Personal skill development, methods and materials for teaching and evaluating in the areas of swimming, badminton, rhythms, tennis, track and field. 3 hours. Spring. Alternate years. Rix/Staff.

### **Hper 311 Coaching Methods**

A series of individual courses designed to give students insight and direction in leading or assisting in the coaching of athletics. Students may elect from a variety of coaching methods

courses in the areas of baseball, softball, basketball, soccer, volleyball, and wrestling. May be repeated for different sports. Prerequisite: Hper 105. 2 hours each. Staff.

### **Hper 315 Adaptive Physical Education**

An introduction to adapted, corrective and developmental physical education. Emphasis is placed on instruction of physical activities for the exceptional child. 3 hours. Staff.

### **Hper 316 Teaching Physical Education in the Elementary School**

A course based on a curriculum of sequential and progressive motor, fitness and social skills development for an elementary physical education program. Emphasis will be placed on program and lesson planning resulting in the application of content, methodology, student assessment and classroom management in a practical teaching experience with students grades one to four. Regulations, standards, and career opportunities will be discussed. Prerequisite: Hper 170, 270, 370, or junior standing. 3 hours. Spring. Alternate years. Rix.

### **Hper 320 Sport & Society**

Investigation of sport as a social phenomenon, including small groups in sport, sport organizations, sport subcultures, socializing institutions, and an in-depth analysis of interscholastic and intercollegiate sport programs. 3 hours. Junior Standing. Alternate years. M Jones.

### **Hper 321 Elementary Human Performance Practicum**

A supervised practical experience teaching physical education activities and concepts to elementary age school children. Prerequisite: Hper 316. 1 hour. Rix.

### **Hper 322 Sport Psychology**

Examination of the psychological basis of sport including effects on learning, perception, motivation, social, and behavioral aspects. 3 hours. Junior Standing. Alternate years. M Jones.

### **Hper 323 Secondary Human Performance Practicum**

A supervised practical experience teaching physical education activities and concepts to Junior high, high school and/or college-age students. Prerequisite: Junior standing in exercise science major or consent of the instructor. 1 hour. Rix.

**Hper 330 Adult Fitness Principles**

A study of the physiological, psychological and sociological aspects of adult fitness. The course includes materials and programs for use in initiating, prescribing, evaluating, monitoring and supervising adult fitness programs. Prerequisite: Biol 240 and Exsc 230. 3 hours. Staff.

**Hper 331 Adult Fitness Programming Practicum**

A supervised practical experience working with adults in a physical fitness program. Prerequisite: Hper 330. 1 hour. Staff.

**Hper 370 Techniques of Softball, Basketball, Flag Football, Soccer, Volleyball, Archery, Golf**

Personal skill development, methods and materials for teaching and evaluating in the areas of softball, basketball, flag football, soccer, volleyball, archery and golf. 3 hours. Fall. Alternate years. Rix/Staff.

**Hper 371 Principles & Techniques of Coaching**

Principles technically applicable to the coaching of sports, including strategy and tactics, motivation, ethics, legal liability, budgeting, and development of organizational, interpersonal and communication skills. Prerequisite: Hper 105 and Hper 311. 3 hours. Alternate years. Schumann.

**Hper 421 Principles & Administration of Physical Education & Athletic Programs**

A study of administrative functions in physical education and athletics, including program organization and evaluation program goals and objectives, personnel, facilities, equipment, fundraising, sport law and risk management. Prerequisite: Junior Standing. 3 hours. Schumann.

**Hper 480 Physiology of Exercise for Human Performance & Laboratory**

The study and application of principles to the development of efficient human movement as it applies to human performance and educational settings. Prerequisite: Biol 202 and 240. 4 hours. Alternate years. Henry.

**Sports Medicine (Spmd)****Spmd 204 Athletic Training**

A basic study of prevention and care of athletic injuries. Students will learn to prevent, evaluate, and care for common injuries. Students will also learn the basics of emergency care and the application of preventive taping. 2 hours. Prerequisite: Hper 105. \$5 Lab Fee. McIntosh.

**Spmd 302 Athletic Training Room Procedures**

Observation of Pacific University athletic training facility operations and completion of National Athletic Training Association competencies. Prerequisite: Spmd 204. Co-requisite: Biol 224 Human Anatomy. 1 hour. Staff.

**Spmd 303 Athletic Training Coverage of Collegiate Practices & Games**

Observation of athletic training procedures and protocols during collegiate games and practices and completion of National Athletic Training Association competencies. Prerequisite: Spmd 302. 1 hour. Staff.

**Spmd 304 Treatment/Evaluation of Athletic Injuries**

Advanced procedures in athletic training, injury evaluation, care and rehabilitation. Consideration for safety factors in athletic contests, sports equipment, and facilities. Theory and practice in the use of therapeutic modalities. Prerequisite: Spmd 204 and Biol 224. Every other year (alternates with Spmd 404). 3 hours. McIntosh.

**Spmd 305 Athletic Training Practicum I**

Observation hours in a clinical setting. Hours may be obtained in a physical therapy clinic or orthopedist's office. Instructor's consent only. 1 hour. McIntosh.

**Spmd 404 Advanced Principles of Athletic Training**

Advanced procedures in Athletic Training including gait analysis, manual therapy, joint injury evaluation, taping and bracing. Discussion of current issues in sports medicine including: drugs and sports, communicable diseases and chronic illnesses. Prerequisite: Spmd 204 and Biol 224. Every other year (alternates with Spmd 304). 3 hours. McIntosh.

**Spmd 405 Athletic Training Practicum II**

Advanced practical application of training skills in a secondary school setting. Prerequisite: Spmd 304. Instructor's consent only. 1 hour. McIntosh.

# FEMINIST STUDIES

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## **Co-Directors**

Alyson Burns-Glover, *Social Sciences Division*

Martha Rampton, *Social Sciences Division*

## **Associated Faculty**

Vernon Bates, *Sociology*

Pauline Beard, *English*

Sara Steinert Borella, *French*

Susan Cabello, *Spanish*

Patricia Cheyne, *Art*

David DeMoss, *Philosophy*

Lorely French, *German*

Linda Gallahan, *Psychology*

Melissa Jones, *Media Arts*

Lawrence Lipin, *History*

Cheleen Mahar, *Anthropology*

Marc Marengo, *Philosophy*

Sarah Phillips, *Sociology*

Martha Rampton, *History*

Jeff Seward, *Political Science*

Feminist Studies is an interdisciplinary minor that investigates the significance of sex and gender in all areas of human life. Feminist analysis is based on the assumption that sex and gender are crucial factors in the organization of our personal and public lives and our social institutions. The Feminist Studies minor includes courses that utilize feminist perspectives to expand and reevaluate the assumptions at work in traditional disciplines in the study of individuals, cultures, social institutions, social policy and other areas of scholarly inquiry. The minor also encompasses courses that examine the roles of women and men in the community, the nature of work and the family, and the importance of race, class, and culture to the study of sex and gender.

The Feminist Studies minor has as its basis the theoretical framework of the introductory course and an advanced 400 level class, which emphasize the diversity of feminist literature and research. The introductory course lays the groundwork for the minor by introducing basic theory and exposure to field research. The advanced course provides space for collaboration with beginning students, the practical application of theories, and completion of the senior capstone project. Elective courses concentrate on substantive issues in the areas of feminist, women's and gender studies and offer a multidisciplinary approach to the program. Such courses address topics that relate directly to feminist theory or have become salient to the minor because of feminist theory.

Students who wish to declare the Feminist Studies Minor must consult with the Co-Directors of Feminist Studies or an FS core faculty member prior to submitting a declaration form. At that time, in consultation with the directors or core faculty members, the student will choose a Feminist Studies Minor advisor. Students should plan to take the first FS core course, Introduction to Feminist Studies 201, in the spring semester of either their freshman or sophomore year. Students should plan to take FS 450 in the spring of either their sophomore or junior year, and FS 451 in the fall of either their junior or senior year. FS 201 and FS 450 will be taught only in the spring, and FS 451 will be taught only in the fall. In addition to the core courses, students must take 3-4 elective courses (12 semester hours). No more than one elective course taken prior to FS 201 can be applied to the minor.

**MINOR IN FEMINIST STUDIES**

FS 201	Introduction to Feminist Studies.....4 (includes one credit for field work)	4
FS 450	Feminist Studies Mentoring .....	2
FS 450	Feminist Studies Capstone .....	2
Three or four electives .....		12
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		20

**At least one course must be from either the Natural or Social Sciences and at least one must be from either the Arts or Humanities.**

**Course Approved for FS Elective Credit:**

All the 300 and 400 level courses listed below when taken for Feminist Studies credit have a prerequisite of FS 201.

Anth 330	Gender in Cross-Cultural Perspective
Art 280	Women in Art
Engl 430	Major Writers: Woolf
Fren 401	Gender, Culture & Society: Women's Writing
FS 210	Action Projects in Feminist Studies
FS 300	Special Topics in Feminist Studies
Hist 246	Gender and Sexuality in Victorian America
Hist 400	Medieval Women
MedA 307	Gender Communication
MedA 401	Women Directors and Feminist Strategies
Phil 255	Feminist Epistemology
PolS 224	Women in Politics
Psyc 260	Psychology of Women
Psyc 420	Sp Topics: The Development of Gender
Psyc 420	Sp Topics: Women and Violence
Soc 309	Sociology of the Family
Spc 317	Gender and Sexuality
Span 485	Women Writers in Latin America

Check individual departments for course descriptions and course schedules for semesters offered. Additional courses are approved annually and may be applied to the minor.

**COURSE DESCRIPTIONS**

**FS 201 Introduction to Feminist Studies**

*This introductory level course explores the various foundations of feminist theory, including perspectives from across the disciplines. Students review and critique readings from early feminist writers, second generation feminist writers and contemporary feminist and deconstructionist theorists. The course consists of two components: a classroom experience with an emphasis on the breadth of feminist literature and field work in the community. Spring only. 4 hours. Staff*

**FS 210 Action Projects in Feminist Studies**

*This course is designed to promote student individual and collaborative work related to issues in feminism and gender studies. Students may participate in a one-time action project centered around an event, a service learning placement, or a collaborative project that promotes the goals of the minor. Projects may include, but are not limited to, serving at sites approved by the FS faculty, working on events connected to Women's History Month, carrying out their FS 201 action projects, and projects designed to promote education in our community. Graded P/NP. Prerequisite: FS 201.*

**FS 300 Special Topics in Feminist Studies**

*This is a special topics course focusing on the specific interests of the faculty and students in the Feminist Studies Minor program. Topics addressed in the course will be derived from a variety of disciplinary standpoints, as well as possibly interdisciplinary collaboration. Some examples of topics that may be offered through this course are: "The Development of Gender," "Women and Film," and "Feminist Epistemology" to name a few. Offered for 3-4 hours. Prerequisites: FS 201 (or permission of the instructor).*

**FS 450 Feminist Studies Mentoring**

*Feminist Studies 450 is designed to allow students an opportunity to fulfil the mentoring requirement of the Feminist Studies minor and begin identifying a topic for the capstone project. This course will also provide an environment in which students will discuss and contextualize ideas and material with the students in FS 201. FS 450 students will meet with FS 201 students one class period a week. Prerequisite: FS 201, two FS electives, Junior or senior standing. Fall only. 2 hours*

**FS 451 Feminist Studies Capstone**

*In this seminar course, students read and analyze advanced works in Feminist Studies and review the material they have encountered in their electives in light of advanced theory. The course culminates in a written essay or research project. The findings of the project are presented to the Pacific Community in a public forum during Women's History Month. Prerequisites: FS 201 and 450, two FS electives, Junior or senior standing. Spring only. 2 hours*

# HISTORY

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Martha Rampton, *Chair, Associate Professor*

Jeffrey G. Barlow, *Professor*

Thomas Beck, *Professor and Dean of the College of Arts and Sciences*

Richard I. Jobs, *Assistant Professor*

Lawrence M. Lipin, *Associate Professor*

The discipline of history is central to the liberal arts; it draws on and contributes to neighboring fields, such as political science, literature, philosophy and the arts, to name but a few. History is essential to an understanding of the evolutionary nature of the institutions and values that have shaped not only the past, but inform the present. The study of history prepares students for a wide range of professions, including law, government, archival and museum work, professions in travel and teaching.

## Goals

The major in history is designed to provide the student with a broad range of offerings in various fields of history. Through these studies the department seeks to teach its majors to conduct creative and thorough research projects, to read historical materials with understanding, to engage in critical analyses from a historian's perspective, and to write polished communicative prose.

The curriculum established by the history major leads the student from broad-based survey classes that cover the U.S., Europe, Islamic Middle East and Asia to more narrowly defined upper-division classes in the specialty of the student's choice. Students encounter the scholarly methodology employed by historians, contributing to the development of verbal, analytical and reading skills. More specifically, throughout the curriculum, history courses require students to produce written work that emphasizes focused analysis supported by historical evidence. In addition, at the lower-division level, students will become familiar with basic historical narratives. At the upper-division level, students will use primary

sources in pursuit of questions of an increasingly thematic nature. Their research will capitalize on the electronic resources currently available. As seniors, history majors participate in a seminar emphasizing historical perspectives, methodological techniques, and a variety of interpretive historical models. History majors will complete a thesis in the last semester of their senior year that demonstrates competence with historical theory and methods.

The department also hosts the Journal of the Association of History and Computing, <http://mcel.pacificu.edu/JAHC/> and upper-division students have an opportunity to work as assistant editors in producing it.

## MAJOR IN HISTORY

### Requirements

**At least four courses must be from the following:** .....12

Hist 101-102 Western Civilization I & II

Hist 111 OR 112 East Asia

Hist 141-142 American History I & II

At least five additional courses, not more than one of which may be at the 200-level and at least one of which must be a 400 level seminar-style course or an approved internship..... 15-20

Hist 490 Senior Research Seminar .....3

Hist 495 Senior Thesis .....3

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33-38

Plus either two years of an appropriate foreign language, a second major, or a minor, chosen in consultation with an advisor from the history department, or the completion of the Social Studies endorsement for secondary teaching.

# MINOR IN HISTORY

## Requirements

For a minor in history a student must complete seven courses in the History Department, at least three of which must be at the 300-level OR above..... 21-28

Any student interested in a history minor should consult with a faculty member in the history department.

For additional information as to staff, program, and student work, see the department's web site at: <http://mcel.pacificu.edu/history/index.html>.

## Course Descriptions

### History (Hist)

#### **Hist 101 Western Civilization I**

The development of western culture and institutions from the ancient world to the late Middle Ages. 3 hours. Rampton.

#### **Hist 102 Western Civilization II**

This course covers the development of western culture and institutions from the Renaissance to the modern age. 3 hours. Jobs.

#### **Hist 111 Foundations of East Asia**

This course deals with the intellectual, social, political, and religious foundations of three East Asian Societies: China, Japan, and Vietnam. The focus of the class is upon classical Asian notions of proper values and institutions, with a concentration on intellectual (both philosophical and religious) foundations considered in a historical perspective. We will also consider issues relative to modern Asia, and to Asian-American family life and culture. The approach will be primarily through original Asian texts in translation. Although it is not required, concurrent registration in History 255, "History Web Lab" (1 hour credit), is recommended. In that lab, students will learn to develop electronic materials for the World Wide Web which will both teach them to create Web pages and will illuminate the contents of the course. 3 hours. Barlow.

#### **Hist 112 East Asia**

This course surveys the modern histories of China, Japan, Tibet, and Vietnam from the 17th century to the recent past. Topics covered include the classical cultures of the countries, economic and political foundations, and the

consequences of Western impact and modern nationalism. The cultures, covered as independent entities, are compared both to each other and to European or Western patterns of development. There will be an opportunity in this course for students to learn how to prepare "Pages" for the World Wide Web. Those who are interested should also enroll for one hour of credit in one of the two sections of History 255, "History Web Lab". Although concurrent enrollment in 255 is voluntary, all students are strongly urged to enroll as the lab will not only teach web page production, but will also enhance student understanding of materials covered in the class itself. 3 hours. Barlow.

#### **Hist 141-142 American History I-II**

This is a two-part survey of American history from European settlement to the Civil War, and from Reconstruction to the present. The parts may be taken separately. 3 hours per semester. Lipin.

#### **Hist 200 The Islamic Middle East: 570-1453**

This is a survey of the history of the Middle East (from Morocco to India) from the birth of Muhammed in 570 to the rise of the Ottoman Turks in 1300. The course concentrates on political developments and institutions as well as the growth and evolution of Islam and Islamic cultures. 3 hours. Rampton.

#### **Hist 206 France from Caesar to Napoleon**

This course covers the history and culture of France from the Roman period until the end of the Napoleonic Wars in 1815. Equal attention is given to political and social/cultural aspects of French history. Through reading of primary sources, discussions, and lecture, the course deals with the distinctiveness of France as well as placing the nation within a broad European historical context. 3 hours. Rampton.

#### **Hist 207 Spain from Rome to Revolution**

This course covers the history and culture of Spain from the Roman era through the Moorish period and touches lightly on the dissolution of the Spanish Empire beginning in the seventeenth century. Equal attention is given to political and social/cultural aspects of Spanish history. Through reading of primary sources, discussions and lecture, the course deals with the distinctiveness of Spain, as well as placing the nation within a broad European historical context. 3 hours. Rampton.

**Hist 208 England from Rome to Revolution**

This course covers the history and culture of England from the Roman period through the Glorious Revolution of 1688. Equal attention is given to political and social/cultural aspects of English history. Through reading of primary sources, discussions and lecture, the course deals with the distinctiveness of England, as well as placing the nation within a broad European historical context. 3 hours. Rampton.

**Hist 210 Ancient Kingdoms of Indochina: Vietnam, Cambodia, and Laos**

This course covers the pre-modern kingdoms of Vietnam, Cambodia, and Laos, with some reference to contiguous areas of Southeast Asia. These kingdoms, such as those of the Vietnamese, the Cham, the Lao, and the Khmer, will be considered within a historical perspective with regard to such topics as political, social, religious, and economic institutions. The Vietnamese will be used as the unifying element around which to understand the other peoples and their kingdoms. Although it is not required concurrent registration in History 255, "History Web Lab" (1 hour credit), is recommended. In that lab, students will learn to develop electronic materials for the World Wide Web which will both teach them to create Web pages and will illuminate the contents of the course. 3 hours. Barlow.

**Hist 211 Japan Past & Present with Film**

This class will survey Japanese history and culture using classical Japanese films as a primary text, supplemented with assigned readings. The goals of the class are to acquaint students with an overview of Japanese history and culture, and to learn to read films, particularly Japanese classical films, as text. There will be an opportunity in this course for students to learn how to prepare "Pages" for the World Wide Web. Those who are interested should also enroll for one hour of credit in one of the two sections of History 255, "History Web Lab". Although concurrent enrollment in 255 is voluntary, all students are strongly urged to enroll as the lab will not only teach web pages production, but will also enhance student understanding of the materials covered in the class itself. 3 hours. Barlow.

**Hist 212 China Past & Present with Film**

This course will provide a survey of the basic institutions and values of China, considered both within their past, or Classical, and their present, or Modern, forms. We will cover such topics as political system and values (Confucianism and Communism), family and gender, poetry and literature, arts, war and diplomacy, economic values and institutions, rebellion and protest, reform movements, etc. Chinese film will be heavily used as a text to illustrate modern Chinese values and Chinese interpretations of traditional values and institutions. There will be an opportunity in this course for students to learn how to prepare "Pages" for the world wide web. Those who are interested should also enroll for one hour of credit in one of the two sections of History 255, "History Web Lab". Although concurrent enrollment in 255 is voluntary, all students are strongly urged to enroll as the lab will not only teach web page production, but will also enhance student understanding of the materials covered in the class itself. 3 hours. Barlow.

**Hist 213 Vietnam & the U.S.**

This is a survey of the origins, development and results of the American war with Vietnam. This course, however, will be taught more within the context of Vietnamese history and culture than within that of American history and culture. Consequently, more emphasis will be given to the roots of the war in Vietnam than to its origins in U.S. foreign policy. There will be an opportunity in this course for students to learn how to prepare "Pages" for the World Wide Web. Those who are interested should also enroll for one hour of credit in one of the two sections of History 255, "History Web Lab". Although concurrent enrollment in 255 is voluntary. All students are strongly urged to enroll as the lab will not only teach web page production, but will also enhance student understanding of the materials covered in the class itself. 3 hours. Barlow.

**Hist 230 The Great War: World War I**

This is a course in the history of World War I. The course includes a discussion of the origins of the war, the military history of the conflict, the domestic political, social and economic conditions in the belligerent nations and the political consequences of this, the formative event of the 20th century. 3 hours. Staff.

**Hist 231      The Experience of  
Total War: World War II**

This is a course in the history of World War II in Europe. Included are a discussion of the origins of the war, the military history of the conflict, the domestic conditions in the belligerent nations and the political consequences of this, the greatest conflict in human history. 3 hours. Staff.

**Hist 232      The Holocaust**

Team-taught interdisciplinary course on the Nazi persecution and ultimate extermination of the Jews of Europe, Gypsies, political enemies of the National Socialist Dictatorship, and those considered undesirable by the NS State. Cross-listed with Engl. 220, Literature and Human Concerns: The Holocaust. 3 hours. Staff.

**Hist 240      Latin American History**

A broad survey of political, social, and economic history of Latin America from the pre-Columbian civilizations to the 20th century. Special emphasis will be given to the complex ramifications of the interaction of European conquerors/settlers, African slaves, and the indigenous peoples of the region. Meets cross-cultural requirement. 3 hours. Seward.

**Hist 242      History of the  
American West**

An exploration into the history of the western United States, with an emphasis on the historical encounter between peoples and cultures, between human societies and nature, between regional and federal governments, between local communities and an international economy, and between popular culture and historical experiences. While the course covers these themes for the entire geographical expanse west of the Mississippi, there will be a strong focus on the Pacific Northwest. 3 hours. Lipin.

**Hist 246      Gender and Sexuality in  
Victorian America**

The development and spread of Victorian culture in the United States during the nineteenth century, particularly as it defined ideas about gender and sexuality. Focus is on the creation of women's sphere and ways in which women accommodated themselves to domesticity, rebelled against it, or used it themselves to discipline their husbands and sons. 3 hours. Lipin.

**Hist 300      The Ancient World  
to AD 400**

This class treats the ancient world from the first civilizations in the fertile Crescent through ancient Egypt, to the development of medieval institutions in the early fifth century AD. The course stresses both broad political, and social/cultural issues. The class is largely run as a seminar with some lecture. Class discussions are based on reading of primary texts. Prerequisite: Junior standing or consent of instructor. 4 hours. Rampton.

**Hist 301      The Medieval World:  
400-1500**

This class treats the medieval world from the development of medieval institutions in the fifth century AD through the mid-fifteenth century. The class stresses social/cultural issues, but also provides an understanding of political and constitutional developments of the period. The class is run as a seminar with some lecture. Class discussions are based on reading of primary texts. Prerequisite: Junior standing or consent of the instructor. 4 hours. Rampton.

**Hist 302      Renaissance, Reformation,  
Revolt: 1500-1800**

This is a history of early modern Europe from the Reformation to the French Revolution. The course treats the spiritual, intellectual, social, political and economic foundations of modern Europe. Prerequisite: Junior standing or consent of the instructor. 4 hours. Rampton

**Hist 305      The History of Magic  
and Witchcraft**

This course deals with medieval and early European conceptions of and reactions to magic, sorcery, and witchcraft from pre-Christian Late Antiquity through the early modern period. The major focus of the course is (1) the development of ecclesiastical/intellectual notions of magic and heresy, (2) a look at primary texts with a view to understanding popular beliefs and practices regarding magic and witchcraft, (3) placing the great witch trials of the late medieval/early modern periods in an historical context of contemporary persecutions of various minorities, (4) explication of the "mature witchcraft theory" and the process of the witch trials. Junior standing or consent of instructor. 4 hours. Rampton.

**Hist 315 Modern Japan**

This course will cover Japanese history from the Meiji Restoration to the present, with an emphasis upon the 20th century. The primary focus of the course will be upon the internal dynamics of Japanese culture. Topics will include political and economic modernization, relations with East Asia and the United States, changes in family and gender roles, the development of fine arts, poetry and literature, the development of Japanese expansionism and the Pacific War, the Japanese Economic Miracle and the place of Japan in the contemporary world. Prerequisite: Hist 112 or 211 or consent of instructor. There will be an opportunity in this course for students to learn how to prepare "Pages" for the World Wide Web. Those who are interested should also enroll for one hour of credit in one of the two sections of History 255, "History Web Lab". Although concurrent enrollment in 255 is voluntary, all students are strongly urged to enroll as the lab will not only teach web pages production, but will also enhance student understanding of the materials covered in the class itself. 3 hours. Barlow.

**Hist 316 China from Mao to Tiananmen**

This course will survey Chinese history and culture in the period from 1949 to the present, with an emphasis on the mass campaigns, from the Great Leap Forward of 1957-58 through the Great Proletarian Culture Revolution, 1965-69. Topics will also include the Reform Movement of Deng Xiaoping and the student protests culminating in the Tiananmen Incident of 1989. An unusual feature of this course is weekly role-playing in which students will be asked to assume Chinese role-types such as peasant, soldier, female cadre, etc., and to play out actual political problems drawn from the mass political campaigns. There will be an opportunity in this course for students to learn how to prepare "Pages" for the World Wide Web. Those who are interested should also enroll for one hour of credit in one of the two sections of History 255, "History Web Lab". Although concurrent enrollment in 255 is voluntary, all students are urged to enroll as the lab will not only teach web page production, but will also enhance student understanding of the materials covered in class itself. Prerequisite: Hist 112 or 212, or consent of instructor. 3 hours. Barlow.

**Hist 330 Industrial Foundations of Modern Europe**

From the origins of the Industrial Revolution to the present technological revolution. The technical,

social and political foundations of the modern industrial state and competing economic ideologies. Prerequisite: Hist 102; or Econ 101, or Junior standing. 3 hours. Staff.

**Hist 331 Europe: 1815-1914 Nineteenth-Century Europe**

Emphasis on new and revolutionary social movements, the development of national institutions and the breakdown of the old diplomatic and international order. Prerequisite: Hist 102 or Junior standing. 3 hours. Staff.

**Hist 332 Europe Since 1914**

Twentieth-century Europe. Emphasis on new and revolutionary social movements, the development of national institutions and the breakdown of the old diplomatic and international order. Prerequisite: Hist 102 or 311 or Junior standing. 3 hours. Staff.

**Hist 334 Twentieth Century Russia**

Russia's development in late Tsarist times, the Bolshevik revolution; Soviet communism under Lenin, Stalin, Khrushchev, and Brezhnev; nationalism and the non-Russian republics; the Gorbachev reforms and the collapse of the USSR; the current situation. 3 hours. Singleton.

**PACS 337 War and International Peace**

An examination of war from an historical and political perspective, and of the attempts to evolve regional and international systems of non-violent conflict resolution. 3 hours. Staff.

**Hist 339 History of Science**

A study of the development of science as doctrine, process and social institution, from early Greek science to the present. Emphasis on western science, including Arab and Islamic contributions. Examination of the impact of culture on science and science on culture. Prerequisite: Sophomore standing. 4 hours. Boersema.

**Hist 341 American Revolution & Constitution**

Covers the ideological, social, economic, and political causes of the American break with the British Empire, the democratizing influence of the revolution on the new state government, and the relationship between this tendency and the construction of the Constitution. Course incorporates research regarding women, African-Americans, and common people into the broader movement. Prerequisite: History 141 or Junior standing. 4 hours. Lipin.

**Hist 342 Civil War & Reconstruction**

Treats the Civil War and its aftermath in context of a broader Western move away from bonded servitude and restrictions on human liberty toward free labor and democracy, and will measure successes and failures, particularly with regard to the legacy of racial division that the war was unable to eradicate. Course will cover the causes of sectional conflict, the military problems of the war, the political, social, and economic conditions within both North and South, and the social and political sources of support and opposition to Reconstruction. Prerequisite: History 141 or 142, or Junior standing. 4 hours. Lipin.

**Hist 343 Industrialization, Labor and the State in America: 1877-1939**

Covers the rise of modern industry in the United States, the problem of labor conflict associated with it, and the steps taken by government, both at the state and the federal level, to regulate the new economy, beginning with laissez-faire governance of the late nineteenth century and concluding with the full elaboration of FDR's New Deal. Course focuses on social, economic and political forces. Prerequisite: History 142 or Junior Standing. 4 hours. Lipin.

**Hist 346 Race and Ethnicity in American History**

Examines the historical experience of specific minority groups (African-Americans, Mexican-Americans, immigrants from Asia, and those from Southern and Eastern Europe) in the United States, the historical roots of racism and its connection to American political and social thought. Prerequisite: History 141 or 142, or Junior standing. 3 hours. Lipin. Meets cross-cultural core requirement.

**Hist 400 Medieval Women**

This course is a seminar on the attitudes towards, roles, work, and responsibilities of women in the period from the fourth century to the fifteenth century. Women in their roles as nuns, witches, prostitutes, brewers, mothers, queens, and consorts are discussed. The course is thematic rather than chronological, and investigates anthropological, feminist, and political theories and paradigms associated with the study of women generally. Assigned reading consists of primary sources, secondary monographs, and journals. Prerequisite: Junior standing or consent of instructor. 4 hours. Rampton.

**Hist 401 The World of Charlemagne**

This course is a seminar on the age of Charlemagne and the European empire he forged in the early Middle Ages. The Course material starts in the early sixth century as the Roman West was mutating, and ends with the decline of the Carolingian Empire in the face of Viking attacks and fratricidal warfare. The class concentrates on political and social/cultural developments in this very important period which formed a bridge from the Classical world to the beginnings of the modern age. The class uses anthropological paradigms as one type of historical methodology. Assigned reading consists of primary sources, secondary monographs and journal articles. Prerequisite: Junior standing or consent of instructor. 4 hours. Rampton.

**Hist 430 Adolf Hitler and the Question of Germany**

The problem of Adolf Hitler in German history. The continuity and break in German history-1848-1945. Prerequisite: Hist 102, 332 and Junior standing. 3 hours. Staff.

**Hist 450 Special Topics in History**

Seminar or tutorial course focusing on topics of special interest to students and faculty. Prerequisite: Junior standing. Specific courses taught in this series will be noted in more detail in annual course schedule. 3 hours. Staff.

**Hist 490 Senior Research Seminar**

Combines a variety of historical methods with major historical themes and controversies. Required of all senior History majors prior to embarking on the thesis. Prerequisite: Senior standing in History. Annually in the fall. 3 hours. Staff.

**Hist 495 Independent Research**

Student-conducted individual research leading to a senior thesis. Required of all History majors. Prerequisite: Senior standing in History and Hist 490. Annually in the spring. 3 hours. Staff.

# HONORS PROGRAM

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Dr. Sarah Phillips, *Director, Honors Program*

The Honors Program is dedicated to challenging exceptional students to explore and develop their gifts as thinkers, researchers, and leaders. The Honors Program is a flexible one that enables students to major in everything from art to physics, to study abroad and to pursue other types of educational opportunities, such as internships, as they earn Honors.

## Goals

**The goals of the program are:**

- to introduce students into a community of learners committed to integrating experience, formal study, and service;
- to provide students and faculty with opportunities to engage in imaginative and ambitious interdisciplinary study and discussion;
- to promote and model creative academic excellence;
- to prepare students for active, productive lives as learners, professionals, and citizens; and to contribute to the intellectual and cultural liveliness of the community.

Pacific Honors students bring a wide variety of experiences, backgrounds, and interests to the Program. A typical seminar will include students whose enthusiasms range through the natural and social sciences, the arts, and the humanities. Many Honors students complete pre-professional programs as they pursue their liberal arts majors. Honors students often serve the community in various ways, as Resident Assistants, as First-Year Seminar mentors, and as House Tutors. Honors students are active in athletics and student clubs, as well as theatre and music. Many members of the Honors Program volunteer through Pacific's Humanitarian Center, tutoring public school students, for example, or working on environmental issues or educating migrant workers and their families. In general, Honors students approach their education at Pacific creatively and energetically, exploring various environments and ways of learning, investing in the community, and pursuing ambitious academic programs.

## Faculty

The Honors Program at Pacific University draws on faculty from every Division of the College. Interested in pursuing interdisciplinary research and/or teaching, the Honors faculty develop seminars designed to challenge students to consider the relationships among various disciplines, various means of constructing and presenting knowledge, and various approaches to learning and teaching. Whether teaching a seminar or advising students pursuing individual research projects, faculty in the Honors Program take mentorship as an important model for student-faculty interaction, encouraging students to assume responsibility for the character of their education by reflecting on the significance of their work for self-understanding as well as for academic development.

## Characteristics

Honors courses are distinguished by their interdisciplinary focus and the expectation for student participation. Students must be willing to engage in the creative synthesis of a range of ideas, modalities, and perspectives in order to succeed in a pedagogical model that emphasizes the integration of experience, analysis, and creative expression. Students in Honors learn how to transform their assumptions into hypotheses, gain familiarity with various approaches to learning, and develop skills that enable them to work collaboratively across a range of disciplines. Excellence in Honors is characterized by intellectual curiosity, analytical rigor, and creative risk-taking expressed in both independent and collaborative work. The Student Honors Council reflects the Program's commitment to helping students develop leadership skills and its insistence that Honors students share responsibility for the quality and character of their educational experience. Grading in the Honors Program is consistent with standards held College-wide.

Interdisciplinary and innovative, Honors seminars allow gifted students to satisfy College Core requirements in the company of others who approach their education creatively and energetically as they pursue high standards and new experiences. These Honors courses enable students to build a

powerful foundation for work in their majors by challenging them to integrate approaches from several disciplines as they strengthen their abilities as writers, critical thinkers, and imaginative problem-solvers. In their first semester, Honors students meet the College's writing requirement; in the next three, they exercise their skills as writers and thinkers as they work toward satisfying requirements for work in the natural and social sciences, the arts and humanities, and in cross-cultural studies. In the fifth seminar, taken in the spring of the junior year, they prepare for independent capstone projects in their disciplines as they consider the meaning of work, the significance of entering a profession, the obligations that accompany education, and the exercise of power. In their senior year, all Honors students design and complete a capstone project or thesis that demonstrates academic excellence and creativity.

The Honors Program also sponsors co-curricular events that complement the seminars and support the development of a community of learners both within and beyond the Program. The Honors Chautauqua Program, endowed by The Merles Bryan Fund, allows scholars and performers to meet with Honors students in various settings and to present their work to the Pacific community in lectures or performances. The Student Honors Council advises the Director of Honors in selecting the Chautauqua Scholars and coordinates its own co-curricular programming, also underwritten by The Merles Bryan Fund, which supports Honors students both on and off campus, defraying registration and travel costs for students to present their work at conferences.

The Honors Program at Pacific University seeks to mentor students as they prepare for careers, graduate study, and service to their communities, honoring intellect and character, talent and achievement. Reflecting the Program's emphasis on creative interdisciplinary thinking, our graduates take a wide variety of paths into the post-baccalaureate world: pursuing graduate degrees across a range of professions and disciplines, preparing for service in the health professions, or practicing an art as a sculptor, writer, painter, or teacher. Honors students build exceptional lives on the foundations of their education at Pacific University.

## Privileges

Honors students enjoy faculty library privileges and may take 18 units of credit per semester within the regular tuition charge in order to meet the demands of the Honors Program. Our students have traveled to present their research at the National Collegiate Honors Council conference and at the National Conference for Undergraduate Research. Honors students are encouraged to apply for and assisted with their applications for prestigious national scholarships, including the Rhodes, Truman, and Marshall Scholarships. The greatest benefit of Honors, however, is participation in a community of learners and the opportunities for exploration, exchange, and discovery this affords: the variety of activities, the development of relationships centered on common intellectual and cultural experiences and passions, and the self-understanding that emerges from collaborative learning and individual risk-taking.

## Admission

Prospective students are invited to apply to the Honors Program when they apply for admission to the College of Arts and Sciences. Honors admissions decisions are based on grade point averages, SAT or ACT scores, an essay, and letter of recommendation. Honors students entering Pacific generally have a high school GPA of 3.7 and SAT scores of 1200 (ACT 26), but applications from other interested students will be considered. Students enrolled at Pacific are invited to apply during their first and second semesters at Pacific. All students with a Pacific GPA of 3.5 or higher at the end of their second semester are invited to apply for admission in the third semester. Interested and qualified transfer students should consult with the Director of Honors to discuss options for entering and completing the Program. In order to remain in the program, students should maintain a cumulative GPA of 3.5. First-year students may continue with a 3.2 or better, but must achieve a 3.5 cumulative GPA by the end of the sophomore year. No courses in the Honors Program may be taken Pass/Fail. The transcripts and diplomas of Honors Students denote Graduation with University Honors, and Honors Students are recognized at Commencement.

## Requirements

Honors students who wish to study abroad are encouraged to do so in either the second semester of their sophomore year or the first semester of their junior year.

Students choosing to study abroad in their sophomore year may either double their enrollment in Honors in a semester before they leave, or take a 200-level Honors seminar in the spring term of their junior year, concurrently with Honors 350. Students studying abroad for a full year as juniors will be expected to take Honors 350 in either their sophomore or senior year.

To graduate with University Honors, students must satisfy the following Requirements

- Honors 100
- Three sections of Honors 200
- Honors 350
- Honors 400: a senior thesis or capstone project in their major department <sup>1</sup>
- Participation in Honors co-curricular activities <sup>2</sup>
- Cumulative GPA of 3.5 or above.

- 1 The senior thesis or capstone project must satisfy departmental criteria for Honors work.
- 2 All Honors students must participate in the co-curricular activities supported by the Honors Program, including The Honors Chautauqua Program. Under no circumstances will a student be allowed to graduate with University Honors with a cumulative GPA below 3.5. Students admitted to the University Honors Program must also meet all College of Arts and Sciences graduation requirements, unless an exception is approved by the Honors Committee.

## COURSE DESCRIPTIONS

### Honors Courses (Horr)

#### Horr 100 Writing in Honors

*Reading scientists on the relationship of science to the arts and humanities, to society, and to ethics, students will approach writing from an interdisciplinary perspective, composing a variety of essays involving argument, analysis, and self reflection as they explore their relationship to various ways of knowing. Satisfies Writing Core requirement. Open only to Honors students. 4 hours. Fall and Spring semesters, Honors Faculty.*

#### Horr 200 Honors Arts Seminar: Topic varies

*These seminars enable Honors students to fulfill College Arts Core requirements as they continue to develop skills as interdisciplinary learners and thinkers, and may be taken more than once for credit as content varies. Non-Honors students admitted with approval of the Director of Honors. 3 hours. Fall and Spring semester. Honors Faculty.*

#### Horr 201 Honors Humanities Seminar: Topic varies

*These seminars enable Honors students to fulfill College Humanities Core requirements as they continue to develop skills as interdisciplinary learners and thinkers, and may be taken more than once for credit as content varies. Non-Honors students admitted with approval of the Director of Honors. 3 hours. Fall and Spring semester. Honors Faculty.*

#### Horr 202 Honors Natural Sciences Seminar: Topic varies

*These seminars enable Honors students to fulfill College Natural Sciences Core requirements as they continue to develop skills as interdisciplinary learners and thinkers, and may be taken more than once for credit as content varies. Non-Honors students admitted with approval of the Director of Honors. 3 hours. Fall and Spring semester. Honors Faculty.*

#### Horr 203 Honors Social Sciences Seminar: Topic varies

*These seminars enable Honors students to fulfill College Natural Sciences Core requirements as they continue to develop skills as interdisciplinary learners and thinkers, and may be taken more than once for credit as content varies. Non-Honors students admitted with approval of the Director of Honors. 3 hours. Fall and Spring semester. Honors Faculty.*

**Honr 205     Chautauqua Series,  
                  Topic Varies**

*Honors 205 is a seminar built around the Merles Bryan Endowed Chautauqua Series for the Honors Program. As such, the topic of the course will change from year to year, with the topic of the speaker series. All topics will be appropriate to interdisciplinary exploration. Students registering for Honors 205 will engage in deeper study of the series topic through readings, discussion, and writing. 1.5 hours. Fall and Spring Semesters, Open only to Honors Students.*

**Honr 350     Junior Honors Seminar**

*A capstone commencement seminar designed to enable students to reflect upon their work in general Honors and in their discipline(s) as they begin to develop their ideas for thesis and capstone work in the senior year. Working within an interdisciplinary framework, students will consider the meaning of work, the significance of entering a profession, the obligations that accompany education, the exercise of power, and approaches to lifelong learning. Open only to Honors Students. Spring semester. Director of Honors.*

**Honr 400-17 Honors Research/  
                  Capstone Project**

*Students design and complete a thesis or project that meets the criteria established by their department for senior thesis or project. All theses and projects will be evaluated by an Honors Review Board, composed of the Director of Honors and the faculty teaching in Honors in the current academic year. Honors 400-417 are offered through departments and are designated on transcripts to identify them by department. Open only to Honors students. 3-6 hours. Fall and Spring semesters, College faculty.*

# HUMANITIES

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The Humanities are composed of the courses in English, History, Media Arts and Communication, Philosophy, and World Languages and Literatures. While these departments have their own goals and specialized programs, they are united in a common endeavor to discover and make relevant the historical direction and essence of humans' cultural endeavors and to help students prepare for a life of quality and meaning. In this sense, the humanities are at the heart of liberal arts education.

## COORDINATED STUDIES IN HUMANITIES MAJOR

By special arrangement, students may pursue a self-designed course of study in the Humanities. Interested students should submit, by the end of their sophomore year, a proposed program with an identifiable academic focus to the Humanities Division Chair. Students must plan a program with a minimum of 48 hours, 18 of which must be upper-division hours in addition to the upper-division hours planned for the Special Projects in the Humanities. Proposals should include:

1. 18 hours emphasis in one department in the division (English, Media Arts and Communication, Philosophy, or World Languages and Literatures) ...18
2. 24 hours divided among three other departments at Pacific (English, Media Arts and Communication, Philosophy, World Languages and Literatures, History, Fine Arts, Music, and selected Peace and Conflict Studies courses) .....24
3. Special Project in the Humanities for a minimum of six hours ..... 6

This project should be approved by the Humanities Division Chair in consultation with the faculty adviser in the student's area of emphasis before the end of the student's junior year. The project must be planned as a part of either Hum 475 (Career Internship), Hum 476 (Overseas Study), or Hum 477 (Individual Study and Research). The student must complete a

final written essay and give a formal presentation on his or her project by the end of the senior year; the essay and presentation may in some cases be incorporated with another senior project.

**Minimum Total Hours** **48**

Interested students should consult with Professor David DeMoss, Humanities Division Chair.

## COURSE DESCRIPTIONS

### Humanities (Hum)

#### **Hum 100** **Origins, Identity, and Meaning**

A required seminar for first-semester first-year students that introduces students to college academic life and the skills needed for success in that life. It is a humanities-based course in its content, intended to engage students in the task of personal and cultural critique, and designed to provide a common learning experience for the entire first-year class. Students will also experience the educational advantages of having a diversity of teaching methods and approaches both within and among the various sections of the seminar; although cross-sectional themes, texts, and events may be adopted by current Hum 100 faculty, the course will be designed and taught in a manner thought most appropriate by the individual instructor. 4 hours. Staff. Fall semester.

#### **Hum 205** **Japanese Culture**

This course is a general introduction to Japanese people, land, and culture. Its major emphasis is on culture: arts, science, industry and language. Meets cross-cultural core requirement. 3 hours. Ikeda. Offered yearly.

#### **Hum 206** **Latin America**

A general introduction to the geography, peoples, and cultures of Latin America, and to their major social and political issues. Meets cross-cultural core requirement. 3 hours. Cabello. Offered intermittently.

#### **Hum 207** **German Culture**

A general introduction to the literature, film, art and music of people in the German-speaking countries, focusing on the time period from the early 19th century to the present. Special emphasis on the intersection of culture with historical, social, and political events. 3 hours. French. Offered intermittently.

#### **Hum 208** **Francophone Africa and the Caribbean**

A general introduction to the literature, culture, peoples, and politics of Francophone Africa and the French-speaking Caribbean, focusing in particular on the 20th century. Special emphasis on the Maghreb, Senegal, and Haiti. Meets cross-cultural requirement. 3 hours. Steinert Borella. Offered intermittently.

#### **Hum 300** **Mentoring in the Humanities**

Each student serves as a mentor in one section of Humanities 100, the required First-Year Seminar course. Mentors attend all Hum 100 classes and co-curricular events and complete all of the readings. They do not take exams, write papers, or participate in the evaluation of students in Hum 100. The mentor is to act as a peer in helping first-year students make the transition from high school to college. They hold study sessions and help students with note taking, writing assignments, and the development of proper study skills. They work closely with faculty in developing the means to good mentoring in their section of Hum 100. They meet with the First-Year Seminar Coordinator one hour each week to review their work and to discuss pedagogical issues associated with teaching the humanities. Mentors are selected by an application process in the spring. 4 hours. Smith. Fall semester.

#### **Hum 306** **Latino Fiction**

A study of the fiction of Latino writers representing the diverse Hispanic cultures of the U.S. with emphasis on the themes of immigration, culture adaptation, and the unique characteristics of the author's Hispanic heritage. Meets cross-cultural core requirement. 3 hours. Cabello/Christoph. Offered intermittently.

#### **Hum 325** **Hispanics in the United States**

A study of the history, literature, culture, and demographics of Hispanic groups in the U.S. An interdisciplinary approach will be taken toward placing in perspective the major political, social, and educational issues facing these groups. Students will simultaneously be engaged in a field internship in the Hispanic community. Prerequisite: Spanish 102. Meets cross-cultural requirement. 4 hours. Bates/Cabello or Phillips/Christoph.

# INTERNATIONAL PROGRAMS & STUDY ABROAD

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Anne Frey, *Director*

Akiko Imamura, *Assistant Director*

The Office of International Programs services both international students and scholars and those interested in study abroad. Located on the second floor of Chapman Hall International Programs provides immigration and cross-cultural services to Pacific University's community of international students scholars and faculty. International Programs also coordinates and administers semester and year long study abroad programs (see Study Abroad section) working with faculty to ensure academic integrity.

Staff from International Programs are active members in NAFSA: Association of International Educators, as well as other international education professional organizations, and represent Pacific University locally, regionally and nationally in professional conferences, workshops, meetings and other symposia.

## International Student and Faculty Advising

The Director and Assistant Director of International programs hold the official designation from the United States Immigration and Naturalization Service (INS) as Designated School Official and the Director holds the title of Responsible Officer from the Department of State. The staff of International Programs is knowledgeable in the areas of F, J, and H regulations. Given the complex and ever-changing nature of immigration regulations, members of Pacific's international community are strongly advised to remain in close contact with International programs for advising and counsel on immigration-related affairs.

Advising related to immigration and cross-cultural issues are also available at the Office of International programs. Any member of the international campus

community having questions, or experiencing difficulties with matters of immigration and cultural adjustment can utilize the International program staff's familiarity with such issues.

Staff from International Programs are active members in NAFSA: Association of International Educators, as well as other international education professional organizations, and represent Pacific University locally, regionally and nationally in professional conferences, workshops, meetings and other symposia.

## STUDY ABROAD

Anne Frey, *Director*

Kazuko Ikeda, *Faculty Chair*

Akiko Imamura, *Assistant Director*

In accordance with Pacific University's mission statement and goals, Pacific University study abroad programs provide students with a unique opportunity to develop skills and knowledge which will prepare them for the diverse community, nation and world. Pacific University considers international study important and encourages all students to gain exposure to other cultures, languages, and ways of life.

Study abroad is required for a major in modern languages and international studies but is open to all students who meet the selection criteria. Pacific University students who participate in a study abroad program can earn a maximum of 31 credits which will count toward their graduation. However, students should consult with their faculty advisor(s) to determine which courses taken abroad can and cannot be used toward their majors or to satisfy other specific University requirements.

Pacific has an agreement with the Oregon University System (OUS) that gives Pacific students access to all OUS study abroad programs. These programs now include some 24 different study abroad

sites in China, Ecuador, France, Germany, Japan and Mexico, to name a few.

Pacific also offers access to a wide array of other study abroad programs. European study in Austria, England, France, Spain, Wales and The Netherlands is available in cooperation with Central College of Iowa and University of Minnesota. In Japan, Pacific is affiliated with Kansai Gaidai in Hirakata, just outside of Osaka, and Nagoya Gakuin University in Nagoya. In Ecuador, Pacific has an affiliation with the Universidad Especialidades Espiritu Santo (UEES) in Guayaquil. In China, Pacific has sent students in recent years to Guanxi University in Gualin and has an exchange agreement with East China Normal University in Shanghai and Central University for Nationalities in Beijing.

### Eligibility

To be eligible for overseas study, students, typically sophomores or juniors, must demonstrate proper personal and academic preparation for the program, be in good academic standing, and have attended Pacific full time for one semester. Applications from freshmen to study abroad during their sophomore year will normally not be approved unless there is a compelling academic reason for the request. In general, applicants are expected to have an overall GPA of at least 2.75 for foreign language programs and 3.0 for programs in English speaking countries (higher for some programs) and to have completed the equivalent of at least two years of college-level foreign language study. A personal essay, letters of recommendation, and a personal interview are also required of all applicants. Students with a GPA below 2.5 at the time of application will have their applications rescinded.

### Cost

The cost for most Pacific University approved study abroad programs will be equal to Pacific tuition, room and board. The University will also provide up to \$1,000 for transportation to and from the study abroad site. For specific program cost information, please contact the International Programs Office.

The University does extend financial aid for approved study abroad programs taking into account both the total expenses associated with a particular program and the demonstrated need of the individual student. The University may also facilitate student access to study abroad programs not affiliated with Pacific, but no financial aid from Pacific will be awarded for such unaffiliated programs.

### Application Deadline

The deadline for application to all Pacific study abroad programs is normally at the beginning of second semester (late January-early February) preceding the academic year in which the study abroad program will be undertaken. Application forms, current cost data, and informational brochures about all study abroad programs are available in the International Programs Office, second floor, Chapman Hall.

## CHINESE

Pacific has an exchange agreement with East China Normal University (ECNU) in the dynamic city of Shanghai. Students study intensive Chinese language and culture while at ECNU and represent Pacific University in a variety of ways during their semester of academic year of study in China.

A sister school relationship provides students with an opportunity to study in Gualin at Guanxi University. Famous for its natural rock formations, Gualin is a smaller setting in which to study. Intensive Chinese language classes are offered along with classes for international students. Students are generally placed in dormitories, however, limited homestays can be arranged.

OUS provides a semester-long program at the Central University for Nationalities in Beijing. This program focuses on intensive language training at the beginning, intermediate, and advanced levels and offers a course entitled Chinese Culture and Chinese National Minorities that includes a three-week study tour to two minority regions in China rarely visited by Westerners. International students are housed together in a University dormitory.

## ENGLISH

### Scotland and Ireland

Pacific has direct enrollment study abroad options at the University of Edinburgh in Scotland and at six colleges and universities in the Irish Republic and Northern Ireland. These institutions in Scotland and Ireland offer almost every course of study in a challenging academic environment. In all cases, a GPA of at least 3.0 is required to be considered.

### Wales

Additionally, Central College offers two English language programs in Great Britain. Students who choose to study in Wales attend Trinity College, a small liberal arts college in Carmarthen, a rural setting with opportunities for many outdoor activities, including canoeing, backpacking, camping, hiking, and rock climbing. Students may enroll in any of

Trinity's five divisions and are also expected to take two courses each term in Welsh Studies. Students are housed in the University's residence halls along with their Welsh classmates.

### England

Students who participate in the Central College program in London enroll in British Studies courses and seminars on special topics in the arts, literature, and social sciences. Students may also enroll in up to two courses at the University of North London. Almost all students also participate in the internship program, choosing from more than 50 internships in a wide variety of fields.

### The Netherlands

Less than 40 minutes away from Amsterdam, Leiden is home to the nation's oldest University, Leiden University. The Central College program in Leiden allows Pacific students to experience continental Europe while taking classes in English. While studying in Leiden, Pacific students can take courses in Art, Business, Economics, Management, Political Science, History, Psychology, Literature and Music. Students must take a beginning Dutch language course while participating on the program. All students live in Dutch residence halls and, whenever possible will be placed as the only American on the floor. All residence halls have single rooms with shared bathroom and kitchen facilities. Meals are not included on this program.

## FRENCH

Four different year-long French programs are available to Pacific students in Paris, Montpellier, Lyon, and Poitiers through Central College, University of Minnesota, and OUS, respectively.

The Central College program in Paris includes a two-week intensive French language program in Nice, prior to the start of classes at the Sorbonne. For the rest of the year, students are housed in residence halls located throughout the student sections of Paris. Pacific University students at 202 level French or higher will enroll in courses for regular and advanced students.

The OUS program in Lyon offers students a chance to explore France's second largest city. The program begins with an intensive language program and then continues at the Centre International d'Études Françaises with the opportunity to take selected regular courses at four different universities in Lyon. Advanced students who pass a qualifying exam may also opt to take all of their courses in the French universities that participate in the program. There are a wide variety of housing options, ranging from homestays with families to sharing apartments with French students to staying in university dormitories. This program is for the full academic year only.

The OUS program in Poitiers exposes students to life in a small French city of 100,000 residents. This program also begins with homestays with French families and an intensive language program. Most students then continue with courses in the Department of French for Foreign Students of the University of Poitiers as well as regular University courses if their language skills are sufficiently advanced. As at Lyon, a wide variety of living arrangements, including homestays with French families, boarding houses, and University dormitories, are available. This program is also for the full academic year only.

The University of Minnesota's program in Montpellier, France offers a comprehensive academic and cultural experience at the intermediate and advanced language levels at the Université Paul Valéry. Montpellier is located in southern France, ten miles away from the Mediterranean. Classes are held at the Université Paul Valéry and are taught by faculty from the University. Housing options vary and include homestays, dormitory or apartment living.

## GERMAN

Pacific gives students of German the opportunity to pursue study abroad in either Germany or Austria through programs offered by OUS and Central College.

## Germany

The year-long OUS program in the state of Baden-Württemberg, the German sister state to Oregon, begins with a four-week program of intensive German. This is followed by study in regular German university courses at any one of nine different universities, each with its own distinctive academic emphasis, located in the cities of Stuttgart, Tübingen, Konstanz, Hohenheim, Ulm, Freiburg, Heidelberg, Mannheim, and Karlsruhe. In addition, students with special interests in education, music, and art may enroll at three more specialized institutions in Ludwigsburg and Stuttgart, although an audition and/or portfolio may be required for admission to the music and art schools.

## Austria

The Central College German language program provides students with an opportunity to study in Austria for either a single semester or an entire year. The program begins with a six-week intensive German program at a Goethe Institute facility in one of several sites in southern Germany. Following the intensive German course, the remainder of the semester or year is spent at the 600-year-old University of Vienna in Austria. Students can take regular courses at the University in language and literature, fine arts, humanities, and the behavioral sciences. At the same time, students take three courses per semester on different aspects of art, music, and literature through Central College's Program in Vienna. Students are housed in residence halls scattered throughout the city which serve both international and Austrian students. Residence halls do not offer meal plans, and meal plans are not included in the Central program fee.

## JAPANESE

Pacific University enjoys a sister school relationship with two Japanese universities that allow Pacific students to enroll in their study abroad programs in Japan for either a semester or a full year.

Nagoya Gakuin is located in a scenic suburb of Nagoya and offers a comfortable campus atmosphere. Kansai Gaidai is located in Hirakata near Osaka and half an

hour train rides way from Kyoto and Nara, the cultural and religious centers of traditional Japan. Both programs offer Japanese language classes and courses, taught in English, on the history and culture of Japan. At both schools, students may live either in an international dormitory or enjoy a home stay with a Japanese family arranged by the school.

In addition, under some circumstances, Pacific students may have access to year-long OUS programs in Tokyo at Waseda University and Aoyama Gakuin University. At both universities, intensive Japanese is offered as well as a variety of courses, taught in English, in Japanese history, literature, politics, economics, and culture. Course work at Aoyama Gakuin, however, is especially focused on business, economics, and politics. At Aoyama Gakuin housing is provided in University dormitories with Japanese roommates; at Waseda University home stays with Japanese families are provided.

## SPANISH

### Ecuador

Pacific has a special relationship with the Universidad Especialidades Espiritu Santo (UEES) in Guayaquil, Ecuador's largest city, principal port, and main commercial center. UEES offers a one-semester program each fall for Pacific students. The program features homestays with carefully selected Ecuadorian families, a series of excursions in and out of Guayaquil, including trips to the Andean highlands, the Amazon basin and the Galapagos. The academic program includes service-learning with a local school or social service agency, intensive Spanish and course work in Latin American history, geography, economics, and literature.

Pacific students may also apply to the OUS program in Ecuador's capital city, Quito. Students may choose from one of two schools: Pontificia Universidad Catolica del Ecuador (PUCE) and Universidad San Francisco de Quito (USFQ). PUCE is located in the center of Quito and is a private, independent institution with 7,000 students. Universidad San Francisco de Quito (USFQ) is located in Cumbaya, a suburb of Quito and has 2,000 students. The program in Quito is available for either

a year-long program, or as a one-semester program in the fall and/or spring semesters. All students are housed with families for one semester with an option to move to an apartment for second semester students.

### Spain

A year-long or semester program is available through Central College at the University of Granada in southern Spain. The Central College program begins with a 3 week orientation with the first two weeks taking place in Ronda, the birthplace of modern bullfighting and the last week in Granada. The orientation includes intensive Spanish and cultural orientation culminating in a language placement exam. Throughout the orientation and the semester students are housed with Spanish host families. In Granada, students may choose from three different course options, including regular classes at the University of Granada for those who have passed the language placement exam. The Granada program also incorporates the opportunity for service-learning projects in the local area.

## OTHER PROGRAMS

Pacific students also have access through the Oregon University System (OUS) to study abroad programs in South Korea and Thailand. However, Pacific does not offer language training in support of this study abroad option. More complete information about these, and other programs, is available in the International Programs Office.

## OVERSEAS PROGRAMS

### WINTER III (January term)

A variety of credit-earning overseas study programs are also available during Pacific's three week winter term (Winter III). These programs are faculty-led and vary from year to year. Recent program destinations have included Vietnam, India, Barcelona, Spain, Switzerland, London, England, Germany and Costa Rica. For an schedule of upcoming Winter III programs, contact the International Programs Office at 503-359-2913.

# INTERNATIONAL STUDIES

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Nancy Christoph, *Spanish, Chair*

Jeffrey G. Barlow, *(History), East Asian Studies Coordinator*

Sara Steinert Borella, *(French), Western European Studies Coordinator*

Victor M. Rodriguez, *(Spanish), Latin American Studies Coordinator*

Susan U. Cabello, *Spanish*

Lorely French, *German*

Naoya Fujita, *Japanese*

Kazuko Ikeda, *Japanese*

Cheleen Mahar, *(Anthropology)*

Martha Rampton, *History*

Philip Ruder, *Economics*

Jeffrey G. Seward, *Political Science*

Seth Singleton, *Political Science*

Michael R. Steele, *English*

David F. Stout, *German*

Ann Wetherell, *Art History*

International Studies is designed for highly-motivated students who plan careers in law, diplomacy, education, international research and the globalized marketplace of business and economics. National and state leaders have placed a high priority on international studies in order to meet the critical need for college graduates who are competent in world languages and who are familiar with world cultures. The national and regional commitment to internationalism in the United States and the increasing interdependence of nations around the world are reflected in a wide range of job opportunities in both government and the private sector.

Within the International Studies major, students are able to focus upon one of three international areas: East Asia, Latin America and Western Europe. International students who wish to major in IS may choose the American Studies option. Each area focus

provides majors with a multidisciplinary background in a language and culture area. On campus International Studies sponsors lectures, festivals, music presentations.

## MAJOR IN INTERNATIONAL STUDIES

Students may apply for the major as early as the first semester of their freshman year at Pacific and, in general, should apply no later than the first semester of their sophomore year. Applications are available from the Director of International Programs, in the Office of International Programs on the second floor of Chapman Hall and from faculty members of World Languages and Literatures. Students who apply later in their academic career may find it difficult to complete the requirements of the major and still graduate from Pacific in four years, especially if they choose to spend an entire year in a study abroad program. Admission is selective and normally requires a 3.0 GPA. IS majors must maintain a GPA of at least 3.0 each semester to remain in the program.

Immediately after being accepted, students must consult with a member of the International Studies faculty (see list above) as well as the chair of International Studies and prepare a complete plan of courses that they intend to take to fulfill the requirements of the major. This plan must be updated and resubmitted immediately upon return from the study abroad experience. As part of that plan, each major must declare an area interest (East Asia, Latin America or Western Europe).

International students (that is, foreign nationals studying at Pacific on a student visa) may select the American Studies option (see the separate requirements for this option set out below). In this case, the foreign language requirement and the study abroad requirement are waived. International students may also complete the regular International Studies major but may not use their native language to fulfill the foreign language requirement. Further, they may not use study in their home country to satisfy the study abroad requirement.

International Studies majors are strongly encouraged to complete a second major in a standard discipline. Students may also want to include a Humanitarian Center multicultural field experience or other relevant internship.

The goals and formal requirements for the major (except for international students choosing the American Studies option) are as follows:

### Goals for the Major

In successfully completing a major in International Studies a student will possess the following attributes:

- Strong written and oral communications skills
- Proven research and analytical skills
- Knowledge of the history and culture of a specific area of the world
- The ability to build on that knowledge to produce a final written thesis and related oral presentation
- Well-developed intercultural skills
- The ability to work collaboratively
- The ability to speak, read and write in a second or third language
- Experience in living and studying abroad

### Requirements:

#### International Area Studies Focus

#### One of the following

IS 201, ECON 329, PSY 160.....	3
Base history course related to area interest.....	3
Electives coherently related to area interest (includes 12 Study Abroad Credits).....	21
Foreign language study at 300-level or above.....	6
Research methods.....	3
IS 399 Junior Tutorial.....	2
IS 401 & IS 402 Senior Thesis .....	4

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42

1. At least one semester of study abroad in a country related to the student's chosen area interest. The country chosen must have as one of its principal languages, the language the student

has previously studied to fulfill the foreign language requirement of the major. Study abroad in English-speaking countries or programs conducted in English may not be used to fulfill this requirement.

**Prior to study abroad**, the student should fulfill at least the following requirements:

2. Foreign language study in one of the principal languages of chosen area interest through the 202-level.
3. One of the following to be chosen in consultation with international Studies advisor: IS 201 (Intercultural Communications) PSY 160 (Culture and Behavior) or ECON 329 (International Economics)
4. A base history course related to the student's chosen area interest. For East Asia, this would normally be HIST 112 East Asia; for Latin America, HIST/POLS 255 Latin American History or HUM 206 Latin America; for Western Europe, HIST 102 Western Civilization II. However, more specialized upper-division history courses approved in advance by the student's IS advisor may also be used to satisfy this requirement.

**In addition, the student must fulfill the following requirements before, during, or after the study abroad experience:**

5. At least 21 semester hours of electives chosen in consultation with the student's IS advisor to create a coherent program of study related to the chosen area interest. Such courses should be approved by students' IS or WORL advisors. No more than 12 semester hours from any single department or discipline and no more than 12 semester hours taken during study abroad may be applied to this requirement.
6. At least six hours of foreign language study at Pacific at the 300-level or above after returning from the study abroad experience.
7. One course in theory or research methods to be taken prior to enrollment for IS 401 Senior Thesis. Note that students planning to spend the entire junior year abroad should complete this requirement prior to study abroad. Students also need to be aware that several of the courses approved for

meeting this requirement have one or more prerequisites. The course chosen should be closely related to the research strategy appropriate to the student's senior thesis project. Approved courses which meet this requirement are the following:

Anth 301	Research Methods in Anthropology
Econ 321	Introduction to Econometrics
Engl 333	Theory of Literature
Engl 332	Introduction to Linguistics
Psy 350	Behavioral Statistics
Soc 201	Introduction to Social Research
Soc 301	Social Statistics

8. IS 399 Junior Tutorial/Seminar in which students work with individual professors to develop a polished senior thesis proposal and meet together in occasional seminar format to share their research proposals. Students who spend their entire junior year abroad must register for IS 399 as an independent study course in close collaboration with a Pacific professor and produce a senior thesis proposal during their second semester of study abroad. A contract for IS 399 while studying abroad should be prepared prior to departure for the study abroad site. A student may not research their thesis topic during their overseas study year unless their topic has been approved by their advisor at Pacific University.
9. IS 401 and IS 402 Senior Thesis in which the student prepares a senior thesis for a public and written presentation. These two semesters of Senior Thesis may not be taken concurrently. Students must make reasonable progress on their thesis project by the end of IS 401 in order to continue with their thesis work in IS 402. Students who do not meet this requirement will be asked to withdraw from the IS major.

### Requirements

#### American Studies Focus

#### **Available only to international students**

1. IS 201 Intercultural Communications.
2. HIST 141-142 History of the United States.

3. Six hours of upper-division courses in American history.
4. Six hours of upper-division courses in American literature.
5. Twelve hours of electives chosen in consultation with the advisor to create a coherent program of study of the United States with at least six hours of electives outside the Departments of History and English.
6. The same requirements for a methodology course, junior tutorial, and senior thesis as all other IS majors.

International students for whom English is a second language and who elect the America concentration are exempt from the foreign language and study abroad requirements and take instead 27 hours in electives.

## COURSE DESCRIPTIONS

### International Studies (IS)

#### **IS 201 Intercultural Communication**

*This course develops awareness and skills for effective communication among people of different cultures. It explores problems related to value differences and examines perceptual relativity, cultural self-awareness, verbal and nonverbal behavior, value analysis, and communication strategies. For both United States and International students. 3 hours. Ikeda.*

#### **IS 399 Junior Tutorial**

*Directed reading and research in the student's area of interest. Prerequisite: Junior Standing in IS. 2 hours. Staff.*

#### **IS 401-402 Senior Seminar and Thesis**

*Sources, materials, and methods of research, writing, and critical analysis. Preparation and defense of major research project. Prerequisite: Senior Standing in IS. 2 hours per semester. Staff.*

#### **IS 450 Special Topics in International Studies**

*This seminar course is an elective which focuses on topics of special interest to students and IS faculty. The course allows students to explore possible topics for their thesis and the methods for approaching those topics. Students may take the course concurrently with IS 401. Prerequisite: Seniorstanding and study abroad. 3 hours. Staff.*

# MATHEMATICAL SCIENCES

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**Michael Boardman**, *Chair, Associate Professor, Mathematics*

**Michael C. Clock**, *Professor, Mathematics*

**Bogdana Georgieva**, *Assistant Professor, Mathematics*

**Christine Guenther**, *Assistant Professor, Mathematics*

**Michelle Hribar**, *Assistant Professor, Computer Science*

**Christopher Lane**, *Assistant Professor, Mathematics*

**Douglas J. Ryan**, *Professor, Computer Science*

The Department of Mathematical Sciences offers programs of study in Mathematics and Computer Science.

Our Computer Science program is characterized by small class sizes, close interaction with faculty, and a curriculum with a breadth and depth rarely encountered in a small university. Because the department follows the ACM (Association for Computing Machinery) curriculum guidelines, students graduating with a degree in Computer Science from Pacific are well-prepared to pursue immediate employment in the computer/electronics industry or continue on to graduate school. With 100% placement in the field since the program inception, our graduates are employed at industry leaders such as Intel, Microsoft, and Hewlett Packard.

The Mathematics major provides students a strong mathematics foundation with emphasis in several key areas including analysis, abstract structures and applied mathematics. Students completing this major are able to pursue careers in applied mathematics, enter graduate programs in mathematics and other fields, or complete certification requirements to teach mathematics in K-12 (see the Education section of this catalog for more details).

## Department Goals

The department maintains common goals for all of its students (majors, minors and others). Students in our courses will learn strategies for abstract problem solving, gain a basic understanding of computers and the broad implications of their use, be exposed to mathematics as a liberal art, and be given the opportunity to hone their computational skills.

For students majoring in Computer Science, we provide, within the context of the liberal arts, excellent preparation for high-tech careers or graduate study in Computer Science.

Students with a program of study in Mathematics will learn methods of mathematical modeling, abstraction, argumentation, and abstract mathematical constructs and paradigms, develop competence in carrying out algorithms, and learn to read and speak the language of mathematics. A mathematics degree from Pacific prepares students for a wide variety of post-graduate activities including work in mathematics and science related fields or graduate study in mathematics or education.

## MAJOR IN COMPUTER SCIENCE

### Requirements

<b>Math 206</b>	<b>Computational Linear Algebra</b> .....	<b>3</b>
<b>Math 226</b>	<b>Calculus I</b> .....	<b>4</b>
<b>Math 240</b>	<b>Discrete Mathematics</b> .....	<b>3</b>
<b>CS 150</b>	<b>Introduction to Computer Science I</b> .....	<b>4</b>
<b>CS 250</b>	<b>Introduction to Computer Science II</b> .....	<b>3</b>
<b>CS 300</b>	<b>Data Structures</b> .....	<b>3</b>
<b>CS 310</b>	<b>Theoretical Computer Science</b> .....	<b>3</b>
<b>CS 320</b>	<b>Assembly Language Programming</b> .....	<b>3</b>
<b>CS 385</b>	<b>Junior Seminar</b> .....	<b>1</b>
<b>CS 430</b>	<b>Computer Architecture</b> .....	<b>3</b>
<b>CS 460</b>	<b>Operating Systems</b> .....	<b>3</b>

CS 480	Principles of Compiler Design .....	3
CS 481	Compiler Laboratory I .....	1
CS 490	Senior Capstone I.....	2
CS 492	Senior Capstone II .....	3
Six credits selected from the following courses .....		6
CS 305	Advanced Programming for Multimedia	
CS 315	Human Computer Interface Design	
CS 360	Special Topics*	
Phy 364	Electronics	
		— 48

\* **Note:** CS 360 can be counted twice as an elective as long as the topics are different.

**Restrictions**

1. At least 18 hours of upper-division CS courses must be taken from Pacific University (Credit by examination not acceptable).
2. At most 1 course passed with a grade below “C-” can count towards the Computer Science major.

**MINOR IN COMPUTER SCIENCE**

CS 150	Introduction to Computer Science I.....	4
CS 250	Introduction to Computer Science II .....	3
Electives	.....	9
Electives are selected from: CS 205, CS 230, CS 300, CS 305, CS 310, CS 315, CS 320, CS 360, CS 430, CS 460, CS 480/481, Math 206, Math 240, Math 324, Phys 364.		
At least one of the following: .....		4
Math 125	Precalculus	
Math 226	Calculus	
		— 20

**Restriction:** Six of the elective credit hours must be upper-division Computer Science courses taken at Pacific University.

**COMPUTER SCIENCE,  
COOPERATIVE PROGRAM**

Contact Professor Ryan

A 3-2 program requiring five years of study for the well-prepared student, three years at Pacific and two years at OGI. Degrees awarded are a baccalaureate degree (normally in Mathematics, Computer Science or Applied Science) from Pacific, and a Master of Science degree in Computer Science from the Oregon Graduate Institute. Upon completion, the two degrees will be awarded concurrently. The student applies for the program during the sophomore year. During the senior year, the student will transfer to OGI to continue study in Computer Science and specialized Mathematics.

**Requirements**

Students planning on a cooperative program must complete the courses below. In addition, students must complete all other Pacific University requirements for a B.S. degree with a major of their choice – normally Applied Science, Computer Science or Mathematics.

CS 150	Introduction to Computer Science I.....	4
CS 250	Introduction to Computer Science II .....	3
CS 320	Assembly Language Programming .....	3
<b>Math</b>		
226-227	Calculus I-II .....	8
Upper-Division Electives selected from C.S. 310, 360, 430, 440/441, 460, 480/481 OR Phy 364.....		6-9
		— 24-27

The student must also complete at least 45 quarter hours of graduate study in computer science and engineering, including a satisfactory written thesis.

## COURSE DESCRIPTIONS

### Computer Science (CS)

Note that all prerequisite courses must be completed with a grade of "C-" or better.

#### CS 120      **The Information Era**

An exploration, with the use of computers, of how information technology is playing an ever increasing role in society. Students will explore a host of topics for using and accessing information such as: searching and navigating the Internet, the world wide web (www), interactive multimedia, communications, and ethics. This is not a programming class and is intended to give students the ability to access and manipulate information in a variety of ways. Class includes lab projects. 3 hours.

#### CS 130      **Introduction to Software Tools**

Many disciplines are finding the need to gather, manipulate, analyze, and graph data. This course will introduce students to some software tools that aid in this process. Software which is widely used at Pacific includes: StatView, Excel, Equation Editor, Power Point and Word. Class includes lab projects. Prerequisite: Math 125. 2 hours (10 weeks). Students cannot get credit for both CS130 and 230.

#### CS 150      **Introduction to Computer Science I**

A first course in computer programming fundamentals: no previous programming experience is required. This course will be taught in C++ and include programming projects in a variety of areas. Course content includes data types, selection structures, repetition structures, functions, arrays, structures and I/O. In addition to three lectures per week, the class meets weekly for a laboratory session. Corequisite: Math 125. 4 hours.

#### CS 205      **Introduction to Programming for Multimedia**

This course introduces students to the programming process and logic. Multimedia projects will be discussed and developed using state of the art scripting and macro languages such as Director and Lingo, Javascript/Java, HTML, and/or Perl. Prerequisite: CS 120 or equivalent. Students cannot get credit for both CS 205 and CS 305. Alternate Years 2002-2003.

#### CS 230      **Introduction to Advanced Software Tools**

This course covers the same topics as CS 130 in the first ten weeks. The last four weeks are spent doing more intense work with StatView, Excel, and Maple. Some programming in Maple will be required. Class includes lab projects. Prerequisite: Math 226. 3 hours 14 weeks. Students cannot get credit for both CS 130 and 230.

#### CS 250      **Introduction to Computer Science II**

A second course in programming that is a continuation of CS 150. The focus of this course is object-oriented programming. Concepts taught include classes, function and operation overloading and inheritance. These concepts will be reinforced with topics such as beginning data structures and windows programming. Prerequisite: CS 150. 3 hours

#### CS 300      **Data Structures**

Data structures are fundamental to advanced, efficient programming. Topics including stacks, queues, linked lists, trees, graphs, hash tables, search and sorting will be covered in discussions centering around more sophisticated programming concepts and problem solving techniques. Prerequisite: CS 250. 3 hours.

#### CS 305      **Advanced Programming for Multimedia**

An introduction to state of the art scripting and macro languages such as Director & Lingo, JavaScript & Java, Perl, and HTML which will be used for Multimedia development. This course will cover and include projects on topics such as Interactive Multimedia on CD ROM, Animation & Sound, Digital Video, the Internet, and Client/Server applications. Students cannot get credit for both CS 205 and CS 305. Prerequisite: CS 250. 3 hours. Alternate Years 2002-2003.

#### CS 310      **Theoretical Computer Science**

This course introduces the foundations of formal language theory, computability, complexity, shows the relationship between automata and various classes of languages, addresses the issue of which problems can be solved by computational means and studies the complexity of their solutions. It also studies Turing machines and equivalent models of computation, the Chomsky hierarchy, context free grammars, push-down automata, and computability. Prerequisite: CS 250. 3 hours. Alternate years 2002-2003.

**CS 315 Introduction to Human Computer Interaction**

Humans interact with computers through user interfaces; designing useful and effective interfaces involves many challenges for both designers and programmers. This course will cover the basics of the field of human computer interaction including the human factors of interactive software, methods to develop and assess interfaces, interaction styles and design considerations. The class will include research and design projects as well as a programming project. Prerequisite: CS250 or MedA260. 3 hours. Alternate Years 2002-2003.

**CS 320 Assembly Language Programming**

An introduction to digital logic, machine structure and instruction sets, assembly language programming (arrays, subroutines, I/O conversion, sorting, searching, lists, look-up tables), interrupts and resets. (Class includes lab projects using MASM) Prerequisite: CS 250 or instructor consent. 3 hours.

**CS 360 Special Topics**

Consists of an area in Computer Science that is getting a great deal of attention. Current topics include (but are not limited to) the following: Windows Programming -This class uses Visual C++ to introduce basic concepts of GUI. (Class includes lab projects). Interactive Computer Graphics-An introduction to interactive computer graphics, including: bit-mapped graphics (low level routines), line drawing algorithms, circle generators, two-dimensional transformations, clipping and windowing, solid area scan conversion, three-dimensional transformations, fractals, and ray tracing. (Class includes lab projects using C/C++, Java, and/or OpenGL). Survey of Programming Languages-An overview of programming languages to include the fundamentals of procedural, functional, and object-oriented languages. (Class includes lab projects using C/C++, Modula-2, and LISP). Prerequisite: CS250 or instructor consent. 3 hours.

**CS 385 Junior Seminar**

This course will expose students to the various fields of Computer Science through weekly seminars by faculty and outside speakers. Students will research a topic of their choice for their Senior Capstone Project. This course culminates in the presentation of the student's project and project specification. Prerequisite: CS major with Junior standing and at least one 400 level CS class (C or better) taken at Pacific. 1 hour

**CS 430 Computer Architecture**

An introduction to the hardware design aspects of all major components of a computer system. Topics include computer arithmetic, Boolean algebra and gate networks, logic design, memory (virtual and cache), I/O devices, pipelined instruction execution, bus structures, microprogramming, and RISC/CISC philosophies. Prerequisite: CS 320. 3 hours. Alternate years 2002-2003.

**CS 460 Operating Systems**

The Operating System as a resource manager. Topics to include: Processes and threads, CPU scheduling, memory management, I/O systems, distributed file systems, multiprocessor operating systems, and case studies. Prerequisite: CS 320. 3 hours. Alternate years 2001-2002.

**CS 480 Principles of Compiler Design**

An introduction to compilers. Topics to include: attribute grammars, syntax-directed translations, lex, yacc, LR(1) parsers, symbol tables, semantic analysis, and code generation. Prerequisite: CS310. 3 hours. Alternate years. 2002-2003.

**CS 481 Compiler Laboratory**

A laboratory course which must be taken concurrently with CS 480. Involves coding, verification, and validation of a compiler. 1 hour. (Class project is implemented on a SUN Ultra 5 using C/Unix). Alternate years 2002-2003.

**CS 490 Senior Capstone I**

The Software Life Cycle contains several stages including: Requirements Specification, Analysis, Design, Implementation, and Testing & Verification. Students will complete the Requirements Specification, Analysis, and Design of the project researched during CS 385. Prerequisite: CS 385. 2 hours.

**CS 492 Senior Capstone II**

During this course, students will complete Implementation, Testing, and Presentation of the project that was designed during CS 490. Prerequisite: CS 490. 3 hours.

## MAJOR IN MATHEMATICS

### Core

#### Mathematics Courses

Math 226, 227,228	Calculus I-III.....	12
Math 240	Discrete Mathematics.....	3
Math 306	Linear Algebra.....	3
Math 311	Ordinary Differential Equations .....	3
Math 490	Senior Capstone .....	2
		<hr/>
		23

#### Supporting Courses

CS 150	Introduction to Computer Science I.....	4
Phys 232	General Physics I .....	4
		<hr/>
		8

#### Elective Groups

At least one course from each of the following groups

<b>Analysis</b> .....	3	
Math 405	Real Analysis	
Math 412	Complex Analysis	
<b>Abstract Structures</b> .....	3	
Math 402	Abstract Algebra	
Math 440	Topics in Algebraic Structures	
<b>Applied Mathematics</b> .....	3	
Math 324	Numerical Analysis	
Math 411	Partial Differential Equations	
<b>Supporting Courses</b> .....	3-4	
CS 250	Introduction to Computer Science II	
Phys 242	General Physics II	
Phys 380	Classical Mechanics	
		<hr/>
		12-13

#### General Electives

At least two other mathematics courses numbered 300 or higher .....	6
	<hr/>
	49-50

**Restriction:** At most, one course passed with a grade below “C-” can count towards the mathematics major.

## MINOR IN MATHEMATICS

### Core

Math 226, 227	Calculus I & II .....	8
Math 240	Discrete Mathematics.....	3
CS 150	Introduction to Computer Science I.....	4
<b>Electives</b> .....	9	
At least nine additional credits of mathematics courses numbered 200 or higher, excluding Math 221 or Math 223. At least two of these courses must be numbered 300 or higher.		
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**Restriction:** At most 1 course passed with a grade below “C-” can count towards the mathematics minor.

## COURSE DESCRIPTIONS

Mathematics courses of at least three credits numbered 165 and above satisfy the mathematics core requirement.

*Note: All prerequisite courses must be completed with a grade of “C” or better.*

### Mathematics (Math)

#### Math 122 College Algebra

*This course offers students the opportunity to polish their general algebra skills in preparation for precalculus, statistics and other courses where a working knowledge of algebra without trigonometry is a prerequisite. Throughout the course, students are asked to translate information back and forth between grammatical and mathematical forms. Topics include modeling, graphing and analysis with linear, quadratic and general polynomial and exponential expressions, solving linear, quadratic and general polynomial equations and inequalities and curve fitting. Applications from social and natural sciences are emphasized as is using the topics from the course in mathematical modeling. 4 hours.*

**Math 125 Precalculus**

Most science and mathematics courses require that students be comfortable working with functions symbolically, graphically and numerically. Precalculus offers students the background they need to pursue these courses. An integral component of the course is translating information back and forth between grammatical and mathematical forms. Concentrating on functions and their properties, the course includes the study of several classes of functions including polynomial, rational, exponential, logarithmic, and trigonometric functions. The conic sections are also studied. Prerequisite: Math 122 or placement. 4 hours.

**Math 165 Modern Topics in Mathematics**

This course exposes students to abstraction and problem solving with mathematical constructs. Elements of descriptive and inferential statistics give students the foundation to understand visual and numerical representations of data and to make informed judgments about survey and experimental study results. Various topics chosen from among management science, voting theory, game theory, symmetry, proportionality, or other modern topics offer the opportunity to see connections of mathematics to business, political science, art and other fields. 3 hours.

**Math 206 Computational Linear Algebra**

This course is intended as an introduction to Linear Algebra with emphasis on the computational aspects of the material. Topics covered include matrices, determinants, Gaussian elimination, vector spaces, eigenvalues and eigenvectors, orthogonal matrices and least squares. This course will include programming assignments in Maple and/or other computer algebra systems. Corequisite: Math 226. 3 hours. Alternate years 2001-2002.

**Math 207 General Elementary Statistics**

A great deal of modern research in the social and natural sciences relies upon the mathematical theories of probability and statistics. This course will introduce students to the basic theory and practice of statistics. Emphasis is on the general ideas of hypothesis testing and estimation. Other topics include classification and presentation of data, descriptive statistics, basic probability distributions, and correlation and regression. Prerequisite: Math 122 or placement. 3 hours.

**Phil/Math 212 Language and Logic**

This course is a survey of formal syntactic and semantic features of language, including topics such as sentential logic, predicate logic, axiomatic systems and set theory, and nonclassical extensions such as multivalued logics. 3 hours.

**Math 221 Foundations of Arithmetic**

Designed for elementary education majors. Elements of logic, numeration, the number systems of arithmetic, elementary number theory, the algorithms of arithmetic. 3 hours. Alternate years 2002-2003.

**Math 223 Foundations of Geometry**

Designed for elementary education majors. Intuitive geometry in two and three dimensions, systems of measurement, estimation and approximation. 3 hours. Alternate years 2001-2002.

**Math 226 Calculus I**

The study of functions and their rates of change. Topics include the concept of derivative as rate of change, limits and continuity, differentiation and its applications, Intermediate, Extreme and Mean Value Theorems, introduction to integrals, and the Fundamental Theorem of Calculus. Prerequisite: Math 125 or placement. 4 hours.

**Math 227 Calculus II**

Investigation of single variable integration including techniques of symbolic integration, numerical integration and error analysis, applications of integration, and improper integrals. Infinite sequences, infinite series, and Taylor series will be introduced. Prerequisite: Math 226. 4 hours.

**Math 228 Calculus III**

The study of calculus of several variables. Topics include visualization techniques, vectors and solid analytic geometry, vector arithmetic, partial differentiation and its applications, gradients, optimization techniques, iterated integrals, line integrals, divergence, curl and related theorems. Prerequisite: Math 227. 4 hours.

**Math 240 Discrete Mathematics**

This course introduces the fundamentals of number systems, sets, functions and relations, logic and proof, elementary combinatorics, Boolean algebra and graph theory. It plays the role of a transition course for mathematics majors, moving them from calculus to the higher level courses in mathematics, and as an important course in logic for computer science majors. Prerequisite: Math 125 or placement. Math 226 strongly recommended. 3 hours.

**Math 301 Mathematical Modeling**

A wide variety of physical and social systems can be described and analyzed using mathematics. In this course, students will learn about the mathematical modeling process through examination and analysis of frequently used models in physics, chemistry, biology and other sciences. Students will also experience generating and testing new models. Prerequisite: Math 226. 3 hours. Alternate years 2002-2003.

**Math 306 Linear Algebra**

Geometrical vectors; their applications and basic properties; real vector spaces; dependence, basis, and dimension; systems of linear equations; linear transformations and matrices; determinants; quadratic forms. Emphasis on argumentation. Prerequisite: Math 226, Math 240. 3 hours.

**Math 311 Ordinary Differential Equations**

Ordinary differential equations and their applications. Topics include the theory of linear equations, investigations of non-linear equations, systems of equations, numerical methods, stability, long term behavior and Laplace transforms. Emphasis is placed on both quantitative and qualitative descriptions of solutions. Prerequisite: Math 227. 3 hours. Alternate years. 2001-2003.

**Math 316 Mathematical Probability**

Summary and display of data, properties of probability, discrete and continuous distributions, moment-generating functions, central limit theorem, and transformations of random variables. Prerequisite: Math 228, Math 240. 3 hours. Alternate years. 2001-2002.

**Math 321 Higher Geometry**

A rigorous study of both Euclidean and non-Euclidean geometries. Prerequisite: Math 240. 3 hours. Alternate years. 2002-2003.

**Math 324 Numerical Analysis**

Linear difference equations, iteration, acceleration of convergence, interpolating polynomials, Fourier analysis, numerical differentiation and integration. Prerequisite: Math 227. 3 hours. Alternate years. 2002-2003.

**Math 385 Junior Seminar**

Designed to acquaint the mathematics major with recent advances in mathematics, help synthesize the student's mathematical knowledge, and provide experience in the oral presentation of mathematical topics. Prerequisite: Mathematics major or minor with junior standing, and at least 6 hours of mathematics courses numbered 300 or higher. Admission is also possible with instructor consent. 1 hour

**Math 402 Abstract Algebra**

A survey of fundamental concepts in abstract algebra. Topics may include Group theory, including quotient groups, fundamental results on group homomorphisms and the study of finite groups; Ring theory, including fundamental homomorphism theorems, quotient rings and Euclidean rings, vector spaces and modules; Field theory including field extensions, Galois theory and classical results concerning constructibility and solvability. Prerequisite: Math 240, Math 306. 3 hours. Alternate years. 2002-2003.

**Math 405 Real Analysis**

A rigorous treatment of the limit concept, continuity, differentiation and integration. Sequence and series convergence, with some attention to regular methods of summability. Uniform and pointwise convergence of sequence and series of functions. Prerequisite: Math 228, Math 240. 3 hours. Alternate years. 2001-2002.

**Math 411 Partial Differential Equations**

Addresses solution methods for the three basic partial differential equations of mathematical physics: the heat, wave and potential equations. Methods covered will include power series, Fourier series, Laplace transform methods, separation of variables, and the method of characteristics. Initial and boundary data will also be covered, as well as physical applications and numerical simulations of solutions. Special topics as time permits. Prerequisite: Math 228, Math 311. 3 hours. Alternate years. 2001-2002.

**Math 412 Complex Analysis**

*Complex numbers, analytic functions, elementary functions, mapping by elementary functions, integrals, series, residues and poles, conformal mapping. Prerequisite: Math 228, Math 240. 3 hours. Alternate years. 2002-2003.*

**Math 440 Topics in Algebraic Structures**

*This course covers various important subjects in mathematics in which algebraic structures play a central role, introducing algebraic ideas by their applications to these fields. Topics may include number theory, matrix groups, topology, coding theory and algebraic geometry. Prerequisite: Math 240, Math 306. 3 hours. Alternate years. 2001-2002.*

**Math 490 Senior Capstone**

*This course is intended as a senior capstone experience for mathematics majors. Students will have the opportunity to use their mathematical skills and knowledge to investigate projects of their choice under the supervision of faculty. Prerequisite: Mathematics major or minor, Senior standing, and at least 9 hours of mathematics courses numbered 300 or higher. 2 credits.*

# MEDIA ARTS & COMMUNICATIONS

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Dave Cassady, *Chair, Associate Professor*

Michael Geraci, *Assistant Professor*

Johanna Hibbard, *Assistant Professor*

Melissa Jones, *Assistant Professor and Softball Coach*

Samuel Mathies, *Assistant Professor and Director of Forensics*

A major in media arts prepares students for careers in a variety of media-related fields including journalism, broadcasting, video, film and multimedia production, public relations and advertising. The program emphasizes theoretical and social aspects of the media as well as the creative and technical components.

In addition to course work, students are able to gain further experience through work with student media outlets such as the student newspaper (Index), television productions (Pacific Productions), and radio station (KPUR) and a variety of campus integrated media projects. All student publications are open to any Pacific student.

Qualified Media Arts students are also eligible for summer internships in professional media.

Students interested in a major in Media Arts or careers in the media and related fields should consult the department chair, Dave Cassady.

**Departmental Goals**

The overall goal of the Media Arts Department curriculum is to produce graduates who are technically and aesthetically proficient in creating mass media and non-media communication and knowledgeable in the legal, ethical and social aspects of the media.

Specific goals include:

- Developing graduates who are capable of understanding communication in a media, organizational, interpersonal and social context.
- Providing students with an understanding of the history and social and cultural roles of mass media in society, both through courses specifically

focused on these topics and by incorporating these themes into other, production-oriented courses.

- Developing in students an aesthetic understanding of media production and technical proficiency in media areas such as video and visual production, writing and computer skills.

## MAJORS IN MEDIA ARTS

Students in media arts at Pacific may major in one of five areas: journalism, video production, integrated media, film production or general media arts. Students may receive credit for more than one major (journalism, video, integrated media or film only) by completing the required courses in each major. In addition to the media arts course requirements, students must also complete a minor or second major in an area outside of Media Arts or may design, with the consent of the faculty, an 18-hour program of study outside the department. The 18-hour program must include at least nine upper-division hours.

## GENERAL MEDIA ARTS MAJOR

### Requirements

MedA 111	Cultural and Historical Foundations.....	3
MedA 112	Modern Mass Media .....	3
MedA 225	Black and White Photography.....	3
MedA 240	Writing for Print Media .....	3
MedA 250	Elements of Video Production .....	3
MedA 260	Elements of Multi-Media Production .....	3
MedA 311	Writing for Electronic Media.....	3
MedA 422	Media Criticism .....	3
MedA 434	Mass Media Law and Regulation .....	3
MedA 495	Senior Project.....	2
MedA 496	Senior Project.....	2
	Upper division Media Arts electives .....	6

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## JOURNALISM MAJOR

### Requirements

MedA 111	Cultural and Historical Foundations.....	3
MedA 112	Modern Mass Media .....	3
MedA 225	Black and White Photography.....	3
MedA 240	Writing for Print Media .....	3
MedA 340	Reporting .....	3
MedA 363	Publication Design .....	3
MedA 370	Advanced Reporting .....	3
MedA 422	Media Criticism .....	3
MedA 434	Mass Media Law and Regulation .....	3
MedA 495	Senior Project.....	2
MedA 496	Senior Project.....	2
	Upper division Media Arts electives .....	6

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## VIDEO PRODUCTION MAJOR

### Requirements

MedA 111	Cultural and Historical Foundations.....	3
MedA 112	Modern Mass Media .....	3
MedA 120	Survey of Film .....	3
MedA 250	Elements of Video Production .....	3
MedA 152/352	Pacific Productions.....	2
MedA 301	Special topics:Film Theory OR	
MedA 401	Special Topics: Topographies.....	3
MedA 302	Documentary Film3	
MedA 311	Writing for Electronic Media.....	3
MedA 320	Studio Video .....	3
MedA 330	Field Video.....	3
MedA 422	Media Criticism .....	3
MedA 434	Mass Media Law and Regulation.....	3
MedA 495	Senior Project.....	2
MedA 496	Senior Project.....	2

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## FILM PRODUCTION MAJOR

The film production concentration is offered in cooperation with the Northwest Film Center in Portland. Students majoring in Film Production will have the fees for courses taught by Northwest Film Center faculty waived for up to 20 credits. No more than 20 hours of coursework from the Film Center may count toward the 124-hour requirement.

### Requirements

MedA 105	Art of Filmmaking .....	3
MedA 111	Cultural and Historical Foundations.....	3
MedA 120	Survey of Film .....	3
MedA 205	16mm Film Editing.....	2
MedA 210	16mm Cinematography.....	3
MedA 250	Elements of Video Production .....	3
MedA 301	Special topics:Film Theory OR	
MedA 401	Special Topics: Topographies.....	3
MedA 302	Documentary Film.....	3
MedA 321	Sound Design .....	2
MedA 422	Media Criticism .....	3
MedA 430	Sync Sound Production .....	4
MedA 434	Mass Media Law and Regulation .....	3
MedA 495	Senior Project.....	2
MedA 496	Senior Project.....	2
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## INTEGRATED MEDIA MAJOR

### Requirements

#### Core curriculum

MedA 111	Cultural and Historical Foundations.....	3
	OR	
MedA 112	Modern Mass Media .....	
Art 110	Basic Design .....	3
Art 217	Computer Graphics Design ...	3
	OR	
Art 218	Computer Graphics Illustration	
Art 226	Photography I .....	3
CS 120	The Information Era .....	3
CS 205	Programming for Multimedia .....	3
MedA 260	Elements of Multimedia Design.....	3
MedA 305	Graphics and Audio for Integrated Media .....	3
MedA 311	Broadcast Writing .....	3
	OR	
Engw 207		
OR 208	Creative Writing.....	3
MedA 350	Integrated Media Production .....	3
MedA 360	Integrated Media Project Design.....	3
MedA 434	Mass Communication Law and Reg.....	3
MedA 495	Senior Project I .....	2
MedA 496	Senior Project II .....	2
	OR	
MedA 475	Internship (In lieu of senior project).....	4-6

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**In addition to the IM core, students must complete one of the following emphases:**

#### Art

Art 210	Illustration .....	3
Art 318	Computer Graphics II .....	3
Art 326	Photography II .....	3

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## Computer Science

CS 150	Introduction to ComputerScience I.....	3
CS 355	Human Computer Interface Design .....	3

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6

## Video

MedA 250	Elements of Production .....	3
MedA 320	Studio Production.....	3
MedA 330	Field Production .....	3

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9

## Marketing

BA 309	Marketing .....	3
BA 333	Consumer Behavior.....	3
BA 443	Special Topics in Marketing .....	3

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9

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Total for major: 46-51

## MEDIA ARTS MINOR

### Requirements

#### General Media Arts

MedA 112	Media in Modern Society ...	3
MedA 225	Introduction to Black & White Photography .....	3
MedA 240	Mass Media Writing .....	3
MedA 250	Elements of Production .....	3
MedA 260	Introduction to Integrated Media .....	3
MedA 311	Writing for Electronic Media .....	3
MedA 434	Mass Communication Law and Regulation .....	3

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## Journalism

MedA 111	Cultural and Historical Foundations.....	3
MedA 112	Media in Modern Society ...	3
MedA 225	Introduction to Black & White Photography .....	3
MedA 240	Writing for the Print Media .....	3
MedA 340	Reporting .....	3
MedA 363	Publication Editing and Design .....	3
MedA 434	Mass Communication Law and Regulation .....	3

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## Video Production

MedA 111	Cultural and Historical Foundations OR	
MedA 112	Modern Mass Media .....	3
MedA 250	Elements of Video Production .....	3
MedA 302	Documentary Film.....	3
MedA 311	Writing for Electronic Media.....	3
MedA 320	Studio Video OR	
MedA 330	Field Video.....	3
MedA 434	Mass Media Law and Regulation.....	3

### One of the following

MedA 120	Survey of Film	
MedA 260	Elements of Multi-Media Design .....	3

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3

**Film Studies**

MedA 120	Introduction to Film History.....	3
MedA 301	Special topics: Film Theory .....	3
At least 6 hours from MedA 401.....		6
An additional three courses to be chosen from MedA 401 (Film Topics), and film specific courses offered by other departments including, but not limited to, English, Politics and World Languages. Course list must be approved by director of film studies, Nancy Breaux....		9
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**SPEECH COMMUNICATION MINOR**

**Requirements**

**There are 21 units required for the minor.**

Meda 101	Fundamentals of Speaking.....	3
MedA 110	Introduction to Communication .....	3
MedA 111	Culture and History Foundations of Mass Communication .....	3
OR		
MedA 112	Media in Modern Society	
MedA 201	Interpersonal Communication .....	3

Three courses (nine units) of electives selected from the following list.

Two courses must be upper-division.

Only one course may come from outside the department.

MedA 200	Argumentation and Debate.....	3
MedA 307	Gender Communication ....	3
MedA 308	Persuasion and Propaganda ...	3
MedA 410	Communication Topics .....	3
MedA 422	Media Criticism .....	3
Psy 308	Social Psychology .....	3
PACS 215	Conflict Resolution .....	3
IS 201	Intercultural Communication .....	3

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**COURSE DESCRIPTIONS**

**Media Arts (MedA)**

**MedA 101 Fundamentals of Speaking**

*This course includes study of communication theory and the preparation and delivery of speeches. Students are expected to give a number of relatively short speeches before the class. Emphasis is on the development of speaking skills before an audience. 3 hours. Mathies, Jones.*

**MedA 105 The Art of Filmmaking**

*A comprehensive introduction to film production and basic analysis, uses Super 8mm format to examine aesthetic properties of light, movement and time as they relate to the art of filmmaking. Basic camera operation and shooting techniques examined along with basic principles of editing. Prerequisite: Film production majors only. Taught at Northwest Film Center. 3 hours. NFC staff. Fee \$490.*

**MedA 110 Introduction to Communication**

*An introduction to the study of human communication. Communication principles will be applied to interpersonal, small group, public, organizational and mass media contexts. 3 hours. Mathies, Jones.*

**MedA 111 Cultural and Historical Foundations of Mass Communication**

*The historical and theoretical development of the American mass media. Emphasis placed on the integration of historical background, contemporary mass communication theory and modern mass communication institutions. 3 hours. Cassidy. Fall.*

**MedA 112 Media in Modern Society**

*A study of the mass media in modern America and the world. Focuses on the economic, technological, legal and social aspects of the media. 3 hours. Cassidy. Spring.*

**MedA 120 Survey of Film**

*Introduces the study of film by examining its history. Film movements, national cinemas, the development of technology, the evolution of the industry, and major directors are areas that are explored. The course is international in scope, and regular screenings are included. 3 hours. Hibbard.*

**MedA 150 Pacific Index**

Working for the student newspaper in editorial, reporting, advertising, design and other capacities. P/NP. 1 hour. May be repeated for credit. Cassidy.

**MedA 151 Intercollegiate Debate**

Participating in intercollegiate forensics as part of the Pacific University team. P/NP. 1 hour. May be repeated for credit. Mathies.

**MedA 152 Pacific Productions:  
Crewing**

Working with Pacific University student video production organization doing video productions. P/NP. 1 hour. May be repeated for credit. Hibbard.

**MedA 200 Argumentation and Debate**

The study of classical and modern argumentation theory and its application to problem solving through reasoning, evidence, and persuasion. The course also covers the structure of collegiate debate as a model for modern debate theory and practice. 3 hours. Mathies. Fall.

**MedA 201 Interpersonal  
Communication**

Examines the interpersonal dimension of communication. Principles, concepts, and theories of relationships will be analyzed, discussed and evaluated in their application to daily interaction. Emphasis on how interpersonal communication is structured and how it functions in transactions. 3 hours. Mathies, Jones.

**MedA 205 16mm Film Editing**

Explores the relationship of image to image and image to sound, both in terms of aesthetics and hands on manipulation of a 16mm flatbed editor and magnasync dubber. Editing outside class required. Taught at the Northwest Film Center. Prerequisite: Film Production majors only. 2 hours NFC Staff. Fee \$560.

**MedA 210 16mm Cinematography**

First of a two class sequence in 16mm film (the second is MedA 430, Sync Sound Production). Teaches the fundamentals of 16mm pre-production, shooting, directing, lighting and editing. Emphasis on camera loading and operations, lighting, composition, continuity, lens properties and film stocks. Taught at Northwest Film Center. Prerequisite: MedA 105. Film Production majors only. 3 hours. NFC staff. Fee \$590.

**MedA 225 Introduction to Black &  
White Photography**

A course designed for Communication majors that consists of basic camera handling techniques and black and white darkroom techniques and procedures. The course has a photojournalistic orientation and assignments are intended for students to photograph for the printed page. Students have an opportunity to have work selected for the University's student paper, the "Index". Students should have a 35mm camera and be prepared to purchase a reasonable amount of film and paper for the course. Non-majors must have consent of the Instructor. 3 hours. Flory. Fall.

**MedA 240 Writing for the Print Media**

An introduction to writing for the print media. Course focuses on the basics of writing for print publication in the form of news and feature stories. Major emphasis upon conciseness and adaptation to the writing situation and material. 3 hours. Cassidy. Fall.

**MedA 241 Introduction to Animation**

This course will introduce students to the art of animation from a historical, theoretical, and technical standpoint. Students will be introduced to different formats and techniques of animation and will get to experiment with various animation techniques as a part of the coursework. 3 hours. Hibbard. Spring.

**MedA 250 Elements of Production**

Study of the various elements which combine to create television and film products. Includes production planning, scriptwriting, camerawork, sound, editing, and directing. Some time spent in the studio for application of learned techniques. Prerequisite: MedA 111, 112. 3 hours. Hibbard. Fall.

**MedA 260 Elements of Multimedia  
Design**

Introduces students to the fundamental tools and principles of the development of multimedia applications. Prerequisite: CS 120. 3 hours. Geraci. Fall.

**MedA 301 Special topics: Film Theory**

An intensive study focusing on a singular application of film theory with an emphasis on contemporary cultural and critical theories. Topics vary each term offered. Prerequisite: MedA 120, 250 or consent of instructor. 3 hours. May be repeated for credit. Hibbard. Offered alternate years.

**MedA 302 Documentary**

The history, philosophy and analysis of the documentary. Explores the documentary as personal essay, autobiography, journalism, political propaganda and social advocacy. Prerequisite: MedA 120 or permission of instructor. 3 hours. Hibbard. Offered alternating years.

**MedA 305 Graphics and Audio for Integrated Media**

Introduces students to the advanced tools and techniques associated with the development of interactive media image, text and sound resources. Prerequisite: MedA 260. 3 hours. Geraci.

**MedA 307 Gender Communication**

Examines the process of gender communication. Principles, concepts, and theories of gender relationships and communication styles will be analyzed, discussed and evaluated in their application to daily interaction. Prerequisite: Junior standing or instructor consent. 3 hours. Jones. Spring.

**MedA 308 Persuasion and Propaganda**

A survey of communication approaches to social influence. Both past and contemporary theorizing will be examined. Rhetorical, social and psychological principles used to influence behaviors of individuals and groups will be studied. Prerequisite: Junior standing or consent of instructor. 3 hours. Mathies. Alternate Winters.

**MedA 311 Writing for Electronic Media**

Various forms of writing for radio and television. Includes extensive practice in preparing scripts for broadcast announcements, commercials, and narrative drama. Prerequisite: MedA 250 and Junior standing. 3 hours. Hibbard. Spring.

**MedA 312 Screenwriting**

Explores the art and business of screenwriting, acquainting students with various markets and techniques necessary to produce professional quality dramas for film and television. Emphasis will be on character development, story construction, dialogue, conflict and resolution. Taught at Northwest Film Center. Prerequisite: Film Production majors only. 3 hours. NFC staff. Fee \$385.

**MedA 320 Studio Video**

The study of facts and practices of techniques in television studio production. Emphasis on directing. Introduction to post-production techniques. Prerequisite: MedA 250. 3 hours. Hibbard.

**MedA 321 Sound Design**

Develops a filmmaker's aesthetic appreciation of the sound element in film/video production. Participants will develop a historical understanding of sound's use in film, see and hear clips from selected works and familiarize themselves with equipment in sound design firsthand through hands-on exercises. Editing outside class is required. Taught at Northwest Film Center. Prerequisite: Film Production majors only; MedA 105, 205 and proficiency with Macintosh computers. 2 hours. NFC staff. Fee \$525.

**MedA 330 Field Video**

The study of facts and practices of Electronic Field Production using single camera/multiple-camera and post-production. Prerequisite: MedA 250. 3 hours. Hibbard. Fall.

**MedA 340 Reporting**

Development of news gathering and reporting skills, and techniques for the mass media. Prerequisite: MedA 240. 3 hours. Cassidy. Offered alternate years.

**MedA 350 Integrated Media Production**

Explores the use of advanced multimedia tools in the development of a significant multimedia project. Students combine the various fundamental principles of design and human technology interface to create a single interactive multimedia application. Prerequisite: MedA 360 or consent of instructor. 3 hours. Geraci.

**MedA 352 Pacific Productions: Production Coordination**

Management/production experience with Pacific Productions. Requires Organization/management with Pacific Productions. Prerequisite: MedA 250 and 320 or 330 and instructor consent. P/NP 1-3 hours (Maximum 6 hours). May be repeated for credit. Hibbard.

**MedA 360 Integrated Media Project Design**

Provides students the opportunity to apply their advanced knowledge of interactive media to issues currently affecting the industry. Students develop a complete proposal, including technical and design specifications, to bring an interactive media solution to areas such as academic and non-academic publications, advertising, dissemination of information and participation in the political process. Prerequisite: MedA 260 and consent of instructor. 3 hours. Geraci.

**MedA 363 Publication Editing and Design**

Copy editing and print layout and design techniques with the emphasis on publication editing and design. 3 hours. Cassidy. Offered alternate years.

**MedA 370 Advanced Reporting**

Investigation of in-depth reporting techniques with specific attention paid to background and analysis and the production of multi-source, multi-part stories. Emphasis is in idea conception and development as well as information gathering and packaging. Prerequisite: MedA 240 and 340. 3 hours. Cassidy. Offered alternate years.

**MedA 380 Directing Actors**

Covers the process of acting and provides the tools to communicate effectively with artists who work on behalf of the director in front of the camera. Dramatic action, emotional throughline, sense memory, beats, physicalization, intention, obstacles, improvisation, tempos and mood imagery will be covered. Taught at Northwest film Center. Prerequisite: Film Production Major, MedA 105, MedA 312 or consent of instructor. 3 hours. NFC staff. Fee \$350.

**MedA 390 Fundraising**

Focuses on fundraising and career development. Helps filmmakers attractively position their project, identify and address their strengths and weaknesses as fundraisers and draw upon appropriate fundraising tools. Teaches looking beyond current projects and developing long range career plans. Includes development of mission statement, marketing with integrity and effective video promotion clips. Taught at Northwest Film Center. Prerequisite: Film Production Major. Fee \$105.

**MedA 399 Independent Study**

Individual study in Media Arts: The student meets with an advisor for reading and discussion. Prerequisite: Senior standing or consent of the instructor. 2-3 hours. Staff.

**MedA 401 Special topics: Film Topographies**

In-depth look at various film movements, genres and directors. Will focus on the question of "what is style?" by examining a wide range of formal conventions, filmic genres, narrative movements and industrial production techniques. Topic varies each term offered. May be repeated for credit. Prerequisite: MedA 120, 250 or consent of instructor. 3 hours. Hibbard.

**MedA 410 Communication Topics**

In-depth study of various topics in speech communication. Subject varies each term offered. Prerequisite: Junior standing. May be repeated for credit. 3 hours. Jones, Mathies.

**MedA 422 Media Criticism**

In-depth analysis of the relationship of the mass media and the political, social, philosophical and moral aspects of modern society. Includes historical and contemporary aspects of the modern mass media. Prerequisite: Senior standing, MedA 111, 112 or consent of instructor. 3 hours. Staff. Spring. (G)

**MedA 425 Media Topics**

In-depth study of specific areas in mass communication and mass media. May be repeated for credit. 3 hours. Staff. Offered intermittently. (G)

**MedA 430 Sync Sound Production**

The production of a short sync sound narrative film in a small group setting. 16mm sync sound recording, advanced lighting techniques, script supervision, budgeting, storyboarding, continuity cutting techniques, sound track construction and working with the film lab are covered. Taught at Northwest Film Center. Prerequisite: Film Production Major, MedA 205, MedA 210. 4 hours. NFC staff. Fee \$850.

**MedA 434 Mass Communication Law and Regulation**

The study of mass communication law and regulation including First Amendment theory, libel, slander, privacy, free press and fair trial, obscenity, FCC regulation and copyright. Prerequisite: Senior standing, and MedA 111 or 112 or consent of instructor. 3 hours. Cassidy. Fall. (G)

**MedA 440 Optical Printing**

Hands-on seminar examines the capabilities of the Film Center's 16mm optical printer by covering loading of the camera and projection unit and programming of the sequencer as well as film stocks, data logging and cleaning procedures. Students will view sample works and shoot weekly exercises for critique the following session. Outside time is required for shooting and can be scheduled to fit a variety of schedules. Film/processing and equipment provided through Equipment/Lab Fee.

Completion of the workshop qualifies participants to utilize the unit for personal and other noncommercial projects at subsidized rental rates as part of the Film Center's Equipment Access program. Taught at Northwest Film Center. Prerequisite: Film Production Major, MedA 205, MedA 210. 3 hours. NFC staff. Fee \$260.

**MedA 475 Internship Seminar**

An intensive review of internship experiences with emphasis on the media work experience and the community in which the experience was gained. Prerequisite: Consent of instructor. Approved internship. 1-3 hours. P/NP. Cassidy.

**MedA 495 Senior Project**

The student creates a product of professional quality. 495 is offered in the Fall and is the planning and proposal stage. Prerequisite: Senior standing and consent of the instructor. 2 hours. Staff.

**MedA 496 Senior Project**

Production of project proposed under 495. Consent of instructor. 2 hours. Staff.

# MUSIC

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**Tim Stephens**, Chair, Associate Professor

**Michael Burch-Pesses**, Associate Professor

**George Harshbarger**, Associate Professor

**Murry Sidlin**, James DePreist Professor of Music

**Scott Tuomi**, Assistant Professor

**Nicole Lee**, Instructor\*

\*part-time faculty

**Adjunct Faculty**

**Lisa Actor**, Instructor in Voice

**David Bryan**, Instructor in Trombone/Tuba

**Steve Conrow**, Instructor in Trumpet/Brass Methods

**Robyn Dubay**, Instructor in Violin/Viola

**David Franzen**, Instructor in Guitar

**Karen Gifford**, Instructor in Flute

**Phil Hansen**, Instructor in Cello

**Alan Juza**, Instructor in Oboe

**Steve Kravitz**, Instructor in Woodwinds

**Steve Lawrence**, Instructor in Percussion

**Karen Mallory**, Instructor in Voice

**Janice Richardson**, Instructor in Bassoon

**Delbert Saman**, Instructor in Organ

**Kelli Brown Stephens**, Instructor in Piano

**John Stowell**, Instructor in Jazz Guitar

**Santha Zaik**, Instructor in Horn

The Department of Music, a fully accredited member of the National Association of Schools of Music, and accredited by the Oregon Teacher Standards and Practices Commission, seeks to fulfill five major functions within the University:

1. to provide access to courses in music for all students of the University regardless of their previous involvement or experience.

2. to provide opportunities for active music-making in a variety of instrumental and vocal ensembles for all interested students, faculty, staff, and members of the community.
3. to prepare elementary and secondary teachers of music.
4. to provide applied music instruction in voice, wind, percussion, string and keyboard instruments; and to offer degrees with performance emphasis in voice and piano.
5. to prepare students for graduate study in music.

## INTRODUCTORY COURSES & COURSES FOR GENERAL STUDENTS

The Music Department offers the following General Studies courses for students with little or no previous experience with music.

**Note: All Music courses count toward satisfying the Arts requirement in the Academic Core:**

Mus 101	History of Classical Music	3
Mus 102	History of Jazz and Rock	3
Mus 110	Elements of Music	3
Mus 131	Introduction to MIDI Lab	1
Mus 181	Class Voice	1
Mus 183	Class Piano I	1
Mus 184	Class Piano II	1
Mus 187	Class Guitar I	1
Mus 188	Class Guitar II	1
Mus 240	Introduction to World Music	3
All performing ensembles		0 or 1
Private instruction		0.5 or 1

### Ensembles

**Open to all students.**  
**See course descriptions.**

Mus 150	Choral Union
Mus 151	Jazz Band
Mus 159	Chamber Ensembles
Mus 163	Chamber Singers
Mus 165	Wind Ensemble
Mus 167	Jazz Choir

Ensembles may be counted as upper-division credits in the Junior and Senior years. With Humanities Division approval, ensemble credits may count towards satisfying the Humanities requirement in the Academic Core. Ensembles are activity courses. 3 credits may count as satisfying the Arts requirement in the Academic Core, 4 more credits may be taken toward the minimum total of 124 credits for graduation. Beyond that, except for music majors and minors, they are considered excess credits.

## Music Department

### Mission Statement and Goals

The Music Department at Pacific University seeks to prepare students:

- for lifelong interest, participation, and enjoyment in music;
- to become informed consumers and intelligent listeners and evaluators of music and musical performances;
- to be functionally literate in the language of music-reading, writing, speaking, and listening;
- to pursue active music making both vocally and instrumentally;
- to create their own music;
- to discover relationships between music, the other arts, and disciplines other than the arts;
- to broaden and deepen their understanding of the music of our cultural heritage;
- to increase their appreciation of musical systems and traditions of cultures other than our own.
- to become more proficient in the music technologies appropriate to their areas of musical interest;
- for careers in elementary and secondary music education;
- to pursue careers as performers specializing in voice or piano;
- for graduate study in music composition, music education, or performance.

## MUSIC PROGRAMS

### The Music Department offers:

- Bachelor of Arts in Music
- Bachelor of Arts in Music: Performance Emphasis (voice and piano)
- Bachelor of Arts in Music Education
- Minor in Music
- Certificate Program: Oregon Symphony Conducting Apprenticeship Program at Pacific University

Students of piano at the 300-level or above are required to provide designated Departmental accompanying, which substitutes for major ensemble participation. Pianists accompanying a Departmental ensemble are to enroll for that ensemble. Those engaged in other Departmental accompanying are to enroll in Mus 120 Accompanying.

Transfer students and students in study abroad programs who major or minor in music at Pacific University must complete Mus 100 Recital Attendance and enroll in the major ensemble appropriate for the student's instrument or voice each semester in residence or until these requirements are met. Applied Music requirements are met only by Departmental examination.

## MUSIC MAJOR

### Core Requirements

Music Theory: Mus 111, 111L, 112, 112L, 211, 211L, 212, 212L.....	16
Music History: Any three of Mus 321, 322, 323, 324 .....	9
Piano: Mus 185* and 186*, and pass Piano Proficiency Test .....	2
<b>Mus 100 Recital Attendance:</b> seven semesters.....	0
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	27

At the end of the second year of music study, each music major's progress will be assessed to evaluate the student's potential to successfully complete upper-division music requirements. Music courses fulfilling requirements in the music major or music minor must be passed with a grade of "C-" or higher.

\*Waived for students who pass the Piano Proficiency Test without enrolling.

Additional Requirements  
specific to degree programs:

## BACHELOR OF ARTS IN MUSIC

Music Major Core Requirements  
plus the following:

Applied Music on student's primary instrument or voice: eight semesters of 0.5 cr. each,

Mus 171 through 472.....	4
Ensembles (large ensemble appropriate to instrument voice, Mus 150, 157, 163, 165).....	6
+Electives in Music.....	9
Senior Project: Mus 495.....	2
Total Additional Requirement credits ...	21

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Total Credits in Music	48
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## BACHELOR OF ARTS IN MUSIC: PERFORMANCE EMPHASIS

Music Major Core Requirements  
plus the following:

Applied Music on student's primary instrument or voice: eight semesters @ 1 cr. ea,

Mus 171 through 472.....	8
Ensembles (large ensemble appropriate instrument/voice Mus 150, 163, 165).....	7
Music History (one additional course of Mus 321, 322, 323, 324, 326, 427, 428).....	3
Pedagogy (Mus 490 or 491, as appropriate) .....	2
Mus 394 Junior Recital .....	0
Mus 494 Senior Recital.....	3
Mus 351 Diction for Singers (voice majors only) .....	1
Mus 282 Basics of Conducting.....	1
Total Additional Requirement credits ...	25

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Total credits in Music	52
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## BACHELOR OF ARTS IN MUSIC EDUCATION

### Music Major Core Requirements plus the following:

Applied Music on student's primary instrument or voice: eight semesters of 0.5 cr. each, Mus 171 through 472.....4

Ensembles: (large ensemble appropriate to instrument/voice, Mus 150, 163, 165).....6

Mus 301; and Mus 302 OR 303 as appropriate.....6

Conducting: Mus 282; and 482 or 483 as appropriate.....3

### Techniques and Methods\*

Mus 490 and three of: 233, 234, 235, 236 .....5

Mus 310 .....3

Total Additional Requirement credits ...27

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Total credits in Music 54

+ Selected in consultation with faculty advisor.

\* May be waived by Departmental proficiency examination.

*Note: Students majoring in Music Education and seeking K-12 certification to teach in public schools must also complete the general courses prescribed by the School of Education. See Education requirements. Total credits in Education: 32.*

## MINOR IN MUSIC

### Requirements

Music Theory:  
Mus 111, 111L, 112, 112L.....8

Music History: any two of Mus 321, 322, 323, 324.....6

Piano: Mus 185\* and 186\*, and pass Piano Proficiency Test .....2

Mus 100 Recital Attendance: four semesters .....0

Applied Music on student's primary instrument or voice: four semesters of 0.5 cr. each .....2

Ensembles (large ensemble appropriate to instrument/voice, Mus 150, 157, 163, 165).....4

\*Waived for students who pass the Piano Proficiency Test without enrolling.

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Total Credits in Music 22

+ Selected in consultation with faculty advisor.

\* May be waived by Departmental proficiency examination.

## COURSE DESCRIPTIONS

### Music (Mus)

#### Mus 100 Recital Attendance

All music majors must enroll in recital attendance for seven semesters and attend at least seven performances per term. All music minors must enroll in recital attendance for four semesters and attend at least five performances per term. Students enrolled in Mus 111, 112, 211, or 212 (except non-music majors/minors) must also register for Mus 100. Prerequisite: Must be music major or minor. 0 hours. Harshbarger.

#### Mus 101 History of Classical Music

This course pursues the development of listening skills, principally with respect to the traditions of Western Classical Music. Emphasis is placed on the development of an aural sense of historical, stylistic, and idiomatic contexts. Previous musical knowledge or experience is neither required nor assumed. 3 hours. Staff. Offered fall semester.

#### Mus 102 History of Jazz and Rock

Surveys the impact of jazz and rock music from both the social/historical and the musical points of view. Emphasis is placed on historical context and development of aural skills. The time frame will be 1900 to the present. 3 hours. Burch-Pesses. Offered Winter III.

#### Mus 110 Music Notation and Songwriting

Introduction to the expressive elements of music and musical notation. Topics include intervals, scales, keys, melody, rhythm, harmony, texture, and form. Recommended as preparation for the music theory sequence, and for aspiring singer-songwriters. No previous musical background necessary. 3 hours. Harshbarger.

**Mus 111 Music Theory I**

Introductory studies in harmony and counterpoint. Emphasis placed on scales, intervals, triads, non-harmonic tones and seventh chords. Ear training utilizing solfege syllables; encompassing melodic dictation, scales, intervals, triads, non-harmonic tones, and specific chords and their inversions. Prerequisite: placement exam or consent. Corequisite: concurrent enrollment in Mus 111L and Mus 100. 3 hours. Stephens. Offered fall semester.

**Mus 111L Music Theory Lab I**

Connecting sound and notation through analysis, aural dictation and sight singing. For music majors. Corequisite: concurrent enrollment in Mus 111. 1 hour. Stephens. Offered fall semester.

**Mus 112 Music Theory II**

A continuation of Mus 111. Emphasis is on the harmonic, melodic, rhythmic and basic formal procedures of the common practice period. Fundamental ear-training and sight singing procedures continued. Primary topics will be secondary dominants, modulation, Neapolitan and Augmented sixth chords, modulation and analysis. Prerequisite: Mus 111 or consent. Corequisite: concurrent enrollment in Mus 112L and Mus 100. 3 hours. Stephens. Offered spring semester.

**Mus 112L Music Theory Lab II**

Connecting sound and notation through analysis, aural dictation and sight singing. Corequisite: concurrent enrollment in Mus 112. 1 hour. Stephens. Offered spring semester.

**Mus 131 Introduction to MIDI Lab**

Introduction to Musical Instrument Digital Interface (MIDI) fundamentals and its practical implications for music education and composition. Basic Macintosh computer skills required. Prerequisite: consent of instructor. 1 hour. Burch-Pesses. Offered both semesters.

**Mus 150 Choral Union**

Rehearsals and performance of traditional choral literature for large, mixed choir. Open to all students, faculty, staff and members of the community. Fundamentals of vocal tone production and musicianship. Public performance required. No audition. 0 or 1 hour per semester. May be repeated. Harshbarger.

**Mus 151 Jazz Band**

A jazz band open to all University students. The band regularly performs with regionally and nationally-known soloists. Repertoire ranges from early Jazz and Big Band to Jazz/Rock fusion. May be repeated. Prerequisite: audition. 0 or 1 hour. Burch-Pesses.

**Mus 159 Chamber Ensembles**

Small ensembles of many different instrumentations and voices open to Pacific students, faculty, staff, and other interested members in the community. Works from all periods and of all styles are studied. It is the responsibility of the students to form an appropriate ensemble and arrange for the appropriate faculty member to provide coaching prior to enrolling in the course. Prerequisite: Music Department Chair consent. Mus 159-06, -07 and -08 require an audition. 0 or 1 hour. May be repeated. Staff.

**Mus 159-01 Chamber Ensemble – Brass**

**Mus 159-02 Chamber Ensemble – String**

**Mus 159-03 Chamber Ensemble – Woodwind**

**Mus 159-04 Chamber Ensemble – Percussion**

**Mus 159-05 Chamber Ensemble – Voice**

**Mus 159-06 Collegium Musicum – Vocal**

**Mus 159-07 Collegium Musicum – Instrumental**

**Mus 159-08 Stage Singers' Workshop**

**Mus 159-09 Combination (3 or more)**

**Mus 163 Chamber Singers**

A select mixed ensemble that performs and entertains regularly both on campus and off campus. Open to all students. Rehearsal and performance of choral literature from the Renaissance to the present. Three to five major performances per year, plus participation in choral festivals and an annual tour. Prerequisite: audition. 0 or 1 hour per semester. May be repeated. Harshbarger.

**Mus 165 Wind Ensemble**

A large instrumental ensemble open to University students, faculty, staff, and other interested members in the community. The band performs major concerts of standard wind ensemble literature each semester and for other various events. Prerequisite: high school level or better ability to play a wind or percussion instrument. 0 or 1 hour. May be repeated. Burch-Pesses.

**Mus 167 Jazz Choir**

This ensemble is a performance outlet for singers, both majors and non-majors, who wish to explore jazz from a vocal perspective. Performances will be both on and off campus and participation in Northwest Vocal Jazz Festivals is also planned. Prerequisite: Audition.0 or 1 hour. May be repeated. Burch-Pesses.

**Mus 171-2, 271-2, 371-2, 471-2****Performance Studies:****Private Lessons**

Private instruction is available on all band and orchestral instruments, piano, organ, guitar, and voice for all University students, whether or not they are Music majors. The -\_71/72 sequence of courses is proficiency-based using nationally accepted criteria for advancement to higher levels. Exact course requirements will be determined by the instructor on the basis of the individual student's needs and experience. Music majors/minors taking private instruction are required to participate in the appropriate large ensemble for their primary instrument and individual daily practice is required in addition to the weekly lesson. Lessons are letter graded. Performance Studies jury exams are required of all performance studies students at the end of each semester, except Mus 171. Music majors and minors enrolled in Performance Studies courses 271 and above are required to perform in a Student Performance Forum (student recital) each semester. Half hour lessons once per week (total of twelve per semester) equal 0.5 credit hour; one hour lessons once per week (total of twelve per semester) equal 1 credit. (See class schedule to coordinate section letter with instrument/voice to be studied.) Prerequisite: none for 171/172 level; 271 and above require recommendation of the faculty, based on progress demonstrated in the jury exam. 0.5-1.0 hours per semester. See list of instructors. Prerequisite: see Music Department chair for section assignment.

**Mus 181 Class Voice**

A course designed for non-music majors to improve their singing skills. Emphasis is placed on improving the vocal technique, breath support, and tone quality of each member of the class in a no-pressure, supportive group situation. 1 hour. Tuomi.

**Mus 182 Class Voice II**

A continuation of Mus 181, this course explores vocal technique for those with some previous knowledge of singing who seek improvement as soloists and/or choral singers. Students study both classical and contemporary (musical theatre) literature and perform selections in a supportive group environment. Offered spring semester. Prerequisite: Music 181. 1 hour. Tuomi.

**Mus 183 Class Piano I**

Class piano for non-music majors/minors with little or no basic music or piano skills; scales, arpeggios, chords, and reading skills necessary for the playing of piano for personal enjoyment. 1 hour. Lee.

**Mus 184 Class Piano II**

A continuation of Mus 183. Prerequisite: Mus 183 or consent. 1 hour. Lee.

**Mus 185 Functional Piano I**

Class piano for music majors/minors with little or no basic piano skills; scales, arpeggios, chords, and reading skills necessary for the playing of simple accompaniments in the public school or private studio. Prerequisite: placement exam or consent. 1 hour. Lee.

**Mus 186 Functional Piano II**

A continuation of Mus 185. Prerequisite: Mus 185 or consent. 1 hour. Lee.

**Mus 187 Class Guitar I**

An examination of various techniques and styles of guitar playing including chord formations, positions, tuning and tone quality. 1 hour. Franzen.

**Mus 188 Class Guitar II**

A continuation of Mus 187. 1 hour. Franzen.

**Mus 191 Beginning Jazz Improvisation I**

Techniques and materials used in the performance of basic instrumental jazz styles such as the Blues and Standards. Studies will include jazz theory, keyboard harmony, solo transcription, and required listening. Prerequisite: Mus 112 or consent. 1 hour. Staff.

**Mus 192 Beginning Jazz Improvisation II**

A continuation of Mus 191. Studies will expand to include alternative harmonic and rhythmic techniques and materials. Prerequisite: Mus 191 or consent. 1 hour. Staff.

**Mus 211 Music Theory III**

A continuation of Mus 112. Emphasis is on the melodic, harmonic, rhythmic, and basic formal procedures of selected Medieval, Renaissance, Baroque, Classical and Romantic schools and styles; advanced ear-training and sight singing. Prerequisite: Mus 112 or consent. Corequisite: concurrent enrollment in Mus 211L and Mus 100. 3 hours. Stephens. Offered fall semester.

**Mus 211L Music Theory Lab III**

Connecting sound and notation through analysis, aural dictation and sight singing. Corequisite: concurrent enrollment in Mus 211. 1 hour. Stephens. Offered fall semester.

**Mus 212 Music Theory IV**

A continuation of Mus 211. This course examines the basic harmonic, melodic, rhythmic, and formal procedures of late 19th and 20th century music; Advanced ear-training and sight singing continued. Primary topics will be the extension of tonality, chromaticism, impressionism, quartal harmony, atonality, serialism, electronic media, and minimalism. Prerequisite: Mus 211. Corequisite: concurrent enrollment in Mus 212L and Mus 100. 3 hours. Stephens. Offered spring semester.

**Mus 212L Music Theory Lab IV**

Connecting sound and notation through analysis, aural dictation and sight singing. Corequisite: concurrent enrollment in Mus 212. Offered spring semester. 1 hour. Stephens.

**Mus 233 String Methods**

Laboratory classes in playing and teaching the string instruments of the orchestra. Violin, viola, cello or bass are presented with members of the class playing the instrument. Particular emphasis is given to the techniques of strong class teaching. Offered S 2000. Prerequisite: Music Major or consent. 1 hour. Staff.

**Mus 234 Woodwind Methods**

Laboratory classes in playing and teaching the woodwind instruments. Flute, oboe, clarinet, saxophone, and bassoon are presented with emphasis on class teaching procedures, positions, and tone production, the care and minor repairs of the instruments. Prerequisite: Music Major or consent. Offered alternate years. 1 hour. Staff.

**Mus 235 Brass Methods**

Laboratory classes in playing and teaching trumpet, trombone, baritone, French horn and tuba. Emphasis is placed on class teaching procedures, positions, tone production, and embouchure. Offered alternate years. Prerequisite: Music Major or consent. 1 hour. Staff.

**Mus 236 Percussion Methods**

Laboratory classes in playing and techniques for teaching, tuning, and care of idiophones, and membranophones. Offered alternate years. Prerequisite: Music Major or consent. 1 hour. Staff.

**Mus 240 Introduction to World Music**

Through lecture, discussion, structured listening and participation, students will explore various music cultures throughout the world including those in Japan, Eastern Europe, Latin America, Africa, Indonesia and India. In addition, the course includes an examination of Afro-American and Native American music as well as other less commonly known North American forms and genres. Meets cross-cultural requirements 3 hours. Tuomi.

**Mus 280 Accompanying**

A basic study of accompanying technique for both instrumental and vocal literature. The course addresses problems of balance, ensemble, texture, and interpretive style. Prerequisite: piano major or minor and consent. May be repeated for credit. 1 hour. Lee.

**Mus 282 Basics of Conducting**

Seminar class covering beginning level music conducting gestures, movement and basic analysis of scores for both vocal and instrumental students. Students will conduct other musicians with graded verbal and video feedback from the instructor. Prerequisite: Mus 112. This class is a prerequisite for Mus 482 and/or Mus 483. 1 hour. Harshbarger.

**Mus 285 Functional Piano III**

A Continuation of Mus 124. Prerequisite: Mus 124 or consent. 1 hour. Lee.

**Mus 286 Functional Piano IV**

A continuation of Mus 223. Prerequisite: Mus 223 or consent. 1 hour. Lee.

**Mus 300 Music for Classroom Teachers**

Fundamental principles, techniques, and procedures for teaching music in the elementary school. Examination of contemporary literature and materials. Introduction to musical notation and first experiences in piano and recorder. Rote songs, reading-readiness, rhythm training, creative music, and listening lessons. Observation. Recommended by the School of Education for elementary teachers. 2 hours. Harshbarger.

**Mus 301 Music in the Elementary School**

An examination of techniques and materials for teaching classroom vocal and instrumental music in the elementary school for the prospective music specialist. Emphasis on lesson planning. Orff, Kodaly methods; the rote song, reading-readiness, the reading song, the rhythm program, the listening lesson, and creative music. Observation of music-making in the elementary school classroom and directed teaching. Prerequisite: Mus 212 or consent. 3 hours. Harshbarger. Offered alternate years.

**Mus 302 Music in the Secondary School (Choral)**

Selection and presentation of vocal music for the high school; conducting skills; examination of typical problems encountered in high school music ensembles; methods and materials for classroom as well as individual teaching; introduction to basic vocal techniques; curriculum development, and organizational practices. Observation. Prerequisite: Mus 212 or consent. 3 hours. Harshbarger. Offered alternate years.

**Mus 303 Music in the Secondary School (Instrumental)**

Selection and presentation of instrumental music for the high school; conducting skills; examination of typical problems encountered in high school music ensembles; methods and materials for classroom as well as individual teaching; introduction to basic instrumental techniques; curriculum development, and organizational practices. Observation. Prerequisite: Mus 212 or consent. 3 hours. Burch-Pesses. Offered alternate years.

**Mus 310 Orchestration and Arranging**

Techniques of scoring and transcribing for various combinations of orchestral and band instruments. Scoring and arranging for ensembles of incomplete instrumentation. Exploration of timbral combinations. Introduction to computer applications in this field. Offered alternate years. Prerequisite: Mus 212 or consent. 3 hours. Stephens.

**Mus 311 Counterpoint**

Intensive studies in contrapuntal techniques and styles, species and modal, as they developed in music history. Prerequisite: Mus 212 or consent. Offered each semester on an arrangement basis. 3 hours. Stephens.

**Mus 312 Analysis**

The study of structure and styles through analysis of characteristic scores of the Baroque, Classical, Romantic, and Modern periods. A study of approaches to analysis including Schenker, Reti, Cooper, Meyer and others. Prerequisite: Mus 311 or consent. Offered each semester on an arrangement basis. 3 hours. Stephens.

**Mus 321 Music History: Antiquity to 1585**

A study of music written during the Medieval, Renaissance, and early Baroque periods. Attention will also be given to the relationships among music, the visual arts, and historical events. Prerequisite: Mus 111 or consent. 3 hours. Tuomi. Offered alternate years.

**Mus 322 Music History: 1585-1809**

A study of works from the early Baroque to the late Classic. The approach will be similar to that described for Mus 321 above. Prerequisite: Mus 111 or consent. 3 hours. Tuomi.

**Mus 323 Music History: 1809-1918**

A study of works from the late Classic, through the Romantic to the early 20th century. The approach will be similar to that described for Mus 321 above. Prerequisite: Mus 111 or consent. 3 hours. Stephens. Offered alternate years.

**Mus 324 Music History: The Twentieth Century**

Surveys the major trends in twentieth-century compositional thought and practice: chromatic tonality, atonality, serialism, neo-classicism, nationalism, avant-gardism, etc. Emphasis will be on various composers, approaches to the problems of tonal language. Prerequisite: Mus 111 or consent. 3 hours. Stephens. Offered alternate years.

**Mus 326 Song Literature**

Surveys the development of the art song, beginning with the troubadour and trouvère songs of the 13th century and extending through contemporary techniques in the genre. Score study and in-class performance required. An elective course for vocal performance majors/minors. Prerequisite: Mus 272, and Mus 323, 324 or consent. 3 hours. Tuomi. Offered alternate years.

**Mus 351 Diction for Singers**

An introduction to International Phonetic Alphabet and its application to the pronunciation of English, Italian, German, French, and Ecclesiastical Latin. A required course for vocal performance majors. Prerequisite: Mus 171 and 172 or consent. 1 hour. Tuomi. Offered alternate years.

**Mus 391 Piano Literature**

A chronological study of standard and lesser known works for solo piano, from pre-Bach to the present. Consideration of editions and library techniques included along with regular short performances by class members. Prerequisite: piano major or minor and consent. 2 hours. Lee.

**Mus 394 Junior Recital**

Candidates for the degree Bachelor of Music in Performance Studies are required to research and perform one-half of a recital (one-half hour minimum). This course is also open to other majors and to qualified non-majors enrolled in Performance Studies. 1 hour per semester. Staff.

**Mus 411 Composition**

Techniques of composition and arranging for various combinations of instruments and voices. Prerequisite: Mus 212 or consent. May be repeated for no credit. 3 hours. Stephens.

**Mus 427 History of the Cantata and Oratorio**

Examines the primary cantata and oratorio repertoire through in-depth analysis, listening, and concert attendance. Both sacred and secular works will be examined, beginning with examples from the 16th century and extending through 20th century works in the idiom. An elective class for music majors/minors. Offered by arrangement. Prerequisite: Mus 112, 323, 324, or consent. 3 hours. Tuomi.

**Mus 428 History of Opera**

A comprehensive study tracing the development of opera and music drama through analysis, listening, and performance attendance. The course will concentrate on works beginning with Claudio Monteverdi and continue through modern innovations in the genre. An elective class for music majors/minors. Offered by arrangement. Prerequisite: Mus 112, 323, 324, or consent. 3 hours. Tuomi.

**Mus 482 Instrumental Conducting**

A detailed study of conducting techniques and instrumental rehearsal procedures. The approach will be through music analysis, and will include beat patterns, body movements, and baton technique. Students will work with instrumental ensembles. Prerequisite: Mus 212, Mus 282 or consent. 2 hours. Burch-Pesses.

**Mus 483 Choral Conducting**

A study of conducting techniques and choral rehearsal procedures to include the teaching of vocal production, breathing, diction, basic musicianship, and performance. Choral literature for ensembles of various age groups and experience will also be examined. Students will work with choral ensembles. Prerequisite: Mus 212, Mus 282 or consent. Concurrent enrollment in a Pacific University choral ensemble is required. 2 hours. Harshbarger.

**Mus 490 Introduction to Vocal Pedagogy**

Laboratory classes in singing and teaching of voice. Emphasis is placed on class teaching procedures, tone production, and healthy singing techniques. Prerequisite: consent of instructor. Offered alternate years. 2 hours. Tuomi.

**Mus 491 Piano Pedagogy**

Provides pianists with the skills to teach reading, techniques, and basic musical expression to beginning, intermediate, or advanced piano students. Prerequisite: piano major or minor. 2 hours. Lee.

**Mus 494 Senior Recital**

Candidates for the degree Bachelor of Music: Performance Emphasis are required to research and perform a full-length public recital of music (one hour minimum) from various periods during their senior year. Open to other students enrolled in Applied Music only with approval of the Music Department. 2 hours. Staff.

### **Mus 495 or 496 Senior Project**

*Candidates for the degree Bachelor of Arts in Music are required to complete a senior project in an appropriate area of music study. Open to students enrolled in other music degree programs only with approval of the Music Department. 2 hours. Staff.*

## **CERTIFICATE PROGRAM**

### **The Oregon Symphony Conducting Apprenticeship Program at Pacific University**

Directed by Murry Sidlin, Resident Conductor of The Oregon Symphony and the James DePreist Professor of Music at Pacific University

The Oregon Symphony Conducting Apprenticeship Program at Pacific University is one of total immersion in which the apprentices study under practicing professional conductors, learn repertoire, acquire conducting skills, and experience the enormous diversity of an orchestral season. Apprentices will meet with the concertmaster and other principal players, librarian, personnel manager, production staff, and even represent and speak on behalf of the orchestra in public informal gatherings.

This is the first conducting program sponsored jointly by a University and professional orchestra in which the program director and principal teacher is a professional conductor on the staff of the orchestra and a full professor at the sponsoring University. Mr. Sidlin therefore is able to guide the study of the students collectively and individually, and, as resident conductor of the Oregon Symphony, has the authority to determine conducting assignments with the orchestra throughout the two year residency.

Please write to the Pacific University Department of Music for the most current materials and information.

#### **Features of the program:**

- A total of 3 apprentices will be in residence at any one time and are invited for a two-year term.
- Positions for up to 2 apprentices are available each academic year.

- Fellowships are awarded to successful applicants to the program to cover room, board and tuition.
- Apprentices will attend every rehearsal and concert of the Oregon Symphony during their period of residency.
- Weekly seminars will be with Mr. Sidlin, Maestro DePreist and visiting conductors and guest artists.
- Seminar study of the current Oregon Symphony repertoire will be with Mr. Sidlin.
- Private conducting lessons for each apprentice with Mr. Sidlin.
- Apprentices will conduct portions of Oregon Symphony rehearsals and concerts.
- Apprentices will also observe other arts performance organizations in and around Portland.

### **Diploma**

At the conclusion of the two-year residency, the apprentice conductor will receive an Artist Diploma from Pacific University and the Oregon Symphony signifying successful completion of the program. It is important to note that this is a non-degree program.

#### **Requirements for entry to the program:**

**It is the expectation that all applicants to the program will have:**

1. Considerable conducting training and experience.
2. Competence at the piano and/or professional level performance skills on an orchestral instrument.
3. There are no age restrictions.

#### **Application packet must include:**

- A letter describing the candidate's current level of artistic development and professional intentions.
- A statement of artistic philosophy concerning the role and philosophy of the conductor in American life in the years ahead, both on and off the podium.
- A thorough resume.
- Three letters of recommendation.
- A video of recent work with orchestra (chamber orchestra or ensemble are acceptable). Must be within the past year.

- A videotaped description of a symphonic composition, as though you were presenting it to an audience. Use piano for examples.
- Applicants who are not U.S. citizens must complete and submit the Pacific University Foreign National Information form at the time of application. Final acceptance into the program is contingent upon the student's ability to obtain a valid visa.

**Send Application packet to:**

Murry Sidlin, Music Department  
Pacific University  
2043 College Way  
Forest Grove, OR 97116

- **Application deadline: March 15.**

**Course Sequence**

MUS 581	Fall semester, first year
MUS 582	Spring semester, first year
MUS 681	Fall semester, second year
MUS 682	Spring semester, second year

**Conducting Advisors**

**James DePreist**, *Chair of the Advising Committee, Music Director, Oregon Symphony, Music Director, Monte-Carlo Philharmonic*

**Thomas Baldner**, *Professor of Conducting Studies, Indiana University*

**Sergiu Comissiona**, *Music director, Vancouver (B.C.) Symphony*

**Lawrence Foster**, *Music Director, Barcelona Symphony Orchestra*

**Norman Leyden**, *Associate & Pops Conductor, Oregon Symphony*

**Gerard Schwartz**, *Music Director, Seattle Symphony*

**Leonard Slatkin**, *Music Director, National Symphony*

**Michael Tilson Thomas**, *Music Director, San Francisco Symphony*

**Hans Vonk**, *Music Director, St. Louis Symphony*

**Certificate Program Course Descriptions**

**Mus 581 Conducting Apprenticeship I**

*Four hours per week: seminar with Mr. Sidlin, Maestro DePreist, visiting conductors, guest artists, and musicians of the Oregon Symphony as well as administrative staff of the orchestra. Study scores of current Oregon Symphony repertoire. Ten hours per week: study and observation of the rehearsal process and procedure with a view from both inside and outside the orchestra. Exposure to management, marketing and production responsibilities. One hour per week: private conducting lesson. Coursework will include rehearsals and/or concerts of the Oregon Symphony. Evaluation by Mr. Sidlin, Maestro DePreist, and members of the orchestra. 12 hours. Sidlin. Offered fall semester.*

**Mus 582 Conducting Apprenticeship II**

*A continuation of Mus 581. Spring semester. 12 hours. Sidlin*

**Mus 681 Conducting Apprenticeship III**

*A continuation of Mus 582. Fall semester. 12 hours. Sidlin*

**Mus 682 Conducting Apprenticeship IV**

*A continuation of Mus 681. Spring semester. 12 hours. Sidlin*

# PRE-OCCUPATIONAL THERAPY

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The school of Occupational Therapy offers a 29-month entry-level master's degree program. The curriculum consists of academic and laboratory experiences integrated with both part-time and full-time professional field work. Entrance to the program is in the fall semester only.

The application deadline is usually December 1. Students who will have completed the occupational therapy prerequisite course requirements by the date of enrollment in the program are eligible to apply for admission. Students who enter without a bachelors degree will receive a Bachelor of Science degree in Human Occupation following completion of their first year in the graduate curriculum.

Students with an interest in occupational therapy should obtain a current brochure from the Office of Admission for Professional Programs. The brochure is the most current document outlining requirements and prerequisites. Students with questions regarding admission to the School are encouraged to talk with the Office of Admissions for Professional Programs (Ext. 2900).

Pre-Occupational Therapy is not an undergraduate major, so students interested in becoming occupational therapists are free to choose any major, as long as they also complete the prerequisite courses listed below. Students who elect to major in a science will need to take more math and science courses in the first semesters. The faculty in the School of Occupational Therapy requires the following prerequisite courses in order to ensure success in the professional program.

Prior to entrance, applicants must have:

- Acquired a bachelors degree and all specified School of Occupational Therapy prerequisite coursework; OR
- Completed a minimum of three academic years of college coursework (90 semester hours) including a minimum of four (4) upper division courses, the specified School of Occupational Therapy prerequisites coursework, and Pacific University bachelor core requirements.

## Requirements

**Natural Sciences ..... 15 hours**

Bio 202, General Biology I

Bio 224, Human Anatomy with Lab

Bio 240, Human Physiology with Lab

Physics 110/111 is strongly recommended.

**Social Sciences ..... 12 hours**

Must include courses from minimally three (3) of the following areas: psychology, sociology, anthropology, politics, government, business and economics. In these areas, include a life-span development course, and an abnormal psychology course.

**Social Science courses must include:**

- courses in human growth and development, preferably across the life span (Psy 180 and/or Psy 318);
- courses which promote an understanding of both normal and abnormal adaptive development at both the individual and group level (Psy 150 and/or Psy 160 and/or Psy 308 and/or Psy 309 and/or Psy 311)

**Writing ..... 3 hours**

Engw 201, Expository Writing

OR

Engw 301, Advanced Expository Writing

**Applied Arts ..... 6 hours**

Various hands-on courses such as design, ceramics, dance, photography, or music.

**Communication**

**(debate or public speaking) ..... 2 hours**

Meda 201 or Meda 205, or IS 201

**Research Design ..... 2 hours**

Psy 348 or Soc 300 or Anth 201

(Statistics will not be accepted)

**Humanities ..... 6 hours**

**Must include courses from**

**two (2) of the following areas:** literature, religion, history, philosophy, ethics, and history or appreciation of art, music, or theater.

**Cross-Cultural Studies ..... 2 hours**



## VISUAL SCIENCE DEGREE (IN COLLEGE OF OPTOMETRY)

Humanities: 12 hours from two disciplines, including Art, English, History, Humanities, Languages, Music, Philosophy, Religion, Speech, Theater, and First-year Seminar) .....12 hours

Social Sciences: 12 hours from two disciplines including Anthropology, Business & Economics, Geography, History & Political Science, Psychology, Sociology, but not First Year Seminar.....12 hours

*Pre-Optometry students are advised to complete the Arts and Sciences core requirements.*

It is wise to begin immediately in Mathematics. In addition, strong students take General Chemistry in their freshman year. Biology, Chemistry, and Mathematics together are a heavy freshman science and math schedule, to be taken with care. Students interested in this schedule for the spring semester should discuss it first with their advisors.

### Sample of 4-Year Pre-Optometry Curriculum

Chem 380 (Bio Chem) offered alternate years.

#### Freshman

##### Fall

Math 125.....	4
First Year Seminar.....	4
Chem 220 .....	4
Elective .....	3
	<hr/>
	15

##### Winter

Elective .....	3
	<hr/>
	3

##### Spring

Biol 202 .....	4
Math 226.....	4
Chem 230 .....	4
Elective .....	3
	<hr/>
	15

#### Sophomore

##### Fall

Biol 204 .....	4
Elective .....	3
Engw 201.....	3
Foreign Language.....	3
Psych 150.....	3
	<hr/>
	16

##### Winter

Elective .....	3
	<hr/>
	3

##### Spring

Biol 204 .....	4
Elective .....	3
Engw 201.....	3
Foreign Language.....	3
Psych 150.....	3
	<hr/>
	16

#### Junior

##### Fall

Chemistry 240 (Organic).....	4
Biology 224 (Anatomy) .....	4
Electives .....	6
	<hr/>
	14

##### Winter

Elective .....	3
	<hr/>
	3

##### Spring

Biology 240 (Physiology) .....	4
Biology 308 (Microbiology) .....	4
Electives .....	6
	<hr/>
	14

**Senior****Fall**

Physics 130/201 OR Physics 232 .....	4
Electives .....	12
	—
	16

**Spring**

Chem 380 (optional) .....	3
Physics 140/203 OR Physics 242 .....	4
Electives .....	9
	—
	16

Bio 204 is a prerequisite for Bio 308 and Biol 302. Biol 300 is also a prerequisite for Biol 302.

**\*Note:**

*Math 226 is a co-requisite for Phys 230*

*Math 125 is a prerequisite for Phys 130 and Chem 230*

*Math 122 is a prerequisite for Math 207 and Chem 220*

### Sample 3-Year Pre-Optometry Curriculum

**Freshman****Fall**

Arts/Soc Science.....	3
Math. 125.....	4
First Year Seminar.....	4
Chem 220 .....	4
	—
	15

**Winter**

Elective .....	3
	—
	3

**Spring**

Biol 202 .....	4
Math 226.....	4
Chem 230 .....	4
Electives: Arts/Soc. Sci./Humanities .....	3
	—
	15

**Sophomore****Fall**

Biol 204 .....	4
Elective .....	3
Engw 201.....	3
Foreign Language.....	3
	—
	13

**Winter**

Elective .....	3
	—
	3

**Spring**

Biol 304 .....	4
Math 207 (Statistics) .....	3
Foreign Lang .....	3
Engw 301.....	3
	—
	16

**Junior****Fall**

Physics 130/201 OR Physics 232 .....	4
Biology 224(Human Anatomy).....	4
Chemistry 240 (Organic).....	4
Elective .....	3
	—
	14

**Winter**

Elective .....	3
	—
	3

**Spring**

Physics 140/203 OR Physics 242 .....	4
Biology 240 (Human Physiology) .....	4
Biology 308 (Microbiology) .....	4
Electives .....	3
	—
	15

**\*\*Note:**

*Math 226 is a co-requisite for Phys 230*

*Math 125 is a prerequisite for Phys 130 and Chem 230*

*Math 122 is a prerequisite for Math 207 and Chem 220*

# PEACE & CONFLICT STUDIES

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David B. Boersema, *Philosophy, Chair*

Jeffrey Barlow, *History*

Vern Bates, *Sociology*

Lorelle Browning, *English*

Alyson Burns-Glover, *Psychology*

Russell A. Dondero, *Politics and Government*

Ellen Hastay, *Director of Pacific Humanitarian Center*

Seth Singleton, *Politics and Government*

Michael R. Steele, *English, Director of the Holocaust Center*

Byron D. Steiger, *Sociology*

Robert Van Dyk, *Politics and Government*

The Peace and Conflict Studies (PACS) program and curriculum evolved from student and faculty interest and concern, and has drawn wide attention. Students may elect a minor in Peace and Conflict Studies. Courses are drawn from faculty in six departments. They investigate the causes and manifestations of violence in self, in society, and in the world of nations, and explore alternatives to violent resolution of conflict. Students are encouraged to develop a closely reasoned philosophical position on peace and conflict that can have lifelong application.

## MINOR IN PEACE AND CONFLICT STUDIES

PACS 101 and 105 ..... 4-6

Two courses chose from  
PACS 208, 211, 213, 214, 215,  
220, 221, 222, 230 .....6

Three courses chosen from  
PolS 340\*, PACS 305, 313, 325, 411,  
430 and 450 ..... 9-10

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## COURSE DESCRIPTIONS

### Peace and Conflict Studies (PACS)

#### PACS 101 Introduction to Peace and Conflict Studies

An introduction to concepts, issues, and approaches relating peace and conflict studies, including forms and causes of peace and conflict, contexts of conflict and violence, and proposed solutions for reducing violence and promoting peace. 3 hours. Steele, Boersema.

#### PACS 105 Peace and Conflict Studies: Field Experience

A course designed to introduce the student to service-learning, provided in a field site drawn from the Humanitarian Center's database and the consequent learning the student will experience with regard to building community, applying one's academic and own personal experience in the course of providing service. Graded P/NP. 1-3 hours. May be repeated once for credit. Hastay.

#### PACS 208 Addictions and Behavior

This course takes a transhistorical, interdisciplinary approach to the question of alcohol and substance abuse and the social costs of addiction and use. The question of consciousness and why we choose to alter it will be addressed through discussions of the physiology of addiction; the sociocultural risk factors and cultural representations of drug use. In addition, this course will include a community-activity component in which students will design community interventions and educational activities in conjunction with the student services program. 4 hours. Burns-Glover and Browning. Meets social science core requirement. (Same as Psy 208.)

**PACS 211 Philosophical and Theological Bases of Peace**

From the philosophical and theological perspective, what is peace and how is it to be defined? What are the conditions for its achievement? Do human nature and the structure of the universe promote or preclude its realization in history? What is the wisdom of human experience and the teaching of the great philosophers and religious leaders on these questions? 3 hours. Steele. Meets humanities core requirements.

**PACS 213 Psychology of Altruism and Aggression**

Historical and modern review of the human and non-human primate behaviors related to altruism, empathy, violence, competition and aggression from a social, biological, interspecies and cross-cultural perspective. 3 hours. Burns-Glover. Meets social science core requirements. (Same as Psy 213.)

**PACS 214 Vietnam and the U.S.**

This is a survey of the origins, development and results of the American war with Vietnam. This course, however, will be taught more within the context of Vietnamese history and culture than within that of American history and culture. Consequently, more emphasis will be given to the roots of the war in Vietnam than to its origins in U.S. foreign policy. There will be an opportunity in this course for students to learn how to prepare

**“Pages” for the World Wide Web**

Those who are interested should also enroll for one hour of credit in one of the two sections of History 255, “History Web Lab”. Although concurrent enrollment in 255 is voluntary. All students are strongly urged to enroll as the lab will not only teach web page production, but will also enhance student understanding of the materials covered in the class itself. 3 hours. Barlow.

**PACS 215 Conflict Resolution**

Theories, strategies, and skills in resolving conflicts are analyzed and applied. Emphasis is placed on practical application of learned skills through conflict simulations. 3 hours. Steiger.

**PACS 220 The Middle East**

An introduction to the places, people and politics of the Middle East, including such concerns as the influence and importance of religion, the revival of Islam and Islamic fundamentalism, the impact and consequences of Western colonialism, the dream and possibility of panarabism, the Arab-Israeli conflict, and future relations with the West. 3 hours. Boersema. Meets cross-cultural core requirement.

**PACS 221 Community Psychology**

The study of how psychology can be applied to social services such as community mental health centers to effect social change. Emphasis is on planning, prevention, early intervention, research and evaluation as well as how to strengthen existing social support networks and create new ones. Empowerment and primary prevention will be the focus of attention. Prerequisite: Psy 150 or Soc 101 or 102. 3 hours. Schultz, Gallahan. Meets social science core requirement. (Same as Psy 220.)

**PACS 222 The Civil Rights Movement**

This course examines the causes, history, and tactics of the struggle to guarantee African-Americans equal treatment under the law in the United States. The primary focus of the course material is on the political movement for equality in the Southern United States from 1954-1968. 3 hours. Van Dyk. Meets social science core requirement. (Same as POLS 222.)

**PACS 230 Navajo Service Learning**

This course permits selected students to engage in a cross-cultural immersion service-learning experience in the Navajo nation during the Winter Three term. 3 hours. Hastay. Meets cross-culture core requirement.

**PACS 305 Advanced Service Learning**

This seminar seeks to build on the mature work and insights of a variety of student placement sites, growing directly from their major course work and a well-considered personal inventory. The seminar is integrative of a wide variety of one's educational experiences at Pacific. Students will apply their academic and personal skills directly in a service-learning site placement, seeking to contribute both to the site and the people there as well as to augment their grasp of the applied knowledge from the chosen major. Prerequisite: PACS 105. 2 hours. May be repeated once for credit. Hastay.

**PACS 313 The Sociology of Violence**

This course examines the social and structural causes, correlates, and consequences of violence. Topics included are social and political violence, subcultural violence, criminal violence, family violence, the media and violence, sports and violence, and racial violence. Prerequisite: PACS 101 or Soc 101. 3 hours. Bates. Meets social science core requirements.

### **PACS 325 The Vietnam War Era**

*This course explores the origins, events and consequences of American involvement in Indochina from historical, political, philosophical and personal perspectives. 3 hours. Browning. Meets humanities core requirements.*

### **PACS 411 Literature About War**

*A seminar on fiction and non-fiction writing about war, considering both text and the reality with which the author comes to grips. Readings may include works such as: The Great War, Meditations in Green, All Quiet on the Western Front, Testament of Youth, Johnny Got His Gun, Harp of Burma. 3 hours. Steele. Meets humanities core requirements.*

### **PACS 430 Human Rights**

*This course offers an in-depth investigation of conceptual and political issues related to rights and human rights, including such issues as the source and extent of rights, the nature of rights-bearers, the justification of rights claims, the legitimacy and means of implementing universal human rights and critiques and evaluations of the social role of rights. 4 hours. Boersema. Prerequisite: PACS 101 and Junior standing. Meets humanities core requirements.*

### **PACS 450 Issues in Peace & Conflict Studies**

*A course wherein students examine important issues and ideas relative to peace and conflict studies, especially for the advanced student completing a minor in PACS. Prerequisite: Permission of instructor. 3 hours. Staff.*

*\*Please see Social Sciences Division for PolS 340.*

## PHILOSOPHY

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**David B. Boersema**, *Chair,*  
*Professor of Philosophy, Douglas C. Strain*  
*Chair of Natural Philosophy*

**David DeMoss**, *Associate Professor*  
*of Philosophy*

**Marc Marengo**, *Associate Professor*  
*of Philosophy*

The Department of Philosophy seeks to acquaint students with various philosophical traditions, to present the chief philosophic problems and types of philosophy, and to help students cultivate the intellectual, civic, and moral virtues of the discipline of philosophy as well as the art and skill of philosophical analysis.

The department seeks to serve those students who intend to pursue graduate studies, those pursuing interdisciplinary career programs, and those who simply desire to understand human reflective traditions in order to enlarge their own horizon of awareness.

Majors are educated in the liberal arts tradition and are carefully counseled to take courses in all areas of the College. Majors in the bioethics emphasis are educated in the liberal arts tradition, with a particular focus on the interface between philosophy and the health professions.

100- and 200-level courses are open to all students. 300-level courses are open to upper-division students, though prior lower-division coursework is recommended. 400-level courses generally require instructor approval. Courses in a foreign language are recommended.

### **Departmental Goals**

As a department, our goal is to educate our students with respect to the history, interpretive frameworks, and analytical techniques of the discipline of philosophy; given this goal, graduating majors and minors should be able to:

- a. exhibit a general understanding of the history and development of philosophy, and a specific understanding of some portion of that history,

- b. describe and critique several of the most important historical and contemporary interpretive frameworks used in the discipline of philosophy (for example, Plato's Theory of Forms, the deontological approach to ethics, and the existentialist analysis of the human condition),
- c. apply the analytical techniques of the discipline of philosophy (for example, by presenting orally and in writing succinct analyses of philosophical texts, and coherently structured arguments in defense of their own philosophical claims).

In addition, the department strives to help students cultivate the intellectual, civic, and moral virtues of the discipline of philosophy (for example, intellectual integrity, objectivity, resilience in the face of obstacles and daunting problems, a commitment to consistency, a knack for seeing and articulating what issues are at stake, the courage to cross-examine opinions that one holds dear, respect for interlocutors and colleagues, a felt obligation to contribute to one's community, etc.).

We pride ourselves on preparing students who intend to pursue graduate studies and/or interdisciplinary career programs; graduating majors and minors should not only be able to seek and obtain admission to graduate school, if that is their realistic goal, or find a job that will begin their chosen career track; they should also be able to philosophically reflect on and express clearly their own goals and choices at this stage in their lives.

**MAJOR IN PHILOSOPHY**

**Requirements**

Phil 101	Knowledge & Reality OR	
Phil 102	Ethics and Values.....	3
Phil/Math 212††		
Language and Logic .....		3
Two courses from Phil 205, 206, 207, 208 .....		6
Phil 495	Senior Seminar .....	4
Upper-division electives in Philosophy .....		12

Additional philosophy course (200 or above) or one course from the following list: ..... 3-4

PACS 430	Human Rights
Hist 339	History of Science
Psy 226	History & Systems
PolS 308	Origins of Western Political Thought
PolS 309	Modern Political Thought
Psy 315	Cognitive Neuroscience
Soc 414	Sociological Theory
Engl 332	Introduction to Linguistics

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**MAJOR IN PHILOSOPHY (BIOETHICS EMPHASIS)**

Majors in the bioethics emphasis are educated in the liberal arts tradition, with a particular focus on the interface between philosophy and the health professions.

**Requirements**

Phil 102	Ethics and Values.....	3
Phil/Math 212		
Language and Logic .....		3
Two courses from Phil 205, 206, 207, 208 .....		6
Phil 307	Ethics, Medicine & Health Care.....	4
Phil 409	Moral Philosophy .....	4
Phil 495	Senior Seminar .....	4
One course in biology .....		3
Two courses from the following list: .....		6-8
Phil 310	Philosophy of Science	
Phil 312	Philosophy of Biology	
Psy 440	Health Psychology and Behavioral Medicine	
Hist 339	History of Science	
Soc 319	Sociology of Medicine	

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## MINOR IN PHILOSOPHY

### Requirements

Phil 101	Knowledge & Reality OR	
Phil 102	Ethics and Values.....	3
Phil/Math		
212	Language and Logic .....	3
One course from		
Phil 205, 206, 207, 208 .....		3
Upper-division electives in Philosophy		
		6-8
		15-17

## MINOR IN RELIGION

### Requirements

Phil/Math 212	Language and Logic.....	3
Phil 110	Religion and the Quest for Meaning .....	3
Phil 205 OR 206	Ancient Philosophy or Medieval	
Philosophy	.....	3
Phil 309	Philosophy of Religion.....	4
Upper-division elective in philosophy		
		3-4
		16-17

## COURSE DESCRIPTIONS

### Philosophy (Phil)

#### Phil 101 Knowledge and Reality

An introduction to traditional issues in epistemology and metaphysics, including such topics as the nature and sources of knowledge, freedom and determinism, the relation of mind and body, personal identity, the relation of knowledge and values. 3 hours. Boersema, DeMoss. Offered annually.

#### Phil 102 Ethics and Values

After developing a few tools of the trade for doing moral analysis, this course will explore the moral reasoning behind a number of contemporary moral issues. What is moral reasoning? What is the grammar of moral discourse? Is morality subjective or objective? Is moral discourse possible in the 21st century? What ethical insight might we derive from such complex contemporary debates as abortion, freedom of expression, and sexual ethics? 3 hours. Marengo, DeMoss. Offered annually.

#### Phil 110 Religion and the Quest for Meaning

This course is an introduction to the academic study of religion. What are the most fundamental meta-narratives that supply people and their communities with self-understanding? Typically, this course explores the identity mythologies of a variety of religious traditions. Religions normally covered are: Buddhism, Hinduism, Christianity, Judaism and Islam. Meets cross-cultural requirement. 3 hours. Marengo. Offered alternate years.

#### Phil 205 Ancient Philosophy

A study of the major issues and personalities that constituted and shaped early western thought, from the pre-socratics (sixth century BCE) through the Hellenistic and Roman era (fourth century CE). 3 hours. DeMoss, Boersema. Offered alternate years.

#### Phil 206 Medieval Philosophy

A study of the major issues and personalities that constituted and shaped medieval western thought from the fourth century through the fifteenth century. 3 hours. DeMoss, Boersema. Offered alternate years.

#### Phil 207 Early Modern Philosophy: 1500-1750

A study of the major issues and personalities that constituted and shaped modern western thought from the sixteenth century through the eighteenth century. 3 hours. DeMoss, Boersema. Offered alternate years.

#### Phil 208 Late Modern Philosophy: 1750-1900

A study of the major issues and personalities that constituted and shaped modern western thought from the mid-eighteenth century through the nineteenth century. 3 hours. DeMoss, Boersema. Offered alternate years.

#### Phil/Math 212 Language & Logic

This course is a survey of formal syntactic and semantic features of language, including topics such as sentential logic, predicate logic, axiomatic systems and set theory, and nonclassical extensions such as multivalued logics. 3 hours. Boersema. Offered annually.

**Phil 214     Philosophy of Art**

This course is an introduction to philosophical issues related to the arts, including such topics as the nature of art, the metaphysics of art (e.g., form, expression, art as process vs. art as object), the epistemology of art (e.g., the locus of meaning in art, what constitutes artistic understanding, can art be "true", and the axiology of art (e.g., art and morals, the social significance of art, how can art be evaluated). Besides general philosophical issues connected to art, particular arts will be considered (e.g., painting, dance, music, theatre, film, architecture). 3 hours, Boersema, DeMoss. Offered alternate years.

**Phil 303     American Philosophy**

A survey of major themes, movements, and figures of American philosophical thought from the seventeenth century to the present. Prerequisite: Sophomore standing. 3 hours. Boersema. Offered alternate years.

**Phil 305     Asian Philosophy**

A study of Asian philosophical texts both historical and contemporary from various cultures, focusing for example on the Hinduism of India, the Taoism of China, and the Zen Buddhism of Japan. Prerequisite: sophomore standing. 4 hours. DeMoss, Offered alternate years.

**Phil 307     Ethics, Medicine and Health Care**

A study of ethical issues that arise in the health care professions. After working through the processes of moral reasoning and learning about some of the major moral theories this course will focus on major topics in health care today. Typically this course deals with such issues as abortion, physician assisted suicide, genetic manipulation and cloning, and comparative health delivery systems. Students will be able to do some independent research on a topic of their choice. Prerequisite: Sophomore standing. 4 hours. Marengo.

**Phil 309     Philosophy of Religion**

An investigation of the structure and content of religious truth-claims. The various arguments for and against the existence of God will be considered along with a few of the more important theories about the nature of religious belief, the logical status of religious propositions and the notion of a "religious use" of language. Prerequisite: Phil 110 or Phil 101 or instructor's approval. 4 hours. Marengo. Offered alternate years.

**Phil 310     Philosophy of Science**

An investigation of issues and concepts within science and about science, including such topics as the nature of explanation, the nature of confirmation, the nature of scientific progress, the relations among science, technology, values and society. Prerequisite: Sophomore standing. 4 hours. Boersema. Offered alternate years.

**Phil 312     Philosophy of Biology**

An introduction to philosophical issues within and about biology, including such topics as design, fitness, and adaptation; units of selection; the nature of species; taxonomy and classification; molecular biology and reductionism; sociobiology. Prerequisite: 8 hours in philosophy or biology. 3 hours. Boersema. Offered alternate years.

**Phil 314     Philosophy of Mind**

This course focuses on the nature of mind and consciousness as interpreted by contemporary philosophers of mind. What is consciousness? Who has it? How is it produced? Prerequisite: Sophomore standing. 4 hours. DeMoss. Offered alternate years.

**Phil 315     Philosophy of Law**

An introduction to philosophical issues within and about law, including such topics as the nature of law, legal reasoning, liberty/rights and the limits of law, the nature of legal responsibility, the nature and justification of legal punishment. Prerequisite: Sophomore standing. 3 hours. Boersema. Offered alternate years.

**Phil 329     Feminism and Philosophy**

This course explores the philosophical potential in the application of feminist categories to traditional areas of philosophical inquiry such as epistemology, logic, metaphysics and value theory. This course will also explore a variety of philosophical critiques of feminist categories and theory. Prerequisite: Sophomore standing. 4 hours. DeMoss, Marengo. Offered intermittently.

**Phil 403     Twentieth Century Philosophy**

A study of the major issues and personalities in twentieth-century philosophy, in such movements and schools as pragmatism, existentialism, phenomenology, positivism, linguistic analysis, structuralism, poststructuralism, and critical theory. Prerequisite: Phil 208 plus one other course in the history of philosophy or instructor's approval. 4 hours. Boersema. Offered alternate years.

**Phil 409 Moral Philosophy**

Intensive study in the field of moral philosophy, including such topics as the nature of moral epistemology, metaethics, and the metaphysics of morals. Prerequisite: nine hours in philosophy or instructor's approval. 4 hours. Marengo. Offered alternate years.

**Phil 412 Major Philosophers**

Intensive study of the works of a major philosopher. Prerequisite: nine hours in philosophy or instructor's approval. 4 hours. DeMoss. Offered alternate years.

**Phil 420 Seminar in Philosophy**

A concentrated study of various issues in philosophy, including such topics as philosophy of language, advanced logic, aesthetics, environmental ethics, moral philosophy, in-depth analysis of particular works or philosophers, etc. Prerequisite: Nine hours in philosophy or instructor's approval. 4 hours. Boersema, DeMoss, Marengo.

**Phil 494 Senior Seminar I**

Required of all philosophy majors in the fall of the senior year; in the spring majors are required to enroll in Phil 495. The purpose of this seminar is to prepare the student to produce a philosophical essay of significant length and quality, a senior thesis. This project will require researching, writing, defending, and perhaps publishing the essay. In Phil 494 students will research and prepare a substantial prospectus for the senior thesis; students will also read, discuss and critique the work of other members of the seminar. Prerequisite: fifteen hours in philosophy and instructor's approval. 2 hours. Boersema, DeMoss, Marengo. Offered fall annually.

**Phil 495 Senior Seminar II**

Required of all philosophy majors in the senior year; in the fall majors are required to enroll in Phil 494. The purpose of this seminar is for each student to produce a philosophical essay of significant length and quality, a senior thesis. This project will require researching, writing, defending, and perhaps publishing the essay. In Phil 495 students will write and defend the senior thesis; students will also read, discuss, and critique the work of other members of the seminar. Prerequisite: Phil 494 and instructor's approval. 2 hours. Boersema, DeMoss, Marengo. Offered spring annually.

**PRE-PHYSICAL THERAPY**

Admission to Physical Therapy is highly competitive for Pacific students as well as others. Pre-physical therapy requirements, like pre-medical requirements, concentrate in the sciences. Pacific's Physical Therapy School has always valued proficiency in writing and a strong education in the humanities and social sciences. To facilitate entry into the School of Physical Therapy, the University has established a gateway program to connect prospective students with the School of Physical Therapy during their years of undergraduate study. This program is outlined below.

Students do not major in "pre-physical therapy". Most students complete a bachelor's degree before beginning the Physical Therapy program. In extremely rare cases students who have met all the prerequisites for Physical Therapy can apply in the junior year. For these exceptional students, the bachelor's degree can be completed during the first year of Physical Therapy school, resulting in a bachelor's degree in either Health Sciences or Biology with Human Emphasis. Students wishing to pursue admission to the Physical Therapy School after three years of undergraduate course work should talk directly with the Office of Admissions. Please note that after the academic year 2002-03 the option of entering the professional program without a bachelor's degree no longer will be available. This means that students enrolling into the College in the Fall Semester, 2000 will be the last class eligible for this option. The course sequences outlined below are for students completing the bachelor's degree before admission to the School of Physical Therapy.

**Physical Therapy Prerequisite**

- Biol 202, General Biology I .....12
- Biol 224, Human Anatomy with lab
- Biol 240, Human Physiology with lab
- Chemistry 220 and 230.....8
- Statistics .....3
- Math 207 or Psych 350 or Soc 301
- Physics 130/201 and 140/203 or
- Physics 232 and 242 .....8
- Psychology 150 (Intro) and
- one other psychology course .....6

English/Writing – must include one writing course beyond the introductory level (ENGW 201 or higher) .....8

Humanities – This can be satisfied by carefully selected core requirements. (At least 3 hours must be outside of English) Fine Arts, humanities, history, philosophy, religion, English (in addition to English prerequisite), music, foreign language, speech/ communication.....6

Social Sciences (at least 3 hours must be outside of psychology).....6

Courses from two of the following disciplines: anthropology, sociology, psychology, political science, economics.

**Sample 4-Year Pre-PT Curriculum**

Physics can actually be moved to any year if you want to double up on labs-and if Math prerequisites are met.

**Freshman**

**Fall**

Chem 220 .....	4
Math. 125.....	4
First Year Seminar.....	4
Language Core .....	3
	<hr/>
	15

**Winter**

HUM Elective.....	3
	<hr/>
	3

**Spring**

Biol 202 .....	4
Math 226 or elective .....	4
Chem 230 .....	4
Language Core .....	3
	<hr/>
	15

**Sophomore**

*Fall*

Biol 204 .....	4
Engw 201.....	3
Humanities or Art.....	3
Psych 150.....	3
Elective .....	3
	<hr/>
	16

**Winter**

Engl Elective .....	3
	<hr/>
	3

**Spring**

Chem 230 .....	4
Social Sci (not Psy).....	3
Cross-cultural .....	3
Art or Humanities .....	3
Elective .....	3
	<hr/>
	16

**Junior**

**Fall**

Biology 224 (Anatomy) .....	4
Soc Sci elective .....	3
Electives (for major) .....	9
	<hr/>
	16

**Winter**

Elective .....	3
	<hr/>
	3

**Spring**

Biology 240 (Physiology) .....	4
Engl elective .....	3
Electives (for major) .....	5
	<hr/>
	16

**Senior**

**Fall**

Phys 130/201 (or 230) .....	4
Math 207.....	3
Electives (for major) .....	5
	<hr/>
	16

**Winter**

Elective .....	3
	<hr/>
	3

**Spring**

Phys 140/203 (or 240.....	4
Electives (for major) .....	5
	<hr/>
	13

**\*Note:**

Math 226 is a corequisite for Phys 230.

Math 125 is a prerequisite for Phys 130, Chem 230.

Math 122 is a prerequisite for Math 207, Chem 220.

# GATEWAY PROGRAM FROM THE COLLEGE OF ARTS AND SCIENCES TO THE SCHOOL OF PHYSICAL THERAPY

## Objectives

To establish ties with prospective undergraduate students, early in their college education, who show an interest in physical therapy.

To guarantee to students who successfully complete the Gateway program an interview for admission to Pacific University's School of Physical Therapy.

## Milestones

1. Students who indicate an interest in physical therapy at the end of their freshman year of college will be identified by their advisors and given information about participating in this program. Students who transfer from another institution or who decide later than their freshman year that they are interested in physical therapy will also be able to enter this program.
2. During the undergraduate's sophomore year, the student will be given the opportunity to participate in a mentoring program with a second year physical therapy student. A minimum number of meetings will need to take place between these two students during the school year. This is for support, for encouragement, and for allowing the undergraduate student have a contact person to ask questions.
3. By the end of the sophomore year in college, the student will have earned at least a 3.0 GPA, both overall GPA, as well as science GPA.

*\*If the student is below a 3.0 GPA at that time, the student will be expected to develop a plan to improve his/her GPA. This should involve the student meeting with the counseling center/support services to obtain help with study skills. The plan should be reviewed by the student's academic advisor.*

4. Since the applicant to SPT needs to have completed 100 hours of observation and needs a reference from a physical therapist, the PT faculty will assist in identifying appropriate facilities for undergraduate internships with physical therapists in the community. This internship can be a part of an internship for another course. It is expected that the course would have either an Exercise Science or Biology internship number attached to it.
- A. The 100 hours of observation should include 75 hours with a single physical therapist allowing the student quality time with the therapist and developing a relationship which would lead to a letter of reference. The remaining 25 hours could be used by the student to allow him/her to observe other areas of physical therapy.
- B. During the observation time, the student will be expected to keep a journal and/or write a paper. To assist the student in preparing the essays for the application process, this written work should reflect on the essay topics and related matters. The current essay questions are: "Why do you want to become a physical therapist?" "Write about a patient who stands out to you and explain why?" "Write about a situation in which you facilitated a change."
- C. It is suggested that at the end of the observation/internship the student rate himself/herself according to the evaluation form found as part of the application. The student can self assess his or her strengths and weaknesses.
5. Another milestone that the student will need to complete is a community service activity, with a minimum of 10 hours. This would be required for the portfolio. This could occur during the school year or during the summer. If the student took a service learning course in college, that would count.
6. During the student's senior year, he/she is expected to enroll in the Understanding Disabilities course taught by Professors Nancy Cicirello, John Medeiros, and Tim Thompson.
7. The student would be expected to take part in a mock interview through Career Services to practice before interviewing for admission to the School of Physical Therapy.

## Portfolio

The student should put together a portfolio during his/her time in the Gateway program. This would need to be completed before December 1 of her/his senior year so that it could be submitted with the application for admission into the School of Physical Therapy.

### **Contents of the portfolio:**

- A. Journal of observation experience.
- B. Description of community service activity.
- C. Documentation of types of interactions with PT student mentor.
- D. Documentation of GPA by University transcript. If the cumulative and/or science GPA fell below 3.0 at the end of the sophomore year, description of steps taken to improve it.
- E. Rating of self during observation time.
- F. Work sheet for prerequisites.

# PRE-PHYSICIAN ASSISTANT STUDIES

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Admission to the School of Physician Assistant Studies is highly competitive. The applicant must complete a bachelor's degree in any discipline, the prerequisite courses listed below and have a minimum of 1000 hours of experience in direct patient care prior to application to the program. In addition, the PA program utilizes computer-based learning throughout the program, therefore, each student is required to have a laptop computer and possess basic word processing skills.

The Physician Assistant Program Admissions Committee considers the following factors in the selection process:

- Strength and breadth of academic record
- Type and depth of prior health care experience
- Strength of letters of evaluation
- Content of application forms and care with which they have been completed
- Quality of writing ability as demonstrated by personal narrative
- Understanding of Physician Assistant profession
- Type of community volunteer activities
- Strength of on-campus personal interview

## Prerequisite Courses

All prerequisite course work must be completed prior to enrollment. The applicant must complete the following courses with a "C" or better.

- **Biological Sciences – 12 semester hours (3 courses\*)**
  - Anatomy (one course with lab) – human preferred
  - Biol 224 Human Anatomy with lab
  - Physiology (one course with lab) – human preferred
  - Biol 240 Human Physiology with lab
  - Microbiology or Bacteriology (one course with lab)
  - Biol 308 Microbiology with lab

- **Chemistry – 11 semester hours (3 courses\*)**

Organic Chemistry or Biochemistry (one of the following courses)

Chem 310/311 Organic Chemistry I with lab

Chem 320/321 Organic Chemistry II with lab

Chem 380 Biochemistry

Two additional chemistry courses with lab (may include additional Organic or Biochemistry Courses)

Chem 220 General Chemistry I

Chem 230 General Chemistry II

Chem 240-241 Survey of Organic Chemistry

Or any course listed above

- **Statistics – 3 semester hours (one course)**

Math 207 General Elementary Statistics

Psy 350 Behavioral Statistics

Soc 301 Social Statistics

- **Psychology or Sociology – 3 semester hours (one course)**

Any course in psychology or sociology

Soc 101 Intro to Sociology

Psy 150 Intro to Psychology

- **English/writing – 6 semester hours (two courses taught at an English speaking university/college)**

Engw 201 Expository Writing or Engw 301

plus a second course in writing or literature

*\*Courses taken to fulfill the science prerequisites must be those for science majors.*

## Clinical Experience

Minimum 6 months (1000 hours, paid or volunteer)

At the time of application submission, the applicant must be able to provide documentation of a minimum of 1000 hours of experience with direct patient contact in a health care setting. A wide range of types of experience will be considered such as:

nurse RN/LVN, paramedic/EMT/corpsman, medical assistant/nurses' aide, medical technologist/technician, respiratory therapist, physical therapist/assistant, speech therapist/assistant, psychologist/therapist/counselor, medical office manager, hospital/clinic/nursing home facility volunteer, home health aide, outreach worker, patient educator, dental assistant and others.

In addition to the required courses, students are encouraged to learn Spanish and to take medical terminology. Students or advisors with questions about the School of Physician Assistant Studies should consult the Graduate Admissions office and the current PA program brochure.

**Sample of 4-Year Curriculum of PA Prerequisites**

*Chem 380 (Bio Chem) offered alternate years.*

**Freshman**

**Fall**

Math 125.....	4
First Year Seminar.....	4
Chem 220 .....	4
Elective .....	3
	15

**Winter**

Elective .....	3
	3

**Spring**

Biol 202 .....	4
Chem 230 .....	4
Elective .....	6
	14

**Sophomore**

**Fall**

Biol 204 .....	4
Elective .....	3
Engw 201.....	3
Foreign Language.....	3
Psych 150.....	3
	16

**Winter**

Elective .....	3
	3

**Spring**

Math 207 (Statistics) .....	4
Engw 301.....	3
Foreign Language.....	3
Elective (optional).....	6
	16

**Junior**

**Fall**

Chemistry 240/241 (Organic) .....	4
Biology 224 (Anatomy) .....	4
Electives .....	6
	14

**Winter**

Elective .....	3
	3

**Spring**

Biology 240 (Physiology) .....	4
Electives .....	9
	14

**Senior**

**Fall**

Electives .....	16
	16

**Spring**

Electives .....	16
	16

Bio 204 is a prerequisite for Bio 308 and Biol 302.

Biol 300 is also a prerequisite for Biol 302.

\*Note:

Math 226 is a co-requisite for Phys 230

Math 125 is a prerequisite for Phys 130 and Chem 230

Math 122 is a prerequisite for Math 207 and Chem 220

# PHYSICS

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Mary H. Fehrs, *Chair, Professor*

Juliet W. Brosing, *Professor*

W. Thomas Griffith, *Distinguished University Professor*

Stephen Hall, *Assistant Professor*

Micah Prange, *Instructor*

Richard Wiener, *Associate Professor, on sabbatical leave 2001-2002*

The program in physics is designed to prepare students for careers in applied physics and engineering, and graduate study in physics, engineering, and professional fields. Physics students are encouraged to gain practical experience through participation in on-campus experimental projects and industrial internships. Facilities are available for student research in optics, nuclear physics, astronomy, non-linear dynamics, and solid state physics. The majority of our graduates go to graduate school in physics and related fields or take engineering-related positions in technical industry.

Visit the Physics Department's Website at <http://www.physics.pacificu.edu> or through the main website at <http://www.pacificu.edu>.

## Goals for the Physics Major

By successfully completing a major in physics, students will be able to:

1. Demonstrate conceptual understanding of fundamental physics principles.
2. Communicate physics reasoning in oral and in written form.
3. Solve physics problems using qualitative and quantitative reasoning that includes sophisticated mathematical techniques.
4. Conduct independent research or work successfully in a technical position.

## MAJOR IN PHYSICS

The student majoring in physics must complete the following:

## Physics Core Requirements

Phy 232-242	General (Workshop) Physics I-II .....	8
	OR	
Phy 202-204	Introductory Physics I-II....	8
Phy 322	Modern Physics with Health Applications .....	4
Phy 332	Waves and Optics .....	4
Phy 380	Classical Mechanics: Dynamics .....	4
Phy 420	Quantum Mechanics .....	4
Phy 460	Electric and Magnetic Fields .....	4
Phy 490-492	Physics Capstone .....	6
	OR	
Phy 480-482	Physics Capstone Seminar .....	2
	AND	
	an internship .....	7
	OR	
	research .....	4
Upper-division electives.....		6-8
		<hr/> 40-45

## Other Requirements

Chem 220-230	General Chemistry I-II..	8
Math 226-228	Calculus I-III .....	12
		<hr/> 60-65

Students who are planning a career in teaching physical science at the high school level can, with prior department approval, substitute either Hist 339 (History of Science) or Phil 310 (Philosophy of Science) for four of the required upper division elective hours. Students planning a teaching career also have the opportunity to gain valuable teaching experience by serving as teaching assistants for lower division courses.

Because there are so many possible career paths for physics majors, we would like to offer some recommendations for upper division electives (of which 6-8 hours are required for the major). Below are suggestions for what we think would offer the best preparation for these alternatives. However,

each student's interests are different; please discuss yours with a member of the department to develop a personalized selection of courses. All physics majors are strongly encouraged to take Math 311 (Differential Equations) and CS 150 (Introduction to Computer Science). Students are also encouraged to take other courses in Math and CS depending on their interests.

**Graduate School in Physical Science**

- Relativity
- Thermodynamics and Statistical Mechanics
- Modern Topics in Physics
- Electronics

**Optics/Optomety**

- Geometric Optics
- Modern Topics in Physics
- Electronics

**Engineering/Applied Science/ Health Science Careers**

- Electronics
- Engineering Mechanics: Statics
- Thermodynamics and Statistical Mechanics

**Teaching Physical Science in High School**

- Relativity
- Thermodynamics and Statistical Mechanics
- History of Science
- Philosophy of Science

**MINOR IN PHYSICS**

The minor in physics is designed to give students a deeper appreciation of physics than can be attained in a one-year sequence. The minor in physics can enhance studies in other disciplines such as (but not limited to) chemistry, mathematics, computer science, and philosophy.

**Requirements**

Phy 232-242	General (Workshop) Physics I-II	
	OR	
Phy 202-204	Introductory Physics I-II....	8
Math 226-227	Calculus I-II .....	8
Phy 322	Modern Physics with Health Applications	OR
Phy 332	Waves and Optics .....	4
Seven additional upper-division credits in physics	.....	7
		27

**MINOR IN APPLIED PHYSICS**

The minor in applied physics is designed for students interested in employment in the high tech industry or in engineering. The minor in applied physics can be used toward completion of the applied science major.

**Requirements**

Math 226-227	Calculus I-II. ....	8
Phy 232-242	General (Workshop) Physics I-II	
	OR	
Phy 202 -204	Introductory Physics I-II....	8
Phy 322	Modern Physics with Health Applications	
	OR	
Phy 332	Waves and Optics .....	4
Phy 364	Electronics.....	4

**One of the following**  
(if not counted above) .... 3-4

Phy 322	Modern Physics with Health Applications	
Phy 332	Waves and Optics	
Phy 376	Engineering Mechanics: Statics,	
Phy 384	Thermodynamics	
Phy 325	Modern Topics in Physics	
<b>One of the following</b>	.....	4
Phy 380	Classical Mechanics: Dynamics	
Phy 420	Quantum Mechanics,	
Phy 460	Electric & Magnetic Fields	

Any student interested in a physics minor should consult with a faculty member in the Department of Physics.

Since all of our upper-division courses (except one) are taught on an alternate year basis, below is a schedule of our courses for the next two years:

### Upper-division

#### Course offerings 2001-2002

##### Fall

Modern Physics with Health Applications

Geometric Optics

Electronics

Physics Capstone I

Physics Capstone Seminar I

##### Winter III

Relativity

##### Spring

Modern Topics in Physics

Quantum Mechanics

Physics Capstone II

Physics Capstone Seminar II

### Upper Division

#### Course offerings 2002-2003

##### Fall

Waves and Optics

Classical Mechanics: Dynamics

Geometric Optics

Physics Capstone I

Physics Capstone Seminar I

##### Winter III

Engineering Mechanics: Statics

##### Spring

Thermodynamics and Statistical Mechanics

Electric and Magnetic Fields

Physics Capstone II

Physics Capstone Seminar II

## COURSE DESCRIPTIONS

All prerequisite courses must be completed with a grade of "C-" or better.

### Physics (Phy)

#### Phy 110      **Physics of Everyday Phenomena**

*Designed to develop an understanding of the phenomena of our everyday life via the laws of physics. The emphasis is not on problem solving but on encouraging students to understand and appreciate their environment from a new perspective. Includes topics in mechanics and other physics subfields such as thermal physics, electrical phenomena. 3 hours. Prange.*

#### Phy 111      **Physics of Everyday Phenomena Laboratory**

*A laboratory course taught for Phy 110 students. Includes experiments in mechanics, thermal physics, and electric circuits. Satisfies laboratory core requirement. Co-requisite: Phy 110. 1 hour. Prange.*

#### Phy 120      **Inquiries in Electricity and Magnetism**

*This is an activity based course for non-science majors, designed to develop a conceptual understanding of both current and static electricity, magnetism, electromagnetic induction, and related concepts at an introductory level. Laboratory investigations are an integral component of this course. Students cannot receive credit for both Phy 110 and Phy 120. 3 hours. Wainwright. Not offered 2001-2002.*

#### Phy 202      **Introductory Physics I**

*The first semester of an algebra-based sequence in physics. Topics include Newtonian mechanics, work, momentum, and energy. The lab component includes computer based experiments in mechanics. Satisfies Natural Science core requirement. Prerequisite: Math 125 4 hours. Fehrs.*

#### Phy 204      **Introductory Physics II**

*The second semester of an algebra-based sequence in physics. Topics include heat and thermodynamics; electricity and magnetism; sound and light waves. The laboratory component includes computer based experiments in heat and thermodynamics; electric circuits. Satisfies Natural Science core requirement. Prerequisite: Phy 202 or Phy 232. 4 hours. Hall.*

**Phy 232 General Physics I –  
Workshop Physics I**

An introductory course in physics (calculus-based) for science and pre-engineering students. First term includes Newtonian mechanics. This course is an inquiry-based, laboratory-oriented course. Satisfies Natural Science core requirement. Co-requisite: Math 226. 4 hours. Brosing

**Phy 242 General Physics II –  
Workshop Physics II**

A continuation of Phy 232 including electricity and magnetism, thermodynamics, and nuclear physics. Satisfies Natural Science core requirement. Prerequisite: Math 226, Phy 232 or Phy 202. 4 hours. Brosing.

**Phy 310 Relativity**

An introduction to Einstein's special and general theories of relativity, with emphasis on the special theory. Topics include the principle of relativity, space-time effects of the Lorentz transformations, relativistic energy and momentum, Minkowski diagrams, the equivalence principle, the geometry of space-time, and gravity. Prerequisite: Phy 202 or 232, Math 226. 3 hours. Hall. Alternate years 2001-02.

**Phy 322 Modern Physics with  
Health Applications**

A project-orientated course taught in a workshop environment that covers important topics in modern physics with applications to human health. Topics include the Bohr theory of the atom, wave/particle duality, atomic and nuclear physics, and an introduction to Schrodinger's equation. Projects may include nuclear medicine, radiation therapy, neutron activation analysis, and magnetic resonance imaging. Prerequisite: Phy 204 or 242, Co-requisite: Math 227. 4 hours. Brosing. Alternate years. 2001-02.

**Phy 325 Modern Topics in Physics**

A class on topics of current interest in physics. The topic for 2001-2002 will be elementary particles. May be taken more than once for credit, as the topic will vary. Prerequisite: Phy 204 or 242, one upper division course in Physics, Math 227. 4 hours. Alternate years 2001-2002.

**Phy 330 Geometric Optics**

(Also listed as Opt 501) The principles and applications of geometric optics, including the propagation of light, reflection and refraction, thin lenses, combinations of lenses, thick lenses, lens systems, mirrors, aberrations, stops and pupils, gradient-index lenses, and optical systems. Prerequisite: Phy 204 or 242, and physics major or minor. 4 hours. Griffith.

**Phy 332 Waves and Optics**

A course on the mathematical description of waves with application to optics. Topics will include wave addition, an introduction to Fourier analysis, laws of geometric optics, image formation, optical systems, interference and diffraction, polarization, lasers, and an introduction to transform optics including holography. The laboratory component will include selected experiments in wave motion, geometric optics, and physical optics. Prerequisite: Phy 204 or 242, Co-requisite: Math 227. 4 hours. Wiener. Alternate years. 2002-2003.

**Phy 364 Electronics**

The basic principles underlying circuit analysis and the operation of analog and digital electronic devices, including: diodes; transistors; op-amps; logic gates; multivibrators; counters; registers; memories; and A/D and D/A converters. Prerequisite: Math 125, Phy 202 or 242. 4 hours. Hall. Alternate years 2001-02.

**Phy 376 Engineering Mechanics:  
Statics**

Presentation, discussion, and application of the principles of static mechanics to problems in physics and engineering including: force analysis, equilibrium in two and three dimensions, trusses and frames, internal forces, centroids, and cables. Special emphasis is given to problem-solving techniques. Prerequisite: Phy 232 or Phy 202, Math 226. 3 hours. Hall. Alternate years. 2002-2003.

**Phy 380 Classical Mechanics:  
Dynamics**

Presentation and discussion of the kinematics and dynamics of single particles and systems of particles, both in inertial and non-inertial frames of reference. In addition to the standard analytical techniques, approximation techniques and a computer algebra system will be used for problem solving. Several mechanical systems will be studied experimentally and computationally. Prerequisite: Phy 204 or 242, Math 227. 4 hours. Fehrs. Alternate years. 2002-2003.

**Phy 384      Thermodynamics and  
Statistical Mechanics**

Presentation, discussion, and application of the laws of thermodynamics and statistical mechanics including gas behavior, equations of states, phase transformations, kinetic theory, probability distributions, ensembles, and the partition function. Prerequisite: Phy 204 or 242 and one upper division course in physics, Math 227. 4 hours. Broising. Alternate years. 2002-2003.

**Phy 420      Quantum Mechanics**

An introduction to quantum mechanics and its application to: free particles, barriers, the simple harmonic oscillator, the hydrogen atom, angular momentum, spin, and identical particle systems. A computer algebra system will be utilized for problem solving and visualization. Prerequisite: Phy 322 or Phy 332, Math 228 or Math 311. 4 hours. Fehrs. Alternate years. 2001-2002.

**Phy 460      Electric & Magnetic Fields**

Development of the nature and mathematical description of electric and magnetic fields in free space and material media, including: Maxwell's equations, electrostatics, magnetostatics, dielectrics, and solutions of Laplace's and Poisson's equations. Prerequisite: Phy 322 or Phy 332, Math 228. 4 hours. Griffith, Wiener. Alternate years. 2002-2003.

**Phy 480      Physics Capstone Seminar I**

The physics seminar portion of Phy 490. (See description of Phy 490). Co-requisite: Senior standing as a physics major, and research or an internship in physics. 1 hour. Broising, Fehrs, Griffith, Hall.

**Phy 482      Physics  
Capstone Seminar II**

The physics seminar portion of Phy 492. (See description of Phy 492). Co-requisite: Senior standing as a physics major, and research or an internship in physics. 1 hour. Broising, Fehrs, Griffith, Hall.

**Phy 490      Physics Capstone I**

The capstone course involves a weekly seminar and a year long research project. In the weekly seminar, students learn how to make presentations and how to do "on-the-spot" problem solving. There will also be outside speakers on current physics research. The other portion of the capstone experience is a year long research project. In addition, there will be weekly meetings in which students discuss their ongoing research projects. The research project will comprise 2 credits of the course. Co-requisite: Senior standing as a physics major. 3 hours. Broising, Fehrs, Griffith, Hall.

**Phy 492      Physics Capstone II**

A continuation of Physics 490. At the end of Physics 492 students will give final oral presentations on their research project or their internship, and submit their research/ internship paper. Prerequisite: Physics 490. 3 hours. Broising, Fehrs, Griffith, Hall.

**Phy 495      Research**

Student-conducted individual research project. 1-3 hours. Broising, Fehrs, Griffith, Hall.

**ASTRONOMY**

**Sci 170      Astronomy**

A survey of astronomy, including the solar system, stars and stellar evolution, galaxies, cosmology, astronomical instruments, and space science. Evening observing sessions. 3 hours. Hall.

# POLITICS & GOVERNMENT

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Russell A. Dondero, *Chair, Professor*

Jeffrey G. Seward, *Associate Professor*

Seth Singleton, *Professor*

Robert Van Dyk, *Associate Professor*

Politics and government is the process by which a community decides what common goals it wants to achieve, what its rules will be, and how those policies and rules will be carried out or enforced. Nothing is more important to a healthy society. We are fascinated by the political process in the United States and in the world and concerned about its outcome, and we welcome all students who share that interest.

While our program provides an excellent foundation for graduate study in political science, the primary focus of the Department is on providing skills and habits of mind useful in a wide range of professions. Recent graduates of the Department have found jobs and careers in law, politics, business, teaching, journalism, and government service. The majority of our graduates continue their education in professional programs in law, business (MBA), international affairs, education, public administration, and other fields. Many work directly after college (often as staff members for elected officials or government agencies) before going on to graduate school.

## Goals

The goals of our curriculum emphasize broad knowledge of political phenomena, practical skills of analysis and communication, and an understanding of theoretical approaches to politics. Graduates will know how to analyze policy problems in a clear and logical way; how to make oral presentations; how to find information; how to write well in the form of a memorandum, short essay, a research report, and an academic paper; how to work in groups; and how to use electronic communication.

## Program

The curriculum is focused on a variety of approaches to political analysis, practical hands-on experience, and student research. An internship or study abroad is strongly recommended for all majors as a useful part of their preparation. The required senior thesis may take a variety of forms ranging from a hands on project based on student field research to statistical analysis of quantitative data to an abstract theoretical treatment of a problem in political philosophy.

The Department's co-curricular program is highlighted by the annual Tom McCall Forum, an event which brings pairs of nationally prominent speakers to Pacific and Oregon. Recent pairings have included Mario Cuomo and Lynn Martin, James Carville and William Safire, Geraldine Ferraro and William Bennett, Robert Bork and Arthur Schlesinger, Pat Schroeder and Jeanne Kirkpatrick, and Ralph Reed and Alan Dershowitz. Students are intimately involved in this event through active participation in the Politics and Law Forum, which also sponsors debates and other events on campus dealing with important local, state, and national issues.

## Internships and Study Abroad

While it is not an absolute requirement, the Department strongly encourages all majors to include in their program a semester-long, off-campus experience.

Over half of our majors find internships, most commonly in the Oregon Legislature or Congressional offices in Washington. Other possible internship sites include social service agencies, government agencies, interest groups, law firms, and the media. Internships for credit involve close collaboration with a faculty advisor and are limited to one semester. Only six hours of internship credit is directly applicable to the requirements of the major.

Pacific offers many study abroad possibilities in England, France, Germany, China, Japan, Ecuador, Mexico, and a number of other countries. These programs are described in detail in the Study Abroad section of the catalog. Students going abroad should include in their plan the

language, history, culture, and economy of their area of interest. No more than six hours of academic work taken abroad (nine hours in the case of those studying abroad for an entire academic year) may be directly applied to the requirements of the major.

Junior year is the best time for off-campus study. Seniors off campus in the fall semester may omit the fall term senior seminar but during that time must prepare a first draft of their senior project for completion and presentation in the spring.

**Portfolio**

The Department will keep a file of each student to measure benchmarks of academic progress, to include a current transcript, the study plan, the second year seminar research report, internship and study abroad reports, selected course papers, material related to relevant extracurricular activities, and the final draft of the senior project. Students are welcome to add other material to their portfolio and should keep their own copy of its contents.

**MAJOR IN  
POLITICS & GOVERNMENT**

**Introductory Courses**

The department offers three introductory level courses, PoIS 101, PoIS 140, and PoIS 180, described in more detail below. None of these courses are required for the major but any of them may be counted for the major. Students interested in the possibility of majoring in politics and government are strongly encouraged to begin with one of these courses.

**Required Complementary course Work**

The following complementary course work outside the Department is a required part of the major. Prospective majors should try to complete these requirements as early as possible in their academic program.

- Econ 101 OR 102 (one required, both recommended) ..... 3-6
- Soc 301 Social Statistics .....4
- Two semester courses in history approved by the Department..... 6-8

**PoIS Requirements**

- PoIS 299 Political Analysis .....4
- PoIS 309 Classics of Political Philosophy.....3
- PoIS 401-402 Senior Seminar and Thesis ...6
- 21 Semester hours of PoIS electives .....21

**These 21 hours must include:**

1. at least one course in American Politics and Law
2. at least one course in Comparative Politics/International Relations at the 200 OR 300 level.
3. at least two other upper-division PoIS courses.

Up to six hours of PoIS internship credit may be counted toward the major, but these six hours may not be counted toward any of the specific upper-division requirements listed above.

43-48

**MINOR IN POLITICAL SCIENCE**

**Requirements**

18 semester hours of PoIS electives, at least 12 hours of which must be at the upper-division level.

18

**COURSE DESCRIPTIONS**

**Political and Government (PoIS)**

**PoIS 101 Power & Community**  
*Exploration of such key concepts as power, authority, legitimacy, justice, law, democracy, social welfare, and human rights. Introduction to analysis of policy problems. 3 hours.*

**PoIS 140 Conflict & Controversy in American Politics**  
*The most enduring questions about politics are the who, the what, the when, and the how of politics. This course seeks to answer these questions as they pertain to the American political system. 3 hours.*

**PolS 180 The United States in World Affairs**

A first course in international relations, focused on current problems and concerns in United States foreign policy. These include both “offshore” issues such as human rights and peacekeeping and “intermestic” issues such as trade and immigration. The course will begin with an overview of American foreign policy traditions and attitudes and of the 20th century background. Students will prepare a case study analysis, a policy and negotiating proposal, and a response to a crisis scenario. 3 hours.

**PolS 221 Politics in Literature & Film**

Exploration of a single major theme of politics through the medium of literature and film. Possible course themes include Latin American film, revolution, war, utopia, propaganda, the Cold war and American political culture. May be repeated for credit when topics vary. Winter III only. 3 hours.

**PolS 222 The Civil Rights Movement**

This course examines the causes, history, and tactics of the struggle to guarantee African-Americans equal treatment under the law in the United States. The primary focus of course material is on the political movement for racial equality in the United States from 1954-1968. Winter III only. 3 hours.

**PolS 223 Women in Politics**

This course surveys historical perspectives and contemporary realities about the role of women in political life. Major topics covered include the treatment of women in the classic texts of political philosophy and feminist reactions to that tradition, a survey of historical and contemporary women’s political movements and political participation in the United States and a comparative view of women’s political participation in non-US settings (cross-listed in Feminist Studies). 3 hours.

**PolS 224 Environmental Politics**

This course introduces students to environmental disputes and the forces that affect environmental policy. Topics include the history and evolution of environmentalism and environmental policy and an extensive case study of a local environmental issue. Students will attend the Environmental Law Conference in Eugene in March, and they will go on several shorter field trips. 3 hours.

**PolS 240 Latin American History**

A broad survey of political, social, and economic history of Latin America from pre-Columbian civilizations to the 20th century. Special emphasis will be given to the complex ramifications of the interaction of European conquerors/settlers, African slaves and the indigenous peoples of the region (cross-listed in History). Meets cross-cultural requirement. 3 hours.

**PolS 299 Political Analysis Seminar**

This course introduces students to some of the basic forms of political analysis including scholarly research, policy analysis, and political strategy. The course is organized as a seminar in which students will be required to present their own projects to the class and actively participate in class discussion. Required for majors (should be taken sophomore year). Prerequisite: PolS 101 strongly recommended. 4 hours.

**PolS 301 Politics & The Media**

Examines the impact of the media upon the political process; the relationship between the press and politicians; and whether the press is a “neutral” force in American politics. Biennially. 4 hours.

**PolS 302 Parties and Elections**

The development of political parties and their organization, function and campaign methods. Analysis of interest groups and their effect on government and political parties. Public opinion and propaganda. Involvement in a political campaign encouraged. Biennially. 3 hours.

**PolS 303 Congressional Politics**

Course focuses on the organizational dynamics of the Congress as the primary legislative body in our national government. The external environment will also be examined to understand how the lobby, the media, the other branches of government influence the legislative agenda. Biennially. 3 hours.

**PolS 304 Grassroots Politics**

Course examines how citizens and interest groups shape “grassroots” politics, i.e., state and local government in the United States. 3 hours.

**PolS 305 The Presidency**

An examination of the evolution of the American presidency as the dominant office within our political system. Biennially. 3 hours.

**PolS 309 Classics of Political Philosophy: From Plato to Postmodernism**

Examines the evolution of ancient, modern and contemporary political thought from the ancient Greeks to the 20th century. Major political theorists who may be studied include: Plato, Aristotle, Augustine, Machiavelli, Hobbes, Locke, Rousseau, Hegel, Mills, Marx, Arendt, Rawls, Nozick as well as feminist and postmodernist critics of traditional political thought. Required for majors. 3 hours.

**PolS 310 Markets, Politics, & Justice**

An examination of political economy ( the interaction of politics and economics) with respect to topics such as macroeconomic policy-making, industrial policy, income distribution, development strategies, and the welfare state plus the political dimensions of economic ideologies including classical liberal, Marxist, and social democratic perspectives. Prerequisite: Economics 101 or 102 strongly recommended. 3 hours.

**PolS 320 Law & Society**

An introduction to the role of law in structuring social relations. The course examines the various ways we encounter the law as it is made by legislatures, as it is made by judges, and as it is practically applied. The course requires an extensive case study of the law as written and applied in a business or political organization. Biennially. 3 credits.

**PolS 321 Protest, Dissent, & Social Change**

This course examines the causes and history of widespread movements that use protest to promote political change. Topics include theories of social movements and case studies that may include the labor movement, the civil rights movement, the women's movement, the environmental movement, and the recent rise of conservative Christian activism. 3 hours.

**PolS 323 Management & Policy**

How organizations function, and how they are managed and led, applied to government and nonprofit agencies. Policy analysis, decision-making, and policy effectiveness. Students will write a case study analyzing an organization or decision, based on field research. Prerequisite: upper-division standing. 4 hours.

**PolS 325 Constitutional Law**

An introduction to the judicial process, legal reasoning and interpretation of the Constitution through analysis of court cases. Subjects include federalism, property, race, gender, and privacy. Biennially. 4 hours.

**PolS 326 Civil Liberties**

This course examines the development of civil liberties in the United States by focusing on the role of the Supreme Court. Subjects include freedom of speech, freedom of press, freedom of religion, and the rights of the accused. Biennially. 4 hours.

**PolS 332 Contemporary Latin America**

An introduction to the politics of the region with a brief survey of history, race relations and political economy of Latin America followed by an analysis of selected individual countries including Brazil, Mexico, Cuba and others. Meets cross-cultural requirement. 3 hours.

**PolS 334 Twentieth Century Russia**

The Russian background and 19th century development; the Bolshevik revolution; Soviet Communism under Lenin, Stalin, Khrushchev, and Brezhnev; Gorbachev's reforms and the collapse of Soviet state; nationalism and the new countries of the former USSR; Yeltsin's Russia of the 1990's; current problems and prospects (crosslisted as HIST 334). 4 hours.

**PolS 336 Contemporary Europe**

This course is a survey of contemporary political, economic, and (to a lesser extent) social institutions and issues in contemporary Europe with a focus on the major countries of Western Europe and the pan-European process of economic and political integration. Topics may include the crisis of European political parties, problems associated with economic and political integration, resurgent nationalism and ethnic conflicts within and across national boundaries, the problem of "European" identity, the New Right, the political role of women.

**PolS 340 International Relations**

Nationalism and cultural identity; the international system and world organization; problems of conflict and war; issues of human rights and democracy; economic globalization and development; and security issues such as the spread of weapons of mass destruction. Prerequisite: upper-division standing. 4 hours.

**PolS 344 East Asia in World Affairs**

Focus on China, Japan, Korea, and Vietnam. The cultural, political, and economic interaction of these countries with each other and with the West; political systems and economic development; globalization and reactions to it; power relations, internal and external conflicts, and the future of East Asia in World affairs. 3 hours.

**PolS 350 Special Topics in Political Science**

Courses of varying formats on specific topics not included in the regular curriculum. Recent examples include Conservative Political Thought, Contemporary Mexico, and Salmon Crisis. May be repeated for credit when the topics vary. 3 hours.

**PolS 370 School & Society**

Explores the relationship between schools and society. The readings, discussion, and reflections are designed to help aspiring teachers develop an understanding of the philosophical, historical, socio-cultural, and legal foundations of education. 2 hours.

**PolS 399 Independent Study**

Student-conducted individual research/theoretical project. Faculty supervised. 1-3 hours.

**PolS 401-402 Senior Seminar & Thesis**

In the first semester, students will define their research project, gather necessary information, and write the first draft of their thesis. The seminar will also meet weekly or bi-weekly to discuss selected readings in political issues and ideas. In the second semester, along with further group meetings and discussions, students will revise and complete their project and formally present it to the seminar. Both semesters required of all majors in their final year. Prerequisite: PolS 299 and two 300-level PolS classes. 3 hours each semester.

# PRE-MEDICAL STUDIES

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## See Dr. Lisa Sardinia

Because of the sequential nature of many of the required courses, students who are considering medical school should seek out the advice of Dr. Lisa Sardinia, Biology during their first year.

All medical schools require introductory courses in Biology, Chemistry, English, Mathematics and Physics, as well as a year of Organic Chemistry. However, students may enter medical school with any major. A list of courses that will satisfy the admission requirements of nearly all medical schools is given below. Students should consult the Guide to Medical Schools published by the American Association of Medical Colleges about specific requirements for schools in which they are interested.

For those students who wish to enter medical school in the year following graduation from Pacific, it is necessary to complete all of the listed courses by the end of the junior year to ensure adequate background for the MCAT exam required for application to all U.S. medical schools. Note that the Biological Sciences portion of the MCAT includes significant amounts of material that are not covered in introductory Biology courses. Pre-medical students are encouraged to take additional Biology courses, particularly courses in cell and molecular biology and physiology.

Applications to take the MCAT and applications for medical school (through AMCAS) are available on the Web or through the Career Development Center. Most medical schools require evidence of clinical experience prior to applying to medical school. Pre-medical students should begin obtaining clinical experience during their first year. The Career Development Center can assist students in finding an internship or field experience in the medical field.

## Required courses:

- Biol 202: General Biology I
- Biol 204: General Biology II
- Chem 220: General Chemistry I
- Chem 230: General Chemistry II
- Chem 310/311: Organic Chemistry I
- Chem 320/321: Organic Chemistry II
- Engw 201: Expository Writing
- Math 226: Calculus I
- Physics 202: Introductory Physics I  
OR
- Physics 232: General Physics I
- Physics 204: Introductory Physics II  
OR
- Physics 242: General Physics II

## Strongly recommended courses:

- Biol 320: Cell Biology
- Biol 330: Genetics
- Biol 400: Molecular Biology
- Biol 470: Animal Physiology
- Chem 380: Biochemistry
- CS 130: Introduction to Software Tools
- Math 207: General Elementary Statistics

# PSYCHOLOGY

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Todd Schultz, *Chair, Associate Professor*

Mark Bodamer, *Assistant Professor*

Alyson Burns-Glover, *Associate Professor*

Linda Gallahan, *Associate Professor*

Psychology can be defined as the empirical analysis of mind and behavior. The department members believe that reliable knowledge of psychological processes represents a necessary condition for meaningful action in the world.

History, culture, economics, international affairs, health and biological sciences – virtually any field of study profits from attention to psychological variables. Psychology is a versatile, inherently interdisciplinary, and multi-methodological enterprise. We concur with William James, who wrote: “The union of the mathematician with the poet, fervor with measure, passion with correctness; that surely is the ideal.”

Our faculty teach a range of courses representing the discipline’s major subject areas: Social, Developmental, Biocognitive, and Personality/Clinical. Psychology classes stress the importance of data analysis, but at the same time encourage students to keep theoretical, “Big Picture” issues in mind. Because we support the traditional aims of liberal arts education, we help students learn how to think clearly and critically, challenge orthodox assumptions, organize and present complicated information, make use of both qualitative and quantitative methods, write well, and develop a commitment to ideals of scholarship and lifelong learning.

Initial requirements for the major in Psychology include Introduction to Psychology; Mind, Theory & Method; Experimental Psychology; and Behavioral Statistics. Students then choose from a menu of elective courses, some focused on basic processes, some strictly theoretical, and some applied. The major concludes with a required Senior Capstone project in which students reflect over the field, consolidate knowledge from previous classes, and form and test hypotheses of their own.

## Goals of the Major

The goals of the Psychology Department are to:

- introduce students to methods of critical analysis that will allow them to interpret and evaluate research and theory;
- expose students to a broad selection of courses that typify the breadth of the discipline and the expertise of departmental faculty;
- instill in students cooperative learning strategies that will enable them to participate effectively in group projects;
- perfect students’ abilities to write clearly, succinctly and with authority, and to orally present theory and data in a research forum;
- and guide students’ career choices by providing them with information on opportunities in basic and applied Psychology, as well as allied health and service professions.

## MAJOR IN PSYCHOLOGY

The Psychology major must complete the following required courses with a grade of “C” or better and maintain a 2.0 grade point average for Psychology electives:

### Requirements

Psy 150	Introduction to Psychology.....	3
Psy 248	Mind, Theory & Method....	3
Psy 348	Experimental Psychology..	3
Psy 349	Experimental Psychology Lab .....	1
Psy 350	Behavioral Statistics .....	3
Psy 390	Junior Seminar .....	3
Psy 490	Senior Thesis Preparation..	2
Psy 495	Senior Thesis Project .....	2

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**Plus required electives:**

Courses that reflect the study of mind, body, & behavior over time: Psy 180, 318, or 340 .....3

in diverse contexts: Psy 160, 213, 260, 308, or 408.....3

Courses that explore the human psyche: Psy 208, 309, 311 or 444 (or Phil 314).....3

the function of brain/body: Psy 315, 321, OR 352.....3

Theory/praxis relations in applied settings: Psy 341, 395, OR 475 (or theory/praxis courses from other departments, by approval)..... 1-4

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13-16

**Plus general electives:**

Any two Psychology, or approved, electives (One must be at the 400 level and have a Psy prefix) .....6

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39-42

The requirements listed above are for the Bachelor of Arts Degree with a major in Psychology. Students pursuing a Bachelor of Science degree with a major in Psychology must also complete the following requirements.

**Additional courses:**

Two additional science laboratory courses .....8

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**MINOR IN PSYCHOLOGY**

The Psychology minor must complete the following required courses with a grade of "C" or better and maintain a 2.0 grade point average for Psychology electives.

**Requirements**

Psy 150 Introduction to Psychology.....3

Psy 248 Mind, Theory & Method....3

Plus five electives.....15  
(Two must have a Psy prefix. Two must be upper-division courses.)

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Students interested in the Psychology minor should consult with a faculty member of the department prior to choosing electives.

**Courses from other departments approved for elective credits in Psychology:**

Bio 330 Genetics.....3

Phil 103 Critical Thinking.....3

Phil 310 Philosophy of Science .....3

Phil 314 Philosophy of Mind.....3

Soc 317 Gender & Sexuality .....3

**COURSE DESCRIPTIONS**

**Psychology (Psy)**

**Psy 150 Introduction to Psychology**  
*This course provides an overview of psychology including psychobiology, learning, memory, perception, motivation, development, social, behavioral/emotional problems and treatments. 3 hours.*

**Psy 160 Culture & Behavior**  
*This course provides a cross-cultural review of general principles of human psychology. Emphasis is on the organizing syndromes of particular cultures and how these world views affect an individual's emotions, cognitions and behaviors. Fills cross-cultural core requirement. 3 hours. Burns-Glover.*

**Psy 180 Lifespan Human Development**  
*A survey of human development and developmental theories from conception until death focusing on physical, cognitive, and social changes that occur across the lifespan. Recommended for non-majors. 3 hours. Gallahan.*

**Psy 208 Addictions & Society**  
*This course takes a transhistorical, interdisciplinary approach to the question of alcohol, substance abuse and the social costs of addiction and use. We will address the human motive to alter consciousness using classic and modern research in the physiology of addiction; sociocultural risk factors and changing cultural representations of drug use. 4 hours. Burns-Glover. (Same as PACS 208.)*

**Psy 210      Current Issues in Psychology**

A seminar-style course on subjects of special interest and current importance within the field, such as *The Nature of Self-Concept*, *Life-Story Models of Identity*, *Intelligence*, *Evolutionary Psychology*, or *Buddhism*, *Psychology*, and *the Mind*. Precise topic varies from semester to semester. May be repeated for credit as topic varies. 3 hours.

**Psy 213      Psychology of Altruism & Aggression**

Historical and modern review of the human and non-human primate behaviors related to altruism, empathy, violence, competition and aggression from a social, biological, interspecies and cross-cultural perspective. 3 hours. Burns-Glover. (Same as PACS 213.)

**Psy 215      Memory & Mind**

The study of human memory which focuses on how memory and other mental functions work, how they fail, and why we think the ways that we do. This course samples across a range of human thought processes, including memory, reasoning, language, and problem solving. 3 hours. Bodamer.

**Psy 220      Community Psychology**

The study of how psychology can be applied to social services such as community mental health centers to effect social change. Emphasis is on planning, prevention, early intervention, research and evaluation as well as how to strengthen existing social support networks and create new ones. Empowerment and primary prevention will be focus of attention. Prerequisite: Psy 150 or Soc 101 or Soc 102. 3 hours.

**Psy 225      Human Learning & Motivation**

Course investigates principles of learning and motivation among humans and other animals. Class will explore applications of these principles in education and society at large. 3 hours. Bodamer.

**Psy 226      History & Systems of Psychology**

An inquiry into the foundations of modern psychology. The intellectual heritage of the discipline within philosophy and the natural sciences will be examined and critiqued. We will consider major theories, emerging research directions and controversies within the sub disciplines of psychology. 3 hours.

**Psy 248      Mind, Theory and Method**

This course will present the historical dialectic between rationalism [theory] and empiricism [data] within the discipline. We will focus our attention on the current rise of neuroscience, behavioral genetics and the return to mind in psychological research. Students will learn the current status of several controversial dichotomies: Mind-body dualism, Nativism-Environmentalism, Essentialism-Operationalism, etc., and the role that social values play in the creation, testing, and interpretation of scientific theories. 3 hours.

**Psy 260      Psychology of Women**

A survey of the physiological, emotional, and cognitive aspects of the female experience. This course examines both the similarities and differences between men and women, with emphasis on experiences which are unique to women. Cultural expectations are examined, particularly those which either overemphasize sex differences or underestimate their psychological and sociocultural value. Prerequisite: Psy 150 or FS 201 or permission of the instructor. 3 hours. Staff.

**Psy 280      Children in Time & Place**

This course examines human cognitive, social, personality and physical development from conception through adolescence across cultures with an emphasis on cross-cultural comparisons and universals. Meets cross-cultural core-requirement. 3 hours. Gallahan.

**Psy 308      Social Psychology**

A consideration of humans as social beings-how they affect and are affected by others. Topics included are: perception of persons, affiliation, communication and attitude change, group processes, leadership, intergroup tension, cultural syndromes, and social roles. Prerequisite: Psy 150 and upper-division standing. 3 hours. Burns-Glover.

**Psy 309      Personality Psychology**

Students study the grand theories of personality through detailed examination of original writings by Freud, Skinner, R.D. Laing, and Maslow, among others. We explore the assumptions, logic, and ramifications of psychological theory, and its place in modern experimental psychology. Some critique of psychology as a discipline is included. Prerequisite: Psy 150 and upper-division standing (or permission of the instructor). 3 hours. Schultz.

**Psy 311 Abnormal Psychology**  
Students critically explore major categories of disorder, with special emphasis on dissociative identity disorder, depression, schizophrenia, and borderline personality. Questions are raised about the use of psychiatric drugs, and attention is paid to the history of insanity. Includes both textbook and original readings. Prerequisite: Psy 150 and upper-division standing (or permission of the instructor). 3 hours. Schultz.

**Psy 315 Cognitive Neuroscience**  
This course examines a range of cognitive processes including perception, memory, problem solving, imagery, and language. A special emphasis will be placed on current neuro-scientific investigations into these topics. Prerequisite: Psy 150 and upper-division standing (or permission of the instructor). Bio 110 or 224 or 240 strongly recommended. 3 hours. Bodamer.

**Psy 321 Sensation & Perception**  
An in-depth analysis of how organisms perceive and comprehend their world. The course explores how receptors, transaction, and neural networks shape and constrain our perception of reality. Prerequisite: Psy 150 and upper-division standing (or permission of the instructor.). Bio 110 or 224 or 240 strongly recommended. 3 hours. Bodamer.

**Psy 340 Child Development**  
An in-depth analysis of child development with a focus on contemporary research from the bio-social-behavioral framework. Students will conduct an in-depth study on a chosen topic that complements the research project for the Human Development Lab. Prerequisite: Psy 348 and upper-division standing; Co-requisite Psy341). Recommended for Spring semester of Junior year. 3 hours. Gallahan.

**Psy 341 Human Development Lab**  
A laboratory course to be taken concurrently with or after Child Development or Applied Human Development. Students will have the opportunity to work with/observe individuals of various ages in research and applied settings. Prerequisite: Psy 349 and upper-division standing. Co or prerequisite: Psy 180; or Psy 340. May be repeated for credit. 1 hour. Gallahan.

**Psy 348 Experimental Psychology**  
This course examines the principles of research design, methodology, and analysis, and their application to a wide range of substantive areas in psychology. The use of a wide variety of social research strategies will be addressed. Prerequisite: Psy 150 and upper-division standing (or permission of the instructor) "C" or better in Psy 150. Must be taken in Junior year. Co-requisite: Psy 349. 3 hours. Fall Only. Bodamer.

**Psy 349 Experimental Psychology Laboratory**  
A laboratory course to be taken concurrently with Psy 348. 1 hour. Co-requisite: Psy 348. Fall only. Bodamer.

**Psy 350 Behavioral Statistics**  
An introduction to experimental design, descriptive and inferential statistics as well as computer statistical analysis. Math 165 strongly recommended. Prerequisite: Psy 348 and Psy 349. Any student substituting Math 207 for Psy 350 must obtain permission through the Psychology Department and must take one additional upper-division elective in Psychology. "C" or better in Psy 348. 3 hours. Spring only. Bodamer.

**Psy 352 Physiological Psychology**  
An introduction to the basic biological foundations of behavior. This course examines neuroanatomy and neurophysiology, and explores how these principles help explain behavior. Bio 110 or 224 or 240 strongly recommended. Prerequisite: Psy 150 and upper-division standing. 3 hours. Bodamer.

**Psy 390 Junior Seminar**  
An intensive and advanced review of issues central to the discipline of psychology which asks students to reflect critically on, and consolidate knowledge gained in previous psychology classes. Prerequisite: "C" or better in Psy 348/49, Upper-division standing and instructor's consent. Open to Psychology majors declaring in Junior Year. Spring only. 3 hours.

**Psy 408 Social Psychology of Intergroup Relations**

This course examines the theories and research in the social psychological study of how group membership affects individual's behaviors. Special attention will be paid to studies of international conflict, race and gender relations. The course is seminar style and will include survey research and class demonstrations. Prerequisite: "C" or better in Psy 308 and upper-division standing (or permission of the instructor). 3 hours. Meets cross-cultural core requirement. Burns-Glover.

**Psy 420 Special Topics in Psychology**

Seminar course focusing on topics of special interest to students and faculty, such as Adolescence, Aging, Women and Violence, Personality, Self-Concept, and Intelligence. Prerequisite: Psy 150 and Junior standing and permission of the instructor. May be repeated for credit as topic varies. 3 hours.

**Psy 425 Basic Clinical Techniques**

This class introduces students to various theories of psychotherapy through the use of original writings by the theorists themselves. A disorder-based approach is taken, and students learn specific techniques for specific types of clients and situations. Some self-analysis takes place as a way of exploring principles of interpretation. Prerequisite: Psy 311 (or permission of the instructor). 3 hours. Schultz.

**Psy 440 Health Psychology & Behavioral Medicine**

Course focuses on the application of psychological theories, principles, and techniques to the prevention, diagnosis, and treatment of health problems. Topics include the role of behavioral and life style variables in illness, procedures for changing health habits and developing healthy life styles, and the utilization of psychological treatment as an adjunct to the medical treatment of health problems. Prerequisite: Psy 352 and upper-division standing (or permission of the instructor). 3 hours. Staff.

**Psy 444 Psychobiography**

An effort to understand the form and content of artistic work from the vantage point of the artist's life history. Previous classes have focused on Sylvia Plath, Picasso, Oscar Wilde, Jackson Pollack, Vladimir Nabokov, Roald Dahl, Jack Kerouac, James Agee, and Truman Capote, among others. Significant use is made of psychological theory as a means of tracing meaningful connections between the life and creative products. Prerequisite: Psy 150 and upper-division standing (or permission of the instructor). 3 hours. Schultz.

**Psy 490 Senior Thesis Preparation**

An intensive writing and research preparation course to be taken following the Junior Seminar course, this course emphasizes the selection of an area of interest from which to develop an independent research project. Students will formulate, draft, and submit a Senior Thesis Research Proposal which will then be used to carry out a Senior Research Project in the spring. Prerequisite: "C" or better in Psy 350 and 390 and permission of instructor. 2 hours. Fall only.

**Psy 495 Senior Thesis Research Project**

Students will execute the research projects they designed during the fall semester and do public presentations of their completed projects. Course includes both independent research and lecture components. Senior psychology majors who are required to complete a thesis project will enroll in this course after successfully completing the Senior Thesis Preparation course. Prerequisite: "C" or better in Psy 490 and permission of the instructor. 2 hours. Spring only.

# SOCIOLOGY & ANTHROPOLOGY

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Vernon L. Bates, *Chair, Professor of Sociology*

Cheleen Mahar, *Professor  
of Anthropology*

Sarah R. Phillips, *Associate Professor  
of Sociology*

Byron D. Steiger, *Professor of Sociology*

Christopher Wilkes, *Professor of Sociology*

The Department of Sociology and Anthropology offers the following programs: a major in Anthropology and Sociology; a major in Sociology; and an interdisciplinary major in Social Work. In addition to the majors, the Department offers a minor in Sociology and in Anthropology.

The major in Anthropology and Sociology recognizes that both fields share a common philosophical and theoretical history. As well, both share a concern for the social and cultural conditions of human life. The fundamental aims of the major are to provide students with the analytical perspectives for the systematic understanding of human social and cultural existence and to prepare students for graduate education and professional employment in which cultural diversity and cross-cultural understanding are essential.

The major in Sociology is designed to provide basic knowledge about the development, structure and function of human groups and societies, and relationships among these groups and societies. The program contributes to liberal education, prepares students for graduate training in sociology, and is preparatory for social services and other careers.

The interdisciplinary program in Social Work provides general knowledge about human needs and resources and elementary skills in building counseling relationships. The major is intended to either provide sufficient skills to function at an entry-level position, such as Public Assistance Case-worker, or to provide the background necessary for entry into graduate study, which is required for many specific careers.

## Goals for the Majors

Students who successfully complete one of the majors should have the ability to carry out an independent senior research project and to present that project in coherent oral and written form to be evaluated by peers and by faculty. Students should also have the ability to carry out similar collaborative projects. It is presumed that these abilities are a foundation for one's life and career. In order to do this students must possess the following:

- an ability to exercise sociological/ anthropological imagination - seeing the relationship between individuals and historical, cultural, and social forces;
- an ability to see the general in the particular-how one's particular life experiences are shaped by the general categories into which one happens to fall: class, age, race, ethnicity, gender, religion, and subculture;
- a fundamental understanding of the important theoretical constructs of each discipline;
- a fundamental understanding of the basic scientific methods of the disciplines, both quantitative and qualitative, and an ability to choose the appropriate methodologies for one's work;
- an ability to understand and use data and statistics.

## MAJOR IN ANTHROPOLOGY AND SOCIOLOGY

A major in Anthropology and Sociology must complete the following core courses with a grade of “C-” or better and maintain a 2.0 average in the major. These same standards apply to the minor in Anthropology.

### Requirements

Anth 101	Introduction to Anthropology.....	3
Anth 301	Research Methods in Anthropology, or	
Soc. 300	Methods of Social Research.....	4
Anth 400	Transnationalism in a Postmodern World .....	4
Anth 494	Senior Research Seminar ...	1
Anth 495	Independent Research.....	3
Soc. 414	Sociological Theory .....	4

Three of the following courses in Anthropology:  
202, 210, 320, 330, 340 ..... 9-10

and three of the following courses in Sociology:  
308, 366, 325, 412, 413 ..... 9-10

37 or 38

## MINOR IN ANTHROPOLOGY

### Requirements

Anth 101	Introduction to Anthropology.....	3
Anth 301	Research Methods in Anthropology.....	4
Electives .....		9

Choose three courses in Anthropology (at least two must be upper-division courses.)

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## MAJOR IN SOCIOLOGY

The Sociology major must complete the following core courses with a grade of “C-” or better and maintain a 2.0 average in the major. These same standards apply to the minor in sociology and anthropology.

### Requirements

Soc 101	Introduction to Sociology ..	3
Soc 102	Social Problems .....	3
Soc 300	Introduction to Social Research .....	4
Soc 301	Social Statistics .....	4
Soc 414	Sociological Theory .....	4
Soc 494	Senior Research Seminar ...	1
Soc 495	Independent Research.....	3

Additional courses in sociology which must include at least one 400 level course ..... 18

**Note:** Soc 400, 401, 470, 471, and 472 cannot be used for the Sociology major.

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Strongly recommended for a sociology major: Hist 101, 102; Phil 101; Econ 101, 102.

## MINOR IN SOCIOLOGY

### Requirements

Soc 101	Introduction to Sociology ..	3
Soc 102	Social Problems .....	3
Electives .....		15

Choose five or more 3-hour courses in sociology (at least four of which must be upper-division.)

**Note:** Soc 400, 401, 470, 471 and 472 cannot be used for the Sociology minor.

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Any student interested in a Sociology minor should consult with a faculty member in the Sociology Department before the end of the sophomore year.

## MAJOR IN SOCIAL WORK

The Social Work major must complete the following core courses with a grade of “C-” or better and maintain a 2.0 average in the major.

### Requirements

Psy 150	Introduction to Psychology.....	3
Psy 180, Psy 318 or Psy 340 (a Developmental Psychology course) ....		3
Psy 311	Abnormal Psychology .....	3
Psy 425	Basic Clinic and Counseling Techniques .....	3
Either Soc 101 or Soc 102 .....		3
Soc 101	Introduction to Sociology	
Soc 102	Social Problems	
Soc 299	Field Experience.....	2
Either Anth 301 or Soc 300.....		4
Anth 301	Research Methods in Anthropology	
Soc 300	Intro to Social Research	
Soc 301	Social Statistics .....	4
Soc 400	Micro Social Work Practice .....	4
Soc 401	Macro Social Work Practice .....	4
Soc 470 and either Soc 471 or Soc 472:		
Soc 470	Social Work Research Seminar.....	1
Soc 471	Evaluation Research for Social Work .....	3
Soc 472	Social Work Internship.....	4-14
<b>Two of the following courses .....</b>		<b>6</b>
Soc 304	Criminology	
Soc 308	Race Relations	
Soc 309	Sociology of the Family	
Soc 311	Delinquency	
Soc 325	Hispanics in the U.S.	
Soc 321	Sociology of the City	
Soc 317	Gender and Sexuality	
Soc 366	Deviance	

## COURSE DESCRIPTIONS

### Anthropology (Anth)

#### Anth 101 Introduction to Anthropology

The character of culture and the nature of social behavior as developed through the anthropological study of contemporary peoples. 3 hours. Mahar. Annually.

#### Anth 202 Film, Text and Culture

This course examines the use of film, photography and text as data collection methods and representations for ethnographic research. Methodological and epistemological issues are explored in a comparison of ethnographic documentaries. As part of the course requirement students are expected to complete short observational and photographic projects. Prerequisite: Anth 101 or Soc 101 or 102. 3 hours. Mahar.

#### Anth 210 Mesoamerican Cultures

A survey of early Mayan and Aztec societies, how they fared under Spanish Colonial rule and their contemporary lives. The course focuses upon indigenous peoples, examining their articulation in contemporary states in relation to ethnic consciousness and cultural processes. Prerequisite: Anth 101 or Soc 101 or 102 or consent of instructor 3 hours. Mahar. Biennially. Meets cross-cultural requirement.

#### Anth 301 Research Methods in Anthropology

Helps students critically evaluate anthropological methods and their own fieldwork strategies. Explores ethnographic fieldwork and methods through an analysis of the nature of social practice as it is reflected in the anthropological literature. Ethnographic methods include participant observation, survey skills, interviewing skills, careful attention to language and the ethical dimensions of research. Students have the opportunity to apply these methods in research projects in the local community. Prerequisite: 6 hours of Anthropology or Sociology or consent of instructor. 4 hours. Mahar. Biennially.

**Anth 320 South American Traditional Societies**

Ethnographic studies of the social, economic and political forms of small-scale non industrial societies. This class looks at a variety of cultural systems from the Amazon Basin to the Andes, during historical and contemporary times. Prerequisite: 6 hours of Anthropology or Sociology or consent of instructor. 3 hours. Mahar. Biennially. Meets cross-cultural requirements.

**Anth 330 Gender in Cross-cultural Perspective**

This class investigates the notion of gender as it has been constituted in different times and places. The course examines theoretical developments in the anthropology of gender and explores gender cross-culturally, using examples from a wide range of societies, past and present. Prerequisite: Anth 101 or Soc 101 or 102 or consent of instructor. Prerequisite: 6 hours of Anthropology or Sociology or consent of instructor. 3 hours. Mahar. Biennially. Meets cross-cultural requirement.

**Anth 340 Symbolism, Myth and Ritual**

Anthropological approaches to the study of myth, ritual and symbols which focus upon cultural meaning. Examines the nature of myth and ritual in a variety of cultures. Prerequisite: Anth 201 or 202 or Soc 413 or consent of instructor. 3 hours. Mahar. Biennially. Meets cross-cultural requirement.

**Anth 400 Transnationalism in a Post Modern World**

Ethnographic approaches to the study of an increasingly mobile and interconnected world. Topics include migration, identity, transnational communities; tourism and cultural self-representation; developments in mass media and communications; and consumerism and international markets. Prerequisite: 9 hours of Anthropology or consent of instructor. 3 hours. Mahar. Biennially. Meets cross-cultural requirements.

**Anth 494 Senior Research Seminar**

The focus is to assist students in selecting an area of interest from which to draw an independent research project, to do an initial literature review, to develop a theoretical framework, and to develop a research methodology for the senior research project. Prerequisite: 19 hrs. of Anthropology or Sociology including Anth 301 or Soc 300. 1 hour. Annually in the Fall. Pass/No Pass. Staff

**Anth 495 Independent Research**

Student-conducted individual research/theoretical project. Prerequisite: 20 hours of Anthropology or Sociology including Anth 494. 3 hours. Faculty supervised.

**Sociology (Soc)****Soc 101 Introduction to Sociology**

Provides an intensive introduction to human behavior in groups including a study of family, education, religion, government, ecology, deviancy. Basic concepts and terminology are emphasized. 3 hours. Staff.

**Soc 102 Social Problems**

Study of the nature, scope, causes, effects alternatives and solutions to the major problems in society, such as poverty, crime, and health. 3 hours. Staff.

**Soc 299 Field Experience**

A course to introduce the student to social service occupations. Placement is made in agencies such as youth services, counseling, and welfare services. Paper required. Instructor's consent required at least two weeks prior to the beginning of the course. Graded P/N. 2 hours. Course may be repeated once for credit. Staff

**Soc 300 Introduction to Social Research**

Analysis and application of the logic and methods of science in sociology is studied. The student learns by doing a research project that goes through all stages: theory, hypothesis, operationalization, research design, population/sampling, data collection, and analysis. Prerequisite: Soc 101 or 102. 4 hours. Biennially. Phillips.

**Soc 301 Social Statistics**

Introductory statistics course for students in the social sciences. The emphasis of the course will be on understanding how social scientists use numerical data to understand social phenomena, and how to use and interpret statistical measures and techniques commonly reported in the social sciences literature. Prerequisite: Math 122 or consent of instructor. 4 hours. Phillips.

**Soc 304 Criminology**

An analysis of criminal behavior from theft to homicide, and society's reaction to it. Specific areas covered include: the defining of criminal behavior, the varieties of crime, the causes of crime, and the criminal justice system from arrest to imprisonment. Prerequisite: Soc 101 or 102. 3 hours. Steiger.

**Soc 308 Race Relations**

The primary emphasis is on the relationships between dominant (majority) and subordinate (minority) racial and ethnic groups in the United States. Designed to enable the student to understand the principles and processes which shape the patterns of relations among racial, ethnic, and other groups in society. Prerequisite: Soc 101 or 102. 3 hours. Bates.

**Soc 309 Sociology of the Family**

The primary emphasis is on the relationship between the familial institution and the society in which it is being studied. Attention is given to trans-historical and cross-cultural data, social change, definitions of the family, socialization, courtship, marriage, divorce, sex roles, sexuality, socio-economic forces, alternative forms, and the future. Prerequisite: Soc 101 or 102. 3 hours. Bates.

**Soc 311 Juvenile Delinquency**

An analysis of the definition of delinquency, its history, causes, societal reaction, and treatment and prevention. Prerequisite: Soc 101 or 102. 3 hours. Phillips.

**PACS 313 The Sociology of Violence**

(See PACS in section on Special Academic programs.) Counts toward the major in Sociology. 3 hours. Bates. Biennially.

**Soc 315 Equality and Inequality**

The course analyzes inequalities of wealth, power, and prestige in societies. The sources and consequence of inequality as well as the moral issues involved are emphasized. Implications for social mobility for the individual or for social groups are analyzed. Prerequisite: Soc 101 or 102. 3 hours. Steiger. Biennially.

**Soc 317 Gender and Sexuality**

An introduction to the theories and methods used by sociologists to study masculinity and femininity, the social and historical construction of sexuality, love, and romance. Discussion includes the sociology of homosexuality, bisexuality, and heterosexuality, as well as issues of HIV/AIDS, teen pregnancy, prostitution, pornography, sexual harassment and rape in the United States. Prerequisite: Soc 101 or 102. 3 hours. Biennially. Phillips.

**Soc 319 Sociology of Medicine**

The course analyzes the social and demographic variables affecting health, morbidity, and mortality rates. It also examines the social roles in illness (e.g., doctor and patient): their definitions and consequences. Attention is given to the study of medical care institutions and their systems and structures. The relations between social policy and health are debated. Prerequisite: Soc 101. 3 hours. Steiger. Biennially.

**Soc 321 Sociology of the City**

An exploration of the modern United States city. We will use Portland as a "laboratory" for understanding the evolution of cities, how modern cities "work," the problems and successes of urban areas. Prerequisite: Soc 101 or 102. 3 hours. Phillips.

**Soc 325 Hispanics in the U.S.**

A study of the history, literature, culture, and demographics of Hispanic groups in the U.S. An interdisciplinary approach will be taken toward placing in perspective the major political, social, and educational issues facing these groups. Students will simultaneously be engaged in a field experience in the Hispanic community. Prerequisite: Spanish 102. Fulfills cross-cultural requirement. 4 hours. Bates/Phillips

**Soc 366 Deviance**

An analysis of definitions of deviance, causes of deviance, and societal reaction to deviance. The relationship between deviant behavior and social justice will be explored. Topics include drug use, mental disorder, the sex industry, suicide, sexual preference, crime and corporate crime. Prerequisite: Soc 101 or 102. 3 hours. Bates.

**Soc 400 Micro Social Work Practice**

This course focuses on the change process at the three levels of social work practice (individual, family and group). Students will acquire specific skills which will assist them in assessing, contacting, working with and terminating some clients. Prerequisite: Soc 299 and Junior standing. 4 hours. Staff.

**Soc 401 Macro Social Work Practice**

This course provides an overview of the major influences on the service delivery system, including social work values and ethics. The student will trace the evolution of social welfare and American social policy in a multicultural context. Macro intervention and the change process at three levels of social work practice (organizations, community, and state and federal public policy) will be the focus of the course. Prerequisite: Soc 299 and Junior standing 4 hours. Staff.

**Soc 407 Collective Behavior and Social Movements**

Description and analysis of human behavior in collectives. Concentration focuses on the dynamics of rumor, panics, crowds, mass behavior, mass communication, fashions, fads, public opinion, and social movements. Prerequisite: 9 hours of Sociology. Junior standing 4 hours. Bates. Biennially.

**Soc 411 Social Change**

Review and critique of theories of social change. Analysis of factors causing change and the mechanisms by which social change comes about. Emphasis is placed on understanding the 20th century. Prerequisite: 9 hours of Sociology. 3 of the 9 maybe taken in Anthropology. Junior standing. 3 hours. Steiger. Biennially.

**Soc 412 Social Interaction**

A study of the interaction process as the central element in human social life, the primary occasion for communication, and the origin of both social structure and the individual human identity. Attention is given to symbolic communication, interaction, socialization, role theory, self-concept, deviance. Prerequisite: 9 hours of Sociology. 3 of the 9 may be taken in Anthropology. Junior standing. 3 hours. Bates. Biennially.

**Soc 413 Sociology of Religion**

A sociological analysis of religious belief, ritual, experience, and organization. Issues to be considered include the social origins of religion, its significance as a social force and as a form of social control, and the relation between religious institutions and the larger society of which they are a part. Prerequisite: 9 semester hours of Sociology. 3 of the 9 may be taken in Anthropology. Junior Standing. 3 hours. Bates. Biennially.

**Soc 414 Sociological Theory**

The origin and development of sociology are analyzed through the examination of major historical theorists and of contemporary schools of sociological thought. Prerequisite: 9 hours of Sociology. Junior standing 4 hours. Steiger. Biennially.

**Soc 450 Special Topics in Sociology**

Seminar or tutorial course focusing on topics of interest to students and faculty. This course may be repeated for credit when topics vary. 3 hours. Prerequisite: Sociology 101 or 102 and Junior Standing.

**Soc 470 Social Work Research Seminar**

The focus is to assist students in selecting an area of interest from which to draw an independent evaluation research project for social work. Students will do an initial literature review to develop a theoretical framework and to develop a research methodology. This course is to be taken before or concurrently with Soc 471 or Soc 472. Prerequisite: 19 hours in Social Work required courses including Soc 300 or Anthro 301 and Soc 301. 1 hour. Staff.

**Soc 471 Evaluation Research for Social Work**

Social work majors may choose, as one alternative, to engage in an evaluation research project—evaluating a social service agency using social science research methods—to fulfill their Social Work major requirements. Prerequisite: 19 hours in Social work required courses including Soc 300 or Anthro 301, Soc 301 and Soc 470. 3 hours. Staff.

**Soc 472 Social Work Internship**

An internship in a social service agency may be chosen as one alternative to fulfill the requirement for social work majors. Interns will be required to meet with the instructor, with other social work interns, and with those students doing evaluation research, in a seminar setting (Soc 470) to discuss their work in this field placement. Prerequisite: 2.75 G.P.A., 19 hours in Social Work required courses including Soc 300 or Anth 301 and Soc 301, and Soc 470. 4-14 hours. Staff.

### **Soc 494 Senior Research Seminar**

The focus is to assist students in selecting an areas of interest from which to draw an independent research project, to do an initial literature review, to develop a theoretical framework, and to develop a research methodology for the senior research project. Prerequisite: 19 hrs of Sociology, including Soc 300 and Soc. 301. 1 hour. Staff. Annually in the Fall. Pass/No Pass. Staff.

### **Soc 495 Independent Research**

Student-conducted individual research/theoretical project. Prerequisite: 20 hours of Sociology including Soc. 494. 3 hours. Faculty supervised.

### **Special topics in sociology taught periodically at faculty discretion:**

#### **Soc 255 Sociology of Humor**

Humor and laughter play a part in all societies. This course examines various theories of humor (including Aristotle, Darwin, and Freud) and analyzes the contributions that the sociological perspective can add to our understanding of the functions and roles humor plays in society. Prerequisite: Any Soc or Anthro course. 3 hours. Steiger.

#### **Soc 255 Sociology through Science Fiction**

Sociology is concerned with understanding the culture and organization of societies. Sociology is concerned with norms, roles, values and institutions (e.g., economics, family, political). The course will develop sociological thinking through the analysis of selected science fiction novels, which have to develop fully realized alternative worlds. Prerequisite: Any Soc or Anthro course.

#### **Soc 255 The Sociology of HIV/AIDS**

An examination of the epidemiologic, political, and social history of HIV and AIDS in the United States. The social construction of AIDS is studied, as is the social response to AIDS and people living with AIDS. We will examine the ethical issues raised by testing, reporting, and treatment policies. Psy 350, 450 and Psy 490 and permission of the instructor. Spring only. Phillips.

## THEATRE

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Edwin S. Collier, Chair, Associate Professor

Greta Christensen, Costume, Make-up Instructor\*

David Thorpe, Technical Director\*

Joan Gunness, Instructor of Dance\*

Rebecca Campbell, Instructor of Dance

Barbara Stalick, Instructor of Dance\*

### **\*adjunct faculty**

At Pacific, the theatre experience is offered to all students regardless of background or major. As the most collaborative of the arts, theatre blends performance with literature, history and the visual arts and provides practical, technical and organizational training.

For those interested in professional theatre or teaching, the curriculum provides a well-rounded foundation for graduate school or the professional world. Students in theatre-related fields such as the performance arts of dance and music, or literature, television, film, and advertising, may enroll in theatre courses to develop skills which can best be practiced in theatre productions. Dual majors are often advised.

At Pacific, students are encouraged to become involved. Acting, directing, scenic and costume construction, design, playwriting, lighting and makeup are but a few of the variety of activities available. We invite you to participate.

### **Theatre Department Goals**

Through theatrical production and academic study the Pacific Theater Department strives to provide students with:

- 1. A broad spectrum of high-quality theatrical production experiences**
  - Appreciation for the Theatre Arts; plays, dance, and musical theatre.
  - Human interaction and social issues from historical and foreign cultures.
  - Dramatic literature: serious drama; historical and social drama; comedy.
  - Theatrical spectacle.

**2. Theatrical production:**

- Performance: acting; dance musical theatre; improv and public speaking.
- Production management.
- Directing and producing.
- Design: scenography, costume, audio and lighting.
- Playwriting.

**3. Real-world work experience for careers after college:**

- Team and small group projects.
- Practical problem solving.
- Management, budget and project organization.
- Personal and group communication.
- Aesthetic decision making
- Time and stress management
- Publicity and audience development

**4. Preparation for careers in television, film, theatre, advertising, arts management, public relations, etc.****5. Preparation for graduate study and careers in teaching.****Arts Electives**

(6 hours from the following) .....6

Art 110, 210, 218, 226, 235, 270

MedA Television, film or audio production

Danc 105, 121, 126, 205, 221, 226, 426 (all 1 hour)

Mus 101-102, 111, 112, 211, 212

**Upper-Division Electives**

(9 additional hours [6 in Theatre]

chosen from the following or others with the approval of

Theatre Advisor) .....9

Art 310, 326

MedA 320, 330, 331 Television, film or audio production

Danc 426

Engl 310, 323, 340

Fren 304

Mus 321-325

Span 304

Thea 310, 325, 360, 370 or approved individual Study Topics

36-39

**MAJOR IN THEATRE****Requirements****Core courses**

Thea 110	Acting I: Fundamentals .....3
Thea 120	Technical Theatre .....3
Thea 150	Theatre Company: Performance .....1
Thea 151	Theatre Company: Technical and Organizational.....1
Thea 215	Intro to Scene Design .....3
Thea 225	Makeup .....1
Thea 330	Directing I: Fundamentals.....3
Thea 350	Theatre History or Thea 360 Modern Theatre...3
Thea 495	Thesis (Directing, play writing, choreography, design or performance – Learning Contract required)..... 3-6

**MINOR IN THEATRE****Requirements**

Thea 110	Acting I.....3
Thea 150	Theatre Company: Performance .....1
Thea 151	Theatre Company: Technical and Organizational (P/N).....1
Thea 120	Technical Theatre .....3
Thea 330	Directing I: Fundamentals.3
Thea 350	Theatre History .....3
Electives: Six upper-division hours in Theatre Arts in consultation with the Theatre Director .....6	

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## COURSE DESCRIPTIONS

### **Thea 101 The Theatre Experience**

An introductory course for the curious – those with little or no background in theatre. Students write, rehearse and produce plays in class. Attend and critique 4-5 plays during term. Not required for theatre majors. 3 hours. Collier. Offered in even numbered years.

### **Thea 110 Acting I: Fundamentals**

Basic Method technique and vocabulary. Students who hope to act in plays encouraged to take course Freshman or Sophomore years. (Advanced beginning acting students are encouraged to enroll in Thea 210) 3 hours. Collier.

### **Thea 120 Technical Theatre**

An introductory practicum to technical Theatre: scenic construction, painting, lighting, costume and audio production. A minimum of 35 lab hours will include assignments on construction and running crews for department productions. 3 hours. Christensen/Thorpe.

### **Thea 150 Theatre Company Performance**

Active participation in a dramatic production as an actor or performer. 1 hour. Collier. Graded P/NP. Offered each semester. May be taken 4 times. Must audition and be cast in a play to enroll.

### **Thea 151 Theatre Company Technical and Organizational**

Active participation in a dramatic production or project as a production assistant or technician. 1 hour. Thorpe. Offered each semester. May be taken 4 times.

### **Thea 210 Acting II: Intermediate**

Intensive scene work and an introduction to classical and style acting, dialect and film acting technique based on fundamentals and vocabulary from Acting I. Advanced beginning actors with considerable prior experience and basic understanding of method acting may enroll with instructor's consent. Prerequisite: Thea 110. 3 hours. Collier. Offered in even numbered years.

### **Thea 215 Intro to Scene Design**

Introduction to scenic design for the stage, with emphasis on concepts of design, script analysis, lighting, drawing, mechanical and computer design and model building. 3 hours. Collier. Offered in odd-numbered years or by arrangement in connection with a specific production.

### **Thea 225 Makeup**

The theoretical and practical application of makeup to the theatre and media. Students are expected to purchase their own makeup supplies. 1 hour. Christensen. Offered spring semester.

### **Thea 270/370 Theatre in London**

An experiential two-week exploration of theatre in England, during which students attend and critique at least 9 professional plays, meet with British theatre professionals and tour theatre facilities in London and Stratford-upon-Avon. Extra cost for airfare, tickets and lodging. (Approximately \$1,875. See schedule for current rate) Offered Winter Three. 3 hours. Collier.

### **Thea 310 Acting III: Style**

Introduction to style acting through research and scene work from classic drama: Greek play, Comedia del'Arte, Elizabethan (Shakespeare) 17th century French and Restoration, 19th century melodrama. 3 hours. Collier. Offered in even numbered years.

### **Thea 325 Directing Performers for the Camera**

An exploration of the relationship between directors and performers in television and film production. Rehearsal and production of short dramatic scenes utilizing video tape. Prerequisite: A basic working knowledge of Method Acting, television production experience, or consent of instructor. 3 hours. Collier. Offered in odd-numbered years.

**Thea 330 Directing**

Lecture-laboratory course exploring the director's art: script analysis, production design, casting, rehearsal and production. Prerequisite: Thea 110 and 220 or consent of instructor. Limited to a small number of students committed to the demanding task of producing one-act plays during a regular academic term. 3 hours. Collier. Offered yearly or by arrangement in connection with a specific project.

**Thea 350 Theatre History**

An exploration of theatre production from Greece to Broadway, including comparisons with film and TV drama. Attend and critique 4-5 plays during term. 3 hours. Collier. Offered in odd-numbered years.

**Thea 360 Modern Theatre**

Development of theatre from 1875, to the present with special emphasis on the influential practitioners and styles of the period. Attend and critique 3-5 plays during the term. 3 hours. Collier. Offered in even-numbered years.

**Thea 495 Senior Thesis**

Intensive practicum arranged with the Director of Theatre. 3-6 hours. Most often a directing assignment, but project may be in any of the following disciplines:

- Directing
- Playwriting
- Performance
- Choreography
- Design: Costume or Scenic Video Drama

**DANCE**

All dance classes count toward satisfaction of the arts core requirement for and can be repeated. All are one credit and are graded P/NP.

**Danc 105 Ballet I**

Classical ballet technique beginning at basic level. Graded P/N. May be repeated for credit. 1 hour. Stalick.

**Danc 121 Jazz Dance I**

Basic Jazz dance for beginners. Graded P/N. May be repeated for credit. 1 hour. Campbell.

**Danc 126 Modern Dance I**

Exploration of basic concepts of dance movement – space, time, design, expression – and appropriate techniques. Graded P/N. May be repeated for credit. 1 hour. Gunness.

**Danc 205 Intermediate Ballet**

Continuation of ballet technique. Graded P/N. May be repeated for credit. 1 hour. Stalick.

**Danc 221 Jazz Dance II**

Continuation of Jazz Dance I. Graded P/N. May be repeated for credit. 1 hour. Campbell.

**Danc 226 Modern Dance II**

Continuation of modern dance technique. Graded P/N. May be repeated for credit. 1 hour. Gunness.

**Danc 426 Advanced Modern Dance**

Continuation of Dance 226. Graded P/N. May be repeated for credit. 1 hour. Gunness.

# WORLD LANGUAGES & LITERATURES

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Naoya Fujita, *Chair, Associate Professor of Japanese*

Sara Bagley, *Instructor of Spanish*

Susan U. Cabello, *Professor of Spanish*

Nancy Christoph, *Associate Professor of Spanish*

Mingfen Cui, *Instructor of Chinese*

Lorely French, *Professor of German*

Kazuko Ikeda, *Associate Professor of Japanese*

Elena Rodríguez, *Instructor of Spanish*

Victor Rodríguez, *Associate Professor of Spanish*

Sara Steinert Borella, *Associate Professor of French*

David F. Stout, *Associate Professor of German, Associate Dean of Arts and Sciences*

Sandra García, *Instructor of Japanese\**

**\* indicates part-time**

The Department of World Languages and Literatures seeks to provide the general student with awareness of and sensitivity toward the cultural and linguistic diversity of an increasingly interconnected world. For students specializing in language study, the Modern Languages curriculum teaches proficiency in speaking, writing, and comprehending a modern language. Majors spend a semester or a year in study abroad. The curriculum is designed to ensure mastery of the languages studied through intensive conversational training.

The faculty of the Department is diverse and international. There are nine full-time faculty members and three part-time members. Seven languages are represented in the curriculum: Chinese, French, German, Italian, Japanese, Latin, and Spanish. All the members of the faculty carry out research or creative writing projects, publish regularly, and participate actively in professional organizations.

The Modern Languages student may concentrate in Chinese, French, German, Japanese, or Spanish

as a primary language. Majors are required to complete 12 semester hours in an accredited program outside the United States, offered in the language in which the student is specializing. Students may also select a major in Japanese or Spanish or a major in Chinese, French or German Studies. Pacific students may apply their financial aid awards to foreign study undertaken through the Study Abroad program of the department. (For more information on studying abroad, see the appropriate section in this catalog.)

All courses in the department are open to non-majors having the appropriate prerequisites. Students are invited to pursue their area of interest within the framework of departmental offerings.

For information about language courses, the major, or the Study Abroad program, contact Professor Fujita.

## Goals for Majors in the Department of World Languages and Literatures

The department seeks to graduate majors who:

- embody the essence of liberal arts values;
- have a high level of proficiency in all four skill areas of the language of concentration: listening, speaking, reading, and writing;
- have participated in at least a semester of study abroad and are sensitive to cultural differences;
- have some knowledge of the major literary and intellectual trends of the culture of concentration;
- are acquainted with the different modes of research within their field;
- have conducted original research and written a senior thesis in the language of specialization or have completed a capstone project;
- are prepared to pursue graduate/professional studies or immediately enter the job market able to seek employment in a broad spectrum of career possibilities.

**MAJOR IN MODERN LANGUAGES****Requirements**

Primary Language (Chinese, French, German, Japanese, Spanish).....	30
Lower Division .....	12
Upper-Division (at Pacific).....	6
Upper-Division (overseas) .....	12
Secondary Language(s).....	12
English Literature or Linguistics (300 or above).....	3
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	45

Students will enter the sequence at a level appropriate to their previous preparation and may be exempt from up to 12 hours of lower-division credit.

International students, who have taken ESL classes at the university level and who want to major in Modern Languages, may be exempted from the 12 credits of a secondary foreign language.

**MAJOR IN JAPANESE****Requirements**

Japn 101-102.....	6
Japn 201-202.....	6
Upper-Division hours earned overseas.....	12-16
4 Upper-Division classes at Pacific, at least two of which must be numbered 400.....	12
One course from the following list: Art 274, Hist 111, Hist 112, Hist 211, Hist 315, Hum 205, Phil 305, Pols 344 ...	3-4
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	39-44

Students will enter the sequence at a level appropriate to their previous preparation and may be exempt from up to 12 hours of lower-division credit.

**MAJOR IN SPANISH****Requirements**

Span 101-102 .....	6
Span 201-202 .....	6
2 classes numbered 300 at Pacific .....	6
(one of these classes may be waived, if student studies abroad for the whole year)	
1 class from the following list: Pols 332, Pols 336, Pols/History 240; Hist 207; Anth 210, Anth 320.....	3
Upper-Division hours earned overseas.....	12-16
*Span/Educ 466 does not count)	
2 classes numbered 400 at Pacific .....	6
Span 485 Seminar in Hispanic Studies ....	3
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	42-46

Students will enter the sequence at a level appropriate to their previous preparation and may be exempt from up to 12 hours of lower-division credit.

**MAJOR IN CHINESE STUDIES**

**Rationale:** To provide a viable major that emphasizes Chinese language, literature, and culture.

**Requirements**

Chin 101-102 .....	6
Chin 201-202 .....	6
Upper-Division hours earned overseas in a Chinese-speaking country.....	12-16
3 upper-division Chinese courses at Pacific.....	9
3 classes from the following list of related classes: (Must include at least 6 credit hours taken at Pacific).....	9-12
<b>Anthropology:</b>	
Anth 340 Symbolism, Myth and Ritual.....	(3 hours)
<b>Art:</b>	
Art 273 Art and Architecture of China.....	3

<b>English/International Studies:</b>	
Engl 33	Introduction to Linguistics .....3
OR	
Engl 343	Studies in Criticism & Theory .....3
OR	
IS 201	Intercultural Communications.....3
<b>History:</b>	
Hist 111	Foundations of East Asia...3
Hist 112	East Asia.....3
Hist 212	China Past and Present with Film.....3
Hist 316	China from Mao to Tinanmen.....3
<b>Philosophy:</b>	
Phil 305	Asian Philosophy.....4
<i>Check individual departments for course descriptions and course schedules for semesters offered.</i>	
Thesis (2 credits/semester)	.....4
	————— 46-53

## MAJOR IN FRENCH STUDIES

Rationale: To provide a viable major that emphasizes France and the French-speaking world.

### Requirements

Fren 101-102	.....6
Fren 201-202	.....6
Upper-Division hours earned overseas in a French-speaking country	.....12-16
2 French classes numbered 300 at Pacific	.....6
1 French class numbered 400 at Pacific	.....3
3 classes from the following list of related classes: (Must include at least 6 credit hours taken at Pacific).....	9-12

### Anthropology:

Anth 340	Symbolism, Myth and Ritual.....3
Anth 400	Transnationalism in a Postmodern World .....3

<b>Art:</b>	
Art 271	History of Western Art II: Renaissance through Impressionism .....3
Art 272	History of Western Art III: Post Impressionism Through 20th Century .....3

### English/International Studies:

Engl 332	Introduction to Linguistics.....3
OR	
Engl 343	Studies in Criticism and Theory.....3
OR	
IS 201	Intercultural Communications.....3

### History:

Hist 206	France from Caesar to Napoleon .....3
Hist 301	The Medieval World: 400-1500.....3
Hist 302	Renaissance, Reformation, Revolt: 1500-1800 .....3
Hist 401	Charlemagne and his Era....3

### Media Arts:

MedA 401	Film Topics* .....3
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### Philosophy:

Phil 412	Major Philosophers* .....4
Phil 420	Seminar in Philosophy* .....4
(*will depend on topic)	

**Note:** Check individual departments for course descriptions and course schedules for semesters offered.

Thesis (2 credits/semester)	.....4
	————— 46-53

## MAJOR IN GERMAN STUDIES

Rationale: To provide a viable major that emphasizes Germany and the German-speaking world.

### Requirements

Ger 101-102	.....6
Ger 201-202	.....6
Upper-Division hours earned overseas in a German-speaking country	..... 12-16

2 German classes  
numbered 300 at Pacific .....6

1 German class  
numbered 400 at Pacific .....3

3 classes from the following list  
of related classes: ..... 9-12

*(Must include at least 6 credit hours  
taken at Pacific)*

**English/International Studies:**

Engl 332 Introduction to Linguistics ...3

OR Engl 343 Studies in Criticism  
and Theory.....3

IS 201 Intercultural  
Communications.....3

Engl 220 Literature and Human  
Concerns: The  
Holocaust History: .....3

Hist 232 The Holocaust .....3

Hist 301 The Medieval World:  
400-1500.....3

Hist 302 Renaissance, Reformation,  
Revolt: 1500-1800 .....3

Hist 401 Charlemagne and his Era ..3

Hist 430 Adolf Hitler and the  
Question of Germany.....3

**Media Arts:**

MedA 401 Film Topics\* .....3

**Music:**

Mus 322 Music History: 1585-1809 ....3

Mus 323 Music History: 1809-1918 ....3

**Philosophy:**

Phil 403 Twentieth Century  
Philosophy .....4

Phil 412 Major Philosophers\* .....4

Phil 420 Seminar in Philosophy\* .....4

(\*will depend on topic)

**Note:** Check individual departments for course descriptions, prerequisites, and course schedules for semesters offered.

Thesis (2 credits/semester) .....4

46-53

**MINORS IN MODERN LANGUAGES**

Students interested in a minor are urged to consult with the professor of the language they wish to pursue.

**Requirements**

**Chinese:**

Chin 101-102 Introduction to  
Chinese Language  
and Culture .....6

Chin 201-202 Intermediate Chinese...6

Upper-Division work in Chinese .....6

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18

**French:**

Fren 101-102 Introduction to French  
Language and Culture ...6

Fren 201-202 Intermediate French .....6

Upper-Division work in French .....6

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18

**German:**

Ger 101-102 Introduction to German  
Language and Culture..6

Ger 201-202 German Conversation  
and Grammar Review...6

Upper-Division work in German .....6

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18

**Japanese:**

Japn 101-102 Introduction to  
Japanese Language  
and Culture .....6

Japn 201-202 Intermediate Japanese...6

Upper-Division work in Japanese .....6

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18

**Spanish:**

Span 101-102 Introduction to  
Spanish Language  
and Culture .....6

Span 201-202 Intermediate Spanish ....6

Upper-Division work in Spanish .....6

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18

Students who enter with previous foreign language training may be exempt from a maximum of 6 hours of the minor requirement. Students entering the sequence at the 301 level will complete a minimum of 12 hours selected from upper-division offerings.

## MINOR IN SPANISH FOR ELEMENTARY TEACHERS

Proficiency level of Spanish 202 required .....	6
Span/Ed 465 Spanish in the Elementary School.....	4
Span/Ed 466 Mexico: A Cultural Mosaic 4 Hum 306 OR 325 (Latino Fiction or Hispanic in U.S.) .....	3/4
Span/Ed Practicum in Tapalpa, Mexico .....	3

20-21

5th year/MAT students can student teach in Mexico for 3 of their 18 weeks in the schools. (The above Spanish courses may not replace Spanish 401, 402, 411, 412 in the Spanish major.)

## COURSE DESCRIPTIONS

### Teaching Languages

### World Languages (WorL)

#### WorL 301-302 Mentoring in Language Teaching

Each student serves as a mentor in one section of a beginning language class (101 and 102 classes in Chinese, French, German, Japanese, Latin, and Spanish). Mentors attend all three of the regular sessions of the class, which will be taught by the professor. Mentors are responsible for facilitating the activities for the fourth hour. They do not participate in the evaluation of students, except to take attendance during the fourth hour. The mentor meets once a week with the supervising professor in the language to develop activities that build oral proficiency, grammatical accuracy, and cultural understanding of the language. Mentors also meet as a group with language faculty to discuss pedagogical issues associated with language instruction. Mentors are selected by an application process in the spring. Prerequisite: consent of instructor. 3 hours. Graded P/NP. Fujita, Staff.

#### WorL 430 Methods of Teaching Foreign Languages

Theoretical and practical considerations in the teaching of foreign languages at the elementary and secondary school levels. Required of all who are working for certification as language teachers. Prerequisite: consent of the instructor. 3 hours. Staff. Offered intermittently. (G)

## WORLD LANGUAGES & LITERATURES

### Chinese (Chin)

#### Chin 101-102 Introduction to Chinese Language and Culture

The beginning course is intended to give training in the basic listening and reading of Chinese (Mandarin). Introduction of Chinese characters and presentation of the cultural behaviors that influence language usage. 3 hours each semester. Cui.

#### Chin 201-202 Intermediate Chinese

The intermediate course is intended for expansion of conversational skills, reading practice, and grammatical constructions. Development of writing skills. Emphasis on effective spoken communication and reading practice. Prerequisite: Chin 102 or equivalent proficiency. 3 hours each semester. Cui..

#### Chin 301 Communicating in Chinese

Development of communicative competence in Chinese with emphasis on conversational skill. Application of cultural awareness in various communication situations. Prerequisite: Chinese 202 or equivalent proficiency. Taught in Chinese. 3 hours. Cui.

#### Chin 305 Chinese Reading and Writing

Study of Chinese writing and the enhancement of reading skills. Acquisition of more vocabulary to facilitate Chinese reading and writing. Cultural and social influences on expressions and styles will be discussed. Taught in Chinese. 3 hours. Cui.

#### Chin 401 Selected Chinese Short Stories

This course will focus on selected topics in contemporary Chinese short stories, which include such themes as nature and humans, life and death, love and loyalty, family and friends, and self and public. Students will understand Chinese values, beliefs, and norms through extensive analysis of these topics. The course also provides the opportunity to enhance Chinese reading skills by studying various styles of the stories. Taught in Chinese. Prerequisite: Chinese 301 and 305, or equivalent proficiency. 3 hours. Meets Humanities core requirement. Cui. Offered alternate years.

**Chin 485 Seminar in Chinese Studies**

An in-depth study of various cultural issues as reflected in the literature, history, politics, society, films & television, art & music, and sports & leisure of China. Taught in Chinese. 3 hours. May be repeated once for credit when content varies. Prerequisite: consent of instructor. Cui. Offered alternate years.

**Chin 494/495 Senior Thesis in Chinese Studies**

This course is designed to assist senior students who are writing a thesis for a major in Chinese Studies. Students will receive direction in completing their research proposal and help in conducting and writing their senior thesis. These are student-conducted individual research theses. Students take 494 and 495 in consecutive semesters. Prerequisite: Senior standing and study abroad. 2 hours per semester. Cui.

**French (Fren)****Fren 101-102 Introduction to French Language & Culture**

The beginning course is intended to give training in the basic patterns and structures of French. Conversation and reading related to the cultures of French-speaking areas. Classroom work is supplemented by laboratory experience. 3 hours each semester. Steinert Borella, Ricciardi.

**Fren 201-202 Intermediate French**

Expansion of conversational skills and continuation of reading practice. Use of periodical and literary sources and audio-visual aids. Prerequisite: Fren 102 or an equivalent proficiency. 3 hours each semester. Steinert Borella.

**Fren 301 Composition & Conversation**

Practice in conversational idiom through reading and discussion of contemporary short stories, periodical literature and oral interviews. Extensive practice in composition with analysis and correction of students' errors in the classroom. Taught in French. Prerequisite: Fren 202 or equivalent competency. 3 hours. Steinert Borella. Offered alternate years.

**Fren 304 Twentieth Century French Theatre**

Analysis of representative plays by French and Francophone authors including Jarry, Sartre, Anouilh, Genet, Beckett, Ionesco, Schwarz-Bart, and others. Introduction of theoretical texts relevant to the plays studied. Prerequisite: Fren 202 or an equivalent competency. Taught in French. 3 hours. Meets Humanities core requirement. Steinert Borella. Offered intermittently. (G)

**Fren 305 French Literature and Culture: 1637 to the present**

An introduction to major developments in French literature and culture including Classicism, the Enlightenment, Romanticism, Realism, surrealism, and the "nouveau roman". Prerequisite: French 202 or equivalent. Taught in French. 3 hours. Meets Humanities core requirement. Steinert Borella. Offered intermittently. (G)

**Fren 307 The Contemporary Short Story**

Study of significant short stories by major writers in the French-speaking world, among them Maupassant, Leciezio, Kamanda, Roy, and others. Prerequisite: Fren 202 or an equivalent proficiency. Taught in French. 3 hours. Meets Humanities core requirement. Steinert Borella. Offered intermittently. (G)

**Fren 308 Contemporary Issues in French Press**

Reading and discussion of selected articles from French newspapers and magazines. Course work would be supplemented by relevant video and audio-visual materials. Prerequisite: Fren 202 or equivalent proficiency. Taught in French. 3 hours. Steinert Borella. Offered intermittently. (G)

**Fren 401 Gender, Culture, and Society: Women's Writing in the Francophone World**

Survey of women's writing in the Francophone world throughout the 20th century. Special focus on the novel and the development of alternative prose forms. Authors from France, Switzerland, Belgium, Quebec, the French Caribbean, Senegal, and Algeria may be included. Taught in French. 3 hours. Meets Humanities and Cross-cultural core requirement. Steinert Borella. Offered intermittently. (G)

**Fren 485 Seminar in French Studies**

A concentrated study of one of the major movements in French and Francophone literature, art, and culture. Topics include: the rise of Classicism, the French Revolution, the 19th century French novel, writing and resistance: 1848-1968, and literature in French-speaking Switzerland. May be taken more than once for credit. Prerequisite: Consent of the instructor. Taught in French. 3 hours. Steinert Borella. Offered intermittently.

**Fren 494/495 Senior Thesis in French Studies**

This course is designed to assist senior students who are writing a thesis for a major in French Studies. Students will receive direction in completing their research proposal and help in conducting and writing their senior thesis in French. These are student-conducted individual research theses. Students take 494 and 495 in consecutive semesters. Prerequisite: Senior standing and study abroad. Taught in French. 2 hours per semester. Steinert Borella.

**German (Ger)****Ger 101-102 Introduction to German Language and Culture**

The beginning course is intended to give training in the basic patterns and structures of German. Conversation and reading related to the cultures of German-speaking areas. 3 hours each semester. French, Stout.

**Ger 201-202 Intermediate German**

Designed to prepare students to identify conversational vocabulary. Expansion of conversational, reading, and comprehension skills. Review and development of grammatical constructions most commonly used in speaking. Use of periodical and literary sources and audio-visual materials. Prerequisite: Germ 102 or an equivalent proficiency. 3 hours. French, Stout.

**Ger 301 Topics in German Culture**

Extensive practice in composition and conversation. Reading and discussion of materials from German newspapers, magazines, and short story collections. Audio-visual materials develop the students' comprehension of the German language, media, society and culture. Prerequisite: Germ 202 or an equivalent proficiency. 3 hours. French. Offered alternate years.

**Ger 302 Contemporary Short Stories and Narrations**

Study of significant short stories by major writers in the post-WWII, German-speaking world: Ingeborg Bachmann, Peter Bichsel, Heinrich Böll, Irmtraud Morgner, Peter Schneider, Christa Wolf, and others. Students report on stories or authors not covered in the classroom. Prerequisite: Germ 202 or equivalent proficiency. 3 hours. Meets Literature core requirement. French. Offered intermittently. (G)

**Ger 303 German Literature and Culture 1750 to the present**

Study of significant developments in literature and culture with focus on the Enlightenment, Classicism, Romanticism, Realism, Expressionism, the Nazi period, and the post-WW II period, including the 1990 unification. Prerequisite: Germ202 or equivalent proficiency. Taught in German. 3 hours. Meets Literature core requirement. French. Offered intermittently. (G)

**Ger 315 Advanced Grammar and Composition**

Extensive review of advanced grammatical concepts and practice of written idiom through reading, viewing, discussing, and writing using short stories, newspapers, films, and magazine articles. Development of vocabulary and grammatical constructions through composition with analysis and correction of students' errors in class. Prerequisite: Germ 202. or equivalent proficiency. 3 hours. French. Offered intermittently. (G)

**Ger 400 German Film**

Analysis of significant 20th-century German films with concentration on films from the Weimar Republic and on New German Cinema. Study of theoretical and literary texts in relation to the cultural and political climate. Prerequisite: consent of the instructor. Taught in German. 3 hours. French. Offered intermittently. (G)

**Ger 485 Seminar in German Studies**

An in-depth study of various cultural issues as reflected in the literature, art, history, and politics of German-speaking countries. Topics include: survey of German literature in historical context; German unification; gender and society; politics and culture. Taught in German. Prerequisite: consent of the instructor. 3 hours. French. Offered intermittently. (G)

**Ger 494/495 Senior Thesis in German Studies**

This course is designed to assist senior students who are writing a thesis for a major in German Studies. Students will receive direction in completing their research proposal and help in conducting and writing their senior thesis in German. These are student-conducted individual research theses. Students take 494 and 495 in consecutive semesters. Prerequisite: Senior standing and study abroad. Taught in German. 2 hours per semester. French.

**Italian (Ital)****Ital 100 Elementary Conversational Italian**

This beginning course is intended to give immersion training in Italian during the Winter 3 period. Conversation and reading related to the cultures of Italian-speaking areas. Classroom work is supplemented by video work and laboratory experience. This course does NOT meet the core requirement. 3 hours. Ricciardi. Offered intermittently.

**Japanese (Japn)****Japn 101-102 Introduction to Japanese Language and Culture**

Intensive introductory Japanese. Training in the basic patterns and structures of Japanese. Emphasis on oral and aural skills. Japanese writing of Hiragana and Katakana is introduced from the beginning to ensure the overall development of language skills. Development of cultural awareness that influences language usage. 3 hours each semester. Ikeda, Fujita, Garcia.

**Japn 201-202 Intermediate Japanese**

Expansion of conversational skills. Development of reading and writing skills in three different characters in Japanese. Application of cultural awareness in Japanese language learning. Prerequisite: Japn 102 or an equivalent proficiency. 3 hours each semester. Ikeda, Fujita, Garcia.

**Japn 301-302 Communicating in Japanese**

Development of communicative competence in Japanese with emphasis on conversational skills. Reading and writing skills will also be practiced to expand vocabulary and cultural knowledge. Application of cultural awareness in various communication situations. Prerequisite: Japn 202 or equivalent proficiency. 3 hours. Fujita.

**Japn 307 Readings in Contemporary Japanese Writers**

Study of short stories and essays written by major writers in Japan. Reading materials are utilized for vocabulary expansion, Kanji recognition and writing in order to achieve better understanding of the content by grasping cultural meanings. Prerequisite: Japn 202 or equivalent proficiency. 3 hours. Meets Literature core requirement. Ikeda. Offered alternate years.

**Japn 315 Grammar and Composition**

Extensive review of grammatical concepts and practice of written idiom through reading, writing, and discussing short stories, newspapers, films, and magazine articles. Development of vocabulary and grammatical constructions through composition with analysis and correction of students' errors in class. Prerequisite: Japn 202 or equivalent proficiency. 3 hours. Fujita. Offered alternate years.

**Japn 401 Topics in Contemporary Literature**

Study of Japanese culture through selected topics in contemporary literature. Topics include various human relationships in Japan, love and death, aesthetic attitudes, attitudes toward religion. Extensive analysis of these topics by understanding Japanese cultural values, beliefs, norms and behavioral patterns. Taught in Japanese. Prerequisite: 302. 3 hours. Meets Literature core requirement. Ikeda. Offered alternate years. (G)

**Japn 402 Selected Issues in the Japanese Press**

The course provides the opportunity to enhance Japanese reading skills and acquisition of cultural knowledge through newspaper and magazine article reading. Supplementary materials are brought in to broaden the students' understanding of the Japanese language, people, and culture. Prerequisite: Japn 302. Taught in Japanese. 3 hours. Ikeda, Fujita. Offered intermittently. (G)

**Japn 415 Structure of Japanese**

Development of linguistic knowledge about the Japanese language. Study of structure of Japanese words and their categorization. Grammatical and syntactical analysis of Japanese sentences. Structural analysis of Japanese paragraphs. This course will be of use to both students of Japanese and to those who intend to become teachers of Japanese. Prerequisite: Japn 301 and 302, or equivalent proficiency. 3 hours. Fujita. Offered intermittently. (G)

**Japn 445     The Sociolinguistics of Japanese**

This course will provide the opportunity to study the impact of the Japanese social norm, and cultural attitudes and values on language usage. Attitudes toward standard language and dialects will be discussed. Variations of styles in spoken and written Japanese will be also analyzed. This course will be of use to both students of Japanese and to those who intend to become teachers of Japanese. Prerequisite: Japn 302, or equivalent proficiency. 3 hours. Fujita. (G)

**Japn 485     Seminar in Japanese Studies (G)**

An in-depth study of various cultural issues as reflected in the literature, art, history, and politics of Japan. Topics include: survey of Japanese literature in historical context; gender and society; politics and culture. Taught in Japanese. Prerequisite: consent of the instructor. 3 hours. May be taken more than once for credit. Ikeda, Fujita. (G)

**Spanish (Span)**

**Span 101-102 Introduction to Spanish Language and Culture**

The beginning course is intended to give training in the basic patterns and structures of Spanish. Conversation and reading related to the cultures of Spanish-speaking areas. Classroom work is supplemented by laboratory practice. 3 hours. Bagley, Christoph, E. Rodriguez and V. Rodriguez.

**Span 201-202 Intermediate Spanish**

Expansion of conversational skills and continuation of reading practice. Use of periodical and literary sources and audio-visual aids. Prerequisite: Span 102 or an equivalent proficiency. 3 hours. Cabello, Christoph, Rodríguez, and staff.

**Span 301     Composition and Conversation**

Practice in conversational idiom through reading and discussion of contemporary short stories, periodical literature, and oral interviews. Extensive practice in composition with analysis and correction of students' errors in the classroom. Prerequisite: Span 202 or equivalent proficiency. Taught in Spanish. 3 hours. Christoph and V. Rodríguez. Offered annually.

**Span 302     Contemporary Spanish Novel**

Study of representative 20th century novels from both Spain and Latin America. Student reports on works and authors not covered in the classroom. Prerequisite: Span 202 or an equivalent proficiency. Taught in Spanish. 3 hours. Meets Literature core requirement. Cabello and V. Rodriguez. Offered intermittently. (G)

**Span 303     Introduction to Hispanic Literatures**

An introduction to the study of literature in Spanish through the genres from different periods and countries of the Hispanic world. Continued practice in composition with in-class editing. Prerequisite: Span 202 or an equivalent proficiency. Taught in Spanish. 3 hours. Meets Humanities core requirement. Christoph. Offered annually.

**Span 304     Contemporary Spanish Drama**

Analysis of representative plays of contemporary dramatists from both Spain and Latin America: Sastre, Mihura, Arrabal, Usigli, Wolf, Carballido, and others. Students report on plays and authors not covered in class. Prerequisite: Span 202 or equivalent proficiency. Taught in Spanish. 3 hours. Meets Literature core requirement. Christoph. Offered intermittently. (G)

**Span 305     Contemporary Spanish Poetry**

Analysis of representative poems of the major contemporary poets of Spain and Latin America: Antonio Machado, Garcia Lorca, Juan Ramon Jimenez, Vicente Alexandre, Pablo Neruda, Cesar Vallejo, and others. Student reports on poems and authors not covered in the classroom. Prerequisite: Span 202 or equivalent proficiency. Taught in Spanish. 3 hours. Meets Literature core requirement. Cabello and V. Rodriguez. Offered Intermittently. (G)

**Span 308     Contemporary Short Story**

A study of short stories by major contemporary writers in the Spanish-speaking world: Borges, Cortazar, Rulfo, Onetti, Garcia Marquez, Concha Lagos, Carmen Conde, Medardo Fraile, and others. Student reports on stories and authors not covered in the classroom. Prerequisite: Span 202 or equivalent proficiency. Taught in Spanish. 3 hours. Meets Literature core requirement. Cabello, V. Rodriguez and Christoph. Offered intermittently. (G)

**Span 315    Advanced Grammar and Composition**

This course is designed to "fill in" the Spanish grammar and vocabulary gaps of the advanced/intermediate student. Course reviews the more difficult grammatical structures in Spanish while introducing advanced vocabulary, idioms and colloquialisms. Emphasizes vocabulary building, composition skills and comprehension of the wide range of Spanish found in literature, journalism, advertising, and everyday speech. Taught in Spanish. Prerequisite: Span 202. 3 hours. Christoph. Offered intermittently. (G)

**Span 401-402    Survey of Peninsular Spanish Literature**

A study of the major works and literary movements of Spain. Student reports on authors, genres, or works not covered in the classroom. Prerequisite: a Spanish course at 300 level or consent of the instructor. Taught in Spanish. 3 hours. Meets Literature core requirement. Cabello and Christoph. Offered alternate years. (G)

**Span 411-412    Survey of Spanish American Literature**

A study of the major works and literary movements of Spanish America from the pre-Columbian era through the 20th century. Prerequisite: a Spanish course at 300 level or consent of the instructor. Taught in Spanish. 3 hours. Meets Literature core requirement. V. Rodríguez. Offered alternate years.

**Span/Ed 465 Spanish in the Elementary School**

This course is an introduction to the principles of second language acquisition as they apply to bilingual education and second-language instruction in elementary school programs. Students will become acquainted with dual language materials, bicultural perspectives, and strategies for the achievement of biliteracy. This class includes the observation component in a bilingual classroom. Prerequisite: Spanish 202 or equivalent. Taught in Spanish and English. 4 hours. Does not count towards Spanish major. Cabello and McClain. Offered intermittently (G)

**Span/Ed 466 Mexico: A Cultural Mosaic**

This class will focus on Mexican history, folklore, culture, music, and visual arts with the needs of the elementary classroom in mind. The class will be taught bilingually and discuss the historical and cultural basis for the Mexican aesthetic. In addition, students have opportunities to participate in musical experiences and hands-on art projects also suitable for the elementary classroom. As a culminating event, the students will design and implement Festival day that will include community participation. Includes an observation component in a bilingual classroom. Prerequisite: Spanish 202 or equivalent. 4 hours. Does not count towards Spanish major. Cheyne/ V. Rodríguez. Offered intermittently. (G)

**Span/Ed 467 Practicum in Tapalpa, Mexico**

Students will complete a teaching practicum in an elementary/middle school in Tapalpa, Mexico. This will also include a weekly seminar and weekend cultural excursions and a two day orientation prior to departure. Prerequisite: Span/Ed 465 Spanish in the Elementary School or consent of instructors. 3 hours. Does not count towards Spanish major. Cabello/ McClain. Offered intermittently. (G)

**Span 485    Seminar in Hispanic Studies**

Detailed study of the works of one or more contemporary writers or of selected areas of Hispanic culture. Students will conduct research and complete a major paper. Taught in Spanish. Prerequisite: completion of study abroad or near-native fluency. May be repeated once for credit when content varies. 3 hours. Cabello, Christoph, and V. Rodríguez.

# Academic Policies & Procedures

## ACADEMIC POLICY ADMINISTRATION

In the College of Arts and Sciences, the Associate Dean, in cooperation with the Registrar, handles matters of academic rules and regulations. The office of the Associate Dean is located in Bates House.

## REGISTRATION POLICIES

### Registration Requirements

In keeping with Pacific's philosophy regarding the student-advisor relationship, prior to registration all students are required to meet with their advisor and together develop the student's schedule of classes.

New students meet with their assigned advisors during the summer; continuing students are advised in April for the fall semester, and in November for the winter term and spring semester. An early registration occurs at the end of those advising periods in November and April, with students registering in priority according to the number of credits earned.

All new students must complete their initial registration no later than the fourth day of classes (or equivalent) of the semester; continuing students may complete initial registration through the 10th day (or equivalent) of the semester. Students may add and drop classes through the 10th day (or equivalent) of the semester. The adding of classes is not normally allowed after the 10th day. Students may withdraw from classes through the 10th week (or equivalent) of the semester, with a "W" posted on the student's academic record. Please refer to the Schedule of Classes for add/drop equivalents for Winter III and summer terms.

A student is officially registered for classes only after needed approvals from the advisor and instructors have been filed with the Registrar and classes are entered into the computer registration system.

### Course Registration

Course registration procedures and class schedules are distributed each semester by the Registrar's Office. Continuing students may pre-register for classes (see Academic Calendar). The University reserves the right to cancel the registration of any student who is delinquent in meeting their financial obligation to the University.

### Measles Vaccination Policy

The State of Oregon requires all full-time college students born after 1956 to have had two doses of the measles vaccine. Students who have not satisfied this requirement by November 1 of Fall semester (March 15 for Spring semester) will not be permitted to pre-register for future classes until they are in compliance. Please direct questions regarding this matter to the Student Health Center at 503-359-2269.

### Oregon Independent Colleges Cross-Registration

Pacific University participates in the Oregon Independent Colleges (OICA) Cross-Registration program, in which students enrolled full-time at any OICA college may take a maximum of one undergraduate course per term at another OICA campus. No additional tuition will be charged for the cross-registered course by either institution, with the exception of possible overload or special course fees. Students may not cross-register for a course that is offered on their own campus unless scheduling conflicts prevent taking the course. Registration is permitted on a "space-available" basis. For more information contact the Pacific University Registrar's Office.

## Withdrawals

Students may drop a class through the first ten class days of the semester (first three days of a three week term) without having the class appear on the transcript. Students may withdraw through the tenth week of the semester (second week of a three week term) and receive a “W” on the transcript, with no grade penalty. Late withdrawals are normally not permitted unless approved by the appropriate Academic Standards committee.

It is the responsibility of the student to notify the Registrar’s Office and the instructor regarding withdrawing from a class, otherwise the student may receive a failing grade. Prior to the end of the withdrawal period instructors may notify the Registrar of student(s) not attending class, and may withdraw them and issue a grade of “W”. If a student has pre-registered for a class and does not attend during the first two weeks (first three days of a three week term), that student may be dropped from the class (unless prior arrangements have been made).

If a student wishes to withdraw from all classes, an exit interview with the Dean of Students is necessary to initiate the formal withdrawal process.

Students who must withdraw for health emergencies or other emergency reasons may be granted an Administrative Withdrawal by the Dean of Students (for undergraduate students) or by the appropriate Dean or Program Director (for Professional students). The Dean/Program Director will consult with the course instructors and may require a statement from a physician or other documentation.

Instructors may withdraw a student from a class for misconduct, or for disruptive or endangering behavior that interferes with the faculty member’s obligation to set and meet academic and behavioral standards in each class. Misconduct or disruption

does not apply to the content of speech or written work protected by freedom of expression or academic freedom. Due process will be followed and students may appeal such decisions to the appropriate committee or administrator.

The Dean of Students, acting on behalf of the University, may withdraw a student from the University if the student has mental or physical health problems that cause the student to engage in or threaten to engage in behavior which (a) poses a danger of causing physical harm to the student or to others or (b) directly and substantially impedes the activities of other members of the campus community. (The procedure to be followed in these withdrawals is printed in its entirety in Pacific Stuff and is in accord with the guidelines of the American Psychiatric Association and Section 504 of The Rehabilitation Act of 1973.) Re-enrollment will be at the discretion of the Dean of Students, in consultation with appropriate health professionals.

## Normal Load, Overloads

To be a full-time student, the student must be registered for at least 12 hours in the semester.

Students may register up to 18 semester hours with no additional tuition charges. A normal load is 14 or 15 hours. Registration for more than 18 hours requires the approval of the advisor and the Dean.

In the Winter III a normal load is one course or three credit hours. Overloads during Winter III are not possible.

## Class Standing:

- **Freshman**/0-29 semester hours completed
- **Sophomore**/30-59 semester hours completed
- **Junior**/60-89 semester hours completed
- **Senior**/90 + semester hours completed

## GRADING POLICIES

Grades are recorded by letter, with the following point values:

A	4.0.....	Excellent
A-	3.7.....	Excellent
B+	3.3.....	Good
B	3.0.....	Good
B-	2.7.....	Good
C+	2.3.....	Satisfactory
C	2.0.....	Satisfactory
C-	1.7.....	Substandard
D+	1.3.....	Substandard
D	1.0.....	Substandard
F	0.....	Failure
P	.....	Pass
H	.....	Pass-A equivalent
HP	.....	Pass-B equivalent
L	.....	Actual grade will be turned in late
N	.....	No Pass
I	0.0.....	Incomplete
IA	4.0.....	Incomplete; contingent grade A
IA-	3.7.....	Incomplete; contingent grade A-
IB+	3.3.....	Incomplete; contingent grade B+
IB	3.0.....	Incomplete; contingent grade B
IB-	2.7.....	Incomplete; contingent grade B-
IC+	2.3.....	Incomplete; contingent grade C+
IC	2.0.....	Incomplete; contingent grade C
IC-	1.7.....	Incomplete; contingent grade C-
ID+	1.3.....	Incomplete; contingent grade D+
ID	1.0.....	Incomplete; contingent grade D
IF	0.0.....	Incomplete; contingent grade F
W	.....	Withdrawal by Student
AW	.....	Administrative Withdrawal
X	.....	Continuing Course (Limited to courses approved by the College. The grade of "X" will revert to a "P," "N," or letter grade when work is completed.)

## Auditing

As an auditor, a student enrolls in, pays for, and attends classes, but does not necessarily complete assignments or take examinations. No credit is received for an audited course. Students must declare the Audit option before the end of the add-drop period. Once you declare the Audit option you may not revert back to the graded option.

## Pass/No Pass Option

Students must declare the Pass/No Pass option before the end of the tenth week of the course, by completing the appropriate form in the Registrar's Office. Once you declare the Pass/No Pass option you may not revert back to the graded option.

In Arts and Sciences, the "P" grade is equivalent to a "C" or above. In Arts and Sciences, students may take one course, in addition to courses requiring P/N grading, each semester on a Pass/No Pass basis; such courses may not be used to fulfill core requirements, science requirements for the B.S. degree, major or minor requirements, or teaching endorsement requirements.

## Incompletes

Instructors may issue a grade of Incomplete only when the major portion of a course has been completed satisfactorily, but health or other emergency reasons prevent the student from finishing all requirements in the course. The instructor and the student should agree upon a timeline for the completion of all work, with the following limitations:

1. Incompletes given for Fall and or Winter III terms must be completed by the following April 15.
2. Incompletes given for Spring semester or Summer session must be completed by the following November 15.

Instructors will issue the grade the student would have earned by not completing the course, preceded by an "I". This grade is determined by including a failing grade for the missing assignment(s) in the calculation of the final grade. If the agreed upon course work is not completed in the period allotted and an extension has not been granted, the grade issued will become permanent. The contingency grade will be used in the computation of the GPA until such time as a new grade is recorded.

## Repeated Courses

If a course taken at Pacific University is repeated at Pacific University, in the College of Arts and Sciences and in Education, only the higher grade is used in computing the grade point average; in all other professional programs BOTH grades are counted in the grade point average.

If a course taken at Pacific is repeated at another institution, the Pacific grade will still be counted in the GPA. No course may be counted more than once towards graduation requirements.

## Grade Change

Once a grade is submitted to the Registrar it shall not be changed except in the case of recording errors. Grade changes must be approved by the appropriate Dean or Program Director.

## Retro-Active Credit

There is a one year time limit for granting retro-active Pacific University institutional credit for which the student did not initially register. This course work must be documented, with the instructor's approval, and completed at Pacific University.

## Grade Reports

Grades will be available to students at the end of each grading period. Grades normally are available at "Boxer online," on Pacific University's website. According to the Student Academic Records Policy, parents of students will be mailed grade reports only if the student has provided the Registrar with a signed release.

## Transcripts

Students may review their academic records online or order a transcript of the Pacific University record in accordance with the Family Rights and Privacy Act guidelines. A signed request for the transcript must be supplied to the Registrar's Office, with a \$3 fee assessed for each official transcript requested. Faxed copies are available for an additional \$3. Unofficial transcripts for presently enrolled students are free, with a limit of two per request, and are to be picked up in person.

Up to one week may be necessary for official transcript requests; two days for unofficial requests. If transcripts must be processed within 24 hours, a "rush" fee of \$15 is charged.

## Dean's List

In order to make the Dean's List in the College of Arts and Sciences, a student must achieve a term GPA of 3.70 with 12 or more graded hours.

## Transfer Credits and GPA

Only grades earned at Pacific are calculated into the Pacific GPA. Courses taken elsewhere, if approved by the Registrar, can be used to meet degree requirements, but the grades in transfer courses are not included in the calculation of the GPA. A grade of below "C-" earned at another institution will not transfer to Pacific University. Transfer courses used to satisfy a major or minor requirement may need department approval.

## SATISFACTORY ACADEMIC PROGRESS

Students will maintain satisfactory academic progress with:

1. a cumulative GPA at Pacific University of at least 2.0.
2. 12 hours of coursework credited toward graduation in the previous semester in which they were enrolled as a full-time student.
3. a GPA of at least 2.0 in the previous semester.

### Warning

Full-time students who do not meet each of these three standards for the first time will be placed on Warning. Students on warning, after meeting with their faculty adviser, may be asked to consult with the Associate Dean, who can help students get the help they need.

The academic progress of students receiving an academic "warning" who have received a "warning" for any previous semester at Pacific University will be reviewed by the Standards and Advising Committee to determine if their status should be changed to "probation" or "suspension".

Students encountering academic problems are reminded that financial aid eligibility also depends on academic achievement. See Financial Aid section in this catalog, and consult the Financial Aid office.

### Suspension and Probation

Students on Warning who fail to meet one or more of the three standards in any subsequent semester may be suspended from the College for one academic year. Students on Warning whose records show significant improvement, or whose circumstances are unusual, may be allowed to continue on academic probation. Decisions on suspension or probation are made by the Standards and Advising Committee of the College of Arts and Sciences.

Students on academic probation are not in good academic standing and are ineligible to participate in University sponsored activities including intercollegiate athletics, forensics, student media and in other activities as the Dean of Arts and Sciences may direct.

### Readmission after Suspension

Suspended students may apply to the Dean's Office to begin the readmission process one year after suspension. Applications will be reviewed by the Standards and Advising Committee. Complete applications for readmission for fall semester must be received no later than August 1st; complete applications for spring semester must be received no later than January 2nd. Completed applications received after those dates will be considered for the following semester.

Within the application for readmission students should present evidence of renewed motivation and commitment to academic success such as successful employment or study at another college during the interim. With such evidence readmission may be granted, unless the Standards and Advising Committee determines that academic success at Pacific is still unlikely.

Students re-admitted after being on suspension will be placed on probation (see above). If a re-admitted student subsequently does not meet the academic standards of Pacific University and becomes eligible for suspension, that student may be dismissed from the University by the Standards and Advising Committee.

## VETERANS' EDUCATIONAL BENEFITS

The Registrar is the certifying official for all Veterans' benefits for students. All eligible students are requested to fill out necessary application and certification documents prior to the start of classes.

## SUMMER SESSIONS

Each summer, Pacific University offers three intensive 4-week terms through the Summer Sessions program. A variety of classes are available which apply to undergraduate degree requirements and graduate teacher education programs. Summer Sessions provide an affordable option for earning additional credits or accelerating degree completion. The Summer Sessions catalog is available in mid-March and may be requested by writing or calling the Registrar's Office.

## OTHER POLICIES & PROCEDURES

### Academic Advising

Students are assigned a faculty advisor by the Dean's Office upon admission to Pacific. Advisors work closely with students to develop a sequence of courses that meets individual needs. Experience shows that successful students are those who have frequent contact with their Faculty Advisors, and students may not register for classes until they have consulted with their advisor.

When students declare a major, during the sophomore year, they should be working with a Faculty Advisor in their major area. Problems with advising should be taken to the Dean's office.

Students who expect to apply to Pacific programs in Teacher Education, Optometry, Physical Therapy, Occupational Therapy, or Professional Psychology must pass specific prerequisite courses: see the relevant sections of this catalog.

Students are urged to seek the help of the Admissions Office which maintains information on prerequisite courses.

### Advanced Placement

Credit toward graduation will be given for a score of 4 or 5 on the advanced placement test in any field. Credit awarded will be four credits in mathematics and the natural sciences and three credits in all other subjects. Actual placement in college courses depends on the student's preparation and is arranged through the relevant department.

### Attendance

Students are responsible for class attendance, participation, and completion of assignments. The University believes that students should attend all classes.

Individual faculty members should notify students in their classes of their attendance policy at the beginning of each semester; students should request a clear statement of policy. The instructor may lower a student's grade or may officially withdraw the student from the course through the tenth week of the semester for poor attendance or participation.

Students are encouraged to inform their instructors of unavoidable absence in advance. Assignment of make-up work is at the discretion of the instructor.

### Independent Study (Learning Contract)

To undertake advanced and independent study in subjects not covered by regular courses, students may arrange independent study with a professor. An independent study form, available at the Registrar's Office, must be submitted to the Dean's office, complete with all approval signatures.

### International Baccalaureate Degree

Pacific University recognizes the International Baccalaureate program as providing college-level work. Six semester credits will be awarded for each higher examination passed with a score of 5 or higher. Course credits will be regarded as transfer credit and will be determined by the Registrar in consultation with the appropriate department chairs. No credit will be awarded for Subsidiary courses. A maximum of 30 credits can be earned.

### Progress Assessments

At the beginning of a student's senior year, or upon student request, the Registrar's Office will prepare an academic evaluation showing progress toward meeting graduation requirements. Students are expected, however, to know what the requirements are.

### ROTC

Students attending Pacific University who are receiving ROTC funding and wish to take ROTC coursework may do so at Portland State University. Pacific will accept up to 14 semester hours of Military science coursework from PSU, excluding MS 111, 112, 113.

Under a cooperative agreement with the University of Portland, Pacific University students may participate in the Air Force Reserve Officer Training Corps (AFROTC) offered on the University of Portland campus. The purpose of the program, which is administered by the Aerospace Studies faculty, is to select and train students to serve as officers in the United States Air Force.

AFROTC is available to men and women with a minimum of 2 years of college remaining. Scholarships are available on a competitive basis for those who qualify. For more information, check out the University of Portland web site or contact the Program Counselor at the University of Portland.

## STUDENTS' RIGHTS UNDER THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student's education records within 45 days of the day Pacific University receives a request for access. Students should submit to the Registrar's Office written requests that identify the record(s) they wish to inspect. The Registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Registrar's Office, the student shall be advised of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student's education records that the student believes are inaccurate. Students may ask Pacific University to amend a record that they believe is inaccurate. They should write the Registrar, clearly identify the part of the record they want changed, and specify why it is inaccurate.

If Pacific University decides not to amend the record as requested by the student, the student shall be notified of the decision and advised as to his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by Pacific University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom Pacific University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Pacific University may disclose education records without consent to officials of another school, upon request, in which a student seeks or intends to enroll.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Pacific University to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

**Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Avenue, SW  
Washington, DC 20202-4605**

## Directory Information

At its discretion Pacific University may provide Directory Information in accordance with the provisions of the Family Education Rights and Privacy Act.

Directory Information is defined as that information which would not generally be considered harmful or an invasion of privacy if disclosed.

Designated Directory Information at Pacific University includes the following: student name, permanent address, local address, temporary address, electronic mail address, telephone number, dates of attendance, degrees and awards received, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, thesis title/topic, photograph, full-time/part-time status, most recent previous school attended, date and place of birth.

Students may withhold Directory Information by notifying the Registrar in writing; please note that such withholding requests are binding for all information to all parties other than for those exceptions allowed under the Act. Students should consider all aspects of a Directory Hold prior to filing such a request. Although the initial request must be filed during the first two weeks of the enrollment period, requests for non-disclosure will be honored by the University for no more than one academic year. Re-authorization to withhold Directory Information must be filed annually in the Registrar's Office within the first two weeks of the fall semester.

## Policy Availability

Pacific University policy explains in detail procedures to be used by the institution for compliance with the provisions of FERPA. Copies of the policy are on the Registrar's Office web site or are available in the Office of the Registrar.

# Academic Conduct Policies

## CODE OF ACADEMIC CONDUCT

Honesty and integrity are expected of all students in class participation, examinations, assignments, patient care and other academic work. Students have the obligation to conduct themselves as mature and responsible participants in this community. Towards this end, the University has established policies, standards and guidelines that collectively define the Student Code of Conduct. The Student Code of Conduct includes all policies, standards and guidelines included in, but not limited to:

- The University Catalog
- The University Handbook
- The student handbook, “Pacific Stuff”
- Professional program policy manuals
- Residence Hall Handbook and Contracts

## Statement of Students’ Rights and Responsibilities

Every student has a right to conditions favorable to learning. Students have the right to pursue an education free from discrimination based on gender, race, ethnicity, religion, marital status, age, sexual orientation or physical handicap. Students at Pacific enjoy the freedoms of speech, expression, and association, the right to privacy, the right to freedom from harassment, the right to due process in judicial matters, and the right to appeal judgments and penalties for alleged misconduct.

Students have the responsibility to conduct themselves, both individually and in groups, in a manner which promotes an atmosphere conducive to teaching, studying and learning. Students are expected to uphold academic and personal integrity, to respect the rights of others, to refrain from disruptive, threatening, intimidating, or harassing

behavior, or behavior which is harmful to themselves, other persons or property. Students have the responsibility to abide by the standards, policies, and regulations of the University.

## Policy of Academic Integrity

Pacific University is an academic community where the pursuit of knowledge, understanding, and skills unites us as its members. This community depends on the integrity of its members to fulfill its mission, and we all have a clear and vested interest in promoting it. Every one of us has reasons to be concerned about academically dishonest practices. Among such reasons are the following:

1. Academic integrity is at the core of our community values.
2. Academic dishonesty can undermine the value of Pacific diplomas by weakening the reputation of Pacific University, associating it in the public mind with institutions whose students have little integrity and a poor work ethic.
3. Academically dishonest practices are corrosive of individual and community integrity.
4. In the long run they harm the perpetrator, who fails to give him/herself the opportunity to develop ideas and skills.
5. They are unfair, because they give the cheater an advantage over other students who are relying on their own work and knowledge.
6. They are unfair because they weaken the link between grades and work, undermining the immediate incentive of students to put in the hard work necessary to develop skills and knowledge.

7. Certain forms of academic dishonesty, because they infringe on copyrights, are illegal.
8. Academic dishonesty is a violation of the Pacific University Code of Academic Conduct and will be punished according to university and college policy.

### Forms of Academic Dishonesty Cheating

Cheating is an attempt to use deception to portray one's knowledge and skills as better than they really are. Behaviors that fall under the label of cheating include, but are not limited to:

1. giving or receiving unauthorized aid in academic work such as the improper use of books, notes, or other students' tests or papers.
2. taking a dishonest competitive advantage, for instance preventing others from obtaining fair and equal access to information resources.
3. using work done for one course in fulfillment of the requirements of another, without the approval of the instructors involved.
4. copying from another student's paper.
5. allowing another student to cheat from your test paper.
6. collaborating on projects or exams that are clearly meant to be individual enterprises.
7. using any unauthorized materials during a test.
8. taking a test for someone else, or allowing someone else to take a test for you.
9. stealing another student's work, including material in a computer file, and submitting it as your own.

### Plagiarism

Plagiarism is the use of someone else's words, ideas, or data as your own without proper documentation or acknowledgment. Quotations must be clearly marked, and sources of information, ideas, or opinions of others must be clearly indicated in all written work. Plagiarism can be unintentional, depending on the nature of the violation; nevertheless, in all cases it is and will be treated as a violation. Behaviors that fall under this category include, but are not limited to:

1. Quoting another person's actual words, complete sentences or paragraphs, or an entire piece of written work without acknowledgment of the source.
2. Using another person's ideas, opinions, or theories, even if they are presented entirely in your own words, without proper acknowledgment of the source from which they were taken.
3. Using facts, statistics, or other material to support an argument without acknowledgment of the source.
4. Copying another student's work.

### Fabrication

Fabrication is the intentional use of invented information, or the use of falsified results or data with the intent to deceive. Behaviors that fall under this category include, but are not limited to:

1. Citation of information not taken from the source that is cited.
2. Listing sources in a bibliography not used in the academic project.
3. Submitting a paper or lab report or any other kind of document based on falsified, invented information, or the deliberate concealment or distortion of the true nature of such data.
4. Forging a signature on a University document.

## Other Forms of Academic Misconduct

These address the intentional violation of University policies, including but not limited to:

1. tampering with grades or helping another to tamper with grades or any other part of a student's academic record.
2. furnishing to a University office or official a document based on information that you know is false or which has been tampered with in an unauthorized fashion.
3. stealing, buying, or otherwise obtaining all or part of an unadministered test. Also the unauthorized (by the instructor) use of a previously administered test.
4. changing a grade in a faculty member's records, on a test, or on other work for which a grade has been given.
5. using electronic information resources in violation of the "Acceptable Use Policy" (which must be signed before joining the University's electronic network).

## Sanctions and Procedures for Handling Cases of Academic Dishonesty

It is Pacific University policy that all acts of academic dishonesty be reported to the Dean or Director of the applicable College or School.

### Sanctions

The range of possible sanctions that may be imposed in instances of academic dishonesty includes, but is not limited to, those listed below; it is general policy that sanctions are imposed that are consistent with the severity of the violation.

1. An "F" for the assignment.
2. An "F" for the course.
3. In case of violations of the "Acceptable Use Policy," sanctions range from being barred from the campus electronic network to suspension from the University.
4. In particularly serious breaches of the academic honesty code, or in repeat offenses, suspension or dismissal from the University may be imposed, as well as other appropriate sanctions.

In all instances, the violation shall be reported to the appropriate Dean or Director. In most first offenses, no permanent record of the violation will be made. Should the student not be involved in any subsequent incidents of academic dishonesty, then the confidential file will be destroyed upon the student's graduation. Only those faculty members directly involved in the incident and those serving on panels that might hear a student's appeal will be notified. Serious or second violations will, however, be noted on the permanent record.

### Procedures

The faculty members will follow these procedures when they believe that an instance of academic dishonesty has occurred.

1. Review the evidence to ensure that there are sufficient grounds to warrant a charge of academic dishonesty. Faculty involved will not consult with colleagues and discuss the details of the incident, but instead consult with the Dean's or Program Directors office to help determine what course of action to pursue.
2. If the faculty member is fairly certain that she or he is dealing with a case of academic dishonesty, the faculty member should meet with the student in question as soon as possible. If the student is unable to explain away the faculty member's suspicions, then the faculty member will collect all available evidence, keeping the originals and submitting photocopies to the Dean or Program Director. Consultation with the program head will occur immediately after having consulted with the student(s) involved. Either the faculty member or the Dean/Program Director will make a photocopy of the work in question available to the accused student(s) on request.
3. When a faculty member believes that a student has violated the academic honesty code during the final examination period and cannot discuss the issue with the student in question (because he/she has left campus for the holiday or summer), the faculty member will assign the student an "L" grade to show that the actual grade will be turned in late.

4. In cases in which the student and the faculty member come to an agreement about the violation and its sanction, the faculty member may assign the grade agreed upon. In any event, the faculty member will submit a timely, brief, written report of the incident to the Dean or Program Director.
5. In cases where mutual agreement between student and faculty member has not been reached, the following procedures shall be followed:
  - a. The faculty member will collect all available evidence and submit photocopies of it (keeping the originals) to the Dean or Director, along with a brief written report of the incident and a recommended sanction.
  - b. The Dean or Director will review the evidence, consult with the student(s), make a determination about whether or not academic dishonesty occurred, and, if so, will impose a sanction commensurate with the nature of the offense.
  - c. The student may appeal the decision of the Dean or Director to the committee designated to receive such appeals for his or her program.

### University Level Appeals

Final appeals for all cases of academic misconduct will be heard by the University Standards and Appeals Board. All requests for appeals of rulings by college or school academic standards committees shall be submitted in writing to the Vice President for Academic Affairs within 10 school days after the ruling is received by the student. Appeals shall be considered by the University Standards and Appeals Board, which is a standing committee of the University.

Appeals must be explicitly justified by at least one of the following reasons:

1. Evidence of error in procedure by a school or college academic standards committee,
2. New evidence sufficient to alter a decision,
3. Evidence that the sanction(s) imposed was not appropriate to the severity of the violation.

Following the receipt of the appeal, the Board shall convene to consider the appeal. On the basis of the available evidence, the Board will deny the appeal, call for a hearing, or when deemed appropriate, return the appeal to the original academic standards committee for reconsideration. Decisions of the University Standards and Appeals Board are final.

The Vice President for Academic Affairs shall appoint alternate members in cases of conflict of interest or if a regular member is unavailable.

### Things Students Can Do to Avoid Charges of Academic Dishonesty

1. Prepare in advance for examinations and assignments; don't let yourself get too far behind in your reading and studying for any of your courses.
2. Prevent other students from copying your exams or assignments. Try to choose a seat during an exam away from other students. Shield your exam. Don't distribute your papers to other students prior to turning them in.
3. Check with your instructor about special requirements that might pertain to that particular course or assignment. If you cannot find a written section in the syllabus or on the actual assignment to answer your questions about what is acceptable, ask the instructor what his/her expectations are.
4. Utilize a recognized handbook on the citation of sources (Many professional organizations have style manuals for this purpose, for example, the APA Style Manual for psychology or the MLA Style Sheet for the humanities). Be sure to ask your professor what an acceptable style guide is for the written work you will be submitting in her/his course.
5. Discourage dishonesty among other students.
6. Refuse to help students who cheat.
7. Protect your rights and those of other honest students by reporting incidents of cheating you have observed to the professor.

# University Services and Resources

## STUDENT LIFE DIVISION

### Dean of Students

The Dean of Students has overall responsibility for many of the services to students at the University such as crisis intervention, disability services, health and wellness, international student services, learning support services, mediation services, multicultural services, new student orientation, parents' programs, residence life, housing, student activities, the University Center, Pacific Outback, Pacific Information Center, the Student Code of Conduct, the judicial process, student government, and the student handbook, "Pacific Stuff". Both undergraduate and professional student governing bodies work closely with the Dean in presenting, discussing and resolving student concerns. The Dean assists individual students and student groups with a wide variety of interests and concerns, and ensures that student opinion is communicated throughout the University. As the Dean for all students at the University, the Dean should be regarded as a resource by both undergraduate and professional program students for questions, problem solving, or simply when it is unclear where to go with a particular issue. The Dean welcomes students' viewpoints on programs, policies and facilities.

### Activities

Pacific University supports numerous student activities including intramural sports, concerts and lectures, an outdoor and off-campus program (Pacific Outback) and a variety of other student groups and clubs. The Milky Way is the center for numerous activities, concerts and movies, and also houses Cosmic Coffee and Pacific Outback. In addition, the University sponsors a variety of student activities

aimed at providing diverse opportunities. These include activities such as a traditional Hawaiian Luau, the McCall Forum, where nationally recognized speakers debate issues of national concern, Founder's Week and Wassail, a traditional holiday celebration.

All students at Pacific University are members of the Associated Students of Pacific University (ASPU). ASPU supports numerous student activities including intramural sports, concerns and lectures, an outdoor and off-campus program, and interest groups such as Politics and Law Forum and Students for Environmental Awareness.

### Student Government

Student Government at Pacific provides ample opportunity for students to develop and exercise leadership, to make decisions, and to create a stimulating campus atmosphere. Undergraduate students are represented by the President and Vice President of the undergraduate student body and by the Pacific Undergraduate Community Council (PUCC). The PUCC, which includes faculty, administrators, and undergraduate students develops, reviews, and recommends policy on matters affecting undergraduate students. Professional students are represented by the Professional Programs Council (PPC) which includes a representative of each of the professional schools.

### Forensics

Students wishing to increase public speaking skills or analytical skills may compete in Forensics (intercollegiate speaking and debating). Students represent Pacific at regional and national Speech and Debate Tournaments throughout the academic year.

Membership on the Forensics Team includes membership in Pi Kappa Delta, a National Honorary Fraternity. In addition to competing, students are expected to

help with the administration of the “Hap” Hingston Invitational High School Speech and Debate Tournament, held in early December.

### Student Media

Student publications and the campus radio station provide valuable opportunities for Pacific students wishing to gain management and production experience in these particular media fields.

- The *Pacific Index*, the campus newspaper, gives students the opportunity to gain valuable writing, editing, advertising, and business experience. The Index is published bi-weekly.
- The *Pacific Review*, a literary magazine, includes poetry, graphics, articles, photography, short stories, and other items contributed by students. It is published twice a year and is sponsored by the English Department.
- *KPUR*, the campus radio station, is broadcast to residence halls and the University Center. Student-managed and operated, *KPUR*, 94.5 FM offers music, news, and special programs – all provided by students.
- *Pacific Productions* provides an opportunity for video production experience through the taping of athletic events, campus activities and independent projects. Productions are broadcast over the community cable TV system.

### Counseling Center

Assistance is available through the Tuality Student Counseling Center for all registered students who pay a health fee as part of their tuition. Services are provided to students experiencing personal problems or academic adjustment difficulties. Common concerns include adjustment to school pressures, homesickness, career anxieties, family issues, and relationships with friends, domestic partners and

classmates. Staffed by a Ph.D. Director, full time Staff Psychologist, a half-time Masters in Social Work, and other trained counselors who provide guidance and support to students, the Counseling Center offers services which are free and confidential.

### Food Service

The campus dining services in the University Center offer a convenient and economical way to meet student’s nutritional needs. ARAMARK, the University’s meal service provider, offers a variety of dining options, such as a salad bar, TacoTime, a grill, a deli bar (The Dive) and a coffee kiosk.

ARAMARK also offers, for the commuter students, faculty/staff and part-time students a Declining Balance program. While cash is the method of choice to pay for meals in the University Center, there is a growing number of students who are choosing a declining balance option. Whether a student lives on or off campus he or she can pay at a discount to have meals or snacks in the commons or the Dive.

### Health Services

Health care is provided through the Tuality Student Health Center. Staffed by two Nurse Practitioners, a Registered Nurse, a Certified Medical Assistant, and Office Administrator, the Student Health Center provides treatment of acute illness/injury and stable chronic illness, family planning services (to partners as well as to students), health education, and referral to physicians. Nurse Practitioners provide general health care including physical exams and prescriptions for medication when appropriate. Appointments are available throughout the week as well as some evenings and weekends. All records in the Student Health Center are confidential.

## Housing and Residence Policies

### Residence Halls

Because learning outside of the classroom is as essential as learning inside the classroom, residential living is an integral part of the total Pacific experience. Residence halls are designed to be living-learning environments where trained residence staff help students make smoother transitions to the next phase of their development. Fostering a climate of friendship and understanding among students with diverse backgrounds is a priority of the residence life program.

The University offers accommodations in four on-campus residence facilities, all of which are smoke-free environments and are supervised by Resident Directors, professional staff members who live in the halls. The three residence halls, Clark, Walter, and McCormick, each have lounges, storage areas, and coin-operated laundry. The halls are divided into smaller living units called "wings". Students in each wing vote on a variety of matters such as how to use activity funds or determining quiet hours. They are also involved in governance and judicial matters. There are also several Theme-Wings, such as the International Wing for students who want an even greater exposure to other cultures or the Environmental/Outdoor Wing for students who wish to actively participate in outdoor activities and/or environmental projects. Trained undergraduate Resident Assistants live in each wing and assist students with the transition with college, with personal and academic concerns, and in mediating and solving residence life problems. Tutors and Wellness Program Coordinators are available in each hall. Students in these halls live in single, double, triple, quad rooms or suites.

The fourth residential area, Vandervelden Court, offers apartment-style living in 37 four-bedroom suites with living and cooking facilities in each unit. The facility is designed primarily for junior and senior undergraduate students and offers more independent living.

### Residence Policies

Because residence hall living is an important factor in the process of social and academic growth, it is necessary for all students to be aware of the policies that apply to living in the halls:

Freshmen and sophomores are required to live and board on campus unless:

1. they have graduated from high school at least two years prior to matriculation;
2. are married/or the parent of a dependent child;
3. are 21 year of age; or
4. live full-time with their parent(s) and/or legal guardians.

*(Note: Criteria #2 requires a residency waiver form on file. These forms are available through the Student Life Office.)*

Housing contracts are binding for a full academic year. Early releases are rare and must be approved by the Residency Options Committee.

Pacific University admits students with the understanding that they will uphold standards of community living. All students are expected to respect the rights and integrity of other members of the community. Conduct that is detrimental to the University community, that violates the Student Code of Conduct, or that transgresses civil law is grounds for disciplinary action. If a student is asked to leave the residence halls for disciplinary reasons, room and board fees will not be refunded.

New students receive housing information over the summer. New students applying for space in Vandervelden Court must submit a non-refundable \$100 housing application fee. Returning students select rooms in the spring of the preceding academic year through a lottery process, and must pay a \$100 lottery entrance fee in order to reserve their room for the following year. Cancellation of a room reservation before June 30 will result in a \$50 refund; cancellation after June 30, will result in forfeiture of the entire \$100.

### Off-Campus Housing

The University owns some off-campus apartment complexes and rental houses that are available to upperclassmen. The Student Life Office does not provide off-campus housing placement but does have a Housing Network web site to assist students looking for housing off-campus and/or roommates. Extensive lists of apartment complexes and links to other housing resources are also present. The site provides individuals with an option to post information to the web if they are looking for housing, seeking a roommate, or have a place to rent. Students who utilize the housing web site frequently find the information very helpful and many have secured housing from this site, so it is recommended that students start their searches here.

The University's housing web site address is [www.pacificu.edu/housing/network](http://www.pacificu.edu/housing/network).

### International Programs

The Office of International Programs serves as a campus liaison for all international students, scholars and staff in matters of immigration and support services. Both the Director and Assistant Director are well versed in F-1, J-1, H-1B regulations and can provide information regarding travel, general maintenance of immigration status, and work authorization both during and after studies in the U.S.

### Learning Support Services for Students with Disabilities

The Learning Support Services for Students with Disabilities Office is designed to arrange for specialized academic support services or modifications to the learning environment for students with disabilities. In general, the University will work with students to provide a variety of services that will accommodate their specific needs. The following services are available: test accommodations; extended test time; distraction free testing; test readers; alternative format; adaptive technology; text on tape; and notetakers. All services can be adapted to accommodate individual needs. The University requires appropriate documentation of a disability in order to better enable students to meet the established academic standards.

It is the responsibility of each student to inform the Director of Learning Support Services of his or her status and particular issues. Students are encouraged to work proactively with the faculty and staff in developing strategies for accommodation.

The University complies with the Americans With Disabilities Act of 1990 (ADA). Questions or complaints about University policy should be directed to the Dean of Students.

### Multi-Cultural Services

The Office of Multicultural Services is designed to assist students in dealing with issues concerning the multiplicity of cultures we have on the Pacific University campus. Spreading cultural awareness and understanding, integrating students from all cultures into the campus community, and celebrating diversity are the main concerns of this office. Students having questions, concerns, or suggestions for topics dealing with multi-cultural issues are encouraged to call or visit the office.

### Pacific Information Center (PIC)

The Pacific Information Center, commonly referred to as the PIC, provides efficient, reliable, accurate and quick service for the Pacific Community. This includes, but is not limited to, the University Switchboard, the Boxer Card (student ID), parking permits, phone cards, guest housing, summer housing, vendors, publications and brochures of University departments and programs, forms, general information, the sale of stamps, Tri-Met tickets and movie tickets, Boxer Briefs and Week At A Glance (WAAG). Computer terminals are provided outside the PIC for students to access the Web and their accounts. The office of the Director of the Pacific Information Center may be found here as well.

## OTHER UNIVERSITY SERVICES

### Alumni Relations

The purpose of the Pacific University Alumni Association, formed in 1892, is to extend and deepen the social and intellectual experience of student's years at Pacific, and to further the welfare of Pacific. All graduates of Pacific University and all former students having completed a year here and who have expressed a desire to retain ties with the University are considered members. The Alumni Relations Office provides services to the alumni of Pacific University including group travel opportunities, alumni gatherings and class reunions, as well as organizing events that bring current students and former students together for seminars, events and cultural and social functions. For more information contact the Alumni Office in Marsh Hall, 503-359-2828.

### Bookstore

The Pacific University Bookstore, located in the University Center and managed by Barnes and Noble College Bookstores, carries all required texts and supplies for course work, including those for professional students. The bookstore stocks both new and used textbooks, and buys back some textbooks at the end of each term. In addition, the bookstore sells some professional program equipment, office supplies, gifts, snacks, emblematic apparel and drug-store items.

### Business Office

The Business Office at Pacific University handles all cashier and accounting operations for the university. This is where students pay their tuition, fees, and any other charges which may be placed on the student account. Information on payment plans and refunds as well as short term and emergency loans can also be acquired at the Business Office. For more information about policies, payment plans, fees and other Business Office matters.

### Campus Public Safety

Campus Public Safety provides assistance and educational information in matters of personal safety, dealing with emergencies, protection of personal property including providing equipment to engrave personal items, and other crime prevention and awareness information. CPS coordinates nightly security checks of housing on and off campus, campus buildings and grounds. CPS is also responsible for parking and traffic control on University-owned property. If a student is concerned about walking to and from buildings on campus, CPS will escort anyone within a six block radius around the university. Students must assume responsibility for their safety by exercising good judgment and personal responsibility and CPS is available to aid in this endeavor. The University is not responsible for the loss of personal property of students, faculty or staff. CPS can be contacted at 503-359-2230 or by e-mail at [cps@pacificu.edu](mailto:cps@pacificu.edu) and is staffed 24 hours a day, seven days a week, 365 days a year.

### Career Development Center

Located in Chapman Hall, the Career Development Center's mission is to help students integrate their classroom education with careful preparation for professional opportunities and graduate programs. Students should take full advantage of the wealth of resources here supporting career exploration, job and internship search, graduate school search, employer research, and related topics.

Many career programs and workshops are offered throughout the year, covering such things as resume writing, graduate school applications, and interview preparation. Larger profile programs include alumni career panels as well as an annual job fair in the spring featuring over 150 employers and a graduate school fair in the fall drawing representatives from over 60 programs across the country. Also figuring prominently among these resources is the Alumni Career Network, a database profiling several hundred Pacific alumni ready and willing to lend career networking assistance to students and graduates of the University.

Through the Career Center's Partnership Program students can embark upon a series of thoughtful work and internship experiences in a wide range of businesses and organizations. Career Center staff and faculty work together to develop these opportunities and shepherd students through this process to complement an outstanding liberal arts education with a thorough grounding in practical, professional preparation. The staff of the Career Development Center take pride in working with students individually to ensure that they receive the very best career support and guidance possible.

### Financial Aid Office

The Financial Aid Office at Pacific is designed to provide financial guidance and information to all students of the University. Information about scholarships, loans, grants, and the Free Application for Federal Student Aid (FAFSA), can be obtained at the Financial Aid Office. For further details, refer to the Financial Aid section of this catalog.

### Humanitarian Center

The Pacific University Humanitarian Center facilitates student access to service-learning opportunities for field placement and courses having a service component. Living groups, campus organizations, and individual students may also find assistance in developing or finding sites for volunteer projects. The Center's database contains more than 200 local organizations that utilize volunteers as well as community outreach programs coordinated through the Humanitarian Center itself.

Most of the Center's service placements are in local social service organizations, peace organizations, governmental agencies and public schools. Among the more popular placements are tutoring and mentoring youth, working with homeless and women's shelters, working with senior citizens, helping environmental agencies, teaching in literacy programs for Hispanic families, and sponsoring a variety of projects on the Navajo Reservation each January.

The purpose of the Humanitarian Center is to help Pacific students make a significant contribution to the community and integrate the learning from that experience in their studies and understanding of civic responsibility. Students who take advantage of a service learning placement also gain unique insight and experience related to careers and valuable life skills.

### Internship Program

Pacific University's Internship Program reinforces the University's commitment to an outstanding education and service to the surrounding communities. Recognizing the value of a healthy marriage between classroom and experiential learning, Pacific aggressively helps students to develop opportunities to apply knowledge and skills gained in the classroom to a professional work situation for a sustained period. Typically, internships are developed in concert by the student, a faculty advisor, a participating organization, and the Career Development Center. Internships are available in a variety of settings – large corporations, non-profit organizations, government agencies, and small businesses – depending on the needs of the student. The Career Center maintains a rich array of opportunities in collaboration with alumni and other professionals in the area, across the country, and around the world.

To be eligible for a for-credit internship, a student must have upper-division standing and normally at least a 2.7 GPA. Internships require careful and early planning with a faculty advisor and must be approved by the student's academic advisor, the department chair, and the Dean of Arts and Sciences. To receive academic credit, the student must first complete a learning contract, obtained in the Registrar's Office. Interns typically keep a daily journal analyzing work experiences and recording personal reflections, write a paper that integrates course material and on-the-job experience, assemble a portfolio of materials developed during the internship, and give a presentation on the internship to the Pacific community upon completion of the experience.

Both part- and full-time internships are available and carry one semester hour of credit for each 40 hours of work up to a maximum of 14 credits in any one semester. A maximum of 17 credits of internship may be counted toward graduation. For further information, students should contact the Career Development Center.

### Library

The Harvey W. Scott Memorial Library offers a welcoming atmosphere and a variety of information and research resources. The Library's collections include books, periodicals, and electronic databases, as well as government documents, videos, DVDs, and sound recordings. Library faculty and staff work regularly with students and faculty to assist them in locating, evaluating and using today's world of information—both traditional and electronic. While the Library strives to build strong, core collections, it also participates in area library consortia to meet the considerable research needs of our students and faculty. Through courier services and interlibrary loans, students and faculty can efficiently tap the research resources of our region and beyond.

### Malheur Field Station

Pacific University participates in Malheur Field Station as part of a consortium of 15 colleges and universities in Oregon, Washington and Idaho.

Malheur Field Station is located in the high desert country, 32 miles south of Burns, Oregon, on the western edge of the Malheur National Wildlife Refuge. An astounding range of wildlife habitats in the region generates more than 840 species of vascular plants, 280 species of birds, and 50 species of mammals. Steens Mountain, a large fault block which rises to 9,700 feet, lies along the southeast boundary of the refuge. Desert landforms, outstanding volcanic features, massive uplifts carved by ancient glaciers, numerous 9,000 to 10,000-year-old archeological sites, cattle baron ranches, pioneer settlements, mines and ghost towns are just a few of the rich discoveries nearby.

The field station has dormitories and trailers, food service, laundry facilities, a store, laboratory and classroom facilities, a small library and a museum.

Courses in such areas as ethnobiology, ecology, natural history, biology, ornithology, geology, art, astronomy and photography are offered during the summer. Pacific students are encouraged to take classes for credit offered by Malheur Field Station. Information about classes and use of the field station is available from Professor William Jordan and from The Director, Malheur Field Station, HC 72, Box 260, Princeton, OR 97721, telephone 541-493-2629, e-mail [mfs@burnsnet.com](mailto:mfs@burnsnet.com). Information can also be obtained by visiting the web site at [www.geol.pdx.edu/MFS](http://www.geol.pdx.edu/MFS).

### Oregon Campus Compact

In 1996, Pacific University joined with five other Oregon colleges and universities to form the Oregon Campus Compact, a division of national Campus Compact: Higher Education in Service to the Nation. This is an organization of college and university presidents committed to helping students develop the values and skills of citizenship through participation in public and community service.

Oregon Campus Compact has as its purpose to increase campus-wide participation in community and public service, and to integrate community service and/or service learning as valued elements of education. It is committed to enhancing a sense of personal and social responsibility, citizenship, and awareness of societal institutions and structures by all members of the academic community while reinvigorating higher education's concern for improving the quality of life in our society. Faculty members, staff, and students may take advantage of ORCC services and resources including: technical assistance for developing service learning courses and programs, mini-grants, a quarterly newsletter, resource library, and workshops on topics of interest in community service learning.

## Oregon Holocaust Resource Center

Established independently in 1984, The Oregon Holocaust Resource Center is a not-for-profit educational organization dedicated to communicating the lessons of the Holocaust to teachers, students and the general community in Oregon and southwest Washington, in fulfillment of the testament left by the victims to the survivors – to remember, to record, to understand, to explain, and to enlighten future generations.

The OHRC maintains curricular materials, the Sylvia Frankel Collection, the Shirley Tanzer Oral History Project, and is a repository for documents, photographs, letters, and other Holocaust artifacts. It also has a Speaker's Bureau that includes Holocaust survivors, liberators, and children of survivors as well as scholars who go out to schools, exhibit sites, and other institutions around the state.

The OHRC organizes a series of annual educational events which include teachers' workshops and seminars, the Sala Kryszek Writing and Art Competition, and the Middle and High School Holocaust Symposium. Center Programs targeted at the general public include lectures by internationally known scholars, film presentations, plays, exhibits, symphony and commemorative events such as Yom Hashoah, Day of Holocaust Remembrance.

Pacific University recognizes and fully supports the importance of the work of the OHRC and, accordingly, the OHRC and Pacific joined in a mutual affiliation in 1994. The OHRC's executive director's office is located in Warner 25 on the main campus. In addition, the OHRC maintains an office in Portland.

## Pacific Athletic Center and Intramurals

The home for athletic activities at Pacific is the newly remodeled and spacious Pacific Athletic Center (PAC). The PAC is available for all student use and houses a gymnasium with three activity areas, a state-of-the-art fitness center, a fieldhouse, three handball-racquetball courts, saunas, dance studio and wrestling room.

Admittance to on-campus Boxer athletic events including basketball, soccer, volleyball and wrestling, are free of charge to all students, spouses and domestic partners, both undergraduate and graduate with a Pacific University Boxer Card. Pacific sports also include baseball, cross country, golf, softball, track and tennis.

Pacific University provides opportunities for participation in the sports of Handball and Men's Volleyball at the club level. The club sports compete against club level programs from other institutions and in some cases, intercollegiate programs. The Handball Club annually sends club players to the Intercollegiate National Tournament.

The Intramural Program provides the campus community with the opportunity to participate in athletic events on a non-varsity level. Organization is provided for same sex and co-ed competition. Sports for the Pacific University student body include, but are not limited to: flag football, three-on-three basketball, volleyball, five-on-five basketball, soccer and softball.

## Pacific University's Museum (Old College Hall)

Old College Hall was built in 1850 and is the oldest permanent structure on the Pacific University campus. It is among the oldest collegiate buildings in the western United States. In 1894 it was moved from its original site where Marsh Hall stands and became Science Hall. Containing laboratories and classrooms for biology and chemistry, for years it was fondly known as the "Chem Shack." Old College Hall was moved in 1963 to its present location.

This compact two-story building with its octagonal belfry or cupola is symbolic of pioneer efforts during territorial days. A significant structure for Oregon and the region, Old College Hall was listed on the National Register of Historic Places in 1974. A few years later, in 1980, a major renovation project was completed. The first floor area contains the Tualatin Academy Room and the Henry Price Memorial Chapel. Both of these spaces are used for special gatherings and events.

As part of Pacific's centennial celebration in 1949, the second floor rooms of Old College Hall were converted into museum galleries. The Pacific University Museum exhibits artifacts relating to the history of the University. Many interesting objects donated by alumni and friends of the University are interpreted here. Personal items from founder Tabitha Brown and President Sidney Harper Marsh are among the collections on exhibit. Treasures from various foreign cultures are also featured in the museum, reflecting Pacific's missionary heritage.

Visits to the Old College Hall Museum may be arranged by appointment through the Office of University Relations at 503-359-2211.

## Registrar

The Registrar's Office at Pacific University strives to provide excellent service to students, faculty and staff through maintenance of academic records and information, and course scheduling. The Registrar's Office is responsible for a number of services including: maintaining student academic records and carrying out course scheduling, enrollment changes

and verification, degree evaluations, and informing students of their rights, responsibilities, and institutional procedures regarding academic regulations and confidentiality of student educational records. The Registrar's Office also provides students with easy access to their educational information, such as course schedules, grades, financial aid awards, billing information and transcripts. More information regarding the Registrar's Office services can be obtained from either staff in the Registrar's Office or from the office's web site at [www.pacificu.edu/registrar/](http://www.pacificu.edu/registrar/)

## Service Center

The Service Center acts as the University's print shop and produces many of Pacific's print materials such as class handouts, department forms, and campus memos. At least two days should be given for small projects for students, which can be completed for a fee.

## Technology Information Center (TIC) (University Information Services)

The Technology Information Center (TIC) is operated by University Information Services (UIS). Resources are available to support the effective use of computing and information technology to meet student academic needs. Some of the services that are managed through UIS include: computer assistance, data processing support, educational technologies, media services, online resources, technology training and 24-hour student access computer labs.

Several computer labs are available at Pacific University offering both PC and Macintosh computers with various academic software packages as well as research and communication tools including e-mail, the World Wide Web, Telnet, FTP, and an international collection of academic reference material. Print resources are also available in a cost-per-copy basis.

The TIC provides answers to student, faculty and staff with technology concerns and questions over the phone, by e-mail and in person.

## Tutoring and Study Skills

All students who want assistance with their course work are encouraged to use the Writing Resource Center, House Tutors, and the Math/Science Center.

The Writing Resource Center, UC 104, provides free consultation service to students who require assistance with writing, English as a second language, World Languages, and with courses in the humanities and social sciences. Trained peer consultants are available on a drop-in system and appointment arranged with individual consultants. The Center is open to all students from 7pm to 10pm from Sunday through Thursday during the school year, with limited hours during Winter Three.

House Tutors also provide tutoring, in the Residence Halls, for a wide range of Arts and Sciences subjects, plus workshops on time management and study skills. Please contact the Writing Resource Center through Pacific University's home page – [www.pacificu.edu](http://www.pacificu.edu).

The Math and Science Center, located in Strain 322, provides free tutorial service to students from 7-10pm every Sunday through Thursday. Qualified tutors are available on a walk-in, first-come, first-served basis.

## University Relations

The University Relations Office, located in Marsh Hall, coordinates fund-raising and alumni activities for Pacific. This office is also responsible for public relations activities, including the dissemination of news and public information. Print communications for external audiences of Pacific University are produced in this office including "Pacific Magazine" (the University alumni magazine), catalogs, brochures, and other publications.

University Relations also keeps local and national media in contact with happenings at Pacific, sends news of Pacific students to hometown media, and operates a Speakers Bureau to facilitate professors speaking for area civic and public school groups. Special events such as the annual Tom McCall Forum political debate, and the Performing Arts Series are also coordinated by University Relations staff.

## Upward Bound

Upward Bound is a Federally-funded college preparatory program that offers educational assistance to high school students. Since 1966, Pacific University's Upward Bound Program – the oldest in Oregon – has helped high school students develop the skills and motivation needed to succeed in college. The project provides academic skills courses; in-school contact; individual tutoring and counseling; college and career planning; cultural and educational activities; help applying to college and for financial aid; a six-week residential summer school; and experience in college classes for seniors.

## Web Based Information

Resources for Professional Students are abundant on the World Wide Web. The Pacific Library through its links with other library systems, can provide navigational tools for students to access information.

**The following sites are recommended as starting points for seeking information:**

Pacific's Home Page  
[www.pacificu.edu](http://www.pacificu.edu)

Pacific's Graduate Studies Page  
[www.pacificu.edu/pphome/index.html](http://www.pacificu.edu/pphome/index.html)

Pacific's Library Page  
[www.pacificu.edu/library/index.html](http://www.pacificu.edu/library/index.html)

Pacific's Student Life Page  
[www.pacificu.edu/studentlife/](http://www.pacificu.edu/studentlife/)

Pacific's Handbooks and Policies  
[www.pacificu.edu/policies](http://www.pacificu.edu/policies)

Please note, web pages are living documents. The addresses shown may change as services to students and others are improved.

# Faculty of Arts & Sciences

**Edmond Alkaslassy (1993)**

Assistant Professor of Biology  
B.S., *University of California at Los Angeles*, 1989  
M.A., *Austin College*, 1992

**Sara Bagley (2000)**

Instructor of Spanish  
B.A., *Pacific University*, 1997  
M.A., *Miami University, Ohio*, 2000

**Jeffrey G. Barlow (1994)**

Professor of History, Matsushita Professor of  
Asian Studies  
B.A., *Southern Illinois University*, 1964  
M.A., *University of Pittsburgh*, 1965  
Ph.D., *University of California, Berkeley*, 1973

**Michelle M. Baron (1999)**

Assistant Professor of Business  
Administration  
B.S., *University of California, Santa Barbara*, 1990  
M.S., *Stanford University*, 1992  
Ph.D., *Stanford University*, 1996

**Vernon L. Bates (1975)**

Professor of Sociology  
B.A., *University of Oregon*, 1969  
M.A., *University of California, Davis*, 1973  
Ph.D., *University of California, Davis*, 1976

**Pauline Beard (1994)**

Associate Professor of English  
B.A., *London University*, 1978  
M.A., *SUNY Binghamton*, 1981  
Ph.D., *SUNY Binghamton*, 1986

**Thomas D. Beck (1991)**

Dean of the College of Arts & Sciences and  
Professor of History  
B.A., *University of California, Berkeley*, 1965  
M.A., *University of California, Berkeley*, 1966  
Ph.D., *University of California, Berkeley*, 1972

**Michael E. Boardman (1995)**

Associate Professor of Mathematics  
B.A., *Western Washington University*, 1985  
M.S., *Western Washington University*, 1987  
Ph.D., *University of Oregon*, 1992

**Mark D. Bodamer (2001)**

Assistant Professor of Psychology  
B.A., *Marquette University*, 1981  
M.S., *Central Washington University*, 1987  
Ph.D., *University of Nevada, Reno*, 1997

**David Boersema (1985)**

Professor of Philosophy, Douglas C. Strain  
Professorship in Natural Philosophy  
B.A., *Hope College*, 1973  
M.A., *Michigan State University*, 1978  
Ph.D., *Michigan State University*, 1985

**Sara Steinert Borella (1993)**

Associate Professor of French  
B.A., *Bates College*, 1988  
Ph.D., *Brandeis University*, 1993

**Juliet Brosing (1987)**

Professor of Physics  
B.S., *Humboldt State University*, 1976  
M.S., *Florida State University*, 1978  
Ph.D., *University of British Columbia*, 1983

**Lorelle Lee Browning (1990)**

Associate Professor of English  
B.A., *University of California, Santa Barbara*, 1972  
M.A., *University of California, Santa Barbara*, 1980  
Ph.D., *University of California, Santa Barbara*, 1986

**Michael Burch-Pesses (1995)**

Associate Professor of Music  
B.S., *University of the State of New York*, 1989  
M.M., *The Catholic University of America*, 1992  
D.M.A., *The Catholic University of America*, 1995

**Alyson L. Burns-Glover (1989)**

Associate Professor of Psychology  
 B.A., California State University, Long Beach, 1983  
 M.A., University of California, Davis, 1985  
 Ph.D., University of California, Davis, 1989

**Susan U. Cabello (1975)**

Professor of Spanish  
 B.A., University of Arizona, 1966  
 M.A., University of Arizona, 1971  
 Ph.D., University of Arizona, 1978

**David Cassidy (1984)**

Associate Professor of Journalism  
 B.S., Arizona State University, 1971  
 M.A., University of Iowa, 1977  
 Ph.D., University of Iowa, 1980

**Patricia B. Cheyne (1994)**

Associate Professor of Art  
 B.F.A., University of Hartford, 1978  
 M.A., Wesleyan University, 1988  
 M.F.A., University of Colorado, 1992

**Nancy K. Christoph (1995)**

Associate Professor of Spanish  
 B.A., Williams College, 1986  
 M.A., University of California, 1990  
 Ph.D., Cornell University, (1995)

**Michael C. Clock (1967)**

Professor of Mathematics  
 B.S., Lewis and Clark College, 1957  
 M.S., Oregon State University, 1961  
 Ed.D., Oklahoma State University, 1967

**Edwin S. Collier (1978)**

Associate Professor of Theatre  
 B.S., Lewis and Clark College, 1964  
 M.S., Portland State University, 1970

**Mingfen Cui (1999)**

Instructor of Chinese  
 B.A., Yantai Teachers' College, 1981  
 M.A., Beijing Normal University, 1982  
 M.A., Zhengzhou University, 1988

**James O. Currie Jr. (1972)**

Distinguished University Professor  
 of Chemistry  
 B.S., Ohio State University, 1965  
 Ph.D., University of Washington, 1970

**David DeMoss (1993)**

Associate Professor of Philosophy  
 B.A., Oklahoma Baptist University, 1981  
 M.A., Baylor University, 1983  
 Ph.D., University of Virginia, 1987

**Andrea Doerfler (1999)**

Instructor of Sociology  
 B.A., Linfield College, 1986  
 M.S., Columbia University, 1988

**Russell A. Dondero (1974)**

Professor of Politics and Government  
 B.A., Whitman College, 1964  
 M.A., University of Minnesota, 1968  
 Ph.D., University of Minnesota, 1973

**Mary H. Fehrs (1979)**

Professor of Physics  
 B.A., Wellesley College, 1966  
 M.A., Boston University, 1968  
 Ph.D., Boston University, 1973

**Lorely French (1986)**

Professor of German  
 B.A., McGill University, 1979  
 M.A., University of California, LA, 1981  
 Ph.D., University of California, LA, 1986

**Naoya Fujita (1994)**

Associate Professor of Japanese  
 B.A., University of Hawaii, Hilo, 1986  
 M.A., Ohio State University, 1988  
 Ph.D., University of Rochester, 1994

**Linda B. Gallahan (1993)**

Associate Professor of Psychology  
 B.S., College of Charleston, 1985  
 M.A., University of Southern California, 1990  
 Ph.D., University of Southern California, 1993

**Bogdana Georgieva (2001)**

Assistant Professor of Mathematics  
 B.S., Lewis and Clark College, 1994  
 M.S., University of Oregon, 1997  
 Ph.D., Oregon State University, 2001

**Michael Geraci (1999)**

Assistant Professor of Media Arts  
 B.A., Pacific University, 1991

**W. Thomas Griffith (1967)**

Distinguished University Professor of Physics  
 B.A., Johns Hopkins University, 1962  
 M.S., University of New Mexico, 1964  
 Ph.D., University of New Mexico, 1967

**Christine Guenther (1998)**

Assistant Professor of Mathematical Sciences  
 B.A., Stanford University, 1989  
 M.S., University of Washington, 1993  
 Ph.D., University of Oregon, 1998

**Deke T. Gundersen (2000)**

Assistant Professor of Environmental Science  
B.S., Indiana University Southeast, 1987  
M.S., University of Louisville, 1990  
Ph.D., Oregon State University, 1995

**Jamie R. Haag (2000)**

Assistant Professor of Economics  
B.A., University of Washington, 1991  
M.A., University of Oregon, 1996  
Ph.D., University of Oregon, 1996

**Stephen Hall (2000)**

Assistant Professor of Physics  
B.S., Worcester Polytechnic Institute, 1988  
Sc., M., Brown University, 1991  
Ph.D., Brown University, 1995

**George A. Harshbarger (1993)**

Associate Professor of Music  
B.A., California State University, 1967  
M.A., San Francisco State University, 1973  
D.M.A., University of Washington, 1985

**Shawn Henry (1998)**

Associate Professor of Exercise Science  
B.S.Ed., Montana State University, 1988  
M.S., University of Montana, 1991  
Ph.D., University of Oregon, 1995

**Johanna Hibbard (2000)**

Assistant Professor of Media Arts  
B.A., University of Oregon, 1992  
M.A., New School for Social Research, 1995  
M.A., University of Iowa, 1998  
M.F.A., University of Iowa, 2000

**Michelle Hribar (1999)**

Assistant Professor of Mathematical Science  
B.A., Albion College, 1991  
M.S., Northwestern University, 1994  
Ph.D., Northwestern University, 1997

**Kazuko Ikeda (1983)**

Associate Professor of Japanese  
B.A., Portland State University, 1981  
M.A., Portland State University, 1985  
Ph.D., University of Oregon, 1992

**Richard I. Jobs (2001)**

Assistant Professor of History  
B.A., Murray State University, 1991  
M.A., Murray State University, 1994  
Ph.D., Rutgers University, 2001

**Kevin E. Johnson (1994)**

Associate Professor of Chemistry  
B.A., Stanford University, 1983  
M.S., University of Washington, 1987  
Ph.D., University of Washington, 1991

**Melissa Jones (1997)**

Assistant Professor of Media Arts,  
Head Softball Coach  
B.A., St. Louis University, 1984  
M.A., Southern Illinois University, 1991

**William T. Jordan (1976)**

Professor of Chemistry  
B.A., Portland State University, 1964  
M.A., Portland State University, 1968  
Ph.D., University of Pittsburgh, 1972

**Chris Lane (1999)**

Assistant Professor of Mathematics  
B.A., University of Oregon, 1991  
M.S., University of Oregon, 1993

**Lawrence M. Lipin (1992)**

Associate Professor of History  
A.B., University of California, Davis, 1978  
M.A., University of California, LA, 1981  
Ph.D., University of California, LA, 1989

**Pamela T. Lopez (1993)**

Associate Professor of Biology, Thomas J. and  
Joyce Holce, Professorship in Science  
B.S., Columbus College, 1980  
Ph.D., University of California, LA, 1990

**Cheleen Mahar (1994)**

Professor of Anthropology  
B.A., University of Northern Colorado, 1967  
M.A., University of Illinois, 1972  
Ph.D., Massey University, 1986

**Marc Marengo (1988)**

Associate Professor of Philosophy and Religion  
B.S., California State University, Chico, 1975  
M.Div., Yale University, 1982  
D. Phil., University of Oxford, 1992

**Jere M. Marrs (2000)**

Visiting Professor of Chemistry  
B.S., University of Kentucky, 1963  
Ph.D., Florida State University, 1971

**Marlene Martinez (1999)**

Assistant Professor of Biology  
B.S., University of California, Davis, 1990  
Ph.D., University of California, Berkeley, 1998

**Samuel Mathies (1998)**

Assistant Professor of Media Arts and  
Director of Forensics  
B.S., University of Wisconsin, 1986  
M.A., California State University, Northridge, 1990

**Vijay Mohan (2001)**

Assistant Professor of Economics

B.A., Sri Ram College, 1993

M.A., Delhi University, 1996

Ph.D., Iowa State University, 2001

**N. Charles O'Connor (1985)**

Professor of Business Administration

B.S., University of Northern Colorado, 1972

M.A., University of Iowa, 1976

**Terry Fischer O'Day (1998)**

Assistant Professor of Art

B.F.A., University of Illinois, 1982

M.F.A., Arizona State University, 1985

**Jodi Paar (2000)**

Assistant Professor of Chemistry

B.A., University of Nebraska, 1990

M.Ed., Northern Arizona University, 1993

M.S., Cornell University, 1998

Ph.D., Cornell University, 2000

**Darlene Pagán (2001)**

Assistant Professor of English

B.A., Aurora University, 1992

M.A., Illinois State University, 1994

Ph.D., University of Texas, Dallas, 2000

**Sarah R. Phillips (1995)**

Associate Professor of Sociology, Director of Honors

B.A., Whitman College, 1986

Ph.D., University of Minnesota, 1993

**Kathlene Postma (2000)**

Assistant Professor of English

B.A., Northern Michigan University, 1986

M.A., Northern Michigan University, 1988

Ph.D., University of Wisconsin, Milwaukee, 1993

**Martha Rampton (1994)**

Associate Professor of History

B.A., University of Utah, 1979

M.A., University of Utah, 1988

Ph.D., University of Virginia, 1988

**Elena Rodríguez (2000)**

Instructor of Spanish

B.A., Universidad Autónoma de Barcelona, 1996

B.A., Universidad Autónoma de Barcelona, 1999

**Victor M. Rodríguez (1996)**

Associate Professor of Spanish

B.A., Universidad de Puerto Rico, 1982

M.A., Brown University, 1987

Ph.D., Brown University, 1993

**Philip J. Ruder (1994)**

Associate Professor of Economics

B.A., Dartmouth College, 1983

M.S., University of Wisconsin, Madison, 1991

Ph.D., University of Wisconsin, Madison, 1994

**Douglas J. Ryan (1983)**

Professor of Computer Science

B.A., University of Northern Colorado, 1980

M.S., Colorado State University, 1983

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J.D., Hastings College of Law, 1996

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B.A., University of Texas, Austin, 1969

M.A., University of Washington, 1981

Ph.D., Stanford University, 1994

**Jan Shield (1971)**

Professor of Art

B.A., Whitworth College, 1967

M.F.A., University of Oregon, 1969

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Professor of Music, James DePreist Professorship in Music

B.M., Peabody Conservatory of Music, 1962

M.M., Peabody Conservatory of Music, 1968

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A.B., Harvard College, 1962

M.A., Yale University, 1963

Ph.D., Yale University, 1968

**Steve R. Smith (1999)**

Instructor of English, Coordinator of First-Year Seminar, Director of the Resource Center

B.A., University of Utah, 1978

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B.A., Trinity College, 1973

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B.A., University of Notre Dame, 1967

M.A., Michigan State University, 1971

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Professor of Sociology

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M.S., University of Oregon, 1972

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B.A., University of Rochester, 1974

Ph.D., Cornell University, 1979

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Ph.D., University of Oregon, 1991

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B.A., University of Canterbury, 1975

M.A., University of Canterbury, 1976

M.A., Stanford University, 1977

Ph.D., Stanford University, 1982

# Faculty Emeriti

## **Amy Beaupre**

Professor of Music

*B.M., Pacific University, 1933*

## **Ramendra K. Bhattacharyya**

Associate Professor of Mathematics

*B.S., Calcutta University, 1951*

*M.S., Calcutta University, 1953*

*Ph.D., Stanford University, 1964*

## **Edward J. Buecher**

Professor of Biology

*B.A., St. Anselm's College, 1960*

*M.A., Indiana University, 1962*

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## **Jane B. Carmichael**

Associate Professor of Optometry

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Professor of Biology

*B.S., Portland State University, 1963*

*M.S., Oregon State University, 1968*

*Ph.D., Oregon State University, 1973*

## **Florence S. Chino**

Associate Professor of Music

*B.M., MacPhail College of Music, 1942*

*B.S., Bemidji State College, 1945*

*M.M., Eastman School of Music,*

*University of Rochester, 1948*

## **Margaret Y. Chou**

Associate Professor of Mathematics

*B.A., National Taiwan University, 1961*

*B.A., University of Oregon, 1966*

*M.A., University of Montana, 1968*

*M.B.A., Portland State University, 1983*

## **Robert A. Davies**

Professor of English

*A.B., University of Massachusetts, 1952*

*M.A., University of Michigan, 1953*

## **Jane L. Ellis-Horner**

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*M.A.T., Lewis and Clark College, 1965*

## **George G. Evans**

Distinguished University Professor of English

*B.A., Beloit College, 1956*

*M.A., Northwestern University, 1957*

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## **Grazio Falzon**

Professor of Romance Languages

*B.A., Malta University, 1959*

*Licent., Malta University, 1959*

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## **Joseph K. Frazier**

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*B.M., VanderCook School of Music, 1938*

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*D.M.E., Indiana University, 1972*

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Professor of Optometry

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## **Leigh Hunt Jr.**

Professor of Political Science

*B.A., Yale College, 1947*

*M.A., University of Minnesota, 1949*

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## **Marshall M. Lee**

Professor of History

*B.S., Whitman College, 1967*

*M.A., Claremont Graduate School, 1969*

*Ph.D., University of Wisconsin, Madison, 1974*

**Leonard Levine**

Distinguished University Professor  
of Physiology and Pharmacology  
B.S., Rutgers University, 1950  
Ph.D., Columbia University, 1959

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Professor of Optometry  
B.S., Columbia University, 1953  
M.S., Columbia University, 1954  
O.D., Massachusettes College of Optometry, 1964

**James V. Miller**

President Emeritus  
B.A., Indiana Central College, 1942  
M.Div., United Seminary, 1946  
Ph.D., Boston University, 1955  
LL.D., Otterbein College, 1972  
LL.D., Indian Central College, 1979

**Gary V. Mueller**

Professor of Art  
B.S., University of Oregon, 1957  
M.S., University of Oregon, 1962  
M.F.A., Cranbrook Academy of Art, 1971

**John L. Neff**

Professor of Dance  
Indiana University, 1947  
Edna McRae School of Dance, 1951  
Gertrude Shurr-May O'Donnell School of  
Modern Dance, 1955  
School of American Ballet, 1955

**William E. Preston**

Clinical Professor of Optometry  
B.S., Pacific University, 1952  
O.D., Pacific University, 1958

**W. Steve Prince**

Professor of English  
B.A., University of California, Santa Barbara, 1950  
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**A. Richard Reinke**

Associate Dean of Academic Programs,  
Associate Professor of Optometry  
B.S., Pacific University, 1951  
O.D., Pacific University, 1952

**Niles Roth**

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B.S., University of California, 1955  
M.Opt., University of California, 1956  
Ph.D., University of California, 1961

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Professor of Speech and Communications  
B.A., Pacific University, 1943  
M.A., Pacific University, 1954  
Ph.D., University of Oregon, 1959

**Donald O. Schuman**

Professor of Optometry  
O.D., Illinois College of Optometry, 1948

**Richard D. Septon**

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B.A., Concordia College, 1956  
O.D., Pacific University, 1960  
M.S., Indiana University, 1968

**Miles M. Shishido**

Distinguished University Professor of Religion  
and Philosophy  
A.B., University of Hawaii, 1947  
D.B., Federated Theological Faculty, 1948  
A.M., University of Chicago, 1963  
Ph.D., University of Chicago, 1967

**H. Joe Story**

Distinguished University Professor of Economics  
B.A., University of California, Santa Barbara, 1959  
M.A., San Francisco State College, 1968  
Ph.D., University of Oregon, 1975

**Truman Teeter**

Professor of Chemistry  
B.S., Oregon State University, 1942  
M.S., University of Oregon, 1949  
Ph.D., University of Oregon, 1954

**Don C. West**

Professor of Optometry  
O.D., Southern College of Optometry, 1949  
B.S., Pacific University, 1961

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Alumni Relations.....	503-359-2828	Physical Therapy, School of.....	503-359-2846
Business Office .....	503-359-2231	Physician Assistant Studies, School of.....	503-359-2898
Career Development Center ...	503-359-2877	President's Office .....	503-359-2214
Catalogs.....	503-359-2218	Professional Psychology, School of.....	503-359-2240
Events and Conferences.....	503-359-2223	Public Affairs/Events .....	503-359-2211
Dean of the College of Arts and Sciences .....	503-359-2201	Registration .....	503-359-2793
Education, School of.....	503-359-2205	Student Services/ Residential Programs .....	503-359-3157
or Eugene Campus .....	541-485-6812	Study Abroad .....	503-359-2725
Financial Aid and Scholarships.....	503-359-2222	Transcripts/Records.....	503-359-2793
Information Services .....	503-359-2944	Tuition/Fees/ Payment of Bills .....	503-359-2128 or 2231
International Programs.....	503-359-2725	University Relations.....	503-359-2211
Library.....	503-359-2204		
Occupational Therapy, School of.....	503-359-2203		

# Academic Calendar 2001-2002

## 2001 FALL SEMESTER

### August

- August 20 - 21** Faculty Conference
- August 21** International Student Orientation
- August 22** Residence Halls Open for Freshmen, 7a.m.
- August 22** New Student Orientation Begins
- August 25** Residence Halls Open for Returning Students, 10 a.m.
- August 26** Food Service for Residence Hall Students Opens for Dinner
- August 27** Classes Begin
- August 30** Last Day for New Student Registration

### September

- September 3** Labor Day  
No Classes
- September 10** Last Day to Add Courses
- September 10** Last Day to Drop Courses With No Record

### October

- October 5** No classes for College of Arts and Science
- October 29 thru  
Nov 19** Advising for Winter III and Spring Semester

### November

- November 5** Last Day to Withdraw from Courses
- November 21** Food Service Closes after Lunch
- November 21** Begin Thanksgiving Holiday, Noon
- November 22, 23** Thanksgiving
- November 25** Food Service Opens for Dinner

### December

- December 4** Last Day of Classes
- December 5** Reading Day
- December  
6, 7, 10, 11, 12** Final Examinations
- December 12** Residence Halls Close, 9 p.m.  
  
Food Service Closes after Dinner

## 2001 WINTER III

## January

- January 2** Residence Halls Open for Returning Students, noon  
Food Service Opens for Dinner
- January 3** Winter III Term Classes Begin
- January 7** Last Day to Add Courses
- January 7** Last Day to Drop Courses With No Record
- January 16** Last Day to Withdraw from Courses
- January 23** Reading Day
- January 24** Winter III Final Exams
- January 25** Residence Halls Open for Returning Students, Noon
- January 31** Fall Graduation Date

## 2002 SPRING SEMESTER

- January 25** International Student Orientation
- January 28** New Student Orientation
- January 29** Spring Classes Begin

## February

- February 1** Last Day for New Student Registration
- February 11** Last Day to Add Courses
- February 11** Last Day to Drop Courses With No Record

## March

- March 22** Food Service Closes after Dinner
- March 25 thru 29** Spring Break
- March 31** Food Service Opens for Dinner

## April

- April 1 thru 22** Advising for Fall Semester
- April 8** Last Day to Withdraw from Courses
- April 17** Senior Projects Day (no Arts and Science classes)

## May

- May 7** Last Day of Classes
- May 8** Reading Day
- May 9, 10, 13, 14, 15** Final Examinations
- May 15** Residence Halls Close for Students Not in Commencement, 9 p.m.
- May 15** Food Service Closes for Residence Hall Students after Dinner
- May 18** Commencement
- May 19** Residence Halls Close for Students in Commencement, Noon

## 2002 SUMMER TERM

- May 27** Classes begin for Term I  
Classes conclude on the date printed in the class schedule

## June

- June 24** Classes begin for Term II  
Classes conclude on the date printed in the class schedule
- July 22** Classes begin for Term III  
Classes conclude on the date printed in the class schedule





**KEY**

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