Academic Divisions of the University

College of the Pacific (Arts & Sciences)
Conservatory of Music
Eberhardt School of Business
Gladys L. Benerd School of Education
School of Engineering and Computer Science
School of International Studies
The Thomas J. Long School of Pharmacy and Health Sciences
Graduate School
Arthur A. Dugoni School of Dentistry
McGeorge School of Law
Center for Professional and Continuing Education
The goals of graduate education at Pacific are threefold: to excite and discipline the intellectual curiosity of its students; to record the products of scholarship through publication; to advance knowledge in the fields of the School’s focus.

Members of the Graduate faculty are proud to be a part of a community of teacher-scholars who provide a superior, personalized educational experience. Pacific’s tradition is to mentor students to become exemplary citizens, leaders, professionals, teachers and researchers.
Accreditation
The University of the Pacific is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC), located at 985 Atlantic Ave., Suite 100, Alameda, CA 94501; 510-748-9001.

Financial Liability
The University is not responsible for additional expenses incurred by a student if the student must discontinue academic progress and wait for the next time a course is offered.

Handicapped Student Enabling Services
An enabling service is administered through the Office of Student Life. Handicapped applicants for admission, or handicapped students, are encouraged to discuss their needs for accommodation in order to make it possible for them to participate in programs offered by the University. The University has housing for handicapped persons, and will arrange for reasonable modification of facilities, programs or scheduling which will facilitate a handicapped student’s participation in academic and social programs. Other forms of assistance will also be provided, including referrals to local agencies that serve the handicapped. An enabling handbook for students is available upon request from the Office of Student Life, and a special kit will be prepared for any handicapped student desiring it.

Statement of Non-discrimination
The University does not discriminate on the basis of race, gender, sexual orientation, national origin, ancestry, color, religion, religious creed, age, marital status, cancer-related or genetic-related medical conditions, disability, citizenship status, military service status, and any other status protected by law. In accordance with the above University policy and in compliance with all applicable laws, all educational services will be provided and all employment decisions (including recruitment, training, compensation, benefits, employee relations, promotions, terminations) will be made without regard to the individual’s status protected by law. To the extent provided by law, the University will reasonably accommodate qualified individuals with disabilities which meet the legal standards for documentation, whenever the individual is otherwise qualified to safely perform all essential functions of the position.

This notice is given pursuant to the requirements of Title IX of the Educational Amendments of 1972, Title VII of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973 and amendments and other laws, orders and regulations governing discrimination. The University of the Pacific has designated the Director of Human Resources to coordinate the University’s efforts to comply with laws, orders and regulations governing discrimination. Any person having a complaint should contact in writing: The Director of Human Resources, University of the Pacific, 3601 Pacific Avenue, Stockton, CA 95211.

Because the catalog is compiled well in advance of the academic year it covers, changes in programs, policies, and the academic calendar may well occur.

All catalog information is subject to change without notice or obligation.
University of the Pacific was established by pioneer Methodist ministers in 1851 as the first chartered institution of higher learning in California. Since its founding, Pacific has earned widespread recognition for its student-centered approach to education, its many firsts and innovations, and the accomplishments of more than 55,000 living alumni.

As an innovator and leader in higher education, Pacific provided the West Coast with its first medical school in 1858 (it later became part of Stanford and today is California Pacific Medical Center), its first coeducational campus in 1871, its first conservatory of music in 1878 and the nation’s first “cluster colleges” in the 1960s. Pacific was also the nation’s first to offer an undergraduate teacher corps program, the first to send an entire class to an overseas campus and the first to establish a Spanish-speaking inter-American college. By moving from San Jose to Stockton in 1924, Pacific became the first four-year private university in the Central Valley. Shortly after occupying the new campus, Pacific established one of California’s earliest schools of education. It was renamed the Gladys L. Benner School of Education in 1992 in honor of the alumna’s endowed gift.

The University experienced its greatest growth and an expansion into graduate professional education under the administration of Dr. Robert Burns (1947-1971). In 1955 the School of Pharmacy was opened (now the Thomas J. Long School of Pharmacy and Health Sciences) in honor of the benefactor and Regent who, with his brother Joseph Long, founded Longs Drugstores) and in 1956 the graduate school. The School of Engineering (now the School of Engineering and Computer Science) was established in 1957 and five years later the College of Physicians and Surgeons, a school of dentistry founded in San Francisco in 1896, merged with the University and became the San Francisco campus. In 2004 the dental school was renamed the Arthur A. Dugoni School of Dentistry to honor the extraordinary leadership of its Dean from 1978 to 2005, based on a $50 million gift from alumni and friends.

A new concept in higher education in the United States found expression in the establishment of cluster colleges in the 1960s that adapted the Oxford and Cambridge model to an American setting. The colleges integrated faculty and students into living and learning communities. The first, Raymond College, was established in 1962. A second followed in 1963 with the opening of Elbert Cowell College, the first bilingual, bicultural college in the country. A third, Callison College, was established in 1967 and focused on non-western studies with a year of study in an Asian culture. The cluster colleges ended in 1982. However, their emphasis on a global education continued in a new School of International Studies, the first university-based undergraduate school of international studies in California. The learning community concept of the cluster colleges was strengthened in College of the Pacific, the liberal arts core of the University, recognized for preparing responsible citizen leaders who will contribute in lasting ways in their careers and communities.

Continuing expansion of graduate professional education, McGeorge College of Law, an independent law school founded in Sacramento in 1924, merged with the University in 1966. In the fall of 1977, the department of business administration in College of the Pacific was reorganized as the School of Business and Public Administration. In 1995 it was renamed the Eberhardt School of Business in honor of the Eberhardt family’s endowed gifts. In 1985 programs designed specifically for adult “re-entry” students were reorganized and revitalized through University College, with further reforms and expansion a decade later into the Center for Professional and Continuing Education.

Beginning in 1995, under the leadership of the University’s 23rd President, Donald V. DeRosa, a new era of expansion and innovation began. That year, Pacific offered the first four-year guarantee whereby students were assured completion of the bachelor of arts degree in four years. Accelerated programs were initiated by President DeRosa to enable students to complete undergraduate studies in combination with professional degrees in pharmacy, law, dentistry and business in one to three fewer years.

In 1999 alumni Dave (’42) and Iola (’45) Brubeck announced that their papers, recordings and memorabilia, a treasure of historic American music and memorabilia, would be deposited at Pacific for study and research. In response to this gift and in honor of a legend in jazz and American music, President DeRosa announced formation of The Brubeck Institute for the study, promotion and performance of American music.

Over the last decade, Pacific has completed or begun work on more than $200,000,000 in new and renovated facilities, including two residence halls, an Art and Geosciences Center, a biological laboratories building, a health science learning center and clinics, a baseball field, an expanded fitness center, a new Humanities building, and an addition and renovation of the library on the Stockton campus. A new University Center and Biological Sciences Center opened, and construction began on a new gymnasium, engineering and technology center in fall 2008.

Pacific’s progress and leadership in higher education have earned national recognition. The University has been consistently ranked in the top 50 “best values” among doctoral level universities by U.S. News and World Report, and is included in many top ten or top five lists for attention to students, financial aid, career placement and student counseling. A Phi Beta Kappa chapter, installed in 2007, is evidence of national recognition of the quality of Pacific’s academic programs. The Stockton campus was ranked as the sixth most beautiful campus in the nation.

In May 2007, President DeRosa announced a $100,000,000 estate gift from former and current Regents of the University, Robert and Jeannette Powell. This transformative gift will primarily be used for scholarships and campus beautification. At the time of the announcement, only 20 other universities world-wide had received a gift of that size.

Pacific Rising, 2008-2015, the University’s strategic plan, was adopted by the Board of Regents in April 2007. It presents the core values, aspirations, commitments and strategies for Pacific to become the West’s most distinctive, student-centered, national university. The six commitments are:

- innovation and creativity across the University.
- distinctive programs recognized for their quality, uncommonness, and sustainability.
- collaborative, multidisciplinary programs that integrate liberal arts and professional education.
- preparing the whole student, especially for responsible professional and civic leadership in a global context.
- strategically expanding and improving partnerships among its alumni and in local, regional, national, and global communities.
- resource growth and management to support ongoing improvements in the quality of education and service.

The complete plan can be viewed at www.pacific.edu/ipc.

In April 2008, President DeRosa announced plans to retire on June 30, 2009. In February 2009, Pamela A. Eibeck was selected to become the 24th President of University of the Pacific, its sixth President since the University’s move to Stockton in 1924.
Unique and Distinctive Programs

A division of the University of the Pacific offering graduate programs emphasizing distinctive forms of creative scholarship, while training students in the principles and methods of research and developing their professional competence.

The goal of graduate education at the University is threefold: to excite and discipline the intellectual capacities of its students, to record and publish the products of intellectual inquiry, and to advance knowledge. To achieve this goal, the Graduate School encourages faculty to work closely with advanced students to create an environment congenial to advanced academic and professional study and to further scholarship and research.

Available through the School of Dentistry is a graduate program in orthodontics leading to a certificate and the Master of Science in Dentistry; a graduate program in oral and maxillofacial surgery leading to a certificate; an International Dental Studies program, and through McGeorge School of Law a Juris Doctor degree in a full-time or part-time program, and Master of Laws (L.L.M. and J.S.D.) degrees in Government and Public Policy, Transnational Business Practice, Advocacy Practice and Teaching and International Water Resources.

Students interested in these programs should apply directly to the appropriate school. The distinctiveness of graduate studies lies in our academic programs, which emphasize various forms of creative scholarship, training of students in the principles and methods of research and developing professional competence, by limiting the number of students enrolled in order to allow them to work more directly with faculty members. Many degree programs are small, and in place of seminar experience students work relatively independently under close supervision of the faculty.

Degrees

Biological Sciences (MS)

Business Administration (MBA, MBA/JD, MBA/PharmD)

Communication (MA)

Education (MA, MEd EdS, EdD, PhD)

Engineering and Computer Science (MSES)

Intercultural Relations (MA)

Music Education (MM)

Music Therapy (MA)

Pharmaceutical and Chemical Sciences (MS, PhD)

Physical Therapy (DPT)

Psychology (MA)

Speech-Language Pathology (MS)

Sport Sciences (MA)

Degree programs leading to the PhD are offered in a newly redesigned interdisciplinary program with faculty from physiology-pharmacology, chemistry, pharmaceutics, clinical pharmacy and chemistry.

Degree programs leading to the EdD are offered in the following areas: educational administration and curriculum and instruction.

A degree program leading to the EdS and a PhD is offered in Educational/School Psychology.
**Credential Programs**

The graduate program in education prepares candidates for credentials for public schools. Preparation programs exist in the following areas: classroom teaching, pupil personnel services, school psychologist, administrative services and two specialist programs (Special Education and Bilingual/Cross-cultural Education [Spanish-English]).

**Pharmaceutical & Chemical Sciences**

Interdisciplinary programs in the Thomas J. Long School of Pharmacy and Health Sciences and the College of the Pacific involve physical-chemical mechanisms of drug absorption and bioavailability, molecular mechanisms of drug action, chemical definition of auto-recognition sites, tumor biology and clinical studies in acute and long-term care facilities. Therefore, its programs emphasize a multi-disciplinary perspective and skills for solving basic problems in individual and community health.

Students in the Pharmaceutical and Chemical Sciences Program may pursue studies in the areas of bioanalytical and physical chemistry, chemical synthesis and drug discovery/design, drug targeting and delivery, molecular/cellular pharmacology and toxicology, and clinical pharmacy and transitional studies. In addition to Master of Science and Doctor of Philosophy degree programs, combined Pharm.D./MS, PharmD/PhD, and PharmD/MBA programs are available.

**Biological Sciences**

Graduate students in Biological Sciences carry out research in areas ranging from field studies in plant and animal systematics and ecology to laboratory studies on bacterial antibodies and cellular morphogenesis, for example. They learn a variety of techniques such as slab gel electrophoresis, electron microscopy and computerized data reduction. The MS Program in Biological Sciences enables students to work closely with faculty members in research and in teaching. Graduate study in molecular and cellular biology, physiology, microbiology, ecology, paleontology and plant and animal systematics provides a good background for advanced study at the PhD level, for entry into professional school (dentistry, pharmacy, medicine), education, or industry. Some biology graduate students also participate in research at the Thomas J. Long School of Pharmacy and Health Sciences.

**Education**

The Gladys L. Benerd School of Education prepares thoughtful, reflective, caring, and collaborative professionals for service to diverse populations. The School of Education directs its efforts toward researching the present and future needs of schools and the community, fostering intellectual and ethical growth, and developing compassion and collegiality through personalized learning experiences. Undergraduate, graduate, and professional preparation programs are developed in accordance with state and national accreditation standards and guidelines to ensure that students who complete these programs will represent the best professional practice in their positions of future leadership in schools and the community.

The Gladys L. Benerd School of Education offers master’s, educational specialist, and/or doctoral degree programs, including relevant state credentials in teaching, curriculum and instruction, school psychology, educational psychology, and educational administration. The School also has numerous units that publish research and provide opportunities for the practical application of theory and pedagogical procedure. These practica and intern sites are available in close proximity to the University.

Graduate assistantships are available, as well as research assistantships, for full-time doctoral students to participate in the scholarly activities carried on in the units of the Benerd School of Education. Some full- and part-time scholarship assistance is available for students who wish to study at the master’s level.

**Communication**

Students in communication may pursue degrees in a number of areas including communication education, political communication and media and public relations. Special or topical areas of worthy interest also may be proposed as well as interdisciplinary programs in conjunction with other departments. Programs may include field studies, internships and other learning experiences as appropriate and approved by the department.

**Business**

The focus of the Eberhardt MBA is to allow students to work with professionals throughout their studies. Through internships, consulting projects and career management seminars, students research and solve actual business problems in the workplace they are likely to encounter in their careers.

The Pacific MBA is designed for recent college graduates, those working individuals with limited managerial experience or business professionals seeking to change careers. The design of the Pacific MBA provides significant opportunities to gain experience through internships and experiential course work in a variety of settings. For the more experienced working professional, it provides a broadening of functional knowledge into all areas of management, and the development of skills necessary for senior management and executive positions.

The Eberhardt School of Business MBA Program has a curriculum that includes leadership, innovation, communications and teamwork as learning objectives. The MBA integrates the classroom with the real business world through interaction with the Pacific Business Forum, Invention Evaluation Service, Westgate Center for Management Development and Institute for Family Business.

All MBA candidates are assigned class projects in cooperation with local companies and agencies and for those with limited work experience, an internship working within a faculty-supervised position is assigned. Ultimately the program will prepare students for successful careers as leaders of business, government and not-for-profit organizations.

**Psychology**

In psychology, students work toward a Master of Arts degree in Psychology emphasizing either applied behavior analysis/therapy or behavioral medicine/health psychology. Students prepare for positions that provide services to mentally and/or developmentally disabled populations, positions in business settings and positions in health care delivery systems involving the application of psychological knowledge to the treatment of physical diseases. The program also provides preparation for doctoral work in psychology elsewhere for those students who wish to study beyond the master’s degree.

Students are prepared for careers using applied behavioral techniques in clinical or business settings with several employment options after the master’s degree, or for entry into doctoral programs in areas such as applied behavior analysis, behavioral medicine and clinical psychology. Both practical experience in a variety of community settings and research experience are emphasized.
Speech Language Pathology
The Master of Science degree in speech-language pathology prepares students for California licensure and national certification. Both on-campus and off-campus practicums are complements to the academic program. Students may also elect to obtain the Clinical Rehabilitative Services Credential/Speech, Hearing and Language. Graduates of the Speech-Language Pathology program are academically and clinically prepared for a professional career in Speech-Language Pathology. Clinical practica are performed in the on-campus Speech, Hearing and Language Center as well as at off-campus sites. Options for employment include schools, hospitals and rehabilitative centers. Close student-faculty interaction encourages students to realize their potential in rehabilitative skills.

Music Therapy and Music Education
In the Conservatory of Music, some students are being prepared to enter college teaching or music education in public or private schools and others study music therapy. Music education students have the opportunity to become involved in a carefully developed micro-rehearsal program. In music education, students already credentialed as music teachers have a wide variety of electives available, in addition to the core courses in research, current topics, music history, and music theory/composition. Electives include advanced conducting, pedagogy, advanced study on instruments or voice, and specialized ensembles such as jazz, wind ensemble, orchestra, choir, opera, or chamber music. There is a thesis option. Students may pursue advanced pedagogical and conducting skills through microrehearsal opportunities and are encouraged to work with rehearsal settings on campus and in local schools. Students earning their teaching credential in combination with their master’s degree are given multiple fieldwork and student teaching opportunities utilizing resources from the Conservatory of Music and the Beneden School of Education. University of the Pacific students pursuing the Master of Arts in Music Therapy are able to focus on their specific personal career goals, by selecting one of two tracks supporting:

- Development of advanced clinical, administrative, and program development skills, or
- Preparation for eventual entry into teaching and research careers.

Physical Therapy
The mission of the Physical Therapist Professional Education Program is to provide a learning environment of academic excellence and to ensure excellence in clinical education in order to facilitate and encourage acquisition of the knowledge, problem solving and clinical skills as well as of the humanitarian and professional values and behaviors necessary for the successful practice of physical therapy. The Doctor of Physical Therapy (DPT) program is committed to educating men and women to lead useful and productive lives in response to their personal needs, the needs of society, and of the profession. Programs of learning are offered to prepare students for entry into the profession of physical therapy as well as to prepare graduates for life-long learning. Students in the Doctor of Physical Therapy Program become lifelong learners who are skilled, reflective, autonomous practitioners advocating for optimal health, wellness and performance for all members of society. The concise curriculum emphasizes development of a strong foundation upon which clinical skills are developed in the context of critical thinking and evidence-based decision making. Each term includes a combination of learning in the classroom and lab, as well as structured opportunities for exposure to patient care. Students complete the program by participating in three full-time clinical internships in a variety of settings throughout the country and internationally.

After successful completion of the entire 25-month program, graduates are eligible to take the licensing examination. The three year licensure pass rate for Pacific graduates is 99%. Once licensed, physical therapist options for employment are extremely varied and our graduates are in high demand as indicated by a 100% employment rate.

The Doctor of Physical Therapy (DPT) degree requires a high level of competency in all practice parameters within the scope of physical therapy. The specific criteria for graduation and permission to sit for professional licensure are enveloped by the national accrediting body. In the spring of 2002, the University of the Pacific and Department of Physical Therapy was granted a full 10-year accreditation cycle, the maximum length for any re-accreditation.

Students entering into this professional degree program must have graduated from an accredited undergraduate college or university and received a baccalaureate degree in a major of choice. All prerequisites must be fulfilled prior to the beginning of the fall semester of the acceptance year. All candidates must apply and be offered an interview within the department prior to acceptance. Formal invitations to become a member of the incoming class are given within the spring semester following the interview.

This professional program is demanding and requires all students to enroll in a continuous educational experience for 25 months beginning in late August during the year of acceptance.

Sport Sciences
The Master of Arts program in sport sciences provides for scholarly study in the areas of sport pedagogy, sports medicine, sport management, and athletic training.

Graduate studies in the sport sciences are frequently interdisciplinary. Although the majority of research studies in some way deal with one or more aspects of human movement, the specific focus of student research may be psychological, sociological or physiological. Following are some examples of the scope of research done by students in the department: sex role identity, spectator aggression, relaxation training, aerobic and blood lipid capacities, biomechanical analyses of movement, prescriptive exercise, women in sports, travel patterns of commercial recreation visitors, comparative coaching styles, personnel selection process and invention of new games.

Engineering and Computer Science
The School of Engineering and Computer Science offers a Master of Science in Engineering Science. The program is designed to strengthen students’ technical, analytical, and professional breadth and depth. Students will be introduced to techniques and best practices of professional research and learn the foundations for assessing the merits of published technical findings. Students interested in eventually pursuing a PhD will want to build upon this training by engaging in research and completing a thesis. Other students interested in applied technology may prefer to enhance their studies with a grade-level practicum experience in industry, or by taking additional coursework.

Intercultural Relations
The School of International Studies, in a partnership with the Intercultural Communication Institute in Portland, Oregon, offers a Master of Arts degree in Intercultural Relations. The program is limited residency, and designed to meet the needs of working professionals who wish to earn an advanced degree while maintaining employment or other
commitments. Students complete their core coursework in 18 months, through attendance at three 2-week residencies in Portland, every January and July. The core curriculum emphasizes a theory-into-practice model, stressing the application of relevant theoretical frameworks and concepts to real-world contexts, including both domestic diversity and international settings. Students develop knowledge and skills in the principles of intercultural relations, leadership and managing change across cultures, problem-solving in intercultural settings, adult learning in a cultural context, culture in the organization, and research and analysis. The program requires a thesis.

**Admissions**

Applicants holding a baccalaureate or equivalent degree and interested in working toward a graduate degree or credential must complete a University of the Pacific Graduate Admission application. All applications must be complete, which includes: the application form, an essay, official transcripts from each college or university attended, three letters of recommendation, and test scores appropriate to the program. The essay must be 300 to 500 words in which applicants discuss their academic interests, objectives and plans for graduate study.

Physical Therapy applicants must visit (www.pacific.edu/pharmacy/dpt) for instructions to apply on line using the Physical Therapy Centralized Application Service (PTCAS). The PTCAS application, University of the Pacific Supplemental Application, and all required materials must be received by October 1. Most personal interviews are conducted in January and early February. Intercultural Relations applicants must complete a form that has questions specific to that program in place of an essay. Master of Business Administration requires a MBA-specific application. Physical Therapy requires a supplemental form for course information. The Psychology Department requires an additional application specific to the Psychology program.

For transcripts to be considered official, they must be in an envelope that has been sealed by the school. The three letters of recommendation must be on the Graduate recommendation form and written within the last year. College instructors who know the applicant’s capacity for graduate work should complete at least two recommendation forms. For information on required tests, see the ‘Test Information’ in this section. See the application for further details.

Applications received complete (including submission of test scores) will be given priority. Incomplete applications and applications received after the deadline will be on a space available basis. Students are not permitted to register as classified students until they have confirmed their acceptance of admission with the Office of Graduate Studies.

Applications of graduates from nonaccredited colleges or universities may be considered individually by the Committee on Graduate Studies.

Qualified students who hold a bachelor’s degree and who are interested in taking a graduate course or courses, without the objective of a graduate degree, may take a course with unclassified status. This status excludes courses in professional programs.

The ability of an applicant to meet or exceed the minimum standards for admission does not guarantee admission to the program.

**Readmission**

Applicants who have been granted admission but are unable to attend within one year must apply for readmission. Readmission is not automatic and cannot be guaranteed.

**Application Fee**

Each applicant must submit the appropriate application fee in U.S. dollars with the Application for Admission. Students enrolled as undergraduate or graduate students at the University of the Pacific at the time of filing the application are exempt from paying the application fee; this does not include unclassified students. The check or money order should be made payable to “University of the Pacific,” for paper applications.

Online Applications = $50

Paper Applications = $75

**Graduate Record Examination (GRE)**

The GRE is required for Graduate degree program admission except for the MBA, the MA and MEd programs in Curriculum and Instruction and in Educational Administration and Leadership, Intercultural Relations programs, and Music Education or Music Therapy students with a GPA greater than 3.5. Applicants who are applying to a credential program only are not required to take the GRE. The GRE subject test in psychology is required for the PhD program in the Department of Educational and School Psychology. All GRE scores must be less than five years old. Applicants must take the GRE General Test at their own expense. The GRE general examination is conducted by the Educational Testing Service (ETS) year round and the subject examinations are given several times each year. Contact ETS at 1.800.GRE.CALL for examination dates or www.ets.org for information.

**Graduate Management Examination (GMAT)**

Applicants applying to the MBA program must take the GMAT examination. This examination is conducted by the Educational Testing Service (ETS) year round. For GMAT information, call the Eberhardt School of Business at 209.946.2629, or contact GMAT, ETS at P.O. Box 6103, Princeton, New Jersey 08541-6103, or www.mba.com. These scores must be less than five years old.

**Intercultural Development Inventory (IDI)**

Applicants to the MAIR program are required to take the Intercultural Development Inventory (IDI), a questionnaire that measures intercultural sensitivity. Once the admission application is received, MAIR applicants will be sent the IDI with instructions to complete and return it to Kent Warren, Director of Graduate Programs at the Intercultural Communication Institute. For further information regarding the IDI, applicants may contact Dr. Warren via e-mail at mair@intercultural.org or by calling 503.297.4622.

**International Applicants**

Graduates of international colleges and universities who have completed the equivalent of at least an American bachelor’s degree are invited to apply for admission. International applicants must request the registrar of each university attended to send official transcripts in an envelope sealed by that university. In some cases original documents, or official and certified copies showing the nature and scope of the student’s education preparation, may be acceptable. An official translation and evaluation from a qualified evaluation service should accompany transcripts in languages other than English.

Each applicant whose native language is not English must submit a report of the Test of English as a Foreign Language (TOEFL) administered by the Educational Testing Service (ETS). The MAIR program requires the TOEFL only for those students who did not graduate from English-speaking institutions. Some international applicants may be required to take the Test of Spoken English (TSE). If the applicant is in this category they will be notified. Information about testing dates and places and application forms, may be obtained by writing to TOEFL, ETS, P.O. Box 6159, Princeton, New Jersey 08541-6151 or for general information, www.toefl.org.
International applicants will not be granted admission unless they can show evidence that they are able to meet education, living and travel expenses to and from the United States. Financial certification must be submitted with the application to fulfill U.S. immigration requirements.

**Financial Assistance**

Graduate financial assistance is available each year in many of the departments and schools where advanced degree work is offered. These awards are granted on the basis of superior qualifications in scholarship and prospective success in advanced studies. Financial assistance may be in the form of scholarship aid toward tuition, cash stipends for services performed, or a combination of both depending upon each student’s program and department recommendations.

Many departments offer Graduate assistantships. Information is available from the department chair/graduate adviser.

Head resident positions in the Residential Life Program are available to graduate students; information and applications may be obtained from the Office of Student Life.

Application for assistantships or fellowships should be made to the Dean of Research and Graduate Studies. The deadline for application is February 1, but earlier applications are encouraged. Since it is necessary for all applicants to be admitted to graduate standing before appointments are made, the admission application to enter a Graduate program must also have been completed by that date.

The Project Teach Scholarship Program, which reduces tuition by approximately one-third, is a unique Tuition Reduction Program that is available on a continuing basis only for graduate students admitted to and enrolled in credential or graduate degree programs in the Benerd School of Education. Interested candidates should contact the Dean’s Office in the School.

Research awards are available for departmental or contract research in some fields. From time to time, fellowships are offered in certain federally supported programs in which University of the Pacific participates.

Graduate students who are U.S. citizens or eligible noncitizens may apply for federal student loans. For information, contact the Financial Aid Office, University of the Pacific, Stockton, CA 95211, telephone 209.946.2421.

**Academic Regulations**

All graduates are urged to read these general regulations carefully. Failure to be familiar with this section does not excuse a student from the obligation to comply with all the described regulations.

Although every effort has been made to ensure the accuracy of this catalog, students are advised that the information contained in it is subject to change. The University and Office of Research and Graduate Studies reserves the right to modify or change the curriculum, admission standards, course content, degree requirements, regulations, tuition or fees at any time without prior notice. The information in this catalog is not to be regarded as creating a binding contract between the student and the school.

**Academic Standing**

All advanced-degree students (master’s or doctoral programs) are expected to make satisfactory progress toward the specific academic degree to which they were admitted. Advanced-degree students are required to maintain a cumulative minimum grade point average (GPA) of 3.0 or higher in all courses listed in their graduate program plan of study and in all courses taken as a graduate student.

Courses in which the grade earned is C- or lower shall not be counted in a student’s degree program, and, if required for the degree, must be repeated. Some departments or programs have established higher grading standards which must be met by students in those programs. All grades earned in courses taken as a graduate student at the University will be counted in the cumulative GPA.

Students in a credential-only program must maintain a GPA of 2.5 and have a cumulative average of 2.5 or higher to clear their credential. Students in a basic teacher education credential only program who wish to do directed teaching in an internship must maintain a 3.0 GPA.

Any advanced-degree student who has completed six (6) or more course units of study and has a cumulative grade point average below 3.0 will be placed on academic probation for the next semester. Students on academic probation who fail to raise their cumulative grade point average to 3.0 at the end of the probationary semester will be subject to disqualification from the Graduate program.

Any advanced-degree student receiving more than one grade of C- or lower will have his or her progress reviewed by the department and the Office of Research and Graduate Studies and may result in dismissal from the Graduate program.

In addition to maintaining a 3.0 average, advanced degree students must make satisfactory progress in their degree programs. Students are expected to make continual progress toward completing required research, qualifying examinations, thesis or dissertation writing, and all other University or Departmental requirements. Failure to make satisfactory progress can result in dismissal from the Graduate program. Students wishing to appeal a disqualification must submit a written petition to the Dean of Research and Graduate Studies.

**Acquisition of Graduate Credit as an Undergraduate**

Pacific undergraduates may petition to open a graduate transcript (i.e., receive credit in graduate-level courses) if they meet all of the following conditions.

The undergraduate student must:

- Be within 9 units of completing the bachelor’s degree.
- Be in the last semester of the bachelor’s degree.
- Request that their adviser submit the completed Evaluation of Degree Requirements form to the Office of the Registrar prior to the last day to add classes. (This serves as permission by the undergraduate adviser for the student to take graduate-level coursework.)
- Be accepted into a graduate or credential program.
- Receive approval of the Application to Receive Graduate Credit as an Undergraduate Student by the Dean of Research and Graduate Studies before the last day to add classes of the last semester as an undergraduate.

The regulations for receiving graduate credit as an undergraduate are as follows:

Graduate credit will only be granted for upper division (100 level) courses. The total number of credits for the semester cannot exceed the maximum graduate course load for the department providing the graduate coursework; this includes coursework taken at other schools.

The tuition rate for the entire semester is at the undergraduate rate.

Units cannot be retroactively transferred from an undergraduate to a graduate program. The approval must be obtained prior to the last day to add classes of the last semester.

Coursework will not count for graduate credit if the student fails to complete the bachelor’s degree during the semester.

Graduate courses completed under this agreement will be recorded by the Registrar as a
new “Unclassified” graduate credit; grades from these courses will not be accounted in the undergraduate grade point average (unless the bachelor’s degree is not completed). No more than 12 units (16 units for student teachers), no matter when they are earned, can be transferred from an “Unclassified” transcript into a graduate program.

Students who do not complete the bachelor’s degree in the semester when graduate courses are taken will not be admitted into a Graduate program and cannot take additional graduate coursework until the bachelor’s degree has been awarded. There is no guarantee that graduate units earned as an undergraduate will transfer to or be counted as post-baccalaureate units by other universities or school districts.

Students are not classified as graduate students until they have been admitted to a Graduate program, have registered for courses, and have completed a term that begins after receiving the bachelor’s degree.

Classification of Graduate Students

**Full:** All students admitted with full graduate standing. Students are advanced from this classification to candidacy for advanced degrees upon formal notification from department with the Office of Graduate Studies.

**Provisional:** Students seeking advanced degrees whose academic records are deficient but who show promise of development or potential for graduate study. Students in this classification must be advanced to full standing before being eligible for degree candidacy. Admission to the educational doctorate is on a provisional basis until a full admission review is satisfactorily completed.

**Credential:** Students admitted to do post baccalaureate work leading toward an initial teaching credential, specialist instruction credential or services credential.

**Clinical Competency**

Many of the graduate programs offered at the University include experiential coursework. Prior to taking a course that includes an experiential component; students are required to demonstrate that they have the necessary skills, aptitude and competencies to successfully complete the course. Faculty of departments offering experiential courses have the discretion of denying enrollment in these courses to students evaluated as not possessing the necessary clinical competencies. Procedures used to assess clinical competency vary across programs. Students may obtain additional information from their Program Director. Students who do not demonstrate adequate clinical and experiential competency can be dismissed from a degree program, regardless of academic standing.

**Commencement**

Master’s degree students who are near completion of degree requirements can participate in the May commencement exercises under specific conditions. All of the following four conditions must be met before the Dean of Research and Graduate Studies can approve the petition.

- A completed Petition to Participate in Graduation Ceremonies has been filed in the Office of Research and Graduate Studies by the Spring semester deadline* for filing the Application for Graduation form. This petition must be signed by the student’s Adviser and Academic Dean (or Graduate Program Director if appropriate).
- All degree requirements will be met before the end of the summer session of the same year. An approved plan of study that specifies all degree requirements will be completed in time and must be on file in the Office of Research and Graduate Studies before the Spring semester deadline for filing the Application for Graduation form.*
- The Masters degree oral examination, including thesis defense or written examination (where applicable), will be successfully completed by the Spring semester deadline for Written/Oral Exam — Thesis/Dissertation Defense†.
- The student is in good academic standing. On a case-by-case basis, special consideration will be given for international students who complete degree requirements after the Fall semester of the same calendar year. Approved CAPP Evaluations must be on file by the Spring semester deadline* and the student must state they will be unable to return to campus to participate in ceremonies in the Spring following degree completion.

Doctoral degree students are ineligible to participate in graduation ceremonies until all degree requirements are met, including all coursework, the final dissertation has been approved by the Office of Research and Graduate Studies and all final paperwork has been submitted.

*This deadline is customarily December 1, but the Office of Research and Graduate Studies or current Graduate Academic Calendar should be consulted to confirm the specific date.

†This deadline is customarily in early April, but the Office of Research and Graduate Studies or current Graduate Academic Calendar should be consulted to confirm the specific date.

**Course Loads**

- **Full Time:** 8 or more units a semester
- **Half Time:** 7 to 4 units a semester
- **Less than Half Time:** 3 to 1 units a semester

**Credit Limitations**

All courses countable for graduate degree credit must be either specifically graduate degree courses (200 or 300 level) or, where allowable, advanced undergraduate courses (100 level). In those departments where courses are shown double-listed (e.g.: COMM 124/224), graduate students ordinarily will register for graduate credit (e.g.: COMM 224). If attending the undergraduate section, graduate students will be required to perform extra work at the graduate level beyond that required for undergraduates.

No more than 12 units (16 units for student teachers), no matter when they are earned, can be transferred from an “Unclassified” transcript into a graduate program.

**Courses not applicable in graduate degrees:**

- Lower division undergraduate courses (001-099)
- Extension courses
- English courses for the improvement of English language skills of foreign students
- Directed teaching or prerequisite courses for directed teaching except for the Master of Education degree or the Master of Arts in Special Education degree.
- Physical education activity courses.

**Double-Listed Courses**

In order to differentiate graduate and undergraduate responsibilities in double-listed courses (100/200 levels), there must be specifically contracted additional work for the graduate courses.

**Grade Point Average/Grading Policy**

The Pacific grade point average is determined by adding the total quality points and by dividing the resultant sum by the total number of quality hours. As a general rule, the ratio is based on the number of letter graded units completed;
e.g., if a student repeats a course both courses will be considered in the grade point average. Students must maintain a minimum GPA of 3.0 or above in all work taken as a graduate student at the University of the Pacific. Grades below a C are unacceptable for courses in a graduate program. Courses that receive a C- or lower must be repeated. (See Academic Standing in section above.) Letter grades are ordinarily assigned in graduate courses. Requests for pass/fail grading must be made through the department chair to the Dean of Research and Graduate Studies. Graduate students must receive a letter grade in any undergraduate course which is part of a course plan for a graduate degree. Petition for any undergraduate course which is part of a program. Coursesthat receive a C- or lower are unacceptable for courses in a graduate program. Petitions to extend must be approved by the Graduate Dean in consultation with the student’s committee or adviser.

Grading Policies

Symbols and Definitions:

Grades are ordinarily assigned in graduate courses. Passing work on the pass/no credit system. Approved only for certain courses and program of a college or school. Note: Research for thesis or dissertation the department may determine whether letter grades or pass/no credit grades are to be given. In seminar or comparable courses, letter grades or pass/no credit may be used.

W Authorized withdrawal from courses after the prescribed period.

Registration

All students must register on the dates published in the University Academic Calendar, after their application for graduate standing has been approved and after they have conferred with their faculty advisor. No registration activity is permitted after the last day to add or drop. Students are held accountable to complete every course for which they register. If it is necessary to add or drop a course, the student must complete the appropriate registration transaction by the last day such activity is allowed.

After the deadline dates have passed (but prior to the end of the term) requests to add or drop courses must be made by special petition to the student’s respective school/college. Requests to add or drop courses after the term must be made to the Academic Regulations Committee (ARC). In either case, petitions are normally approved only if it can be shown that the request is warranted due to some special situation or hardship. Courses which a student is allowed to drop after the deadline will appear on the student’s transcript with the notation “W” but will not count in the units earned or in the calculation of the grade point average. Any petitions approved after the deadline dates will be subject to a clerical service fee. Tuition and fee refunds are based on the date a withdraw form is initiated in the Office of the Registrar.

Registration - Continuous

All graduate students in graduate degree programs must satisfy the Continuous Registration Policy for each of the school terms defined for the student’s program, from the first term of registration upon admission into a Graduate program until all degree requirements are met or their status as a degree student is terminated. This includes students who are completing preliminary or final examinations, or presenting terminal projects, and applies to students regardless of location. Continuous Registration can be met in one of two ways:

1. Registration for at least one unit in a course that is required in your program, or
2. If students are not registering for a regularly scheduled course they must register for the appropriate section of a Continuous Registration course (see Office of Research and Graduate Studies website) during the add period stated in the university calendar. A $50 fee will be applied to your student account and must be paid by the published deadline.

Registration - Individualized Study

To register for an Individualized Study (Independent Study course, Internships, or Practicum) obtain and submit an approved Individualized Study Request form to the Office of the Registrar. Students and faculty will complete a written contract specifying the nature of the work to be undertaken and the method of evaluation. The individualized study form must have proper approval within the unit and be filed with the Office of the Registrar. Independent study courses may not be taken in the same term that a regular course is offered in that subject.

Repeating of Courses and Grade Replacement Policy

Only courses with grades of “C-” or lower can be repeated. Once a course is completed with a grade of C or higher, the graduate student cannot repeat that course or any prerequisites for the course. When a course is repeated, grades from both the original and repeated attempts appear in the official records and transcripts.

Requirements for the Master’s degree

1) The requirements of a candidate for these degrees in any semester or summer session must be approved by the chair of the major department as to courses and amount of load.
2) The candidate must maintain a minimum GPA of 3.0 or above in all work taken as a graduate student, either at the University of the Pacific or any other institution. See the Grading Policy section and or Academic Standing.
3) Satisfactory completion of a minimum of 30 or 32 units of (graduate) work, depending on requirements of program.
4) The completion of a minimum of one academic year of “residence work”; i.e., the candidate must be registered for at least 4 units per semester for two semesters. Two summer sessions of at least 4 units each will be considered the equivalent of one-half year of residence.

5) The passing of a department examination covering the major field (date to be fixed by department chair) where applicable.

(See department section for more information).

**Requirements for the Doctor of Education Degree**

1) There must be the equivalent of at least three years of successful graduate study in accredited colleges and universities, including at least two full years of work at the University.

2) Students must fulfill the doctoral residency requirement. Advancement to Doctoral Candidacy for students admitted after Spring, 2008 is dependent upon full admission to the EdD program, satisfactory completion of a specific program of study, and successful completion of Applied Inquiry III.

3) Approval of the dissertation, which includes a final oral examination to determine to the satisfaction of the candidate’s committee whether the stage of scholarly advancement and research ability demanded for final recommendation for the candidate has been reached.

4) All requirements for the Doctor of Education degree must be completed within five years from the date of advancement to Doctoral Candidacy and within nine years after the first day of the semester of enrollment in EdD coursework at Pacific following Provisional Admission to the EdD program.

Advanced students interested in applying for the Doctor of Education program should consult the department chair of the proposed major.

(See department section for more information).

**Requirements for the Doctor of Philosophy Degree**

**Course of Study:** The course of study to be pursued for the PhD degree will be arranged with students by their adviser. Work in other departments will be planned according to the needs of the individual student. See department section for further information.

**Grade Point Average:** Expected to complete work with at least a 3.0 GPA in all courses. Students judged by their major department to have unsatisfactory records will be reviewed by the Dean of Research and Graduate Studies who may take action to terminate their continuation.

**Mastery of the field of study:** Students must show competence in their discipline by means of qualifying examinations or scholarly papers before advancement to candidacy for the degree (requirements vary by degree program at least one year prior to the date on which degree candidates expect to present themselves for the degree.

**Compliance with language research skill requirements:** Students must demonstrate their ability to read at least one foreign language and/or to use at least one research skill such as an advanced computer language or advanced statistical analysis. The language and/or skill(s) are to be chosen with the approval of the student’s advisory committee. For the specific language requirements in chemistry and pharmaceutical sciences see the appropriate sections of this catalog.

**Admission to Candidacy:** Students when they have completed satisfactorily the following requirements: at least 45 credit hours or course equivalents beyond the bachelor’s degree; satisfied the language/research skills requirement; completed the qualifying examinations or scholarly papers; and received formal approval for admission to candidacy by the student’s advisory committee and major department.

**Presentation of an acceptable Dissertation:** In order to be acceptable, the doctoral dissertation must be (1) a significant contribution to the advancement of knowledge or (2) a work of original and primary research.

**Passing of a final oral examination:** When the dissertation is completed, candidates present themselves for the final examination to an examining committee appointed by the Dean of Research and Graduate Studies and consisting of the candidate’s adviser (who shall act as chair) and such other examiners as the Dean shall designate, after consulting with the candidate’s adviser. The committee shall include at least one person who is not a member of the department directly concerned.

The examination shall be oral and shall deal intensively with the field of specialization in which the candidate’s dissertation falls, though it need not be confined to the subject matter of the dissertation. In order to be considered satisfactory, the report of the examining committee must be unanimously favorable.

(See department section for more information).

**Residence and Time Limits**

The period of residence shall involve students in a total commitment to their graduate program. Completion of a minimum of one academic year of “residence work”; i.e., the candidate must be registered for at least 4 units per semester for two semesters. Two summer sessions of at least 4 units each will be considered the equivalent of one-half year of residence.

All requirements for a master’s degree must be completed within a period of not more than seven years. Students who fail to meet all requirements within this period will have to reapply to the program.

All requirements for the Doctor of Education degree must be completed within five years from the date of advancement to Doctoral Candidacy and within nine years after the first day of the semester of enrollment in EdD coursework at Pacific following Provisional Admission to the EdD program.

All requirements for the PhD degree must be completed within seven years from the date of entrance into the degree program at this University, and within three years from the date of advancement to candidacy.

A student working for the PhD degree is required to spend at least three years of work devoted only to graduate study and investigation under proper supervision—or the equivalent thereof in part-time work—for the completion of the residence requirement. If part-time work is done elsewhere other than at the University of the Pacific, such work shall be subject to the approval of the Committee on Graduate Studies. At least 30 units, in addition to the dissertation, must be completed at this University.

In the PhD program in Pharmaceutical and Chemical Sciences, two consecutive semesters of residence are required after the master’s degree or after one year of graduate work when the master’s degree is not taken. A minimum of 9 units or two courses of work must be taken during each semester of residence. In the PhD program in School Psychology, the residency requirements can be met by taking 18 units of coursework within 12 calendar months.

Courses taken ten or more years prior to the comprehensive examination (PhD program), Qualifying Scholarly Activity (EdD programs), or final examination (Masters programs) do not apply towards the graduate degree and must be repeated to satisfy the degree requirements. Requests for variances are made to and evaluated by the major department, which subsequently recommends to the Office of
Research and Graduate Studies what credit for previous coursework should be permitted. Final approval is granted by the Dean of Research and Graduate Studies.

To re-admit to a program, a student must have attained an average grade of 3.0 both in the major department and in all work taken as a graduate student. A student must submit a re-admit application and be accepted into a Graduate program and work with their current adviser to outline remaining requirements. This new program must be completed within a period of four years. No further extension is permitted.

Theses and Dissertations
The Office of Research and Graduate Studies makes available, to faculty and graduate degree candidates, instructions for the preparation of theses and dissertations. The instructions are to be applied to all theses and dissertations submitted at University of the Pacific in partial fulfillment of advanced degree requirements. Theses and dissertations must be submitted by the deadline dates published in the Graduate Academic calendar.

These courses are numbered 299 (Master’s Thesis) and 399 (Dissertation), the grade is given on a Pass/No Credit basis and submitted to the Dean of Research and Graduate Studies on an appropriate grade form available at the Graduate Office. The Dean of Research and Graduate Studies submits the grade to the Registrar’s office after final approval of the thesis.

Transfer Credit
Work done in other institutions since completion of the baccalaureate will be considered and evaluated, but not more than 6 of the required units may be transferred, and they must be regular on-campus advanced courses, countable by that institution toward its graduate degrees, and have been completed with a grade of B- or better. Some departments set higher standards and these are identified in individual program descriptions.

Grade points earned in those courses will not be counted in the student’s Pacific grade point average.

Courses must be filed on the Request to Transfer Course Work Done In Other Institutions form and must be approved by the Department Chair/Adviser, Director of Graduate Programs or Dean of the attending school, and the Dean of Research and Graduate Studies.

Unclassified Graduate Students
Graduate Unclassified students may complete up to 12 units (16 units for student teachers) prior to being required to formally apply for admission to the university. Upon acceptance to the university, resident and transfer coursework will be evaluated by school/department for applicability to degree.

Withdrawal from a Semester or the University
Students wishing to completely withdraw from a semester or from the university will have to initiate the process in the Office of the Registrar. The date in which the student picks up the form from the office will be the official date used by financial aid for Title IV refunds and by student account for tuition refunds. If a student wishes to withdraw from a semester after the last day to withdraw, it must be approved by the Academic Regulations Committee. Courses the student was registered for after the last day to drop will appear on that student’s transcript with the notation “W” but will not count in the units earned or in the calculation of the grade point average.

Within one year of the withdrawal date, a student in good academic standing who withdraws from a program may be readmitted by filing an approved readmit application. This request is submitted to the Office of Research and Graduate Studies Students who wish to re-enter a program more than one year after withdrawing or being inactivated must file a full graduate application for admission to the Office of Research and Graduate Studies.

An official withdrawal from the University is the termination of rights and privileges offered to currently enrolled students, including but not limited to early registration.

Campus & Community
The main campus of University of the Pacific, located near the center of Stockton, has grown from the original 40 acres of the Harriet M. Smith Memorial Campus to a total of 175 acres. In 1974, the University acquired 42 acres of land adjoining the campus, including nine permanent classroom buildings formerly the property of San Joaquin Delta Community College.

McCaffrey Center was also completed in 1974, containing student apartments, cafe, grocery store, theatre and the University Bookstore, all in a village-like atmosphere. Located north of the Calaveras River which runs through the campus are the Cowell Student Health Center and the Thomas J. Long School of Pharmacy and Health Sciences complex, which also houses the entry level graduate program in physical therapy.

Pacific’s San Francisco campus offers a dental program consistently ranked as one of the best in the nation. The University’s McGeorge School of Law is situated in Sacramento and offers both day and evening programs.

The William Knox Holt Memorial Library is the main library at Pacific. Many library sources can be accessed Online. The Holt-Atherton Department of Special Collections includes the Stuart Library of Western Americana and the University Archives. About 75 percent of the writings of naturalist John Muir are included in the collections, which also provide extensive information and photographs for research of the California Gold Country and the Gold Rush. The W.J.B. Fry Library is a collection of historical materials pertaining to the United Methodist Church and its commitment to higher education.

The Science Library is located in the Thomas J. Long School of Pharmacy and Health Sciences building with materials in chemistry, health sciences and pharmacy. The Music Library in Irving Martin Memorial holds sound recordings, slides, films, video tapes, laser discs and an extensive collection of folk dance music. Pacific is also home to a number of special programs including the Brubeck Institute, housing the collection of Jazz Legend Dave Brubeck, the Muir Institute, holding the papers of naturalist and Sierra Club Founder John Muir and as of the summer of 2002 the Jacoby Center focusing on urban studies.

Stockton is the center of a metropolitan area of more than 230,000 population, located near the geographical center of the state. It occupies a key location in the rich Central Valley, a fertile agricultural area. Stockton is the seat of government of San Joaquin County. It is also an inland, deep-water seaport and serves as the agricultural, industrial and transportation hub of the valley. Produce and manufactured goods are distributed from this port to all parts of the world.

The Mother Lode country, the Sierra Nevada, Lake Tahoe, Squaw Valley and Yosemite are all within a few hours’ driving distance. San Francisco and the rich and varied cultural life of the Bay Area are less than a two-hour drive from the campus.

Within its own community the University benefits from participation in the activities of the Stockton Symphony Orchestra, the Stockton Opera Association, the Stockton Chorale, the Civic Theatre, the Pioneer Museum and Haggin Galleries, and the Stockton Public Library.
Student Housing

The University provides student housing in residence halls, apartments, and Greek houses. Detailed descriptions of these facilities, including cost are available from Housing and Greek Life Office 209.946.2331.

Residence Halls: The majority of rooms are double occupancy and are reserved for incoming freshmen and sophomore students. A limited number of single rooms are available to students at extra cost; medical documentation will be required for placement. Assignment requests to single rooms and other accommodations are not guaranteed.

Students living in the residence halls are required to take one of the three meal options: the Platinum level plan (3,850 Dining Dollars per year), the Gold level plan (3,600 Dining Dollars per year), or the Silver level plan (3,330 Dining Dollars per year).

Apartments: The University maintains five apartment complexes. The University Townhouses on the north campus have one-and two-bedroom apartments for students.

A coeducational hall, Manor Hall, for upper-division and is located on Pacific Avenue across the street from the Conservatory of Music. This hall is made up of suites of rooms with each room having its own cooking alcove. Each suite of two rooms share a semi-private bath. The University’s newest apartment complexes, known as Monagan and Brookside Halls, are located on Brookside Road, between the Thomas J. Long School of Pharmacy and Health Sciences and the Cowell Health Center building. Each suite features four bedrooms, two full baths, living room and dining/kitchen area. Seniority for assignment to Brookside Hall is given to graduate level students and students in the Pharmacy and Health Sciences.

The Housing and Greek Life Office also maintains off-campus apartment listings. All students living in the apartments must be on a Bronze level meal plan (1,200 Dining Dollars per year).

Fraternities and Sororities Communities: Pacific offers 13 social Greek organizations; 6 fraternities and 7 sororities. While each chapter has specific requirements to become a member, the minimum requirements include the completion of 12 college units and a 3.0 cumulative college grade point average.

Students are eligible to live in a fraternity or sorority house beginning the following semester or term after becoming a member. Of the 13 social Greek organizations, six offer a University operated on-campus living option. These include Alpha Phi, Delta Delta Delta, Delta Upsilon, Pi Kappa Alpha, Sigma Chi, and Theta Chi.

Eligibility: Graduate students desiring University housing must be registered students to be eligible. Rental agreements for apartments are for the academic year or for students in Pharmaceutical Sciences for a minimum of two consecutive terms.

Health Services

Cowell Wellness Center (CWC), part of Pacific’s Student Life, is a modern facility that where both health and counseling services are co-located. It is located across the foot bridge, north of the main campus, at the corner of Brookside Road and Manchester. Combined, Health and Counseling Services provide a professional staff of practitioners including a supervising physician, nurse practitioners, consulting psychiatrist, licensed psychologists, and counseling interns and registered nurses. Students are provided with health education and wellness information as well as health care during illness in order to promote the skills and attitudes necessary for students to become responsible for their own health.

Therapists are trained to assist students in building self-confidence, being assertive, relating to others, reducing stress, solving problems, finding options, and managing ongoing conditions. Personal counseling, both one-to-one and group, is available.

Due to the Privacy Act, staff do not routinely discuss student’s care with anyone, including parents, unless the student has provided a written consent to release information. With consent, however, professional staff are available to address questions and concerns about students’ health issues and treatment plans.

The staff of Health and Counseling Services are active within the Student Life Division at Pacific and actively contribute to the goal of helping our students achieve academic and social success through attention to their health and wellness.

All students taking 9 units or more are automatically charged a Health Services fee of $120 per semester.

Health and Counseling Services are available to students who have:
1. Registered for classes at Pacific’s Stockton Campus, Pacific McGeorge School of Law, and Dugoni School of Dentistry
2. Paid the Health Services Fee and
3. Submitted the required health history form and have completed with a physical exam

Hours of Operation
Mon-Fri: 8 am to 6 pm

Summer Hours:
Mon-Thur: 7:30 am to 4 pm
Fri: 7:30 am to 1 pm

The Wellness Center is closed weekends, holidays and the holiday break in December.

Health Services Fee includes:
Physician appointments
Nurse practitioner
Registered Nurse services
Health and wellness management
Counseling services

Health Service Fees do not cover the cost of outside referrals. If students do not have insurance coverage a student plan is available through the University. The coverage period runs from August 1st to July 31st or students can choose to enroll on a semester by semester basis. Students can access information about the plan via the Internet: www.studentresources.netaetnastudenthealth.com or call CWC at 209.946.2315 for assistance.

Please note: Students are automatically charged for the university contracted insurance policy unless they have completed the waiver found on the Aetna website.
Phone: (209) 946-2141
Location: Wendell Phillips Center 110, 111
Website: http://www.pacific.edu/college/
Tom Krise, Dean

Programs Offered
Master of Science in Biological Sciences
Master of Arts in Communication
  Communication Education
  Political Communication
  Media and Public Relations
Master of Arts in Psychology
Master of Arts in Sport Sciences
  Sport Pedagogy
  Sports Medicine
  Sport Management
  Athletic Training
Master of Science in Pharmaceutical and Chemical Sciences*
Doctor of Philosophy in Pharmaceutical and Chemical Sciences*

*For detailed program requirements for these degrees please consult the School of Pharmacy section in this catalog.

The hallmark of all of our graduate programs in College of the Pacific is close personal interactions with dedicated faculty members who have a passion for teaching, research, and learning. For graduate students, this means discussion-based, personalized interactions with instructors in the classroom as well as opportunities to collaborate with faculty on original research projects and to co-author or co-present the results in professional venues. Graduate students in the College also have the opportunity to acquire additional training and apply their knowledge through internships in professional settings. Many also work with our undergraduates as teaching assistants, laboratory instructors, discussion leaders, and coaches. All graduates of our programs emerge “practice-ready,” prepared for employment in their field, careers as teachers of their disciplines, or entry into advanced degree programs.
Biological Sciences

Phone: (209) 946-2181
Location: Classroom Building, South Campus
Website: www.pacific.edu/college/biology
Gregg Jongeward, Co-Chair
Craig Vierra, Department Director of Graduate Program and Co-Chair

Programs Offered

Master of Science in Biological Sciences

In order to earn the master of science degree in biological sciences, students must complete a minimum of 32 units with a Pacific cumulative grade point average of 3.0.

I. Required Graduate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 166</td>
<td>Vertebrate Embryology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 165</td>
<td>Embryology and Development</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 162</td>
<td>Comparative Vertebrate Anatomy</td>
<td>(5)</td>
</tr>
<tr>
<td>BIOL 159</td>
<td>Molecular Biological Techniques</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 157</td>
<td>Topics in Biomedical Research</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 158</td>
<td>Computerized Data Acquisition</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 155</td>
<td>Biological Electron Microscopy</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 154</td>
<td>Cell Biology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 153</td>
<td>Parasitology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Plant Kingdom</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 149</td>
<td>Animal Histology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 148</td>
<td>Principles of Immunology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 147</td>
<td>Genetics</td>
<td>(4)</td>
</tr>
</tbody>
</table>

II. Thesis/Research

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 297</td>
<td>Graduate Research</td>
<td>(4-6)</td>
</tr>
<tr>
<td>BIOL 299</td>
<td>Thesis</td>
<td>(2-4)</td>
</tr>
<tr>
<td>BIOL 101</td>
<td>Electives (2 courses at the 100 or 200 level or from CHEM 141)</td>
<td>(8)</td>
</tr>
</tbody>
</table>

Note: 1) Students may count a maximum of six (6) units of Research and/or Independent Study toward their degree. 2) Students are encouraged, where appropriate, to select courses offered by other departments or units of the University, such as Chemistry or the Thomas J. Long School of Pharmacy and Health Sciences.

Undergraduate Course Offerings

See General Catalog for course descriptions

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 101</td>
<td>Genetics</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 122</td>
<td>Principles of Immunology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 128</td>
<td>Animal Histology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 130</td>
<td>Plant Kingdom</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 145</td>
<td>Microbiology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 147</td>
<td>Medical Microbiology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 151</td>
<td>Parasitology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 153</td>
<td>Cell Biology</td>
<td>(4)</td>
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<tr>
<td>BIOL 158</td>
<td>Computerized Data Acquisition</td>
<td>(4)</td>
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<tr>
<td>BIOL 159</td>
<td>Molecular Biological Techniques</td>
<td>(4)</td>
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<tr>
<td>BIOL 162</td>
<td>Comparative Vertebrate Anatomy</td>
<td>(5)</td>
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<tr>
<td>BIOL 165</td>
<td>Embryology and Development</td>
<td>(4)</td>
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<tr>
<td>BIOL 166</td>
<td>Vertebrate Embryology</td>
<td>(4)</td>
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<tr>
<td>BIOL 169</td>
<td>Elements of Biochemistry</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 175</td>
<td>Ecology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 176</td>
<td>Ecology and Conservation Biology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 179</td>
<td>Evolution</td>
<td>(4)</td>
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<tr>
<td>BIOL 182</td>
<td>Medical Endocrinology</td>
<td>(4)</td>
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<tr>
<td>BIOL 185</td>
<td>Comparative Animal Behavior</td>
<td>(4)</td>
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<tr>
<td>BIOL 186</td>
<td>Hormones and Behavior</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 193</td>
<td>Special Topics</td>
<td>(3 or 4)</td>
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</table>

Graduate Course Offerings

BIOL 222. Immunology (4)
Immunoglobin structure, function, and expression in animals. Molecular and cellular mechanisms of humoral immune response, cell-mediated immunity, complement system, autoimmune diseases, tolerance induction, transplantations, cancer immunity, vaccines, and cytokine actions are emphasized. Prerequisite: graduate standing.

BIOL 224. Cancer Biology & DNA Repair (4)
The course will examine the morphological and molecular events that accompany the change of a normal cell into a cancerous cell. Emphasis on the cell and molecular biology of genes that play a role in this process. Lab will use molecular techniques to analyze genes involved in carcinogenesis and DNA repair. Prerequisites: graduate standing.

BIOL 234. Comparative Physiology (4)
A detailed review of organ function in diverse groups of organisms. Emphasis on physiological adaptation to the environment. Prerequisite: graduate standing.

BIOL 244. Developmental Biology (4)
The genetic control of development and the physiological mechanisms involved in fertilization and differentiation. Prerequisites: graduate standing.

BIOL 247. Medical Microbiology (4)
Same as BIOL 147. Three additional hours per week of seminar and/or special project. Prerequisite: graduate standing.

BIOL 251. Parasitology (4)
Same as BIOL 147. Three additional hours per week of seminar and/or special project. Prerequisite: graduate standing.

BIOL 253. Cell Biology (4)
Same as BIOL 153. An in-depth look at the structure and function of a cell with an emphasis on the methodologies of Cell Biology. Research-based current understanding of the topics is stressed. Special project required. Prerequisite: graduate standing.

BIOL 255. Biological Electron Microscopy (4)
Same as BIOL 155. The processes and techniques involved in examining biological specimens with the transmission electron microscope will be covered in detail. When competence in specimen processing is achieved, each student will perform an original experiment as a term project. Prerequisite: graduate standing.

BIOL 265. Embryology and Development (4)

BIOL 279. Evolution (4)
Same as BIOL 179. Special project required. Prerequisite: graduate standing.

BIOL 291. Independent Study (2 or 4)

BIOL 293. Special Topics (3 or 4)

BIOL 295. Graduate Seminar (4)

BIOL 297. Graduate Research (1-6)

BIOL 299. Thesis (2 or 4)
Chemistry

Phone: (209) 946-2271
Location: Classroom Building
Website: http://www.pacific.edu/college/chemistry/
Larry Speer, Chair
Xialing Li, Department Director of Graduate Studies

Programs Offered*

Master of Science in Pharmaceutical and Chemical Sciences
Doctor of Philosophy in Pharmaceutical and Chemical Sciences

*Detailed program information found on page 67.

Communication

Phone: (209) 946-2505
Location: Psychology/Communication Building
Website: http://www.pacific.edu/college/communication/
Qingwen Dong, Chair
Jon Schamber, Department Director of Graduate Studies

Programs Offered

Master of Arts in Communication
  Communication Education
  Political Communication
  Media and Public Relations

Master of Science in Pharmaceutical and Chemical Sciences

The Department of Communication offers graduate-level instruction leading toward the Master of Arts degree. The degree program combines training in communication theory, methodology and practice for students who desire knowledge and skills for solving work-related communication problems and for students who intend to enter doctoral programs. The program offers three concentrations of study: 1) Communication Education, 2) Political Communication, and 3) Media and Public Relations, each of which integrates coursework from related disciplines, providing graduate students with an interdisciplinary approach to the study of communication. Each concentration is designed for students who regard knowledge of communication as important for their chosen professional careers but may or may not hold a bachelor’s degree in communication.

The nature of the discipline of communication requires students to possess a high level of proficiency in written and spoken English. For this reason, students who come from non-English speaking cultures should only apply for the program if they have extensive training and experience in speaking and writing in the English language.

Thesis and Non Thesis Options

The thesis option (Plan A) requires 28 units of coursework and 4 units of thesis. Students must successfully complete a 6-hour written comprehensive examination and a 1-hour oral examination administered by a committee of three professors prior to collecting data for the thesis. The thesis must contribute to the body of knowledge of the field in a significant manner.

The non-thesis option (Plan B) requires 32 units of coursework. Students must also successfully complete a 12-hour written comprehensive examination and a 2-hour oral examination administered by a committee of four professors, one of whom must be from another discipline. Four hours of the written comprehensive examination covers material from a “landmark works in communication” list developed by the department faculty.

Grade Point Requirements

Candidates for a graduate degree must maintain a cumulative GPA of at least 3.0. No grade below a B- (2.7) will be counted toward the degree program in any course at the 200 level. No grade below a B (3.0) will be counted toward the degree program in any course at the 100 level. Students seeking admission to the Department of Communication must maintain a GPA of 3.0 or above in all upper-division undergraduate study and complete the Graduate Record Examination with satisfactory results.

Graduate Assistant Requirements

A full-time graduate assistant will normally take 8 units. Graduate assistants who seek to take more than 8 units must receive department approval and approval of the Graduate Dean.

Master of Arts in Communication

Concentration Communication Education

In order to earn the master of arts degree in communication with a concentration in communication education, students must complete a minimum of 32 units with a Pacific cumulative grade point average of 3.0.

COMM 270 Introduction to Graduate Study
COMM 271 Graduate Seminar: Rhetorical Thought
COMM 272 Graduate Seminar: Interpersonal Communication
COMM 273 Graduate Seminar: Mass Communication
COMM 274 Statistical Applications in Communication Research
COMM 276 Communication in Learning Settings

Note: 1) COMM 274 may be satisfied by EPSY 214 Intermediate Statistics (3 units) and COMM 297 Graduate Research (1 unit).

One of the following courses from the School of Education: 3
CURR 209 Curriculum Theory
EADM 204 Pluralism American Education
EADM 233 Seminar: Multicultural Education
Or an approved course by adviser

One of the following courses: 4
COMM 289 Graduate Practicum
COMM 287 Graduate Internship
COMM 273 Graduate Seminar: Mass Communication

One of the following Options:

Thesis Option Plan A:
COMM 297 Graduate Research
COMM 299 Thesis
6-hour written comprehensive examination
1-hour oral examination

Non Thesis Option Plan B:
COMM 291/297 Graduate Independent Study or Research 2

Additional course from the School of Education: 3
CURR 209 Curriculum Theory
EADM 204 Pluralism American Education
EADM 233 Seminar: Multicultural Education
Or an approved course by adviser
12-hour written comprehensive examination
2-hour oral comprehensive examination

**Master of Arts in Communication**

**Concentration Political Communication**

In order to earn the master of arts degree in communication with a concentration in political communication, students must complete a minimum of 32 units with a Pacific cumulative grade point average of 3.0.

- COMM 270 Introduction to Graduate Study 4
- COMM 271 Graduate Seminar: Rhetorical Thought 4
- COMM 273 Graduate Seminar: Mass Communication. 4
- COMM 274 Statistical Applications in Communication Research 4
- COMM 278 Political Communication 4

*Note:* 1) COMM 274 may be satisfied by EPSY 214 Intermediate Statistics (3 units) and COMM 297 Graduate Research (1 unit).

- POLS One approved elective from Political Science department 4
- COMM 287 Graduate Internship arranged through the Jacoby Center 4

One of the following Options:

**Thesis Option Plan A:**

- COMM 299 Thesis 4
- 6-hour written comprehensive examination
- 1-hour oral comprehensive examination

**Non Thesis Option Plan B:**

- COMM Graduate Independent Study, Graduate Research or 200 level elective 4
- 12-hour written comprehensive examination
- 2-hour oral comprehensive examination

**Master of Arts in Communication**

**Concentration Media and Public Relations**

In order to earn the master of arts degree in communication with a concentration in media and public relations, students must complete a minimum of 32 units with a Pacific cumulative grade point average of 3.0.

- COMM 270 Introduction to Graduate Study 4
- COMM 273 Graduate Seminar in Mass Communication Theory 4
- COMM 274 Graduate Seminar in Statistical Application 4
- COMM 275 Graduate Seminar in Public Relations 4
- COMM 277 Graduate Seminar in Media Relations 4

*Note:* 1) COMM 274 may be satisfied by EPSY 214 Intermediate Statistics (3 units) and COMM 297 Graduate Research (1 unit).

One of the following courses from the Department of Sports Sciences, School of Business or School of Education:

- SPTS 274 Advanced Sport Marketing and Promotions 4
- BUSI 109 Management and Organizational Behavior 4
- BUSI 214 Negotiation 4
- BUSI 279 Leadership 4
- EADM 204 Pluralism American Education 4
- EADM 233 Seminar: Multicultural Education 4

Or an approved course by adviser

1) COMM 297 Graduate Research (1 unit).

One of the following Options:

**Thesis Option Plan A:**

- COMM 299 Thesis 4
- 6-hour written comprehensive examination
- 1-hour oral comprehensive examination

**Non Thesis Option Plan B:**

One of the following courses from the Department of Sports Sciences, School of Business or School of Education:

- SPTS 274 Advanced Sport Marketing and Promotions 4
- BUSI 109 Management and Organizational Behavior 4
- BUSI 214 Negotiation 4
- BUSI 279 Leadership 4
- EADM 204 Pluralism American Education 4
- EADM 233 Seminar: Multicultural Education 4

Or an approved course by adviser

1) If needed, an additional 1 unit of COMM 297 Graduate Research should be taken when a 3 unit elective was chosen.

**Course Offerings**

**COMM 214. Argumentation and Advocacy** (4)

This course introduces students to the theory and practice of argumentation, which is a method of decision-making emphasizing reason giving evidence. The course includes instruction in debating, research, and critical writing, as well as advanced topics in the study of public deliberation. **Prerequisites:** three of the following 4 courses, COMM 027, 031, 043, or 050, with a GPA of 2.5 or better, or permission of the instructor.

**COMM 216. Rhetorical Theory and Criticism** (4)

This course strives to help students derive insight into how symbolic processes affect human awareness, beliefs, values, and actions. The course treats criticism and analysis as methods of inquiry into the nature, character, and effects of human communication. It addresses various methods of rhetorical criticism in terms of their central units of analysis and typical intellectual concerns. **Prerequisite:** COMM 160 or permission of the instructor.

**COMM 224. Publications Editing** (4)

Copy editing, proofreading, headline writing and makeup and layout for newspapers, magazines, newsletters, pamphlets and brochures comprise the many elements of this course. Students will explore all phases of the editing business, including revision and rewriting of copy to make it succinct and readable. Projects in each editing area will be required. **Prerequisite:** COMM 121 and 140 or permission of the instructor.

**COMM 237. PR Case Studies and Problems** (4)

Advanced course in public relations. The course will engage students in case study research and application of public relations principles. Written and oral presentations; adherence to professional standards of excellence. **Prerequisite:** COMM 135.

**COMM 239. Theory of Mass Communication** (4)

An overview of major theories and research in mass communication. Application of theories that explain and predict communication effects of political campaigns, advertising, entertainment, and information. Theoretical areas to be covered include socialization, information, diffusion, advertising, persuasion, and uses and gratification’s research. The state, function, and form of theory in mass communication will be discussed. **Prerequisite:** COMM 160 or permission of the instructor.
COMM 255. Persuasion
A study of contemporary understandings of human interaction. Beginning with epistemological issues as a framework, the course examines theory building, foundation theories of our discipline, and contextual theories.

COMM 272. Graduate Seminar: Interpersonal Communication
This course provides the student who has achieved a general understanding of interpersonal communication issues the opportunity to choose and explore a particular area of special interest. The first phase of the course will focus on discussion of several theories of interpersonal behavior. Beginning approximately the fourth week of class, each student will bring in and present two or more abstracts of published articles related to the interest area. The last session(s) will provide the opportunity for students to share their conclusions with the others. Each student will complete a paper which presents a research proposal in the area of interest. The term paper is due the last scheduled day of classes.

COMM 273. Graduate Seminar: Mass Communication
The purpose of this course is to provide an introduction to mass communication theory and scholarship from three different scholarly perspectives: the social science or traditional paradigm, the critical theory paradigm, and the ethnographic paradigm. Students will not only be exposed to the literature in each of these areas but also be asked to conduct small scale studies from two of the three paradigms. Because the class is a seminar, student presentations and discussion will be the major activity during class time.

COMM 274. Statistical Applications in Communication Research
This course is designed to prepare Master's and Doctoral students in Education and the Social Sciences for the completion of their thesis/dissertation.

COMM 275. Graduate Seminar in Public Relations
The Graduate Seminar in Public Relations is designed through in-depth study and research to formalize understanding of Public Relations: theory and practice, functions in organizations and role in society. You will study concepts and theories related to public relations role in social systems. A "mock" APR will test knowledge at the end of the semester with both a written and an oral examination.

COMM 276. Communication in Learning Settings
This graduate seminar is designed to develop knowledge of current communication education research and effective communication strategies for teaching undergraduate courses in communication.

COMM 277. Media Relations
This course is to discuss and debate media relations principles and practice.

COMM 278. Political Communication
This course is designed to provide a grounding in rhetorical approaches to persuasion in a political context, to acquaint students with the range of political ideologies, and to examine the theoretical and pragmatic opportunities and obstacles to advocacy in the current mediated content of national, regional, or location politics.

COMM 279. Thesis
(2 or 4)
Psychology

Phone: (209) 946-2133
Location: Psychology/Communications Building
Website: www.pacific.edu/college/psychology
Roseann Hannon, Chair

Programs Offered

Master of Arts in Psychology

The department offers a program of graduate study leading to the MA degree in psychology with special strengths in applied behavior analysis, behavioral psychology, and behavioral medicine/health psychology. Students receive formal academic training in cognitive-behavioral and behavior analytic principles and techniques. All students obtain experience in relevant applied settings and/or teaching assistantships. The design and conduct of research is required throughout a student’s graduate work and students are provided with research mentorship and supervision.

The program prepares students for (1) entrance into doctoral programs and for (2) employment in applied behavior analysis settings. Students applying to the doctoral preparation track are those who wish to increase their experiences and skills in order to become more competitive doctoral program applicants. Students in this track are interested in obtaining their doctorate in clinical or counseling psychology, behavior analysis, and developmental, social, or cognitive psychology. Previous graduates have been successful in entering quality doctoral programs and obtaining employment in a variety of settings.

Opportunities for specialized training, applied experience, and research are available in many settings including:

- a. The Community Re-Entry Program, a multifaceted treatment program for adults with chronic mental illness closely affiliated with the Psychology Department. It is designed to move adults with chronic mental illness to greater independence, and it provides special intervention and research opportunities with individuals diagnosed with schizophrenia;
- b. Behavioral Instructional Service, a program that provides in-home intervention for people with developmental disabilities in conjunction with Valley Mountain Regional Center;
- c. Contracts with local schools, several of which provide opportunities for experience in behavioral assessment and intervention. Most of these services are provided in the field, such as working with students and their teachers in area schools and working with parents of children with developmental disabilities or behavioral problems.
- d. Additional practicum facilities in the community include Stockton Children’s Home, Regional Youth Services Program, San Joaquin County Mental Health Services, Head Start, Stockton Unified School District, and the Transitional Learning Center for homeless children. The Behavior Analyst Certification Board (BACB) has accepted many of these practicum experiences toward eventual board certification in Behavior Analysis.

Our students have had a high rate of sitting for and passing the BACB exam and being accepted into doctoral programs.

Master of Arts in Psychology

In order to earn the master of arts in psychology, students must complete a minimum of 30 units with a Pacific cumulative grade point average of 3.0.

Minimum 18 units, including:

- PSYC 207 Psychology of Learning 4
- PSYC 233 Research Design 4
- PSYC 251 Behavioral Treatments/Applications 4
- PSYC 253 Teaching & Supervising Behavior Change 2
- PSYC 299 Thesis 4

One of the following options:

Minimum 12 units each:

- a) Doctoral Preparation Track
  - PSYC Three electives from 200 level (PSYC 297 -Graduate Independent Research recommended)
- b) Applied Behavior Analysis Track
  - PSYC 258 Behavioral Assessment
  - PSYC Two ABA electives from Behavioral Medicine, Radical Behaviorism, TBA ABA electives

Note: 1) Full-time students are expected to spend four semesters and one summer in residence in Stockton as part of completing their program of studies. All students must complete a one year research apprenticeship during their first year. Many students continue on as research apprentices during their second year, particularly those in the doctoral preparation track.

Course Offerings

PSYC 207. Psychology of Learning (4)
The scientific investigation of learning and behavior. Both experimental and related theoretical developments are considered, as well as applications of the basic principles of learning to issues of social significance.

PSYC 220. Clinical Neuropsychology (4)
This course focuses on the relationship between human brain functioning and behavioral/psychological functioning. The primary emphasis is on the diagnosis and treatment of brain dysfunction in humans. Methods of evaluating clients for the presence of various types of brain dysfunction using psychological testing are studied in depth, along with corresponding neuroanatomy and neuropathology. Research techniques for developing a clearer understanding of both normal and abnormal brain functioning is studied. Instructor permission required.

PSYC 251. Behavioral Treatment/Applications (4)
An overview of behavior therapy, behavior modification and cognitive social learning techniques for behavioral change and assessment. Interviewing skills, rapport building and ethical legal factors related to behavioral intervention are covered, as are current empirically validated treatments for various clinical disorders. Prerequisite: Open only to graduate students; by permission only.

PSYC 253. Supervising and Teaching Behavior Changes (2)
Introduces graduate students to the role of practicum supervisor and instructor. Under the supervision of the PSYC 053 course instructor, students develop, sustain, and evaluate their own interventions at pre-approved externship sites. Students conduct bi-weekly discussion groups providing undergraduate students enrolled in PSYC 053 with additional resources for the course. Students meet weekly with the instructor to discuss practicum concerns and teaching responsibilities. Students gain practical experience carrying out independent research projects, which are often presented at research conferences, as well as teaching experience. All responsibilities are carried out under the supervision of the PSYC 053 instructor. Prerequisites: Extensive training in behavior analysis AND instructor approval.
PSYC 254. Child Mental Health (4)
A study of the causal factors related to the development of mental health problems in children, with an emphasis on the behavioral learning histories and cognitive behavioral patterns associated with specific disorders. Socio-cultural contributions to mental health are also stressed. Behavioral and cognitive behavioral techniques are presented that are used to treat disorders commonly diagnosed in childhood. Students also learn strategies for communicating with children.

PSYC 255. Couples and Family Therapy (4)
An introduction to couples and family therapy theory and practice. Cognitive behaviorism is used as the foundation, and students also learn a broad systems perspective. Students are familiarized with the predominant family therapy styles in current use, and well as numerous family therapy strategies.

PSYC 256. Behavioral Medicine/Health Psychology (4)
A survey class on the overlapping fields of behavioral medicine and healthy psychology, two of the fastest growing fields in contemporary psychology. Focuses on a biopsychosocial model of illness, how this model compares to a more traditional biomedical model of illness, and the applications of a biopsychosocial model to the treatment and prevention of chronic illnesses such as coronary heart disease, cancer, arthritis, AIDS/HIV, and stroke. Other topics include health promotion, chronic pain, the disease prone personality, medical compliance, and the doctor-patient relationship. Of interest to any student who aspires to become a health care professional in health psychology, clinical psychology, medicine, pharmacy, physical therapy, or nursing.

PSYC 258. Behavioral Assessment (4)
An overview of behavioral assessment techniques. Specific topics to be covered include data collection, inter-observer agreement, social validity, treatment integrity, functional assessment, stimulus preference assessment, indirect assessment techniques, and psychometric assessment procedures.

PSYC 259B. Behavioral Analysis: Marital/Family Therapy (4)
PSYC 259C. Behavioral Analysis: Marital/Family Therapy (4)
PSYC 259X. Behavior Analysis (4)

PSYC 283. Research Design (4)
Design and analysis of research using single subject and groups.

PSYC 285E. Behavior Analysis Internship I (1)
Clinical experience with the University of the Pacific Behavior Analysis Services Program. This course includes practice in conducting behavior analysis programs for clients, overseeing the implementation of behavioral programs by others, attending behavioral program planning meetings, and reviewing program-relevant literature. Faculty and staff will observe interns engaging in activities in the natural environment at least once every two weeks, and provide specific feedback to interns on their performance. Multiple populations and sites will be available, including but not limited to, typically developing school-aged children in school and home settings, and individuals with psychiatric diagnoses and/or developmental disabilities in their homes or in community settings. Instructor permission required.

PSYC 285F. Behavior Analysis Internship II (1)
Clinical experience with the University of the Pacific Behavior Analysis Services Program. This course includes practice in conducting behavior analysis programs for clients, overseeing the implementation of behavioral programs by others, attending behavioral program planning meetings, and reviewing program-relevant literature. Faculty and staff will observe interns engaging in activities in the natural environment at least once every two weeks, and provide specific feedback to interns on their performance. Multiple populations and sites will be available, including but not limited to, typically developing school-aged children in school and home settings, and individuals with psychiatric diagnoses and/or developmental disabilities in their homes or in community settings. Instructor permission required.

PSYC 291. Graduate Independent Study (1-4)
PSYC 293. Special Topics (1-4)
PSYC 295. Graduate Seminar in Psychology (4)
PSYC 297. Graduate Independent Research (1-4)
PSYC 299. Thesis (2 or 4)
Sport Sciences

Phone: (209) 946-2209
Location: Main Gym
Website: www.pacific.edu/college/sportsciences
Christopher Snell, Chair
Pete Schroeder, Graduate Studies Coordinator

The graduate program in Sport Sciences provides for scholarly study in the areas of exercise science, sport pedagogy and sport management. A major strength of the program lies in its flexibility. Academic programs are individually designed to meet the needs and objectives of students with a variety of emphasis areas.

A typical program includes a core content of classes in sport sciences. Students also supplement their programs with courses in biology, business, chemistry, communication, education, pharmacy, or psychology according to academic and professional goals. Graduate students are also given opportunities for experiential learning and collaborative research.

Programs Offered

Master of Arts in Sport Sciences
- Exercise Science
- Sport Pedagogy
- Sport Management

Admission Requirements

1. Undergraduate degree in sport sciences and/or physical education/sport management/sports medicine or completion of essential undergraduate prerequisites, as determined by the Graduate Studies Committee.
2. Completion of the Graduate Records Examination (GRE)

Master of Arts in Sport Sciences

Plan A Thesis

In order to earn the master of arts degree in sport sciences, students must complete a minimum of 32 units with a Pacific cumulative and major/program grade point average of 3.0. Courses must be graded B-(2.7) or higher to be counted toward the degree program.

SPTS 279 Research Methods in Sport Sciences 4

Note: 1) Fulfillment of the prerequisite requirement for SPTS 279; i.e., completion of a course in statistics or an introduction to research course involving statistical analysis of data, with a B- or better. 2) Units received for meeting this prerequisite requirement may not be included among the minimum units required for the master’s degree. 3) Courses may be taken concurrently.

SPTS Approved electives 28
(16 of these units must be at the 200 level)

Comprehensive Exam

Must satisfactorily complete a written comprehensive examination covering three general/comprehensive disciplinary areas.

Note: 1) The examination may be taken during the latter part of the semester in which coursework is being completed. The student’s graduate faculty adviser serves as the coordinator of the Comprehensive Examination, and the coordinator has the responsibility of obtaining questions from the appropriate colleagues. The examination questions are forwarded to the Graduate Studies Coordinator/Designee who schedules and administers the examination. Following a review of the written examination by appropriate instructors, the results will be transmitted to the student in writing. There is a departmental mechanism by which a student who has an unsuccessful result may apply for retesting in consultation with the Graduate Studies Committee.

General Guidelines Applicable to both Plan A and Plan B Students

1. An individual Plan A or Plan B study program is to be approved by the end of the first semester of study. Programs, developed by the student and adviser, are to be submitted to the department chair for review and approval. Changes in programs may subsequently be made by following the same review-approval process.
2. The student will be assigned to a graduate faculty adviser based on student/faculty interest and in consultation with the Graduate Studies Coordinator.
3. All Independent Studies and/or Independent Research must be reviewed and approved by the department chair or Graduate Coordinator prior to registration.
4. Dates for open colloquia, written comprehensive examinations and final oral examinations are to be confirmed by the Graduate Studies Coordinator.

Course Offerings

SPTS 233 Advanced Kinesiology (4)
A graduate seminar which considers the musculoskeletal analysis of human movement, posture, exercise prescription, and rehabilitation. Prerequisite: SPTS 133, graduate standing or permission of the instructor.

SPTS 235 Graduate Nutrition/Exercise Metabolism (4)
A thorough study of the principles of nutrition as they relate to health and participation in sport or physical activity. The course includes calculation of energy needs and expenditures, and the role of carbohydrates, fats, protein, vitamins, minerals, and water in sport and physical activity.
SPTS 237. Advanced Sport Psychology (4)
This course will provide a detailed examination of the theories and concepts that explain how the human psyche affects sport performance. Particular emphasis will be given to the application of these concepts for coaches and athletes.

SPTS 239. Advanced Applied Sport Psychology (4)
A graduate seminar designed for advanced students exploring theoretical concepts of psychology as they relate to individual and group behavior in physical activity environments.

SPTS 241. Advanced Sociology of Sport (4)
A graduate seminar dealing with theoretical concepts of sociology related to the American sport environment. This course uses a sociological perspective to provide an appreciation of sport as an integral part of our cultural dynamics. The relationship of sport and other social institutions such as media, economy, politics, and education will be covered, as well as the relationship of sport and social stratification such as gender, race, and class.

SPTS 247. Advanced Exercise Physiology (4)
Advanced study of physiological responses to exercise with emphasis on laboratory methods and procedures for testing and demonstrating these responses for research application. Prerequisites: SPTS 147 or equivalent, and permission of the instructor. Lab fee required.

SPTS 248. Applied and Clinical Physiology (4)
This course is designed to study the fundamental principles of exercise testing and interpretation for high risk, healthy, and athletic populations. The course is structured to focus on the cardiovascular, metabolic, and pulmonary responses to aerobic exercise and implications for designing training programs for enhancing health, fitness, and performance. This course will serve as a foundation for clinical exercise science and the use of exercise testing in the study of cardiac, metabolic and respiratory pathology.

SPTS 253. Advanced Adapted Physical Education (4)
This course provides the culminating learning experience for those teaching credential candidates who are completing the waiver program with an emphasis in adapted physical education. Lab fee required.

SPTS 255. Advanced Motor Learning (4)
This graduate course examines both the information processing and dynamical systems approaches to the study of human motor behavior and skill acquisition. Content is theoretically and research based with a behavioral emphasis. Topics covered will include: variability and motor control; visual control of action; the role of reflexes; task interference; limitations in information processing, effects of stress on performance, and the Schema theory. It is intended to provide students with an advanced understanding of the conceptual, functional properties of the motor system and human motor performance and their application to teaching, coaching, industrial and therapeutic settings.

SPTS 257. Advanced Clinician in Sports Medicine (4)
This course integrates theory and practice and requires students to develop a research topic, consistent with an explicitly and narrowly defined area of interest. Prerequisite: Permission of the instructor.

SPTS 259. Professional Preparation in Sport Sciences (6)
Course is designed for the future professional practitioner who wishes to deliver an effective, meaningful clinical or educational experience to a diverse population and help them sustain it through knowledge to conceive and plan meaningful programs, the administrative skill to produce an organizational structure within school and/or practicum that optimizes the impact of the program, and the creative energy to link the program to opportunities for children and adults. Students will engage in an in-depth study of the research on teaching and the application of research-based knowledge to the teaching and clinical professions.

SPTS 261. Advanced Biomechanics of Sport (4)
Advanced study of mechanical principles which influence human movement; both non-cinematographic and cinematographic/video graphic techniques are used to analyze and evaluate motor skills and errors in performance; critical evaluation of current research findings in biomechanics. Prerequisite: undergraduate course in kinesiology or biomechanics or permission of the instructor. Lab fee required.

SPTS 265. Advanced Sports Law (4)
This course addresses legal issues and responsibilities relevant to professionals in the areas of sports medicine, sport management, sport pedagogy and athletics. General legal principles supported by case law in such areas as negligence, contract law, constitutional law, antitrust laws and unlawful discrimination are offered.

SPTS 269. Advanced Management of Sport Enterprises (4)
The purpose of this class is to prepare graduate students to lead in the unique business environment of sport. The unique governance structure of intercollegiate athletics and professional sports will be presented. Students will then develop a multi-frame approach to management of sport organizations. Students will also explore the subjective nature of leadership to develop a style best suited for sport. Emphasis will be placed on the integration of applied research using leadership and management theories.

SPTS 272. Advanced Case Analysis of Sport and Fitness Management (4)
A graduate seminar designed to provide breadth and depth of topical knowledge beyond that covered in the introductory course.

SPTS 274. Advanced Sport Marketing and Promotions (4)
An in-depth study of the unique nature of sport marketing that focuses on three areas. Students will learn how to market sport products and events. The course will explore the many mechanisms through which sport is used as a marketing tool. Finally, students will learn to gain maximum benefit from the relationship between sport and the media.

SPTS 275. Advanced Sport Management (4)
This class provides graduate students with the knowledge base necessary to lead the mega-events and manage multipurpose and single-use facilities common in sport. The first portion of the course will be devoted to event planning, marketing and execution. The second part of the course will focus on the planning, design and maintenance of sports facilities. Special attention will be given to the environmental impact of sporting events and facilities.

SPTS 279. Research Methods in Sport Sciences (4)
An in-depth evaluation of the various methods used in the disciplines of the sport sciences, including experimental, descriptive, qualitative and historical; means of selecting a research problem and planning its solution; important considerations regarding review of the literature; overview of proper form and style in research writing. Student must complete a fully developed research proposal as part of this course. Prerequisites: graduate standing and completion of a course in statistics.

SPTS 287. Advanced Internship: Sport Medicine (4)
An opportunity for qualifying students to work in an area of sports medicine that interests them. Prerequisites SPTS 257, graduate standing and approval by course supervisor.

SPTS 287A. Advanced Internship: Sport Management (4)
Professional leadership experience for graduate students. Agency placement is based on student goals and professional leadership background.

SPTS 287B. Advanced Internship: Sport Management (4)
Professional leadership experience for graduate students. Agency placement is based on student goals and professional leadership background.
SPTS 289A. Advanced Practicum: Sport Management (2-4)
This course is designed to provide students with a practical experience in the application of administrative theory. Prerequisite: SPTS 169 or SPTS 269.

SPTS 289B. Advanced Practicum: Coaching (2-4)
Non-classroom experiences in activities related to Sports Medicine, under conditions determined by the appropriate faculty member. SPTS 189 represents advanced practicum work involving increased independence and responsibility. Enrollment is limited to six units maximum of 089/189a, b, c, d offerings and no category within a course may be repeated for credit.

SPTS 291. Independent Study (2-4)

SPTS 293. Special Topics (3 or 4)
Prerequisite: graduate standing or permission of the instructor.

SPTS 297. Independent Research (1-4)

SPTS 299. Thesis (4)

---

**College of the Pacific Faculty**

**Biological Sciences**

**Greg Anderson,** 2002, Assistant Professor, BA, University of Missouri-Columbia, 1990; PhD, University of Tennessee, 2001.

**Mark Brunell,** 2002, Associate Professor, BA, California State University, 1988; MA, California State University, Fullerton 1991; PhD, University of California, Riverside, 1996.

**Gregg D. Jongsaward,** 1996, Co-Chair and Associate Professor, BS, University of Minnesota, 1986; PhD, California Institute of Technology, 1993.

**Janet Koprivnikar,** 2007, Assistant Professor, BS, University of Houston, 1998; MS, 2001; PhD, 2006.

**Kirkwood Land,** 2004, Assistant Professor, BS, University of California, Davis, 1992; MA, University of California, Riverside, 1995; PhD, University of California, Los Angeles, 2001.

**Leah Larkin,** 2008, Assistant Professor, BA, Swarthmore College, 1991; PhD, The University of Texas, 2002.

**Geoffrey Lin Cereghino,** 2000, Associate Professor, BS, University of California, Davis, 1989; PhD, University of California, San Diego, 1995.

**Joan Lin Cereghino,** 2000, Associate Professor AB, Princeton University, 1987; PhD, University of California, San Diego, 1992.

**Stacey Luthy,** 2007, Assistant Professor, BS, Louisiana State University, 1997; PhD, The University of Miami, 2004.

**W. Desmond Maxwell,** 1999, Associate Professor, BS, The Queen’s University of Belfast, Ireland, 1986; PhD, 1991.


**Richard R. Tenaza,** 1975, Professor, BA, San Francisco State College, 1964; PhD, University of California, Davis, 1974.

**Eric O. Thomas,** 1993, Associate Professor, BS, University of California, Riverside, 1984; MA, 1987; PhD, University of California, Berkeley, 1991.

**Srinivas Venkatram,** 2006, Assistant Professor, BS, Madurai Kamaraj University, India, 1992; MS, 1994; PhD, University of Kentucky, 2000.

**Craig A. Vierra,** 1995, Co-Chair and Professor, BS, University of California, Davis, 1990; PhD, University of California, Riverside, 1994.

**Lisa Wirschutz,** 1998, Associate Professor, BS, University of California, Berkeley, 1986; PhD, University of California, San Francisco, 1996.

**Chemistry**

**Larry O. Speer,** 1970, Professor and Assistant Chair, B.S., University of Kansas, 1965; Ph.D., University of Colorado, 1969.

**Dieter Gremel,** 2005, Research Professor, B.S., University of Cologne, 1969; Ph.D., University of Cologne, 1972.

**Andreas Franz,** 2002, Associate Professor, B.S., Universitaet-Gesamthochschule Siegen, 1994; M.S., University of the Pacific, 1997; Ph.D., University of the Pacific, 2000.

**Patrick R. Jones,** 1974, Professor, B.A., University of Texas, 1966; B.S., 1966; Ph.D., Stanford University, 1971. Member, Phi Beta Kappa.


**C. Michael McCallum,** 1994, Associate Professor, B.S., Michigan State University, 1988; Ph.D., University of California, Berkeley, 1993.
Jianhua Ren, 2002, Associate Professor, B.S., Beijing Normal University, 1986; M.S., Auburn University, 1994; Ph.D., Purdue University, 1999.


Vycheslav V. Samoshin, 1999, Professor, M.S., Lomonov Moscow State University, USSR, 1974; Ph.D., M.S.U. 1982; D.Sc., M.S.U. 1991.

Bálint Szatmáry, 2008, Associate Professor, M.S., Eötvös Loránd University, 1997; Ph.D., Eötvös Loránd University, 2001.

Jerry Tsai, 2008, Associate Professor, B.S., University of California, Los Angeles, 1991; Ph.D., Stanford University, 1998.

Liang Xue, 2007, Assistant Professor, B.S., Fudan University, Shanghai, China, 1996; Ph.D., Clemson University, 2004.

Communication

Martin Bates, 2005, Assistant Professor, BA, University of the Pacific, 1996; MA, 1999; PhD, Pennsylvania State University, 2004.

Teresa G. Bergman, 2006, Associate Professor, BA, University of California, Berkeley, 1978; MA, San Francisco State University, 1991; PhD, University of California, Davis, 2001.


Qingwen Dong, 1996, Chair, Associate Professor, BA, Beijing Second Foreign Language Institute, 1983; MA, University of Missouri-Columbia, 1990; PhD, Washington State University, 1995.

Carol Ann Hackley, 1985, Professor, BA, California State University, Sacramento, 1961; MA, Ohio State University, 1984; PhD, 1985.

Randall J. Koper, 1985, Professor, BA, Michigan State University, 1974; MA, 1984; PhD, 1985.

R. Alan Ray, 1987, Assistant Professor, BS, Memphis State University, 1977; MA, 1980; PhD, University of Missouri, 1986.

Jon F. Schamber, 1980, Professor, BA, University of the Pacific, 1974; MA, 1975; PhD, University of Oregon, 1982.

Paul Turpin, 2007, Assistant Professor, BA University of California, Berkeley, 1994; MA, University of Southern California, 1997; PhD 2005.

Psychology

Roseann Hannon, 1970, Chair, Professor, BS, Frostburg State College, 1965; MS, Pennsylvania State University, 1967; PhD, University of South Dakota, 1970.

Gary N. Howells, 1971, Professor, BA, Oregon State University, 1964; MA, University of Utah, 1970; PhD, 1971.

Scott Jensen, 2006, Assistant Professor, BS, Brigham Young University, 1998; MS, Colorado State University, Fort Collins, 2003; PhD, 2004.

Carolynn S. Kohn, 2003, Assistant Professor, BA, University of California Santa Barbara; MA, Hahnemann University, 1996; PhD 2000; BCBA.

Matthew P. Normand, 2007, Assistant Professor, BA, Western New England College; MA, Western Michigan University, 1999; MS, Florida State University, 2002; PhD, 2003; BCBA.

Stacy Riley, 2006, Assistant Professor, BS, Fayetteville State University, 1996; MA, The University of Alabama, 1999; PhD, 2002.

Deborah Schooler, 2007, Assistant Professor, BA, Brown University, 1999; PhD, University of Michigan, 2004.

Sport Sciences

Margaret E. Cicolella, 1985, Professor, BS, University of Colorado, 1970; MS, Brigham Young University, 1972; EdD 1978; JD, Humphreys College of Law, 1993.

Darrin Kitchen, 2005, Assistant Professor, BA, California State University, Chico, 1996; MS, California State University, Sacramento, 1997; EdD, University of the Pacific, 2006.

Linda Koehler, 1989, Chair, Associate Professor, BA, Purdue University, 1971; MS, University of New Mexico, 1975; PhD, University of Illinois, 1982.

Peter J. Schroeder, 2007, Assistant Professor, BS, Truman State University, 1996; MA, University of the Pacific, 1998; EdE, University of Missouri, 2003.


Mark Van Ness, 1999, Associate Professor, BS, Wheaton College, 1990; MS, California State University, Sacramento, 1993; PhD, Florida State University, 1997.
The Conservatory of Music offers one graduate degree in music education: the Master of Music. Additionally, the Master of Education (with an emphasis in music education) is available through the Benerd School of Education. Building on previous music and teaching experiences, these programs are individualized and lead to a creative, productive career in teaching music, pre-K through college. The design of the graduate program gives students individual faculty attention and opportunities to work with experts in their field.

Master’s students in the Conservatory of Music take a range of coursework designed to enhance their own musicianship and their ability to develop musicianship in others. Graduates develop advanced skills in conducting, pedagogy, music studies, and research. Degrees are designed for those with a previous degree/credential in music education (Master of Music) and for those seeking teaching credential in music (Master of Education). In general, the Master of Music includes more coursework in music, while the Master of Education includes more education courses.

**Admission Requirements**

Admission to any graduate program in music at University of the Pacific is based upon both academic qualifications and musicianship, including overt musical behavior as demonstrated in performance and listening. Academic considerations for the entering master’s student, regardless of major, are discussed in earlier pages of this catalog under Admission. The graduate faculty of the Conservatory of Music consider each prospective graduate student based upon:

Music education majors — a live audition or tape of either:

1. The candidate’s primary solo performing medium.
2. A recent (within two years) example of a performance or demonstration by a school ensemble or class taught or conducted by the applicant.
3. The candidate’s original compositions (with scores).

Candidates must have a Bachelor’s Degree in Music

Candidates must apply for and be accepted into the Graduate programs of the Conservatory of Music and the School of Education

Credential candidates must apply for and meet the admission procedures and standards of the Credential Program of the School of Education during the first term of attendance

Instructions regarding repertory and recording specifications are available in the Office of the Dean, Conservatory of Music and should be requested by all applicants.

**Comprehensive Examination**

At the conclusion of the master’s program, all students are expected to pass a comprehensive written and/or oral examination/thesis defense on all work covered during their graduate study at University of the Pacific.
Master of Music Degree in Music Education

Candidates for the Master of Music degree must have their baccalaureate degree from an accredited school or department of music and must also give evidence of accomplishments during their undergraduate years commensurate with those leading to the Bachelor of Music degree at University of the Pacific. All transcripts and placement tests will be evaluated; recommendations for courses of study will be made accordingly. Supplementary undergraduate work may be prescribed if deemed advisable. The major field is music education.

The music education department offers two plans for students who have completed an undergraduate music education degree: Plan A with emphasis on research, Plan B with emphasis on advanced techniques and practices in music education and music. Students with an undergraduate music degree other than music education can obtain the master’s degree and California music certificate in teaching through the Master of Education in Music Education offered through the School of Education. See music education department chair for program description.

In certain cases (depending on previous teaching experience), a candidate may gain the teaching credential with the Master of Music Education degree, working with both the Conservatory of Music and the Benerd School of Education; see music education department coordinator for details. Note that both MM programs contain a number of electives; specific courses come from the upper division and graduate courses listed later in this catalogue and in the university’s general catalogue. This flexibility of electives allows for the personalization of the degree plan.

Program Requirements

In order to earn the master of music degree in music education, students must complete a minimum of 33 units with a Pacific cumulative grade point average of 3.0.

Plan A: Thesis

MUSC 202  Introduction to Research in Music  3
MUSC 203  Contemporary Issues in Music Education and Therapy  3
Minimum ten units from the following:  10
  MHIS  Minimum 2 units in Music History
  MCOM  Minimum 2 units in Music Theory
  MAPP  Additional units in Applied Music
Three to nine units of non music courses:  (such as education, psychology, languages, statistics)  3-9
Four to ten units from  4-10
  MEDU  Music Education
  MHIS  Music History
  MTHR  Music Therapy
  MCOM  Music Theory
  MAPP  Music Applied
MEDU 299  Thesis  4
One of the following must be met before degree is awarded:
  Bachelor's degree in Music Education
  Music Education Credential

Plan B: Seminar

MUSC 202  Introduction to Research in Music  3
MUSC 203  Contemporary Issues in Music Education and Therapy  3
Minimum ten units from the following:  10
  MHIS  Minimum 2 units in Music History
  MCOM  Minimum 2 units in Music Theory
  MAPP  Additional units in Applied Music
Three to nine units of non music courses:  (such as education, psychology, languages, statistics)  3-9
Four to ten elective units from  8-14
  MEDU  Music Education
  MHIS  Music History
  MTHR  Music Therapy
  MCOM  Music Theory
  MAPP  Music Applied
One of the following must be met before degree is awarded:
  Bachelor's degree in Music Education
  Music Education Credential

Note: 1) 18 units must be at the graduate (200 or higher) level.

Music Therapy

Pacific’s music therapy program offers post baccalaureate education for 1) entry to the music therapy profession (Certification/Equivalency) and 2) also offers a Master’s Degree in Music Therapy, which supports career advancement beyond the entry-level foundations required for Board Certification. Flexible learning options support a broad range of enhanced career opportunities for rapidly developing health care arenas. Advanced (MA) coursework affords students greater depth and breadth in knowledge and skills for advanced clinical competency and career development. Master’s degree students in music therapy receive individual mentoring throughout the process, from selecting an area for career focus, through the development of advanced skills and specialization.

Overview of Post-Bachelor's Degree Music Theory Options

1. Master of Arts Degree in Music Therapy  (See complete program description below.) This program is for Board-Certified Music Therapists seeking preparation for advanced level of practice, with specialization in either clinical or academic areas. Application is submitted to the graduate school; an informal musicianship assessment and interview is done prior to student advising.

2. Certification (Equivalency) Program in Music Therapy  (These students do not earn a degree from Pacific.) This program is designed for individuals who already have bachelor's degrees in music (e.g., performance, music education, music management, etc.) or those with degrees in areas other than music (e.g., psychology, special education, English, etc.). This option does not include all the coursework that would be required to earn a second bachelor's degree. Instead, the Certification Program focuses on the completion of all necessary music/music therapy courses, competencies, and clinical internship as required by the AMTA as prerequisites to sit for the board certification examination, administered by CBMT (Certification Board for Music Therapists). Passing the board certification examination certifies individuals to begin the professional level of practice of music therapy with the MT-BC credential (Music Therapist-Board Certified).
A popular and flexible learning option for mature individuals making a career change, the overall length of time to complete the Certification program may vary due to practical issues of balancing work or family commitments. The number of courses required for the completion of the certification program will vary according to the academic background and musical skills of those who apply. The music therapy faculty works closely with potential Certification students to design an individualized plan to enable students to complete the various requirements in a cost-effective and timely manner, to expedite their entry into the music therapy job market. An important first step in this supportive mentoring process is the initial interview and music skills assessment session with the music therapy faculty and the principal instrument audition with Conservatory Applied Faculty, which occur during the process of application to the Certification program. (See the detailed Certification/Equivalency Program description below.)

3. Certification (Equivalency) Program Plus Master's Degree in Music Therapy (These students are classified as graduate students and are referred to as Certification Graduate Students.) This program supports rapid development of advanced clinical competencies for strong careers in music therapy clinical or academic settings. Persons who already have an undergraduate degree, demonstrate strong musicianship, and who qualify to enter the Graduate School may apply for this program. A complete application for graduate school admission is required for this program option, as well as the audition, interview, and music skills assessment described under the Certification program application procedure below. The Music Therapy Certification Graduate student first completes the Certification Program requirements. (See the Certification/Equivalency program description below.) Then, depending upon the individual’s situation, some students may begin work toward the graduate (MA) degree while completing their Certification requirements. Certification Graduate students who are making good progress in the certification/undergraduate level academic and competency work may concurrently take graduate level classes such as MUSC 202 or 203, music electives, or courses in other departments which support development of competencies for their area of specialization.

However, since all core music therapy courses in the Master of Arts in Music Therapy Program focus on advanced clinical skills, these courses can only be taken after successful completion of all (undergraduate level) Certification courses and the clinical internship (MTHR 187). Certification Graduate students usually earn the MT-BC credential shortly after completing internship, and are encouraged to work part-time as music therapists; this “real life” experience is extremely valuable in conjunction with the advanced coursework in music therapy. (For more information on the advanced phase of the Certification Graduate program option, see the MA program description below.)

Certification (Equivalency) Programs in Music Therapy

Program Description

The Music Therapy Certification program is designed for individuals who already have bachelor's degrees in music (e.g., performance, music education, composition, etc.) or in areas other than music (e.g., psychology, special education, English, etc.). The MT Certification program does not require students to earn a second bachelor's degree. Instead, the Certification Program focuses on the completion of all required courses in music foundations, music therapy, and health/behavioral/natural sciences, AMTA-defined music therapy competencies, and the 6-month full time clinical internship, all required as prerequisites to sit for the board certification examination, administered by CBMT (Certification Board for Music Therapists). Passing the board certification examination certifies individuals to begin the professional level of practice of music therapy with the MT-BC credential (Music Therapist-Board Certified), recognized as the professional standard throughout the United States and in many other countries.

The Certification program offers a popular and flexible learning option for mature individuals making a career change to enter music therapy. The number of courses required for the completion of the certification program varies according to the academic background and musical skills of those who apply. However, students must complete all of the required music therapy courses listed below (min. 27 units) at the University of the Pacific, or demonstrate equivalent coursework from an AMTA-approved academic program. The music therapy faculty works closely with potential Certification students to design an individualized plan for successful study, and to document completion of all courses, supervised clinical training (minimum 1200 hours), and demonstration of AMTA competencies required for eligibility for the Board Certification examination.

Application Procedure

Applicants to the Certification Program must complete the following and submit all materials to the Graduate School:

1. Online application to the graduate school. Select the “Music Therapy Certification Program” option.
2. Official transcripts of all college level academic work, with evidence of completion of a baccalaureate degree.
3. Letter of application detailing reasons for pursuing a career in music therapy.
4. At least 3 letters of reference/recommendation supporting the applicant’s potential to succeed in a helping professions program.
5. International students are required to complete TOEFL and financial certification.
6. The GRE is NOT required for the Certification program.
7. Applicants must prepare an audition on their principal musical instrument, to meet or exceed the Conservatory requirements for Transfer level undergraduate applicants. Specific instructions for each instrument area can be found on the Conservatory website. This audition should be scheduled with the Conservatory main office, or may be submitted via DVD recording.
8. All applicants must also meet with the music therapy faculty for an interview and assessment of functional music skills. You will be expected to:
   a) Sing and accompany yourself with piano and/or guitar. You may use sheet music or lead sheet. You should prepare 2 contrasting pieces from traditional or contemporary musical styles.
   b) Sing an American folk song unaccompanied, from memory. If you are unable to arrange for a campus interview/assessment because of distance, you will be expected to audio or video tape your musical skills assessment, as well as complete a telephone interview.
9. All applicants will be asked to discuss/write about your professional interests and goals at the time of the interview with the Music Therapy faculty.
Program Requirements

The following courses constitute the Certification program in music therapy at the University of the Pacific, as approved by the AMTA (American Music Therapy Association). Music therapy courses must be completed at the University of the Pacific or other program approved by AMTA. Total units for course requirements are approximated and may vary slightly according to the college or university where course(s) are completed. Certification students must maintain a minimum grade point average of B in all coursework taken during the Certification program, must earn a B or better in all music therapy courses, and must demonstrate interpersonal and professional skills appropriate to the clinical profession as evaluated by the Music Therapy Program faculty, in order to remain in the program.

Music foundations courses completed at a NASM-approved college level program may be applied to fulfill Music Therapy Certification requirements, subject to evaluation by Conservatory faculty.

1. Students who have completed a bachelor’s degree in music at a NASM-Accredited institution will be considered to have completed music foundation coursework.

2. Students who have completed theory coursework at an institution not accredited by NASM will be assessed for knowledge and skill level. Failing to meet competencies in theory and musicianship, students will be required to take additional theory coursework.

3. Students who need to complete theory coursework at Pacific will be evaluated for placement in music theory.

Health/Behavioral/Natural Sciences courses may be transferred from other accredited college level institutions. No courses with a grade lower than a B- will be accepted in this category.

Students must provide official college transcripts documenting any courses to be applied to the Certification requirements. Courses with grades of C or lower will not be accepted for credit toward Certification requirements. Course description and course syllabus are required to support evaluation of course equivalence.

Program Requirements

1. Music Theory Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCOM 009</td>
<td>Music Technology</td>
<td>1</td>
</tr>
<tr>
<td>MCOM 010</td>
<td>Music Theory and Aural Perception I</td>
<td>4</td>
</tr>
<tr>
<td>MCOM 011</td>
<td>Music Theory and Aural Perception II</td>
<td>4</td>
</tr>
<tr>
<td>MCOM 012</td>
<td>Music Theory III</td>
<td>2</td>
</tr>
<tr>
<td>MCOM 013</td>
<td>Aural Perception III</td>
<td>1</td>
</tr>
</tbody>
</table>

Additional courses to reach minimum of 16 units:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCOM 014</td>
<td>Introduction to Orchestration</td>
<td></td>
</tr>
<tr>
<td>MCOM 015</td>
<td>Music Theory IV: 20th Century</td>
<td></td>
</tr>
<tr>
<td>MCOM 016</td>
<td>Aural Perception IV</td>
<td></td>
</tr>
<tr>
<td>MCOM 019</td>
<td>Music &amp; Computer Technology</td>
<td></td>
</tr>
<tr>
<td>MCOM 030</td>
<td>Jazz Theory and Aural Training</td>
<td></td>
</tr>
</tbody>
</table>

II. Music History Courses (3 semesters)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHIS 006</td>
<td>Music of the World's Peoples</td>
<td></td>
</tr>
<tr>
<td>MHIS 008</td>
<td>History of Jazz</td>
<td></td>
</tr>
<tr>
<td>MHIS 012</td>
<td>Music History II</td>
<td></td>
</tr>
<tr>
<td>MHIS 013</td>
<td>Music History III</td>
<td></td>
</tr>
</tbody>
</table>

Note: 1) One semester may consist of world music or jazz/contemporary music (Recommended)

III. Music Performance & Skills Foundations

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPER</td>
<td>4 semesters of Ensembles</td>
<td>4</td>
</tr>
<tr>
<td>MPRC 105</td>
<td>1 semester of Percussion Instruments</td>
<td>1</td>
</tr>
<tr>
<td>MPRC 151</td>
<td>1 semester of Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MAPP 010</td>
<td>2 semesters of Applied Instruction on Principal Instrument</td>
<td>2</td>
</tr>
</tbody>
</table>

IV. AMTA level Proficiencies

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piano</td>
<td>Proficiency</td>
</tr>
<tr>
<td>Voice</td>
<td>All students must take MAPP 001E</td>
</tr>
</tbody>
</table>

Note: 1) Individual assessments by the faculty determine whether the AMTA required music skills competencies have been met. 2) Course instruction at Pacific is available in any music foundation area if needed.

V. Health/Behavioral/Natural Science Courses

Minimum of 20 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 111</td>
<td>Abnormal Psychology</td>
<td>4</td>
</tr>
<tr>
<td>SPED 123</td>
<td>The Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 011</td>
<td>Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Additional courses to reach minimum of 20 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAPP 001E</td>
<td>Voice Class for Music Therapy and Music Education Majors</td>
<td>1</td>
</tr>
<tr>
<td>MTHR 011</td>
<td>Music as Therapy: A Survey of Clinical Applications</td>
<td>3</td>
</tr>
<tr>
<td>MTHR 018</td>
<td>Basic Music Skills for Music Therapists and Applied Professionals</td>
<td>3</td>
</tr>
<tr>
<td>MTHR 020</td>
<td>Observation and Assessment in Music Therapy</td>
<td>2</td>
</tr>
<tr>
<td>MTHR 135</td>
<td>Music with Children in Inclusive Settings: Therapeutic &amp; Educational Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHR 140</td>
<td>Psychology of Music</td>
<td>3</td>
</tr>
<tr>
<td>MTHR 240</td>
<td>Psychology of Music (For students concurrently enrolled in the MA in Music Therapy program)</td>
<td>3</td>
</tr>
<tr>
<td>MTHR 141</td>
<td>Music Therapy in Mental Health and Social Services</td>
<td>3</td>
</tr>
<tr>
<td>MTHR 142</td>
<td>Music Therapy in Medicine and Health Care</td>
<td>3</td>
</tr>
<tr>
<td>MTHR 150</td>
<td>Fieldwork in Music Therapy</td>
<td>4</td>
</tr>
<tr>
<td>MTHR 187</td>
<td>Internship in Music Therapy</td>
<td>2</td>
</tr>
</tbody>
</table>

Master of Arts Program in Music Therapy

Program Description

The MA in music therapy requires a minimum total of 36 units and provides a balance across three main areas, with at least 15 units in music therapy foundation courses, 13 units in specialization field courses (much of which is selected by the student with faculty advisement), and 10 or more units of free electives. Students have the option to take additional elective courses related to their specific goals for clinical or for research/academic professional development, resulting in a range of 36-40 units earned within the MA in Music Therapy degree program.

The MA in MT program provides a foundation set of courses for all students, and then allows for individualization of the plan of study. Students pursuing the MA in Music Therapy are able to focus on their specific personal career goals by selecting one of two tracks supporting:
Master of Arts in Music Therapy

In order to earn the master of arts degree in music therapy, students must complete a minimum of 36 units with a Pacific cumulative and major/program grade point average of 3.0.

Music Therapy Foundational Courses:

Minimum 13 units

MTHR 231 Individual Music Therapy: Advanced Theory and Techniques 3
MTHR 232 Group Music Therapy: Advanced Theory and Techniques 3
MTHR 260 Advanced Clinical Practice 2

Note: 1) Two semesters, one unit each semester. 2) Students may fulfill one unit of this requirement by completing a Special Topics course in a clinical practice area.

MTHR 251 Music Therapy Supervision I: Intro to Theory and Applications 1
MTHR 252 Music Therapy Supervision II: Applied Experience 1
MUSC 203 Contemporary Issues in Music Therapy and Music Education 3

Choose one of the following Options:

Academic/Research Track
(Option A, Thesis Plan)

Studies in this track prepare the graduate student to go on to doctoral level studies, leading to careers in academia and/or research. Students may receive mentored experience in college teaching as well as develop skills for research and scholarly work. Studies culminate in a research thesis. The thesis may consist of either experimental or applied research related to the student’s specialization interests.

Required Courses:

Minimum 13 units

MTHR 240 Psychology of Music 3

Note: 1) May be waived if prior upper division undergraduate coursework covered this course content

Two Research Design & Statistics Course Electives 6
MUSC 202 Introduction to Music Research
200 level Research course

Note: General students take MUSC 202 unless they have already had extensive coursework experience in the research mythologies

MTHR 299 Thesis 4

Free Electives

Minimum 10-14 units

Area of Specialization Electives 6

Note: 1) All Music Therapy graduate students select a minimum of 6 elective units to support their chosen area of specialization and can benefit from graduate coursework selected from among many program offerings across the University in such areas as: counseling/health psychology/ experimental psychology/ behavior analysis (Department of Psychology), special education/educational or counseling psychology (Benerd School of Education) or courses from the MEd in Music Education program. Academic Track students are also encouraged to consider electives from Speech-Language Pathology and other Health Sciences or helping professions offerings, as well as applied music studies or ensembles in the Conservatory.

Additional electives from the following:

MTHR 230 Bonny Method of Guided Imagery and Music Level I Training
MTHR 265 Supervised Experience in Music Therapy Human Research; may be repeated
MTHR 291 Independent study
MTHR 275 Music Therapy College Teaching: Curriculum, Competencies & Classroom
Other Music electives

Clinical Track
(Option B, Clinical Clerkship Plan)

Studies in this track support the development of skills for advanced clinical practice, program development, and administrative positions. Studies culminate in a Clinical Clerkship project, where the student designs, implements, and evaluates an innovative applied project or a model demonstration program in their area of clinical specialization.

Required Courses:

Minimum 13 units

MTHR 240 Psychology of Music 3
Two Research Design & Statistics Course Electives  
MUSC 202 Introduction to Music Research  
200 level Research course  

**Note:** General students take MUSC 202 unless they have already had extensive coursework experience in the research methodologies  

MTHR 245  Clinical Clerkship  

**Free Electives**  
Minimum 10-14 units  
Area of Specialization Electives  

**Note:** All Music Therapy graduate students select a minimum of 5 elective units to support their chosen area of specialization and can benefit from graduate coursework selected from among many program offerings across the University in such areas as: counseling/health psychology/experimental psychology/behavior analysis (Department of Psychology), special education/educational or counseling psychology (Benerd School of Education) or courses from the MEd in Music Education program. Clinical Track students are also encouraged to consider electives from applied music studies or ensembles in the Conservatory, electives from Speech-Language Pathology and other Health Sciences or helping professions offerings or liberal or fine arts studies which might enhance their careers as creative therapists. Electives in business management or music business are also options for Clinical Track students.  

Additional electives from the following:  
MTHR 230  Bonny Method of Guided Imagery and Music Level I Training  
MTHR 285  Supervised Experience in Music Therapy Human Research; may be repeated  
MTHR 291  Independent study  
MTHR 275  Music Therapy College Teaching: Curriculum, Competencies & Classroom  

Other Music Electives  

**Program Policies**  
Requirements for the MA Degree in Music Therapy and students concurrently enrolled in the Music Therapy Certification Program:  

- Students enrolled in the Certification Graduate program option must complete all Certification coursework requirements, demonstrate functional music competencies, and complete an approved clinical internship prior to enrolling in any foundational music therapy graduate courses except MUSC 203.  
- MUSC 203 requires prerequisite MTHR 141 for Certification Graduate students, but may be taken concurrently with MTHR 142 with permission of adviser.  
- Students may take MTHR 230 concurrently with MTHR 187 (Internship) with permission of both the MTHR 230 instructor and the Clinical Training Director.  
- Specialization field courses MUSC 203 and MTHR 240 may be taken concurrently with Certification coursework. Other MA specialization field and free elective graduate courses except Human Research, College Teaching, Thesis, or Clerkship may also be taken prior to the internship, MTHR 187.  

For all MA in Music Therapy students:  

- The work for the master's degree must be completed within 7 years from the date when the first 200 level course was taken at Pacific.  
- Students must pass the Board Certification Examination or provide evidence of current re-certification (MT-BC) status prior to completion of the Master's Degree in Music Therapy.  
- Students who provide evidence of equivalent prior coursework may substitute a free elective for any required course, with permission of adviser and music therapy program director.  
- Students enrolled in Thesis or Clerkship will meet at least once each semester with their faculty adviser, and are encouraged to participate in Graduate Research Progress Meetings with peers and MT faculty members.  
- In order to provide Protection of Human Research Subjects, IRB oversight, student liability insurance coverage, and ongoing faculty mentoring of students during Thesis and Clerkship work:  
  - Students must be continuously enrolled for a minimum of 1 unit of credit (MTHR 299 or MTHR 245) each Fall or Spring semester while working with human subjects in thesis or clinical clerkship projects. Thesis and Clerkship students who wish to conduct human research during summer sessions will enroll in MTHR 265, Supervised Experience in Music Therapy Human Research, during each summer session the research is being conducted.  
  - Students must be enrolled for a minimum of 1 unit of credit (MTHR 299 or MTHR 245) during the semesters in which the thesis or clinical clerkship is proposed and when it is defended. Thesis and Clerkship proposal and defense meetings with the student's faculty committee must be scheduled between September 1 and May 1.  

**Required Advanced Clinical Competencies**  
Students must demonstrate advanced clinical competence in music therapy as well as academic success, in order to receive the MA degree. The American Music Therapy Association (AMTA) defines advanced clinical competencies expected of individuals earning a graduate degree in Music Therapy. As the student progresses through the MA program coursework, the Music Therapy faculty will evaluate each student for demonstrations of advanced competencies. Particular emphasis is placed upon the acquisition of advanced competencies relevant to the student’s area of specialization. Assessment of advanced competencies are made by the Music Therapy faculty and are included in course requirements leading to the award of the MA degree in Music Therapy.  

**Course Offerings**  

**Music Composition Department**  

**MCOM 208. Counterpoint**  
(3)  
Study of Palestrina’s and Lassus’ contrapuntal techniques accomplished through written exercises and analysis. **Prerequisites: MCOM 010-017.**  

**MCOM 209. Advanced Orchestration**  
(3)  
Focus on orchestration techniques from the first half of the 20th Century, and new performance practices. This study is accomplished through orchestral analysis and writing exercises including a reading session with the orchestra. **Prerequisites: MCOM 010-017.**  

**MCOM 211. Advanced Computer Music**  
(3)  
A course taught in the Conservatory Computer Studio for Music Composition which focuses on the use of sampling/sound design, digital audio recording and editing, automated mixing, and computer manipulation as resources for music composition. An additional project will be assigned for those wishing graduate credit. **Prerequisites: MCOM 010-017, MCOM 019 or equivalent.**  

**MCOM 212. Composition – Computer Music**  
(2)  
Private composition study in computer music within the Conservatory Computer Studio for Music Composition.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>MCOM 213</td>
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<td>MUSC 202</td>
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<td>MUSC 203</td>
<td>Contemporary Issues in Music Education and Music Therapy</td>
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<td>MEDU 200</td>
<td>Video Microrehearsal for Music Teaching Candidates</td>
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<td>MEDU 201</td>
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<td>MEDU 202</td>
<td>Fieldwork in Music Education</td>
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<td>MEDU 210</td>
<td>Seminar in Music Education</td>
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<td>MEDU 220</td>
<td>Instrumental Organization, Conducting and Literature</td>
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<td>MEDU 221</td>
<td>Choral Organization, Conducting, and Literature</td>
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<td>MEDU 222</td>
<td>Advanced Problems in Elementary Music Teaching</td>
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<td>MEDU 291</td>
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<td>MEDU 299</td>
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<td>MEDU 301</td>
<td>Video Microrehearsal for Experienced Music Teachers</td>
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<td>MEDU 310</td>
<td>Seminar in Music Education</td>
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<td>MEDU 311</td>
<td>Philosophy of Music Education</td>
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<td>MEDU 312</td>
<td>Graduate Research in Music Education</td>
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<tr>
<td>MEDU 313</td>
<td>Graduate Research in Music Education</td>
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<tr>
<td>MEDU 322</td>
<td>Issues in Elementary Music Teaching</td>
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<td>MEDU 391</td>
<td>Graduate Independent Study</td>
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<tr>
<td>MEDU 393</td>
<td>Special Topics</td>
<td>1-2</td>
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</tbody>
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**General Music Department**

- **MUSC 202. Introduction to Music Research** (3)
  - Designed for the graduate level student in developing music research skills.
- **MUSC 203. Contemporary Issues in Music Education and Music Therapy** (3)
  - Graduate students will research, analyze, and reflect on current values, philosophical issues, and contemporary trends in the professions of music education and music therapy.

**Music History Department**

- **MHIS 250. Medieval Music** (3)
  - Topics in music history to c. 1450. Emphasis will be on research methodology. Prerequisites: MCOM 010-017, MHIS 011, 012, 013, or permission of the instructor.
- **MHIS 251. Music in the Renaissance** (3)
  - Topics in the history of the music of the 15th and 16th centuries. Prerequisites: MCOM 010-17, MHIS 011, 012, 013, or permission of the instructor.
- **MHIS 252. Music in the Baroque** (3)
  - Topics in music history from c. 1580-1750. Prerequisites: MCOM 010-017, MHIS 011, 012, 013, or permission of the instructor.
- **MHIS 253. Studies in the Classical Period** (3)
  - Study of music from c. 1750-1810 with stress on evolution of style and historical factors which relate to this evolution. Prerequisites: MCOM 010-017, MHIS 011, 012, 013, or permission of the instructor.
- **MHIS 254. Studies in the Romantic Period** (3)
  - Study of music of the 19th century and its relationship to other art forms and historical developments. Emphasis will be on research methodology. Prerequisites: MCOM 010-017, MHIS 011, 012, 013, or permission of the instructor.

**Music Education Department**

- **MEDU 200. Video Microrehearsal for Music Teaching Candidates** (3)
  - Microrehearsals, seminars, individual and group viewing sessions to define and develop rehearsal-teaching techniques with video recording as basic tool. Prerequisites: Bachelor’s degree in music, approval by Music Education faculty.
- **MEDU 201. Video Microrehearsal for Experienced Music Teachers** (1-4)
  - Restructuring of music teaching techniques using video recording techniques; microrehearsals, seminars, individual and group viewing sessions; field application of new procedures. Prerequisites: Bachelor’s degree in music, two years of full-time music teaching in public schools, permission of the instructor.
- **MEDU 202. Fieldwork in Music Education** (3)
  - Advanced work in schools. May include music drama, small ensembles, unique curriculum design as well as large ensembles and class instruction.
- **MEDU 210. Seminar in Music Education** (3)
  - Discussion, research and writing related to music education.
- **MEDU 220. Instrumental Organization, Conducting and Literature** (3)
- **MEDU 221. Choral Organization, Conducting, and Literature** (3)
- **MEDU 222. Advanced Problems in Elementary Music Teaching** (3)
- **MEDU 291. Graduate Independent Study** (1-3)
- **MEDU 293. Special Topics** (3)
- **MEDU 293A. Special Topics** (3)

**Applied Music Department**

- **MAPP 210. Graduate Applied Music for Non-performance Majors** (1-2)
  - By audition only.
- **MAPP 291. Graduate Independent Study** (1-4)

**Music Performance Department**

- **MPER 269. Advanced Opera Theatre Workshop** (1)
- **MPER 280. Advanced Opera Production Major Ensemble** (1)
- **MPER 291. Graduate Independent Study** (1-4)
Music Therapy Department

MTHR 230. Bonny Method of Guided Imagery and Music Level I Training (3)
Intensive 5-day residential seminar introduces theory and clinical applications of the Bonny Method of Guided Imagery and Music (BMGIM) and other music and imagery techniques. Participants gain personal experience with BMGIM. Hands-on experiential exercises, demonstrations, and clinical examples introduce simple imagery techniques to add to participants’ existing repertoire of therapeutic interventions. This residential phase of the course meets the Association for Music and Imagery (AMI) requirements for introductory training in the Bonny Method. The on-line learning component extends and deepens the student’s understanding through exposure to literature in the Bonny Method, sharing of discoveries from readings and music listening, as well as personal reflection and integration of experiential learning. Prerequisites: Evidence of clinical experience and permission of instructor required. Due to the experiential nature of this course, participants must be willing to participate in all learning activities and in the group sharing process, and attend all seminar sessions as listed in the residential seminar course schedule. All students and instructors are expected to maintain confidentiality of personal material shared by group members.

MTHR 231. Individual Music Therapy: Advanced Theory and Techniques (3)
This course explores current theories and techniques of music-centered psychotherapy for supportive, re-educative/rehabilitative, and re-constructive levels of clinical practice with a variety of populations. Includes development of therapeutic relationship through music improvisation, and focused music-evoked imagery to address supportive and re-educative goals for individual clients. Experiential learning includes classroom simulations and supervised clinical practice. Prerequisites: Successful completion of MTHR 187 (or AMTA-approved clinical internship) and MTHR 230 (or Level I training in the Bonny Method of Guided Imagery and Music) or permission of instructor.

MTHR 232. Group Music Therapy: Advanced Theory and Techniques (3)
This course examines theories and models for group music therapy with applications for a variety of clinical populations. Includes approaches for quick group assessment and brief treatment environments. Focus is on therapist and member roles and tasks within group development processes. Students refine group facilitation skills using music-centered techniques of improvisation and music-evoked imagery through in-class simulations and supervised clinical practice. Prerequisite: Grade of B or better in MTHR 231 or permission of instructor.

MTHR 240. Psychology of Music (3)
Psychological foundations of music. Includes the study of acoustics, perception of sound, and physical and psychosocial responses to music. Students survey current research in music/musical therapy and develop skills in applied research methodology. Students enrolled for graduate credit also complete a formal research project proposal and a mock IRB proposal as preparation for eventual research activities within the graduate program or professional venues. Recommended for graduate students in music therapy or music education. Open to students in other majors. Prerequisites: Requires basic music reading skills.

MTHR 245. Clinical Clerkship in Music Therapy (1-4)
As an alternate requirement for Thesis, Clinical Clerkship is designed for students who may want to focus on clinical skills and knowledge. Student completes a major project related to an applied therapeutic or educational setting.

MTHR 251. Music Therapy Supervision I: Introduction to Theory and Applications (1)
This course provides a foundation for effective music therapy clinical supervision. Introduces multicultural, ethical, and legal considerations; explores factors unique to music therapy supervision. Readings, workbook assignments, field observations and in-class discussion of theories and techniques prepare students for MTHR 252, and practical experience supervising undergraduate students in clinical training settings. Prerequisites: Completion of MTHR 187 (or AMTA-approved clinical internship).

MTHR 252. Music Therapy Supervision II: Applied Experience (1)
Provides mentored practice in clinical supervision; supports individualized skill development of competencies for professional participation in clinical management and student, volunteer, or peer supervision situations. Learning experiences include direct on-site supervision of undergraduate music therapy students in fieldwork placements, maintaining the on-site learning environment, monitoring student progress, conducting formal evaluations, conducting group student supervision and regular participation in supervisor’s group consultation meetings with faculty. Prerequisite: Grade of B or better in MTHR 251.

MTHR 260. Advanced Clinical Practice in Music Therapy (1)
This course provides individualized experiences for development of advanced clinical skills in music therapy. Students may focus on a new area of specialization, or may work within a familiar clinical environment, developing skills at a more advanced level. Experiences may include supervised practice in advanced music therapy techniques, interdisciplinary collaboration, new program development, or expansion of an existing clinical program. Prerequisites: MTHR 187 or clinical internship. Two semesters required.

MTHR 265. Human Research in Music Therapy: Supervised Experience (1)
This course offers individualized experiences for development of advanced research skills in music therapy. Provides faculty oversight and supervision of human research in clinical or laboratory settings. Students may focus on their own independent research project or may work within a collaborative or faculty directed research environment. Required for students conducting summer research activities with human subjects, including projects contributing to completion of the master’s thesis. Prerequisites: Completion of University Human Subjects (IRB) training for student investigators, and permission of instructor. May be repeated.

MTHR 275. College Teaching in Music Therapy: Curriculum, Competencies & Classroom (3)
Students review AMTA requirements for music therapy undergraduate program curriculum and for competency-based education and clinical training. Course provides mentored practice in teaching foundational level music therapy college courses; supports individualized skill development for professional participation in academic music therapy programs as an instructor. Permission of instructor.

MTHR 291. Graduate Independent Study (1-4)
Prerequisite: Completion of University Human Subjects (IRB) training for student investigators, and permission of instructor. May be repeated.

MTHR 293. Special Topics (1-4)
Prerequisites: Requires basic music reading skills.

MTHR 293A. Special Topics (1-4)

MTHR 299. Thesis (1-4)
An original monograph embodying original research.
Conservatory of Music Faculty


K. Allen Brown, 1981, Assistant Professor of Percussion, BM, University of Oregon, 1969; MM, Western Michigan University, 1972; Doctoral study at the University of Illinois.


Robert Cobum, 1993, Chair, Composition and Music History; Professor of Music Theory and Composition, BM, University of the Pacific, 1972; MA, University of California, Berkeley, 1974; PhD, University of Victoria (Canada), 1995.


Daniel Ebbers, 2004, Assistant Professor of Voice, BM, University of Wisconsin-Stevens Point, MM, University of Southern California.

James Haffner, 1999, Assistant Professor, Director of Opera, BA, Baldwin Wallace College, 1993; MFA, University of Cincinnati College, 1996.

Eric Hammer, 1993, Professor, Director of Band Activities; Professor of Music Education, BM, University of the Pacific, 1973; MM, University of Oregon, 1990; DMA, University of Oregon, 1994.


James W. Hipp, Interim Dean of the Conservatory of Music, 2007, BM, University of Texas, Austin, 1956; MM, University of Texas, Austin, 1963; Doctor of Music, University of Texas, Austin, 1979.

Pelin Hsiao, 2006, Assistant Professor of Music Therapy, PhD, University of Iowa, 2006; MA, New York University, 1994; Certified Music Therapist, 1994; BA, Chinese Cultural University (Taipei, Taiwan), 1986; Board Certified Music Therapist, 2001; Teaching Credential in Music Education (1996) and Special Education (1999).

Patrick Langham, 2003, Associate Professor of Jazz Studies; BM, University of Tennessee, 1992; MM, 1994.

Burr Cochran Phillips, 2007, Assistant Professor of Voice, BM, University of North Texas, 1982; MM, Texas Christian University, Fort Worth, TX, 1994.

Francois Rose, 1997, Associate Professor of Composition; BM, McGill University, 1986; MM, 1991; PhD, University of California, San Diego, 1997.


Nicholas Waldvogel, 2001, Associate Professor, BA, MA, Harvard University, 1989; MM, Peabody Conservatory, 1993; Graduate diploma in Conducting, Peabody Conservatory, 1994; PhD, Yale University, 1992.

Linda Wang, 2003, Assistant Professor of Violin; BM, University of Southern California, 1992; Artist Diploma, 1996; MM, 1997.

Sarah Clemmens Waltz, 2007, Assistant Professor of Music History; Program Director of Music History, PhD in Music History, MPhil, Yale University, 2007; BM in Music History with Honors, Oberlin Conservatory, 2000; BA in Physics, Oberlin College, 2000.

Thereese M. West, 2003, Music Therapy Program Director, Assistant Professor of Music Therapy and Music Education, BA, University of California, Riverside, 1976; Music Therapy Equivalency, Willamette University, 1984; MM, Music Therapy, University of Miami, (FL), 1999; PhD, Interdepartmental Studies: Music Therapy and Health Psychology, University of Miami, (FL), 2003; Board Certified in Music Therapy, 1989; Fellow, Association for Music and Imagery (AMI), 2002.


Master Of Business Administration

Admission Requirements

- Admission to the Eberhardt MBA Program is competitive and based on criteria which indicate a high promise of success. Performance in prior coursework and standardized test scores are strong considerations in the admission decision.
- A U.S. bachelor's degree or its equivalent is required for admission. The MBA Admissions Committee gives equal consideration to all undergraduate majors in the admissions process.
- MBA admission decisions are made on a rolling basis. Applicants are notified immediately when decisions have been made.
- The completed application packet must be submitted before the Admissions Committee can render a final decision. The required materials include:
  - The completed application form and supporting materials.
  - Transcripts from all undergraduate, graduate and professional schools attended.
  - Two letters of recommendation written by people knowledgeable of the applicant's qualifications for graduate work.
  - A score on the Graduate Management Admissions Test (GMAT). For GMAT information and materials go to www.mba.com. These scores must be less than five years old.
  - Applicants are encouraged to prepare for the GMAT by obtaining review material and sample questions published specifically for this purpose.

Special Programs

Dual-degree JD/MBA Program: The dual-degree JD/MBA Program allows students to complete their three-year law degree at Pacific's McGeorge School of Law and the 16-month Eberhardt MBA Program together in only four years. To combine the two programs, students can count up to 24 units of course credit toward both degrees. Students interested in the dual-degree JD/MBA Program must apply and be accepted by both the MBA Program and the Law Program separately.

Peace Corps Masters International MBA Program: Masters Internationalist students complete a portion of their studies on campus prior to entering the Peace Corps. Students will then leave for a Peace Corps assignment, including language, technical and cross-cultural training. After completing a Peace Corps assignment, students will return to campus for a semester to complete their degree. All returned Peace Corps volunteers will receive a stipend from the Peace Corps for their volunteer service. Students interested in the Masters International Program must apply and be accepted by both the MBA Program and the Peace Corps separately.

PharmD/MBA: This dual-degree integrated, collaborative program allows students interested in management positions in the pharmaceutical and biotech industries to develop the needed expertise. Both degrees can be completed in four years, depending on academic background. Students interested in this program must apply and be accepted by both the MBA and Doctor of Pharmacy programs separately. Please see MBA application for special instructions.

Curriculum Outline

The Eberhardt MBA Program is designed to train the managers of the 21st century. The rigorous and intellectually challenging coursework goes beyond the traditional business school curriculum to emphasize important managerial skills like leadership, innovation, communication and a global perspective.

Program Prerequisites: All students are expected to have completed prerequisite courses in subjects necessary for success in MBA coursework prior to beginning the MBA. These include six semester units of economics: Macroeconomics and Microeconomics (or three units of Managerial Economics), three units of Probability and Statistics and three units of College level Finite Math/Calculus. These courses may have been taken at either the undergraduate or graduate level.

Eberhardt 16-Month MBA Program

The MBA curriculum has a global orientation and is designed around an intensive phase of foundation courses and an advanced phase of integrated management studies. It offers a carefully designed combination of rigorous classroom work, intensive case-based discussions and off-campus experiences. Students progress through the program as part of a cohort.

Electives are offered in Finance, Marketing and Entrepreneurship.
**Master of Business Administration**

In order to earn the master of business administration degree, students must complete a minimum of 51.5 units with a Pacific cumulative grade point average of 3.0.

The sample schedule is another view of the program progression:

**Fall Semester**
- BUSI 211  Applied Business Principles  20
- BUSI 251  Applied Business Economics  3
- BUSI 252  Global Strategic Marketing  3
- BUSI 276  Entrepreneurial Management  3
- Two electives  6

**Spring Semester**
- BUSI 220  Corporate Finance  3
- BUSI 249  Global Strategic Marketing  3
- BUSI 276  Entrepreneurial Management  3
- Two electives  6

**Summer Semesters**
- BUSI 268  Global Business Competition  3
- Requires 2-3 weeks in an international location to study competition in global markets.
- Required MBA-level internship

**Electives:**
- BUSI 221  Entrepreneurial Finance
- BUSI 222  Student Investment Fund
- BUSI 223  Investment Management
- BUSI 241  Marketing Research
- BUSI 245  Customer Relationship Management
- BUSI 263  International Finance
- BUSI 272  Entrepreneurship
- BUSI 275  Management of Technology and Innovation

**Internship Program:**
- BUSI 291  All students will be required to participate in an internship.

**Applied Research/Consulting Projects:**

All students will participate in field projects throughout their MBA courses. Students desiring additional field experience can apply for additional internships or research/consulting projects.

**International Experience:**

All students are expected to participate in an international business experience through the Global Business Competition course, which is conducted in a foreign location (e.g., Panama, Costa Rica, Chile, Finland, Hong Kong, Korea, Singapore, France, Spain, Taiwan, and Ireland in recent years). International competency is an essential element of success in today's global economy. Eberhardt MBA students study abroad and undertake projects in the host country often in collaboration with a partner business school in the host country.

**Juris Doctorate / Master of Business Administration Joint Degree**

See MBA program for sample Plan of Study.

**Master of Business Administration Peace Corps International Program**

See MBA program for sample Plan of Study

**Doctorate of Pharmacy / Master of Business Administration Joint Degree**

See MBA program for sample Plan of Study

**Course Offerings**

A student must receive a grade of ‘C’ or higher in any course which is a prerequisite.

**BUSI 210. Business and Public Policy**  
(3)

This course is an applied and intensive overview of business administration. Topics include nine academic modules covering managerial economics, information systems, data analysis and decision making, accounting, finance, marketing, organizational behavior, operations management and strategy formulation. In addition, there are three required pass/no credit modules on team building, presentation skills and career development. The course concludes with a competition between teams consisting of students in the course. The course is team taught by several faculty in the Eberhardt School of Business, each in their own area of specialization. This course is the required beginning course for all students in the MBA program. Prerequisites: Admission into the MBA Program, ECON 053, ECON 055, MATH 037, MATH 045, or equivalent courses.

**BUSI 211. Applied Business Policy**  
(20)

This course is an applied and intensive overview of business administration. Topics include nine academic modules covering managerial economics, information systems, data analysis and decision making, accounting, finance, marketing, organizational behavior, operations management and strategy formulation. In addition, there are three required pass/no credit modules on team building, presentation skills and career development. The course concludes with a competition between teams consisting of students in the course. The course is team taught by several faculty in the Eberhardt School of Business, each in their own area of specialization. This course is the required beginning course for all students in the MBA program. Prerequisites: Admission into the MBA Program.

**BUSI 212. MBA Career Development Seminar**  
(1)

This course is designed to enable business students to clearly define their career objectives and available opportunities as it relates to the Pacific MBA. Through the course, MBA students will be trained in the tactics and methods of conducting a successful job search and in preparing for multiple career transitions over the course of their entire business career. Prerequisites:  

**BUSI 213. Corporate Social Responsibility**  
(2)

The purpose of this course is to improve your abilities as a manager to anticipate, analyze, respond to and manage issues of social responsibility and ethics that you will face in your career. You will have an opportunity to consider challenges that arise across different business functions in both domestic and global markets. Sample topics may include compliance with a variety of laws, fair and unfair competition, responsibility to customers, shareholders, employees and the environment, insider trading, product safety and more. Prerequisite: BUSI 211. Graduate students from other programs may enroll with permission of the Associate Dean in the Eberhardt School.

**BUSI 214. Negotiation**  
(2)

The purpose of this course is to understand the theory and processes of negotiation as it is practiced in a variety of settings. This course is designed to be relevant to the broad spectrum of negotiations problems that are faced by managers and individuals. Thus, the content is relevant to students interested in marketing, entrepreneurship, consulting relationships, international management or mergers and acquisitions. In addition, the course will emphasize negotiations that occur in the daily life of the manager. Prerequisite: BUSI 211.
BUSI 220. Corporate Finance  (3)
A second course in financial management that introduces a set of analytical tools needed to make sound corporate decisions in such areas as capital budgeting, capital structure and dividend policy. Prerequisite: BUSI 211.

BUSI 221. Entrepreneurial Finance  (3)
An in-depth analysis of the financial issues facing a business start-up. Specific attention is paid to the acquisition of financing for new ventures and the financial management of new and growing businesses. Prerequisite: BUSI 211.

BUSI 222. Student Investment Fund  (3)
Student Investment Fund (SIF) is operated entirely by students, allowing them to gain hands-on, real world experience in managing an investment fund with substantial market value. Students perform sector analyses as well as financial analyses of a wide array of securities, and as a group have to determine the fund’s sector allocation and stock/bond/cash allocation. SIF, while maintaining a well-diversified portfolio, strives to outperform the market (S&P 500). Prerequisite: BUSI 211 and permission of instructor.

BUSI 223. Investment Management  (3)
This course teaches students a set of analytical tools necessary to evaluate the profitability of a vast array of financial assets such as stocks, bonds, options and financial futures. Prerequisite: BUSI 211.

BUSI 224. Entrepreneurial Finance  (3)

BUSI 225. Investments/Portfolio Analysis  (3)

BUSI 230. Enterprise Systems Analysis  (3)

BUSI 231. Database Management  (3)

BUSI 236. Business Programming  (3)

BUSI 238. Comp. Netwrkg & Telecommunications Management  (3)

BUSI 239. MIS Project  (3)

BUSI 241. Marketing Research  (3)
A study of concepts and techniques useful in the solution of marketing problems and in the identification of marketing opportunities. Emphasis is given to the design of information acquisition and to the evaluation and interpretation of research findings. Prerequisite: BUSI 211.

BUSI 245. Customer Relationship Management  (3)
This course explores the process of understanding, creating and delivering value to targeted business markets and individual customers. Relying upon assessment of value in the marketplace, it provides a means of gaining an equitable return on value delivered and enhancing a supplier firm’s present and future profitability. It also provides students with the knowledge and skills necessary to perform consumer analyses that can be used for understanding markets and developing effective marketing strategies. Prerequisite: BUSI 211.

BUSI 247. Consumer Behavior  (3)
This interdisciplinary course discusses the consumer as the focus of the marketing system. Knowledge about the customer behavior, obtained through the application of a series of analytic frameworks and tools, is presented as the basis for marketing decisions at both the strategic and tactical levels. Central focus of the course is the analysis of customer decision-making processes and an understanding of the customer activity cycle or consumption chain. Methods to build customer satisfaction and loyalty through relationship marketing are stressed. Prerequisite: BUSI 211.

BUSI 249. Strategic Marketing  (3)
This course develops students’ decision-making skills in the complex and fast changing international marketplace. The course provides an integrated analysis of the marketing functions of a firm, viewed primarily from the upper level of management. Emphasis is placed on formulation of goals and objectives and selection of strategies under conditions of uncertainty as they relate to the pricing, distribution and promotion of new and existing products, to achieve corporate objectives in today’s global environment. Prerequisite: BUSI 211.

BUSI 263. International Finance  (3)
This course provides students with a conceptual framework for analyzing key financial decisions faced by multinational corporations. The major focus of this class will be on spot exchange markets, forward exchange markets, the balance of payments, exchange rate determinations, hedging strategies, financing alternatives, transfers of international payments, and international bonds and equities investment and diversification. Prerequisite: BUSI 211.

BUSI 265. Global Marketing Strategy  (3)

BUSI 267. International Business Law  (3)

BUSI 268. Global Business Competition  (3)
Today, all levels of business operations are becoming global. Business people must consider additional parameters when they enter the global sphere. The rules of the game such as laws, customs, theories, and business practices may be different. This course will work on business problems and strategies within the global environment in which U.S. businesses compete. The key objective of this course is to analyze the operation of global firms; various types of entry strategies into foreign countries, impacts on host and home countries, and the powerful flexibility of global systems. Prerequisite: BUSI 211 or the permission of the instructor and the MBA Director.

BUSI 269. Comparative Management  (3)

BUSI 270. Human Resource Management  (3)
This course explores research, theory, and practical applications to administrative problems in human resource management. The course provides students with an understanding and appreciation of: strategic HRM, HRM law, job analysis & design, employee recruitment, selection & placement, training & development, performance evaluation, compensation & benefits, labor relations & collective bargaining, safety & health, international HRM, HRM computer simulation, HR information/management systems and other HRM technological innovations.

BUSI 272. Entrepreneurship  (3)
This course will provide an experiential introduction to the creation of a new business enterprise. Building upon mentor experiences, internship and work experiences and the use of selected guest speakers, the course will focus on writing a business plan that could be presented to a venture capitalist (or other source) for funding. Topics will include the traits of successful entrepreneurs, generating business opportunities, screening opportunities, “the window of opportunity,” the venture team, family businesses, management/marketing/financial skills needed, “intrapreneurship,” etc. Prerequisite: BUSI 211.

BUSI 274. Managing Quality/Productivity  (3)
The purpose of this course is to recognize the essence of an organization as its operations, or as its production and service delivery. Topics will include the life cycle of operations and supply chain strategies for goods and services, the integration of and information flows between business functions, and the challenges of the globalization of operations and supply chain choices. Students will apply analytical methods for developing, delivering, and improving production systems in a “real world” field experience. Prerequisite: BUSI 211.
BUSI 275. Technology and Innovation (3)  
The process of taking science and technology to the marketplace has taken on strategic importance to company leadership in many industries. This course will provide students with concepts, frameworks, and tools for managing technology and innovation. How can companies identify the major developments in science and technology that will affect them directly and indirectly? What avenues are available for maintaining technological leadership, and how can they be integrated into a company’s overall objectives? What global strategies are available for developing technology and taking it to the marketplace? Prerequisite: BUSI 211.

BUSI 276. Entrepreneurial Management (3)  
This course is designed to integrate the functional knowledge you have acquired in your first semester as an MBA student and to teach you how to apply it within innovative and entrepreneurial business settings that call upon managers to make decisions and plans under conditions of uncertainty. The focus on the entrepreneur and entrepreneurial management reflects two considerations. The first is the growing recognition of the critical importance of entrepreneurial activities in capitalist economics. The second is that it introduces you to a set of opportunities that most of you will encounter in your careers. New companies as well as innovative businesses at larger firms often look for businesspeople with the perspective and skills needed to thrive in innovative business environments and our aim is to help prepare you for such opportunities. Prerequisite: BUSI 211. Graduate students from other programs may enroll with permission of the Associate Dean in the Eberhardt School.

BUSI 277. Small Business Consulting (3)

BUSI 279. Leadership and Change (3)  
This course utilizes the research and practice of recent years concerning situational leadership and transformational leadership. The class emphasis will be experiential. Emphasis will be placed on consensus building, values alignment and vision building. Prerequisite: BUSI 211.

BUSI 281. Strategic Management (3)  
The vast majority of newly formulated business strategies fail in their implementation. In some cases they end up as faint, half-hearted replicas of the original plans. In other cases they simply never materialize at all. This course uses the case method in a multinational corporate setting to address the managerial challenge of strategy implementation by examining the organizational elements that must be drawn into line to support a strategy, and by examining the immense difficulties involved in changing an organization. Prerequisite: BUSI 211.

BUSI 282. Entrepreneurial Rapid Growth (3)

BUSI 283. Administrative Internship (1-3)

BUSI 291. Graduate Independent Study (1-3)

BUSI 293. Special Topics (1-4)

Eberhardt School of Business Faculty


Joel Herche, 1994, Associate Professor, BA, Central Washington University, 1979; MBA, Golden State University, 1986; PhD, University of Oregon, 1989.

Peter E. Hilsenrath, 2009, Professor, B.A., University of California, Santa Cruz, 1978; Ph.D., University of Texas, Austin.

Ronald Hoverstad, 1990, Associate Professor, BA, Augsburg College, 1974; MBA, St. Cloud State University, 1981; PhD, University of Minnesota, 1986.

Albert H. Huang, 1998, Assistant Professor, BS, National Chiao-Tung University, Taiwan, 1986; MBA, Rochester Institute of Technology, 1990; PhD, University of North Texas, 1996.

Sacha M. Joseph, 2006, Assistant Professor, BA, University of the West Indies (Jamaica), 1998; MS, Florida State University, 2004; PhD, Florida State University, 2006.

John R. Knight, 1995, Professor, BA, Tulane University, 1969; MBA, Louisiana State University, 1978; PhD, 1990.

Unro Lee, 1990, Professor, BA, University of Southern California, 1977; MA, Indiana University, 1981; PhD, Purdue University, 1986.

Jeffrey A. Miles, 1996, Professor, BA, Ohio State University, 1984; MPS, Cornell University, 1986; MLHR, Ohio State University, 1992; PhD, 1993.

Stefanie Naumann, 1999, Assistant Professor, BS, Tulane University, 1993; PhD, Louisiana State University, 1998.

Gerald V. Post, 1999, Professor, BA, University of Wisconsin-Eau Claire, 1978; PhD, Iowa State University, 1983.


Chris Sablynski, 2009, Associate Professor, B.S., University of Florida, 1986; M.S., San Francisco State University, 1996; Ph.D., University of Washington, 2002.

Ray Sylvester, 1972, Associate Dean, Professor, BA Gettysburg College, 1962; MBA, University of Michigan, 1963; PhD, 1972.

Darla M. Szydlowicz, 2006, Assistant Professor, BA, Columbia University, 1988; MA, University of California, Berkeley, 1990; PhD, University of Illinois, 1998.


R. Daniel Wadhwa, 2006, Assistant Professor, BA, Yale University, 1991; PhD, University of Pennsylvania, 2003.

Suzanne B. Walchli, 2000, Assistant Professor, BA, Duke University, 1975; MBA, Wharton Graduate Division, University of Pennsylvania, 1978; PhD, Northwestern University, 1996.

Cynthia Wagner Weick, 1990, Professor, BS, Ohio State University, 1979; MS, 1980; PhD, University of Pennsylvania, 1986.

Stephen W. Wheeler, 1994, Professor, BA, California State University, Sacramento, 1976; MS, 1982; PhD, Arizona State University, 1988.
Credentials Offered

Preliminary Multiple Subject Credential
Preliminary Single Subject Credential in the following areas:

Educational Specialist (mild/moderate) – Level I and Level II
Educational Specialist (moderate/severe) – Level I and Level II
Preliminary Administrative Services Credential
Professional Clear Administrative Services Credential
Personnel Services Credential in School Psychology
Speech-Language Pathology Services Credential

(More information contact Speech Language Pathology Department)

Mission

The Benerd School of Education embraces a mission of preparing thoughtful, reflective, caring, and collaborative educational professionals for service to diverse populations. Further, the Benerd School of Education directs its efforts toward researching the present and future needs of schools and the community, fostering intellectual and ethical growth, and developing compassion and collegiality through personalized learning experiences.

Admissions Requirements

General Admissions Requirements:

1. A cumulative GPA of 3.0 or better for the last 60 units of college or post-baccalaureate work.
2. An appropriate degree from an accredited university (Bachelor’s for admission to master’s programs; masters for admission to doctoral programs).
3. A completed application portfolio to the Graduate School, an essay following departmental guidelines; official transcripts from all college-level coursework including official verification of the awarding of degrees; and three letters of recommendation attesting to the candidate’s ability to undertake doctoral studies.
4. Some programs require the Graduate Records Examination (GRE). Please see specific programs for information.
5. Review by the appropriate department.
6. Evidence of qualities and character in keeping with the philosophy and standards of this University and the School of Education.
Basic Education Policies

Master of Education Degree

The Gladys L. Benerd School of Education offers a master’s degree which is designed for high potential graduate students who desire to become candidates for an initial teaching credential. This degree is the Master of Education degree (MEd). This degree prepares teachers to deal with instructional theory and applied research, and to develop competence beyond the skills of the usual beginning teacher. For specific information about MEd program requirements, please refer to the Curriculum and Instruction program information.

Requirements for the Master of Arts Degree

Graduate students wishing to secure a Master of Arts degree with a major in the School of Education must meet the requirements specified for all Master of Arts degrees. Students should consult with the assigned departmental adviser within the first semester of enrollment to develop a plan of study. The Gladys L. Benerd School of Education has four programs leading to a master’s degree, of which plans A, B and C require a core of common courses in the major. The core courses include:

- EADM 204 Pluralism in American Education 3
- CURR 209 Curriculum Theory 3
- EPSY 201 Techniques of Research 3
- EPSY 220 Nature and Conditions of Learning 3

Program with Thesis (Plan A)

The requirements of the thesis plan are as follows:

1. Thirty units of graduate work, with 16 units in courses numbered 201 or above.
2. Required core courses common to all master’s degree programs in education.
3. A minimum of 16 units in education, including a thesis of 4 units.
4. Such additional courses as may be required for the adequate development of the thesis problem.
5. With the approval of the Dean or appropriate departmental chair, the candidate may choose coursework in not more than two other departments outside the School of Education.
6. An acceptable thesis must be submitted within the deadlines as stated in the Graduate School calendar.
7. Successfully pass a final oral examination.

Program with Seminars (Plan B):

The requirements of the seminar plan are as follows:

1. Completion of 32 units of graduate work, with 18 units in courses numbered 201 or above.
2. Required core courses common to all master’s degree programs in education.
3. Completion of a minimum of 18 units in the School of Education.
4. Completion of a minor of 6 or more units selected from a discipline department other than education.
5. Specializing in an area of interest: (at least 10-12 units as approved by adviser), such as curriculum and instruction, special education, bilingual/cross-cultural education, English as a second language, educational and counseling psychology or foundations.
6. A seminar and/or research paper in the field of specialization.
7. Successfully pass a final examination.

Program with Projects (Plan C):

The program under Plan C is designed for the Master of Arts degree and concurrently to meet certain state certification and licensing requirements and/or to prepare candidates for careers in specific professions (e.g. Student Affairs).

General Requirements:

1. A minimum of 32 units of graduate work, with 18 units in courses numbered 200 or above.
2. Required courses common to all master’s degree programs in the School of Education.
3. Completion of the specific program requirements as described in departmental/program information.

Master of Arts Degree: Special Program (Plan D):

Although most candidates will utilize Plans A, B or C, a special program can be designed for well-qualified students who have professional or personal needs for specialized study. Such special programs provide opportunity for course offerings in the School of Education to be linked with those of other schools and departments. Requirements for special programs, in addition to departmental approval, include the following:

1. A content major of at least 21 units. This will represent the student’s primary area of interest and need for professional development. Courses may be chosen within a given department but are likely to include relevant courses from several departments.
2. Research and evaluation methodology and/or theoretical constructs of at least 6 units. The student will be expected to develop relevant competencies in one or more of the following: research methods, critical analysis, inquiry techniques, or theory.
3. Field experience and/or research of not less than 4 nor more than 6 units. Depending on the specific area of study, this may include supervised field experience, practicum, action research or thesis. The purpose will be to synthesize the total program by demonstrating competencies in the field or through some research project.
4. A minimum of 32 units of graduate coursework with 18 units at the 200 level or above.
5. A minimum of 18 units in the School of Education.

With the framework described above, this program operates on a highly individualized basis. A student is assigned a primary adviser in the School of Education who is responsible for working out a program. Students and their advisers will submit a rationale and description of their program for the departmental file. For an interdisciplinary program, the student also will receive appropriate advising from a department outside the School of Education.

Doctor of Education Degree Basic Policies

The EdD degree is designed to ensure that each graduate possesses a deep understanding of foundational issues; key theories related to the student’s academic focus; historic and emerging research related to student's academic focus; critical issues of research, policy, and practice; moral dimensions of research, policy, and practice; leadership challenges and opportunities; and methods and limitations of research. The degree is also designed to ensure that the candidate can identify key issues and problems and engaged in focused and systematic research into problems and related questions. Further, the degree is designed to ensure that graduates possess leadership competencies including verbal and written communication skills; professional maturity; personal discipline; and social and emotional intelligence competencies.
**Requirements for the Doctor of Education Degree**

Graduate students wishing to secure a Doctor of Education (EdD) degree must meet the requirements specified for all Doctor of Education degrees. Students should consult with the assigned departmental adviser within the first semester of enrollment to develop a plan of study. The Gladys L. Benerd School of Education has two departments which offer EdD degree: the Department of Curriculum and Instruction and the Department of Educational Administration and Leadership. Students seeking EdD degrees through both departments take the following core courses:

- **CURR/EADM 352** Applied Inquiry I 3 units
- **CURR/EADM 354** Applied Inquiry II 6 units
- **CURR/EADM 356** Applied Inquiry III 3 units
- **CURR.EADM 358** Applied Inquiry IV 3 units

Candidates seeking EdD degrees through both departments must also complete a doctoral dissertation and register for a minimum of 2 and a maximum of 7 units of CURR/EADM 399. Students may register for CURR/EADM 399.

**Program Stages:**

The successful completion of Applied Inquiry I will qualify each student for “full” admission to the doctoral program; The successful completion of Applied Inquiry III with the production of a quality problem statement and literature review coupled with an interview with faculty advances the student to Candidacy.

**Dissertation:**

An acceptable dissertation must be based on an original investigation. It must present either a contribution to knowledge and/or understanding, or an application of existing knowledge to the candidate’s special field of study. The dissertation must be submitted by the appropriate deadlines as stated in the current Graduate Academic Calendar. As noted above, students admitted to the EdD programs in the Benerd School of Education will require a minimum of 2 units and maximum of 7 units of EADM/CURR 399 Dissertation to be completed after the dissertation proposal is completed.

**Period of Candidacy:**

The maximum time allowed for completion of an EdD program is governed by the following guidelines: (a) students must complete the Applied Inquiry III within four years after the first day of the semester of enrollment in EdD coursework at Pacific as provisionally admitted doctoral students, (b) their dissertation proposal must be approved by the dissertation committee within three years after advancement to Doctoral Candidacy; and (c) the dissertation itself must be completed within five years after advancement to Doctoral Candidacy. All requirements for the Doctor of Education degree must, therefore, be completed within nine years after the first day of the semester of enrollment in EdD coursework at Pacific as a provisionally admitted doctoral student. The student is expected to complete the dissertation within three years from the time of Advancement to Candidacy. Failure to meet these deadlines will require the student to register for five additional units of dissertation. Students who do not meet these deadlines will be dropped from the doctoral program.

**Final Oral Examination:**

A final oral examination usually of two hours, conducted by the candidate’s dissertation committee, shall be held in accordance to the deadline established by the Graduate School. This oral exam shall concern itself with the candidate’s dissertation and implications thereof. Supplemental information is available in School of Education department offices.

**Semester Hour Requirements:**

A minimum of 55 doctoral units must be taken at this University. Applicants should consult with the adviser for program requirements. Some (usually no more than 6) post master degree units may be approved by petition for transfer from another university.

Credit value of the dissertation: Not less than 2 nor more than 7 units.

**Grade Point Average Requirements:**

Grade point average of at least 3.0 in all work taken while in graduate studies. Preferably this should be 3.5.

**Minimum Residence:**

The period of residence work represents an opportunity to secure additional competency in the area of specialization as well as the development of an acceptable dissertation. Residency requirement can be met by taking 18 units of coursework within 12 calendar months.

**Courses Outside the Field of Education:**

Related courses outside the field of education may count towards a major upon prior approval of the department chair and the Dean of the School of Education.

**Requirements for the Doctor of Philosophy Degree:**

The Doctor of Philosophy degree in Educational Psychology with a specialization in School Psychology prepares professionals for systems interventions as school psychologists, and provides advanced training in applied development with diverse populations and consultation methods. For specific information about the PhD program in Educational Psychology with a specialization in School Psychology, please refer to Educational/School Psychology program information.
**Curriculum and Instruction**

Website: www.pacific.edu/education  
Location: Gladys L. Benerd School of Education  
Marilyn E. Draheim, Ph.D., Chair

**Degree Programs**

Master of Education in Curriculum and Instruction (MEd)  
- with a Single, Multiple and/or Educational Specialist (mild/moderate) or (moderate/severe) Level I Credential  
Master of Arts in Curriculum and Instruction (MA)  
Master of Arts in Special Education (MA)  
- with an Educational Specialist (mild/moderate) or (moderate/severe) Level I/II Credential  
Doctor of Education in Curriculum and Instruction (EdD)

**Credentials Offered**

Preliminary Multiple Subject Credential  
Preliminary Single Subject Credential in the following areas:  
Educational Specialist (mild/moderate) – Level I and Level II  
Educational Specialist (moderate/severe) – Level I and Level II  
The School of Education also offers professional masters degree programs in partnership with the San Joaquin county Office of Education and Project Pipeline. These are MA programs that follow Plan D. See the C & I department for additional information.

**Admissions Requirement**

1. A cumulative GPA of 3.0 or better for the last 60 units of college or post-baccalaureate work.  
2. An appropriate degree from an accredited university (Bachelor’s for admission to master’s programs; masters for admission to doctoral programs).  
3. A completed application portfolio to the Graduate School, an essay following departmental guidelines; official transcripts from all college-level coursework including official verification of the awarding of degrees; and three letters of recommendation attesting to the candidate’s ability to undertake doctoral studies.  
4. Official Scores on the Graduate Records Examination (GRE). For the EdD program only.  
5. Departmental interviews if requested.  
6. Evidence of qualities and character in keeping with the philosophy and standards of this University and the School of Education.

**Master of Education in Curriculum and Instruction Degree Requirements**

In order to earn the master of education degree in curriculum and instruction, students must complete a minimum of 38 units, of which 22 must be in courses 200 or above, with a Pacific cumulative grade point average of 3.0.

**I. Teacher Education Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 140</td>
<td>Transformational Teaching &amp; Learning</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 141</td>
<td>Transformational Teaching &amp; Learning Practicum</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 130</td>
<td>Technology Enhanced Learning Environments</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 163</td>
<td>Teaching English Learners</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following courses:  
- Most candidates take:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 150</td>
<td>Teaching and Assessment</td>
<td>4</td>
</tr>
</tbody>
</table>

Physical Education candidates take:  
- SPTS 159 | Sports Pedagogy | 3 |

Education Specialist Candidates, in addition take:  
- SPED 123 | The Exceptional Child | 3 |
- SPED 166 | Building Family Professional Partnerships | 3 |

**II. Professional Courses:**

Complete one of the following groups:  
- **Group A| Multiple Subject Candidates:**
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 151</td>
<td>Teaching Science</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 152</td>
<td>Teaching Mathematics</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 160</td>
<td>Productive Learning Environments</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 161</td>
<td>Literacy Development</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 162</td>
<td>Literacy Assessment</td>
<td>2</td>
</tr>
</tbody>
</table>

**Note:** EDUC 161 is a prerequisite or concurrent enrollment required.  

- **Group B| Single Subject Candidates:**
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURR 175/EDUC 156</td>
<td>Teaching Reading and Language Arts</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete one of the following:  
- Most candidates take:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURR 179X</td>
<td>Teaching in the Content Areas*</td>
<td>4</td>
</tr>
</tbody>
</table>

Music Education Candidates take:*  
- MEDU 114 | Music in Elementary School and Community | 2 |
- MEDU 115 | Music Experiences for the Child | 2 |
- MEDU 118 | Music in Secondary School | 2 |
- MEDU 117 | Music Experiences, 7-12 | 2 |

**Note:** N.B. These titles, units and ordering of courses for the Single Subject SB 2042 program are subject to change.)  

- **Group C| Education Specialist, Mild/Moderate Disabilities, Level I Candidates:**
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 224</td>
<td>Assessment of Special Education Students</td>
<td>3</td>
</tr>
<tr>
<td>SPED 228M</td>
<td>Advan. Programming Mild/Moderate</td>
<td>3</td>
</tr>
<tr>
<td>SPED 242M</td>
<td>Curriculum and Instruction/SPED Students Mild/Moderate</td>
<td>3</td>
</tr>
<tr>
<td>SPED 295E</td>
<td>Positive Behavioral Support in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 161</td>
<td>Literacy Development</td>
<td>4</td>
</tr>
</tbody>
</table>

- **Group D| Education Specialist, Moderate/Severe Disabilities, Level I Candidates:**
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 224</td>
<td>Assessment of Special Education Students</td>
<td>3</td>
</tr>
<tr>
<td>SPED 228S</td>
<td>Advanced Programming, Moderate/Severe</td>
<td>3</td>
</tr>
<tr>
<td>SPED 242S</td>
<td>Curriculum and Instruction/SPED Students, Moderate/Severe</td>
<td>3</td>
</tr>
</tbody>
</table>
III. Professional Practice (Student Teaching or Internship):
Complete on of the following groups:
Group A) Multiple and Single Subject candidates:
SPED 125X Teaching Exceptional Learners 2
Complete 12 units from:
EDUC 270** Professional Practice 12
EDUC 272** Professional Practice Seminar 12
Note: internship requires a teaching contract and Memorandum of Understanding for the Teacher Education Program and the Employer.

Group B) Education Specialist Credentials
One of the following:
SPED 298M Directed Teaching: Special Education, Mild/Moderate 6-10
SPED 298S Directed Teaching: Special Education, Moderate/Severe 6-10
SPED 298IM Internship: Special Education, Mild/Moderate 6-10
SPED 298IS Internship: Special Education, Moderate/Severe 6-10
Note: An approved Internship is an option for Directed Teaching for the Education Specialist Credentials. To be approved for Internship, a student must have a bachelor’s degree and meet all program requirements for an Internship. Normally, candidates enroll in two semesters of five units each. On a case by case basis, candidates may be approved to begin an internship while taking professional methods courses in the Special Education Program.

IV. Additional Graduate Level Courses:
A minimum of 12 units at the 200 level, including:
EPSY 201 Techniques of Research 3
One of the following Theory and Practice courses: 3
CURR 209 Curriculum Theory
CURR 212 Instructional Strategies & Classroom Processes
CURR 214 Supervision of Instruction,
CURR 295A Seminar: Middle School Curriculum
CURR 295B Seminar: Secondary Curriculum
CURR 295G Seminar: Elementary School Curriculum
Electives Minimum 6 units at the 200 level from the CURR, SPED, EADM or EPSY Departments to complete a minimum of 22 units at the 200 level and to satisfy a minimum of 38 units.
Note: Students may not double count the unit value of credential courses taken as an undergraduate to complete a bachelor’s degree in the 38 unit count for the Master of Education Degree.

V. Successful passage of an one hour oral examination.

VI. California Requirements for a Teaching Credential must be met to qualify for a credential. These include:
1. Successful completion of the State Certificate of Clearance (Fingerprint review for the Commission on Teacher Credentialing)
2. Clearance of TB test (within past four years)
3. Clearance of fingerprints for the program’s credential office
4. Passage of the California Basic Education Skills Test (CBEST) or appropriate writing subtest on CSET-MS examination
5. Passage of the appropriate California Subject Examination for Teachers (CSET)
6. Completion of United States Constitution Requirement
7. Passage of the Reading Instruction Competency Assessment (RICA) for Multiple Subject or Education Specialist Credentials
8. Successful Passage of a Teaching Performance Assessment (PACT Teaching Event)
9. Passage of all Program Assessments and Program Transition Phases including the following:
   a. Entry level GPA requirements (3.0 or higher); recommendations; essay
   b. Advancement to Credential Candidacy (essay; interview; recommendations)
   c. Embedded Signature Assignments
   d. Content Area Assessments
   e. Advancement to Professional Practice (Student Teaching or Internship)
   f. Approval of Teaching Performance Expectations
   g. Minimum GPA of 3.0, with no credential specific course grade below 2.0 (“C”)
   h. Exit from the Program Assessments

Master of Arts in Curriculum and Instruction Degree Requirements
Master of Arts programs in Curriculum and Instruction are designed to meet the professional and academic needs of educators. Master of Arts Degree programs in the department of curriculum and instruction typically follow Plans A, B, and D described above.

Plan A (Thesis)
In order to earn the master of arts degree in curriculum and instruction plan A, students must complete a minimum of 30 units, of which 16 must be in courses 200 or above, with a Pacific cumulative grade point average of 3.0.

I. Core Courses:
EADM 204 Pluralism in American Education 3
CURR 209 Curriculum Theory 3
EPSY 201 Techniques of Research 3
EPSY 220 Nature and Conditions of Learning 3

II. Thesis:
CURR 299 Thesis 4
Note: An acceptable thesis must be submitted within the deadlines as stated in the Graduate School calendar.

III. Additional Courses:
Electives With the approval of the Dean or 14 appropriate departmental chair, the candidate may choose coursework in not more than two other departments outside the School of Education. Courses may be required for the adequate development of the thesis problem.

IV. Successfully pass a final oral examination.

Plan B (Seminar)
In order to earn the master of arts degree in curriculum and instruction plan B, students must complete a minimum of 32 units, of which 18 must be in courses 200 or above, with a Pacific cumulative grade point average of 3.0.
**I. Core Courses:**
- EADM 204 Pluralism in American Education 3
- CURR 209 Curriculum Theory 3
- EPSY 201 Techniques of Research 3
- EPSY 220 Nature and Conditions of Learning 3

**II. Additional Courses:**
- Electives Courses selected from a discipline department other than education. 6
- Electives Area of interest courses from C&I Department (CURR, EDUC or SPED) 10-12

**Note:** Specializing in an area of interest: (at least 10-12 units as approved by adviser), such as curriculum and instruction, special education, bilingual/cross-cultural education, English as a second language, educational and counseling psychology or foundations.

**Electives Courses to complete a minimum of 18 units at the 200 level and to satisfy a minimum of 32 units**

**III. Successfully pass a final examination.**

**Plan D (Special)**

In order to earn the master of arts degree in curriculum and instruction plan D, students must complete a minimum of 32 units, of which 18 must be in courses 200 or above, with a Pacific cumulative grade point average of 3.0.

- Electives Content major. This will represent 21 the student’s primary area of interest and need for professional development. Courses may be chosen within a given department but are likely to include relevant courses from several departments 6
- Electives Courses in Research and evaluation methodology and/or theoretical constructs 6

**Note:** The student will be expected to develop relevant competencies in one or more of the following: research methods, critical analysis, inquiry techniques or theory.

- Electives Courses in Field experience and/or research 4-6

**Note:** Depending on the specific area of study, this may include supervised field experience, practicum, action research or thesis. The purpose will be to synthesize the total program by demonstrating competencies in the field or through some research project.

- Electives Courses to complete a minimum of 18 units at the 200 level and to satisfy a minimum of 32 units

**Master of Arts in Special Education with an Education Specialist (Mild/Moderate) or (Moderate/Severe) Level I Credential**

Graduate students may enroll in a Master of Arts in Special Education degree program if they already hold a valid Multiple or Single Subject Credential. Candidates will complete the requirements for the Education Specialist: Mild/Moderate Disabilities Credential, Level I or the Education Specialist: Moderate/Severe Disabilities Credential, Level I. Some prerequisite credential courses may have been completed because of holding a valid Multiple or Single Subject Credential. Additional required courses to complete a minimum of 32 units include:

- EPSY 201 Techniques of Research 3
- EPSY 220 Nature and Conditions of Learning 3
- EADM 204 Pluralism in American Education 3
- CURR 209 Curriculum Theory 3

**Education Specialist Level II Credentials Mild/Moderate and Moderate/Severe Disabilities**

Graduate students may enroll in the Level II program in order to complete the credential or combine a Level II Education Specialist Credential with a Master of Arts degree. Upon successful completion of all the requirements for the Level I Education Specialist Credential (32 units), the student, with the assistance of a special education adviser from the University, will develop an individual induction plan. A Level II portfolio is required. To complete the Level II credential, students will need to take:

- SPED 250 Introduction to the Induction Plan 2
- SPED 295A Crucial Issues in Special Education 3
- Electives 2 courses of 3 units each 6
- SPED 252 Portfolio Assessment 2

Also, to complete the Level II credential, students must complete elective courses for a total of 16 units. Students may complete 25% of the program requirements by completing approved district support activities, equivalent of 1 to 4 units, and a satisfactory exit interview. They must complete a minimum of 12-units of university coursework. Students in the Master of Arts program will work with a university adviser to design a program plan for the additional graduate units for a total of a minimum of 32 units.

**Doctor of Education in Curriculum and Instruction**

In order to earn a doctor of education degree in curriculum and instruction, students must complete a minimum of 55 units post-master’s work units, of which 38 must be in courses 200/300 level with a Pacific cumulative grade point average of 3.0.

**I. Core Courses:**
- CURR 352 Applied Inquiry I 3
- CURR 354 Applied Inquiry II 6
- CURR 356 Applied Inquiry III 3
- CURR 358 Applied Inquiry IV 3
- CURR 399 Doctoral Dissertation 2-7

**II. Electives in the major:**
- Electives Courses to complete a minimum of 38 units at the 200/300 level and to satisfy a minimum of 55 units
III. Students successfully complete various stages of the EdD program in the following manner:

- **Full Admission**
  - Successful completion of CURR 352

- **Advancement**
  - Successful completion of CURR 356 to Candidacy with the production of a quality problem statement and literature review coupled with an interview with faculty

- **Registration for Successful completion of a dissertation**
  - Dissertation proposal (likely in conjunction with CURR 358)

- **Program**
  - Successful completion of a minimum of two units of CURR 399, presentation and successful dissertation defense, satisfactorily meeting all graduation requirements (including those of the Graduate School) for graduation

**Administration and Educational Leadership**

Phone: (209) 946-2580
Website: www.pacific.edu/education
Location: Gladys L. Benerd School of Education
Dennis Brennan, Ph.D., Chair

**Degree Programs**

- Master of Arts in Educational Administration
  - and a Preliminary Administrative Services Credential
- Master of Arts in Educational Administration
  - with a concentration in Student Affairs
- Doctor of Education in Educational Administration
  - with a concentration in K-12 Administration/Leadership
- Doctor of Education in Educational Administration
  - with a concentration in Higher Education Administration

**Credentials Offered**

- Preliminary Administrative Services Credential
- Professional Clear Administrative Services Credential

**Admissions Requirement**

1. A cumulative GPA of 3.0 or better for the last 60 units of college or post-baccalaureate work
2. An appropriate degree from an accredited university (Bachelor’s for admission to master’s programs; masters for admission to doctoral programs).
3. A completed application portfolio to the Graduate School, an essay following departmental guidelines; official transcripts from all college-level coursework including official verification of the awarding of degrees; and three letters of recommendation attesting to the candidate’s ability to undertake doctoral studies.
4. Official Scores on the Graduate Records Examination (GRE). For the EdD program only.
5. Departmental interviews if requested.
6. Evidence of qualities and character in keeping with the philosophy and standards of this University and the School of Education.

For experienced educators who desire to prepare for positions as supervisors, consultants, vice principals, principals, or district office staff, the School of Education offers programs meeting the requirements for the Preliminary and Professional Clear Administrative Services Credentials.

The credential programs may be combined with the master’s degree or the doctorate in education.

**Master of Arts in Educational Administration and a Preliminary Clear Administrative Services Credential**

**Additional Admission Requirements:**

1. Application to department chair and subsequent approval by department.
2. Possession of a valid basic teaching credential or a services credential with a specialization in pupil personnel, health or librarian, or clinical and rehabilitative services as specified in the State of California Education Code, and verification of three years of successful full-time experience in the public schools or private schools of equivalent status.
3. Verification of having passed CBEST.
4. Written verification of desirable personal and professional characteristics for supervisory service.

**Degree Requirements:**

In order to earn master of arts in educational administration and a preliminary administrative services credential, students must complete a minimum of 33 with a Pacific cumulative grade point average of 3.0.

**I. Core courses:**

- EADM 204 Pluralism in American Education 3
- CURR 209 Curriculum Theory 3
- EPSY 201 Techniques of Research 3
- EPSY 220 Nature and Conditions of Learning 3

**II. Preliminary Administrative Services Credential courses:**

- EADM 276 Sem.: Educational Planning, Delivery and Assessment 3
- EADM 278 Educational Organizations and Diverse Constituencies 3
- EADM 280 School Law and Legal Processes 3
- EADM 283 School Finance and Business Administration 3
- EADM 286 Administration of Human Resources 3
- EADM 289 Educational Leadership 3
- EADM 292 Field Experience 3-4

**Note:** Candidates must complete an approved program at one institution.

In addition to the above program, an Administrative Intern Credential is offered for qualified candidates leading to certification as an administrator. Interns are required to complete 4 units of EADM 292. Consult the department chair for further information.

**Professional Clear Administrative Services Credential**

The Professional Clear Administrative Services Credential Program is an advanced preparation program extending the knowledge and skills of those who have a Preliminary Administrative Services Credential. Consult the department chair for further information.
Master of Arts in Educational Administration with a concentration in Student Affairs

The program is designed to meet CAS standards

**Degree Requirements:**
In order to earn master of arts in educational administration with a concentration in student affairs, students must complete a minimum of 36 units, of which 18 must be in courses 200 or above, with a Pacific cumulative grade point average of 3.0.

**I. Core courses:**
- EADM 204 Pluralism in American Education 3
- CURR 209 Curriculum Theory 3
- EPSY 201 Techniques of Research 3
- EPSY 220 Nature and Conditions of Learning 3

**II. Educational Administration core courses:**
- EADM 278 Diverse Schools and Organizations 3
- EADM 289 Educational Leadership 3

**III. Student Affairs Core Courses:**
- EADM 240 Introduction to Student Affairs 3
- EADM 241 Student Development Theory 3
- Complete one of the following: 3
  - EADM 243 Legal Issues in College Student Affairs
  - EADM 244 Assessment/Strategies for Student Dev.

**IV. Field Experience:**
- EADM 292A Student Affairs Field Experience 3

**V. Optional Thesis and/or Cognate Courses**
Complete six units from the following: 6
- EADM 299 Thesis
- Electives Courses chosen in cognate with adviser approval.

**Note:** 1) Thesis must be completed for 3-6 units within the specifications and deadlines established by The Office of Research and Graduate Studies. 2) With the approval of the Dean or appropriate departmental chair, the candidate may choose coursework to complete the cognate in not more than two other departments outside the School of Education.

**VI. Successfully pass a final oral examination.**

Doctor of Education in Educational Administration

In order to earn a doctor of education degree in educational administration, students must complete a minimum of 55 units post master's work units, of which 38 must be in courses 200/300 level with a Pacific cumulative grade point average of 3.0.

**I. Core Courses**
- CURR 352 Applied Inquiry I 3
- CURR 354 Applied Inquiry II 6
- CURR 356 Applied Inquiry III 3
- CURR 358 Applied Inquiry IV 3
- CURR 399 Doctoral Dissertation 2-7

**II. Electives**
Electives Courses to complete a minimum of 38 units at the 200/300 level and to satisfy a minimum of 55 units

**III. Students successfully complete various stages of the EdD program in the following manner:**
- **Full Admission**
  - Successful completion of CURR 352
- **Advancement**
  - Successful completion of CURR 356 to Candidacy with the production of a quality problem statement and literature review coupled with an interview with faculty
  - Registration for Successful completion of a dissertation
  - Dissertation proposal (likely in conjunction with CURR 358)

**Program**
- Successful completion of a minimum of Completion two units of CURR 399, presentation and successful dissertation defense, satisfactorily meeting all graduation requirements (including those of the Graduate School) for graduation

**Department of Educational/School Psychology**

Phone: (209) 946-2559
Website: www.pacific.edu/education
Location: Gladys L. Benerd School of Education
Linda Webster, Ph.D., Chair

**Degree Programs**
- Master of Arts in School Psychology *
- Educational Specialist in School Psychology (EdS) *
  - and a Pupil Personnel Services Credential in School Psychology
- Doctor of Philosophy in Educational Psychology (PhD) *
  - with a specialization in School Psychology
  - and a Pupil Personnel Services Credential in School Psychology

* The Master of Arts in School Psychology is a non-terminal degree available to students pursuing an EdS or PhD in the Educational/School Psychology department.

**Credentials Offered**
- Pupil Personnel Services Credential in School Psychology

**Admissions Requirements**
1. Students must hold the baccalaureate or equivalent.
2. A cumulative GPA of 3.0 or better in all college work.
3. A completed application portfolio to the Office of Admission, which includes the filing of official test scores for the Graduate Record Examination (both the general test and the Advanced Test in Psychology are required); an essay emphasizing the desire to work as a school psychologist in the public schools; official transcripts from all college level coursework including official verification of the awarding of degrees; and three letters of recommendation attesting to the candidate's ability to undertake graduate studies.
4. An admissions interview with representative(s) of the Department of Educational and School Psychology.
5. Review by the Department of Educational and School Psychology and the Dean of Research and Graduate Studies.
6. Evidence of qualities and character in keeping with the philosophy and standards of this University and the profession of School Psychology.
7. Applications are accepted only to admission for the Fall semester.
Educational Specialists in School Psychology

The Education Specialist degree program in school psychology leads to a Pupil Personnel Services Credential in school psychology. The program requires two years of full-time coursework with fieldwork (leading to a “non-terminal” MA), and culminates in an additional third-year internship. Applications are accepted only for admission for the fall semester. The program is designed to prepare highly effective school psychologists who are knowledgeable regarding the developmental issues and needs of both regular and special education. The program also intends to prepare highly effective school psychologists who apply skills in data-based decision making and accountability for work with individuals, groups, and programs. Additional goals include preparing highly effective school psychologists who apply developmental knowledge from cognitive, learning, social and emotional domains across diverse socio-cultural and linguistic contexts and ensuring school psychologists can demonstrate the necessary positive interpersonal skills they will need to facilitate communication and collaboration among students, school personnel, families, and other professionals. EdS. program requirements include the following required courses:

In order to earn an education specialist degree in school psychology, students must complete a minimum of 60 units with a Pacific cumulative grade point average of 3.0.

Master of Arts in School Psychology (Optional degree):

Minimum of 32 units, including:

- EPSY 201 Techniques of Research 3
- EPSY 214 Intermediate Statistics 3
- EPSY 301 Data-Based Decision Making I 2
- EPSY 302 Data-Based Decision Making II 2
- EPSY 306 Psychotherapeutic Interventions in the Schools 3
- EPSY 307 Group Counseling 3
- EPSY 309 Consultation Methods 3
- EPSY 315 Individual Assessment 3
- EPSY 316 Behavior & Personality Assessment in the Schools 3
- EPSY 321 Sem: Advanced Human Development III 3
- EPSY 220 Nature & Conditions of Learning 3
- EPSY 294B School Psychology Fieldwork 2

Additional Requirements for Education Specialist degree:

- EPSY 300 Sem: Intro to School Psychology 1
- EPSY 308 History, Systems, & Indirect Interventions 3
- EPSY 310 Crisis Intervention 3
- EPSY 311 Law & Professional Ethics 1
- EPSY 312 Child Psychopathology & Wellness Promotion 3
- EPSY 317 Neuropsychology in the Schools 3
- EPSY 320A Sem: Advanced Human Development I 3
- EPSY 320B Sem: Advanced Human Development II 3
- SPED 295E Positive Behavioral Support 3
- EADM 204 Pluralism in American Education 3
- SPED 224 Educational Assessment of Special Educ Students 3
- SPED 228M/S Advanced Programming for Special Educ Students 3
- EPSY 294B School Psychology Fieldwork 2
- EPSY 398 School Psychology Internship 6

Portfolio Examination:

Students are required to present a portfolio that addresses competencies in the domains of school psychology as delineated by the National Association of School Psychologists. This includes obtaining a passing score (160) on the Praxis II exam in school psychology.

Doctor of Philosophy in Educational Psychology

The doctoral degree program represents a year to two year program of study beyond the EdS. Thus, it requires a four-to-five year course of study, including a year-long internship. The PhD Program in School Psychology prepares professionals for systems interventions as school psychologists, and provides advanced training in consultation, applied development, and program evaluation. The following courses are required for the PhD program:

In order to earn a doctor of philosophy in educational psychology, students must complete a minimum of 97 units with a Pacific cumulative grade point average of 3.0.

Master of Arts in School Psychology (Optional degree):

Minimum of 32 units, including:

- EPSY 201 Techniques of Research 3
- EPSY 214 Intermediate Statistics 3
- EPSY 301 Data-Based Decision Making I 2
- EPSY 302 Data-Based Decision Making II 2
- EPSY 306 Psychotherapeutic Interventions in the Schools 3
- EPSY 307 Group Counseling 3
- EPSY 309 Consultation Methods 3
- EPSY 315 Individual Assessment 3
- EPSY 316 Behavior & Personality Assessment in the Schools 3
- EPSY 321 Sem: Advanced Human Development III 3
- EPSY 220 Nature & Conditions of Learning 3
- EPSY 294B School Psychology Fieldwork 2

Additional Requirements for Education Specialist degree:

- EPSY 300 Sem: Intro to School Psychology 1
- EPSY 308 History, Systems, & Indirect Interventions 3
- EPSY 310 Crisis Intervention 3
- EPSY 311 Law & Professional Ethics 1
- EPSY 312 Child Psychopathology & Wellness Promotion 3
- EPSY 317 Neuropsychology in the Schools 3
- EPSY 320A Sem: Advanced Human Development I 3
- EPSY 320B Sem: Advanced Human Development II 3
- SPED 295E Positive Behavioral Support 3
- SPED 224 Educational Assessment of Special Educ Students 3
- SPED 228M/S Advanced Programming for Special Educ Students 3
- EPSY 294B School Psychology Fieldwork 4
- EPSY 398 School Psychology Internship 6
- EPSY 324 Seminar: Advanced Consultation and Supervision 3
- EPSY 395J Seminar: Promoting Cultural Competence 3
- EPSY 395C Quantitative Research Design 3
- EPSY 395D Advanced Statistical Methods 3
- EPSY 397 Graduate Research 6
- EPSY 399 Doctoral Dissertation 4
### Course Offerings

#### Undergraduate

See General Catalog for course descriptions

The courses listed below, when taken by graduate students, may be used to a limited extent toward meeting requirements for graduate degrees in education. For the Master of Education all courses used to satisfy teaching credentials requirements may be offered toward meeting degree requirements.

#### Department of Curriculum and Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 010.</td>
<td>Dean's Seminar</td>
<td>(1)</td>
</tr>
<tr>
<td>EDUC 011.</td>
<td>Children's Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>EDUC 100.</td>
<td>Introduction to Language</td>
<td>(3)</td>
</tr>
<tr>
<td>CURR 123.</td>
<td>Introduction to Syntax and Semantics</td>
<td>(3)</td>
</tr>
<tr>
<td>EDUC 120.</td>
<td>First and Second Acquisition</td>
<td>(3)</td>
</tr>
<tr>
<td>EDUC 130.</td>
<td>Technology Enhanced Learning Environments</td>
<td>(2)</td>
</tr>
<tr>
<td>EDUC 140.</td>
<td>Transformational Teaching and Learning</td>
<td>(4)</td>
</tr>
<tr>
<td>EDUC 141.</td>
<td>Transformational Teaching and Learning Practicum</td>
<td>(2)</td>
</tr>
<tr>
<td>EDUC 142.</td>
<td>Visual Arts in Education</td>
<td>(4)</td>
</tr>
<tr>
<td>EDUC 150.</td>
<td>Teaching and Assessment</td>
<td>(3)</td>
</tr>
<tr>
<td>EDUC 151.</td>
<td>Teaching Science (MS)</td>
<td>(2)</td>
</tr>
<tr>
<td>EDUC 152.</td>
<td>Teaching Mathematics (MS)</td>
<td>(2)</td>
</tr>
<tr>
<td>EDUC 155.</td>
<td>Teaching in the Content Areas I</td>
<td>(2)</td>
</tr>
<tr>
<td>EDUC 157.</td>
<td>ESL Theory and Practice</td>
<td>(3)</td>
</tr>
<tr>
<td>EDUC 161.</td>
<td>Literacy Development (MS)</td>
<td>(4)</td>
</tr>
<tr>
<td>EDUC 162.</td>
<td>Literacy Assessment (MS)</td>
<td>(2)</td>
</tr>
<tr>
<td>EDUC 163.</td>
<td>Teaching English Learners</td>
<td>(3)</td>
</tr>
<tr>
<td>EDUC 164.</td>
<td>Introduction to Bilingual Education</td>
<td>(3)</td>
</tr>
<tr>
<td>EDUC 165.</td>
<td>Teaching in the Content Areas II</td>
<td>(2)</td>
</tr>
<tr>
<td>EDUC 170.</td>
<td>Professional Practice</td>
<td>(2-10)</td>
</tr>
<tr>
<td>EDUC 171.</td>
<td>Professional Practice Music</td>
<td>(2-10)</td>
</tr>
<tr>
<td>EDUC 172.</td>
<td>Professional Practice Seminar</td>
<td>(2-10)</td>
</tr>
<tr>
<td>EDUC 175.</td>
<td>Teaching in the Content Areas III</td>
<td>(2)</td>
</tr>
</tbody>
</table>

#### Department of Special Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 123.</td>
<td>The Exceptional Child</td>
<td>(3)</td>
</tr>
<tr>
<td>SPED 124.</td>
<td>Assessment of Special Education Students</td>
<td>(3)</td>
</tr>
<tr>
<td>SPED 125X.</td>
<td>Teaching Exceptional Learners</td>
<td>(2)</td>
</tr>
<tr>
<td>SPED 128M.</td>
<td>Advanced Programming for Students with Mild/Moderate Disabilities</td>
<td>(3)</td>
</tr>
<tr>
<td>SPED 128S.</td>
<td>Advanced Programming for Students with Moderate/Severe Disabilities</td>
<td>(3)</td>
</tr>
<tr>
<td>SPED 142M.</td>
<td>Curriculum and Instruction for Students with Mild/Moderate Disabilities</td>
<td>(3)</td>
</tr>
<tr>
<td>SPED 142S.</td>
<td>Curriculum and Instruction for Students with Moderate/Severe Disabilities</td>
<td>(3)</td>
</tr>
<tr>
<td>SPED 166.</td>
<td>Building Family – Professional Relationships</td>
<td>(3)</td>
</tr>
<tr>
<td>SPED 191.</td>
<td>Independent Study</td>
<td>(1-3)</td>
</tr>
<tr>
<td>SPED 193.</td>
<td>Special Projects</td>
<td>(1-3)</td>
</tr>
<tr>
<td>SPED 195E.</td>
<td>Positive Behavioral Support in the Classroom</td>
<td>(3)</td>
</tr>
</tbody>
</table>

#### Department of Educational Administration and Leadership

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EADM 130.</td>
<td>Seminar: Cultural Basis of Conflict</td>
<td>(3)</td>
</tr>
</tbody>
</table>

#### Department of Educational and School Psychology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 121X.</td>
<td>Learner Centered Concerns</td>
<td>(3)</td>
</tr>
<tr>
<td>EPSY 191.</td>
<td>Independent Study</td>
<td>(1-3)</td>
</tr>
</tbody>
</table>

#### Course Offerings

#### Department of Curriculum and Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 256.</td>
<td>Literacy Development in Secondary Schools</td>
<td>(3)</td>
</tr>
</tbody>
</table>

This course provides an introduction to the teaching of reading and writing in the content areas. The course focuses on understanding the processes of reading and language and how to design appropriate teaching strategies to encourage growth in learning from text. An emphasis will be placed on integration of reading and writing throughout the curriculum. The course meets credential requirements. **Prerequisite: Admission to credential candidacy.**

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>EDUC 257.</td>
<td>ESL Theory and Practice</td>
<td>(3)</td>
</tr>
</tbody>
</table>

This course is designed to provide a link between theory and practice in the teaching of ESL. Aspects of language learning will be discussed, and concomitant instruction and curriculum will be analyzed while developing a working model for the development of curriculum which will be appropriate for the teaching situation.

<table>
<thead>
<tr>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 256A.</td>
<td>Introduction to Bilingual Education</td>
<td>(3)</td>
</tr>
</tbody>
</table>

This course provides an overview of bilingual education and is designed to meet the needs of both undergraduate and graduate students who are interested in understanding the role of bilingual, bicultural education in schools. Students explore the related implications of second language acquisition research, sociopolitical theory, and historical as well as contemporary experiences in the content of program design, instructional practice, and school/community relations toward a conceptualization of bilingual education as a source of pedagogical enrichment strategies for all learners in all settings.

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 270.</td>
<td>Professional Practice</td>
<td>(2-10)</td>
</tr>
</tbody>
</table>

Student teaching for the SB 2042 Multiple Subject credential in public schools, for full-day placement. Requires additional assignments and action research for the M. Ed. Degree. **Prerequisites:** Completion of prerequisite coursework with grade “C” or higher; minimum GPA of 3.0; Admission to Teacher Education/Credential Candidacy; CBEST passed; subject matter completed and approved; approval of a Certificate of Clearance, TB test clearance; program assessments completed; completion of Directed Teaching approval process and clearance by the Director of Field Experiences. The United States Constitution requirement must be completed to apply for a teaching credential. No other coursework permitted other than EDUC 172 and SPED 125X and weekend and vacation workshops, except that a candidate must petition in ad-
vance to the Curriculum and Instruction Department’s Director of Field Experiences for enrollment in an additional concurrent course. Open only to M. Ed. Degree candidates. Corequisite: EDUC 172 and SPED 125X.

**EDUC 271. Professional Practice Music** (2-10)
Student Teaching or Internship for the Music Single Subject credential. The Music Education Department Chair approves one or more semesters of Directed Teaching and assigns number of units for each semester. The total over one or more semesters must be ten (10) units. Open to Master of Education candidates. Prerequisites: 1) Student Teaching; 2) Internship. 1) Completion of all prerequisite coursework with grade of “C” or higher; minimum GPA of 3.0, Admission to Teacher Education/Credential Candidacy; CBEST passed; subject matter completed and approved; approval of a Certificate of Clearance, TB test clearance; program assessments completed; completion of Directed Teaching approval process and clearance by the Director of Field Experiences and Music Education Department Chair. The United States Constitution requirement must be completed to apply for a teaching credential. 2) Prerequisites are the same as those for Student Teaching; a GPA of 3.0 in Teacher Education courses is required, and the United States Constitution requirement must be completed prior to enrolling in an internship. A contract from the district and a Memorandum of Understanding between the district and the University of the Pacific are required. Corequisites: EDUC 172 and SPED 125X. These corequisites must be taken once, if Directed Teaching is split over two or more semesters.

**CURR 209. Curriculum Theory** (3)
An examination of curriculum from various philosophical and learning theory points of view. Models and rationales of curriculum will be explored. Historical perspectives and specialized areas of the curriculum will be examined in terms of present and future societal needs. Methods of curriculum dissemination will be delineated.

**CURR 212. Instructional Strategies and Classroom Processes** (3)
Use of a variety of instructional strategies to achieve course objectives. Includes a review of research on effective teaching skills related to motivation, expectations, modeling, questioning, grouping, direct instruction, cooperative learning and classroom management. Knowledge of contemporary lines of inquiry with regard to classroom processes.

**CURR 214. Supervision of Instruction** (3)
Review of models of supervision and processes that support effective descriptions of classroom practices, analysis and feedback regarding those data and the provision of instructional support for continuing classroom improvement. Includes a practicum component.

**CURR 221. Research in Second Language Acquisition** (3)
This course focuses on the linguistic, psychological, social and cultural processes in learning and teaching a second language. It is designed to examine the major theoretical perspectives and research studies in second language acquisition. It involves critical analysis and critique of important literature and research studies in second language acquisition. It covers techniques for conducting classroom-based research in second language learning and teaching. Students in this course will learn to develop a research proposal to investigate an area of interest in the field of second language acquisition.

**CURR 225. Psychology of Reading** (3)
An exploration of current theory and research findings related to the psychological processes involved in literacy acquisition and development. Emphasis on a cognitive and psycholinguistic approach to understanding the processes of reading. Implications for instruction.

**CURR 252. Teaching the Creative, Talented and Gifted Child** (3)
A review of the major writings and research dealing with the creative learner and his classroom needs. Will present opportunities to develop curriculum plans and methods and approaches that can successfully be applied in an on-going educational program to assist the creative student in reaching his full potential.

**CURR 261. Microcomputers in Education** (3)
This course introduces the student to the major concepts and applications related to the use of microcomputers in education. Students will learn basic operations, terminology and capabilities of microcomputers within an educational context. Key issues related to the use of instructional technology will be discussed. Application and evaluation of software for classroom instruction and management will be investigated.

**CURR 262. Advanced Methods in Bilingual Education** (3)
This course provides a critical interpretation of current practice in bilingual education, based on theory and research.

**CURR 265. Microcomputers & Curriculum Design** (3)
Issues related to the educational application of instructional technology and its impact on education will be investigated. Students will do in-depth analyses of software applications and their validity in relation to learning models and current curriculum. Students will work with multi-media software and develop media projects. Various projects related to evaluation and use of software, teaching strategies and research in new technologies will be required.

**CURR 277. Practicum** (2-4)
**CURR 277A. Practicum (Montessori)** (2-4)
**CURR 280. Modern Trends in Early Childhood Education** (3)
Acquaintance with current trends in the education of children from birth through third grade.

**CURR 282. Advanced Curriculum and Theory in Early Childhood Education** (3)
Involvement with curriculum design, analysis and evaluation.

**CURR 291. Graduate Independent Study** (1-3)
Graduate students may enroll in library research with consent of the department chair.

**CURR 292. Advanced Fieldwork**
Prerequisite: Consent of the department chair.

| **292A.** Elementary Education |
| **292B.** Secondary Education |
| **292D.** Early Childhood Education |
| **292F.** Reading |
| **292H.** Special Projects |
| **292I.** Advanced Fieldwork in Bilingual Education |

**CURR 293. Special Topics**
Prerequisite: Consent of the department chair.

**CURR 295A. Seminar: Middle School Curriculum** (3)
Review of curricular issues in middle schools in the United States, including an analysis of curricular concepts and the social, economic and political forces that may shape forthcoming curricular design. Specific content includes historical and philosophical foundation; curriculum trends, alternative approaches; and curriculum materials analysis.
CURR 295B. Seminar: Secondary Curriculum (3)
Review of the curriculum issues in middle and secondary schools in the United States, including an analysis of curriculum concepts and the social, economic and political forces that may shape forthcoming curricular design. Specific content includes historical and philosophical foundations, curriculum trends, alternative approaches, curriculum materials, analysis and issues that relate to adolescence.

CURR 295E. Seminar: Teaching Reading and Writing (3)
Examines current theory, research, trends, and issues in the teaching of reading and writing. Students will translate theory and research in practice through observation of and participation with children in reading and writing activities. Prerequisites: graduate standing and previous coursework in one of the following: reading, writing, language development.

CURR 295G. Seminar in Elementary Curriculum (3)
Review of curricular issues in elementary schools in the United States, including an analysis of curricular concepts and the social, economic, and political forces that may shape forthcoming curricular design. Specific content includes historical and philosophical foundation; curriculum trends; alternative approaches; and curriculum materials analysis.

CURR 295H. Seminar in Language Teaching (3)
A seminar in ESL methods, materials, theories and current research. Prerequisite: CURR 127 or 227 or concurrent enrollment in 227.

CURR 297. Graduate Research in Education (1-3)
Graduate students may enroll in some field investigation with consent of the department chair.

CURR 299. Master's Thesis (2, 4)
Course is devoted to preparation of a thesis proposal and the preparation, completion, and defense of the thesis. Master of Arts candidates enrolled in a program and course objectives.

CURR 302. Issues in Teacher Education (3)
Review and analysis of current curricular topics related to pre-service and inservice teacher preparation.

CURR 304. Program Evaluation (3)
Selection design and use of formal and informal devices for the purpose of making diagnosis of learner strengths and weaknesses, measuring learner progress and making summative evaluations of learner achievement, both on an individual and larger scale basis.

CURR 306. Curriculum Materials Development (3)
Design and development of appropriate curriculum materials for achieving program and course objectives.

CURR 308. Issues in Curriculum and Instruction (3)
Exploration of crucial issues and trends in curriculum and instruction: their historical origins, current manifestations and implications for teaching and learning in effective schools.

CURR 318. Research in Classroom Context (3)
This course will focus on developing skills and knowledge related to conducting research in culturally and ethnically diverse classroom settings. Emphasis will be placed on collection and analysis of data, primarily through observations, interviews and curriculum documents. Students will design and implement a study in a classroom context and present their work both oral and written form.

CURR 320. Advanced Curriculum Studies (3)
This course is intended to be a capstone research course in curriculum studies. Emphasis will be placed on critical analysis of curriculum issues and subsequent research-based and theoretical perspectives relative to areas of doctoral scholarship.

CURR 322. Applied Inquiry I (3)
In this course, students will work collaboratively in learning communities to identify and explore general and specific educational/social/political issues that are affecting learners/learning outcomes for key educational constituencies. Each student will identify a preliminary issue/problem/concern for investigation/research and engage in early exploration of foundational issues, key theories, and seminal and emerging research on these topics.

CURR 324. Applied Inquiry II (3)
This course will provide doctoral students with an overview of assumptions/limitations/strengths and claims of educational research. Further, it will provide them with an overview of quantitative methodologies (data collection and analysis strategies) and of the relevance of these for specific problems and questions. Prerequisite: CURR 352.

CURR 325. Applied Inquiry III (3)
This course will place doctoral students into professional learning communities with colleagues and a faculty leader. In these communities, students will work collaboratively and independently to ensure that each student develops a refined research statement and draft literature review. Prerequisite: CURR 354.

CURR 328. Applied Inquiry IV (3)
This course will place doctoral students into professional learning communities with colleagues and a faculty leader. In these communities, students will work collaboratively and independently to ensure that each student develops a defense-ready dissertation proposal. Prerequisite: CURR 356.

CURR 331. Graduate Independent Study (1-3)
Doctoral students may enroll in directed library research with consent of the department chair.

CURR 332. Curriculum Practicum (2-4)
Prerequisites: completion of a graduate level course which surveys various types of educational research, and introduces methodological concepts and techniques, such as EPSY 201, with a letter grade of B or better, and EPSY 214.

CURR 337. Graduate Research in Education (1-3)
Prerequisite: CURR 352.

CURR 339A. QSA Proposal Development (1)
Doctoral students prepare and obtain approval of a proposal for three Qualifying Scholarly Activity (QSA) projects approved by a department faculty member mentor and two additional department faculty. Students may enroll in CURR 397A as early as the semester after Advancement to Full Admission has been completed or as late as the semester after they have completed a minimum of thirty units.

CURR 339B. QSA Projects (1)
Doctoral students develop and complete each of three proposed QSA projects. Students work with a mentor and two department faculty in conducting research relevant to three proposed projects. Doctoral students must have completed the approval of the Qualifying Scholarly Activity proposal (CURR 397A) or have permission to be concurrently enrolled in CURR 397B. Students may enroll more than one time in CURR 397B until all three QSA projects have been completed and defended.
CURR 397C. Dissertati on Proposal Development (1)
Open to a doctoral student who has successfully completed all coursework and three Qualifying Scholarly Activities after taking CURR 397A and CURR 397B. The student prepares and defends the dissertation proposal and Institutional Review Board (IRB) proposal. The student concurrently enrolls in a minimum of one unit of CURR 399: Doctoral Dissertation.

CURR 399. Doctoral Dissertation (1-15)

Curriculum and Instruction: Special Education Program

SPED 224. Assessment of Special Education Students (3)
The role of assessment in teaching students with disabilities will be explored. In addition, teacher made tests, curriculum based assessment, portfolio assessment and commonly used standardized tests will be examined. This course will comply with the California Commission on Teacher Credentialing (CCTC) requirements for the Preliminary Level One Credential for Educational Specialist: Mild/Moderate or Moderate/Severe Disabilities. Prerequisites: SPED 123, SPED 166 and Admission to Teacher Education/Credential Candidacy or permission of Special Education Coordinator or Department Chair of Curriculum and Instruction.

SPED 228M. Advanced Programming for Students with Mild/Moderate Disabilities (3)
Theoretical and applied information pertaining to the characteristics and educational needs of students with mild to moderate disabilities will be presented. The course will comply with the California Commission on Teacher Credentialing (CCTC) requirements for the Preliminary Level One Credential for Educational Specialist: Mild/Moderate Disabilities. Prerequisites: SPED 123, SPED 166 and Admission to Teacher Education/Credential Candidacy or permission of Special Education Coordinator or Department Chair of Curriculum and Instruction.

SPED 228S. Advanced Programming for Students with Moderate/Severe Disabilities (3)
Presentation of theoretical and applied information pertaining to specialized health care and sensory needs as well as educational characteristics for students with moderate/severe disabilities. This course will comply with the California Commission on Teacher Credentialing (CCTC) requirements for the Preliminary Level One Credential for Educational Specialist: Moderate/Severe Disabilities. Prerequisites: SPED 123, SPED 166 and Admission to Teacher Education/Credential Candidacy or permission of Special Education Coordinator or Department Chair of Curriculum and Instruction.

SPED 242M. Curriculum and Instruction for Students with Mild/Moderate Disabilities (3)
Presentation of theoretical and applied information pertaining to methods of curriculum and instruction for students with mild to moderate disabilities. This course will comply with the California Commission on Teacher Credentialing (CCTC) requirements for the Preliminary Level One Credential for Educational Specialist: Mild/Moderate Disabilities. Prerequisites: SPED 123, SPED 166 and Admission to Teacher Education/Credential Candidacy or permission of Special Education Coordinator or Department Chair of Curriculum and Instruction.

SPED 242S. Curriculum and Instruction for Students with Moderate/Severe Disabilities (3)
This course will present theoretical and applied information pertaining to methods of curriculum and instruction for students with moderate to severe disabilities. This course will comply with the California Commission on Teacher Credentialing (CCTC) requirements for the Preliminary Level One Credential for Educational Specialist: Moderate/Severe Disabilities. Prerequisites: SPED 123, SPED 166 and Admission to Teacher Education/Credential Candidacy or permission of Special Education Coordinator or Department Chair of Curriculum and Instruction.

SPED 250. Introduction to Induction Plan (2)
The purpose of this practicum-based course is two-fold: to introduce the student to the induction plan process, and provide an opportunity for candidates enrolled in the Mild/Moderate or Moderate/Severe Level II Educational Specialist Credential Program to identify their particular professional needs, set goals and objectives for their continued teacher development and apply theoretical understandings to the classroom. The course will comply with the California Commission on Teacher Credentialing (CCTC) requirements for the Level II Professional Development Educational Specialist Mild/Moderate and Moderate/Severe Clear Credential. Prerequisite: Completion of the Preliminary Level I Educational Specialist Credential Program in Mild/Moderate and/or Moderate/Severe.

SPED 252. Portfolio Assessment (2)
This is the last class in the 16-unit course sequence for the Level II phase of the Educational Specialist credential program. The course provides an opportunity for candidates enrolled in the Mild/Moderate or Moderate/Severe Credential Program to apply theoretical understandings to the classroom and demonstrate professional competencies, through a series of evaluation processes. Students enrolled in this course are expected to log 40 contact hours in the field. Students must have two years of teaching experience as an Educational Specialist. This course will comply with the California Commission on Teacher Credentialing (CCTC) requirements for the Level II Professional Development Educational Specialist Mild/Moderate or Moderate/Severe Disabilities Clear Credential. The Special Education coordinator or department chair must be consulted prior to enrollment to update progress on the Professional Induction Plan. Prerequisites: SPED 250, SPED 295a or SPED 385a and completion of electives in the Professional Development Plan.

SPED 291. Independent Graduate Study (1-3)

SPED 293. Special Project (1-3)
Prerequisite: Consent of the department chair.

SPED 295A. Seminar: Crucial Issues in Special Education (3)
Provides a methodology and format for advanced special education students and other related disciplines to explore crucial issues and trends and their historical origin. Attention to research and the development of positions on trends, issues and current law.

SPED 295E. Positive Behavioral Support in the Classroom (3)
Theoretical and applied information pertaining to methods of providing positive behavioral support to students with and without disabilities in educational settings will be examined. This course will comply with the California Commission on Teacher Credentialing (CCTC) requirements for the Preliminary Level One Credential for Educational Specialist: Moderate/Severe Disabilities. Prerequisites: SPED 123, SPED 166 and Admission to Teacher Education/Credential Candidacy or permission of Special Education Coordinator or Department Chair of Curriculum and Instruction.

SPED 297. Graduate Research (1-3)

SPED 298IM. Internship: Mild/Moderate (5)
This internship experience provides an opportunity for candidates in the mild/moderate credential program to apply theoretical knowledge and acquire skills to the classroom in an internship experience. Students must register for five units for each of two semesters for a total of ten units. All prerequisite and required courses must be completed to enroll in an Internship and permission must be obtained from the Director of Special Education.

SPED 298IS. Internship: Moderate/Severe (5)
This internship experience provides an opportunity for candidates in the moderate/severe credential program to apply theoretical knowledge and acquire skills to the classroom in an internship experience. Students must register for five units for each of two semesters for a total of ten units. Prerequisite: All prerequisite and required courses must be completed to enroll in an Internship and permission must be obtained from the Director of Special Education.
SPED 298M. Directed Teaching: Special Education (mm) (6-10)
This student teaching experience provides an opportunity for candidates in the mild/moderate credential program to apply theoretical knowledge and acquired skills to the classroom in a student teaching experience. **Prerequisites:** All prerequisite and required courses must be completed to enroll in Directed Teaching and permission of the Director of Special Education.

SPED 298S. Directed Teaching: Special Education (ms) (6-10)
This student teaching experience provides an opportunity for candidates in the moderate/severe credential program to apply theoretical knowledge and acquired skills to the classroom in a student teaching experience. **Prerequisites:** All prerequisite and required courses must be completed to enroll in Directed Teaching and permission of the Director of Special Education.

SPED 299. Master’s Thesis (4)

SPED 391. Independent Graduate Study - Special Education (1-3)

SPED 393A. Special Topics (1-3)
**Prerequisite:** Consent of the department chair.

SPED 395A. Seminar: Crucial Issues in Special Education (3)
 Provision of a methodology and format for advanced special education students and other related disciplines to explore crucial issues and trends and their historical origin. Attention to research and the development of positions on trends, issues and current law.

SPED 397. Graduate Research (1-3)

**Department of Educational Administration and Leadership**

EADM 204. Pluralism in American Education (3)
A multi-disciplinary examination of the effects of cultural and social pluralism on educational policy, philosophy, classroom instruction and professional ethics in American public education, both historically and as contemporary issues.

EADM 206. Comparative Education (3)
Educational principles, practices and organizational structure and school administration in the United States and other societies.

EADM 207. Sociology of Education (3)
Study of sociology of education and the classroom.

EADM 210. Seminar in American Educational Thought (3)
A philosophical treatment of American education.

EADM 220. Seminar: Social Class Effects in Education (3)
Explores the nature of social class and its effects on learning in the classroom.

EADM 230. Seminar: Cultural Basis Conflicts in Education (3)
Analysis of cultural diversity in American classrooms. Not open to doctoral students.

EADM 231. Seminar: Educational Anthropology (3)
Analysis of culture, language and values in education.

EADM 232. Gender Issues: Cross-cultural Pers. (3)
An examination of social, economic and political forces which foster and perpetuate gender stratification and related issues. Trends/movements regarding gender roles/status are investigated from the perspective of economic and political systems in the context of Eastern and Western societies.

EADM 233. Seminar: Multicultural Education (3)
Analysis of the theoretical and philosophical foundations of cultural pluralism, acquire an understanding of strategies for implementation of cross-cultural education, and the development of units of instruction for use in cross-cultural education.

EADM 234. Asian Cultures (3)
This course provides knowledge of East and Southeast Asian value systems. By studying Eastern philosophies and Eastern ways and life the student will gain a deeper understanding of cross-culturalism and its implications for American education and society.

EADM 240. Introduction of Students Affairs (3)
A comprehensive introduction and overview of student affairs functions within institutions of higher education. Emphasis will be on the history and evolution of the student affairs movement; gaining an understanding of the multiple roles of the student affairs practitioner, creating an awareness of the best practices in student personnel; and developing knowledge of current issues regarding students and student services functions in higher education.

EADM 241. Student Development Theory (3)
A forum for students to critically examine and evaluate current student development theories, research, and implications for practice. The course content includes study of attitudes and characteristics of American college students and their various cultures. This course also explores current issues in higher education as they impact student affairs roles and practice.

EADM 242. College Student Environment (3)
The characteristics and attitudes of traditional and non-traditional American college students and the effect of the college environment on students. Students will study the historical and contemporary characteristics of students, understand the characteristics and needs of various sub-populations, and research the effects of college and its environments on students.

EADM 243. Legal Issues in Higher Education Student Affairs (3)
Provides an overview of legal issues in American higher education, specifically those related to Student Affairs. This course is designed to ensure that students have the opportunity to learn basic legal principles necessary to function in an administrative or managerial capacity in post-secondary institutions. Administrative arrangements, policy issues, and case law will be reviewed and discussed.

EADM 244. Strategies Promoting Student Development (3)
This course is a dual study of theory and research pertaining to human learning and the design of effective learning environments. Attention will be given to an analysis of applications of college student development theories and models for practice for the design of programs to promote college student development and change.

EADM 245. Counseling Theories in College Student Affairs (3)
A critical and comprehensive study of current counseling theories and their application for student affairs practitioners.

EADM 246. Counseling Special Populations (3)
The course focuses on the study of counseling processes and techniques with student client populations that are ethnically and racially diverse. We will build on the skills that students learned in the basic counseling theories course taught in prior semesters. Students will explore theory and research beyond the contention that students of color may have different needs and experiences in counseling situations. We will also look at personal ethnic identity and how it affects the assumptions brought to counseling. Students will also learn what it means to be “culturally competent” in regard to counseling skills.

EADM 276. Seminar: Educational Planning, Delivery, and Assessment (3)
The role of the administrator as the instructional leader is the focus. Facets of the instructional program include curriculum planning, programmatic issues, delivery systems and assessment and evaluation.
EADM 277. Diversity and Constituency in Educational Administration (3)
Explores the values and concerns of the many diverse communities that constitute a school community. Effective ways to involve various communities in the participation of school life are presented.

EADM 278. Educational Organizations and Diverse Constituencies (3)
Organizational patterns and issues that are related to the administration of educational organizations will be presented. Particular emphasis is placed on effectively involving diverse stakeholders in the organizational culture of educational institutions.

EADM 280. School Law and Legal Processes (3)
Laws, legal principles, interpretations and practices governing federal, state, county and local school organization and administration; laws relating to youth; contracts, liability and tort; effect of federal and state laws on education.

EADM 283. School Finance and Business Administration (3)
Public schools as economic institutions; the roles of the federal, state, and local governmental agencies related to school finance; public school revenues and expenditures; budget development and administration; operational finance of funds and services.

EADM 286. Administration of Human Resources (3)
Skills and techniques of employee selection, orientation, administration, supervision and evaluation; staff development activities; determining personnel need; employee organizations.

EADM 289. Educational Leadership (3)
Functions, responsibilities and relationships of the school principal. Emphasis given to instructional leadership, leadership styles, human relations skills, working with school-community task groups and forces, public relations, needs assessment, decision-making analysis and computers as a management tool.

EADM 290. Seminar: Computers in Educational Administration (3)
Techniques of computer utilization as a management tool in school site and central office administration.

EADM 291. Graduate Independent Study (1-3)
Graduate students may enroll in library research with consent of the department chair.

EADM 292. Field Experience in Administration and Supervision (1-4)
Experience in practical on-the-job administrative and supervisory functions at a school site. One unit over each of three semesters is required. Open only to administrative credential candidates at the University. Prerequisite: Consent of the department or department chair.

EADM 292A. Student Affairs Field Experience (1-3)
Student Affairs Field Experience allows students to experience a variety of professional roles under the guidance of mentorship of a qualified Student Affairs or Higher Education Administration practitioner. Field experience serves as a complement to students’ classroom learning and integrates classroom theories and ideas with practical applications.

EADM 293. Special Topics (1-3)
Prerequisite: Consent of the department chair.

EADM 299. Master’s Thesis (1-4)

EADM 350B. Seminar: Social Scientific Thinking (3)
A doctoral course that provides a meaningful theoretical context within which various methodologies and research designs may be better understood.

EADM 352. Applied Inquiry I (3)
In this course, students will work collaboratively in learning communities to identify and explore general and specific educational/social/political issues that are affecting learners/learning outcomes for key educational constituencies. Each student will identify a preliminary issue/problem/concern for his/her dissertation project and engage in early exploration of foundational issues, key theories, and seminal emerging research on these topics.

EADM 354. Applied Inquiry II (6)
This course will provide doctoral students with an overview of assumptions/limitations/strengths and claims of educational research. Further, it will provide them with an overview of quantitative and qualitative methodologies (data collection and analysis strategies) and of the relevance of these for specific problems and questions. Prerequisite: EADM 352.

EADM 356. Applied Inquiry III (3)
This course will place doctoral students into professional learning communities with colleagues and a faculty leader. In these communities, students will work collaboratively and independently to ensure that each student develops a refined problem statement and draft literature review. Prerequisite: EADM 354.

EADM 358. Applied Inquiry IV (3)
This course will place doctoral students into professional learning communities with colleagues and a faculty leader. In these communities, students will work collaboratively and independently to ensure that each student develops defense ready dissertation proposal. Prerequisite: EADM 356.

EADM 360. Seminar: Trends, Issues, and the Dynamics of Change (3)
Examines current issues and the impact of change in administration of educational programs.

EADM 361. Seminar: Ethics, Law and Finance (3)
An examination of the relationships between ethics, law, and finance as each impacts upon administering decision-making in educational institutions.

EADM 362. Seminar: Administration of Instructional Programs (3)
Instructional leadership, staff development, educational program planning/evaluation, curriculum designs and instructional delivery strategies, monitoring and evaluating student progress, use of instructional time and resources.

EADM 363. Seminar: Personnel Issues (3)
Personnel management, resource allocations, employee evaluation, collective bargaining, staffing, staff development, conflict mediation.

EADM 364. Seminar: Educational Policy-Making and Politics (3)
Issues and techniques relative to policy formulation and implementation are examined. The political, social and economic forces that impact policy decisions are emphasized.

EADM 365. Seminar: Administration of Higher Education (3)
A study of administrative, educational and personnel problems and issues in community colleges and four-year institutions.

EADM 366. Seminar: Communications and Public Relations in Education (3)
Techniques of effective communications in educational organizations are presented. Developing and maintaining positive public relations and public support for educational problems are emphasized.

EADM 367. Seminar: Cultural Diversity and Educational Administration (3)
Techniques for working with culturally diverse student, community and faculty populations.

EADM 368. Seminar: Administering Complex Educational Organizations (3)
An in-depth examination of the theories, issues, trends, and challenges of administering complex educational organizations.
To provide an in-depth examination of the structure, functions, politics, and purpose of school district administration.

EADM 370. Professional Induction Planning (2)
Development of a collaborative professional induction plan to meet the requirements for the Professional Administrative Services Credential.

EADM 371. Professional Assessment (2)
A formal assessment of candidates for the Professional Administrative Services Credential.

EADM 372. Program Evaluation and Grant Writing (3)
This course prepares doctoral students with the attitudes, ethics and skills to evaluate a variety of public and private programs, and develop requests for funding to meet grant specifications.

EADM 373. Economics of Education (3)
This course prepares students to analyze alternative methods of assessing the contributions of education to economic growth, education and inequality, education production functions, cost analysis and planning, and economic aspects of innovation.

EADM 381. Law in Higher Education (3)
This course prepares students to examine the legal dimensions of the collegiate-level decision process. Administrative arrangements, policy issues and case law will be analyzed.

EADM 382. Leadership in Higher Education (3)
This course prepares doctoral students with the attitudes and skills to analyze leadership theories, challenges and strategies in higher education.

EADM 383. Administering Curriculum, Pedagogy and Assessment in Higher Education (3)
The application of principles and promising practices for teaching and learning in higher education. This course will examine curriculum design, pedagogy and assessment in post secondary programs of study.

EADM 391. Graduate Independent Study (1-3)

EADM 392. Internship and Advanced Field Experience in Administration (1-4)
Prerequisite: Consent of the department chair.

EADM 397A. Qualifying Scholarly Activities (1)
A doctoral candidacy qualifying requirement to demonstrate competence in research and subject matter. Student will (a) identify a research area and level, (b) complete a scholarly annotated bibliography, (c) respond to a question in the form of a scholarly paper, and (d) orally defend the response to the question.

EADM 397B. Seminar: Doctoral Research in Educational Administration (3)
The goal of this semester is to have doctoral students develop an acceptable dissertation proposal. Faculty members will lead discussions, provide individual assistance, and collaborate on individual student progress with the aim of assisting the student in the proposal development process. The seminar will be divided into group sessions and individual meetings with student selected dissertation advisers. Prerequisite: Consent of the department chair.

EADM 399. Doctoral Dissertation (1-15)

EPSY 201. Techniques of Research (3)
Study of the various research methodologies including qualitative, descriptive, causal-comparative, survey, correlational and experimental. Emphasis on learning to read and comprehend research published in professional journals. This includes understanding how basic descriptive and inferential statistics are applied to address quantitative research questions.

EPSY 214. Intermediate Statistics (3)
Not intended to be a first course in statistics. Review of descriptive statistics including correlation and probability; introduction to applied inferential statistics including t-test for means, tests for proportions, tests for correlations and ANOVA utilizing statistical computing software. Emphasis is placed on conceptual understanding to ensure students recognize the power as well as the limitations of statistical techniques.

EPSY 220. Nature and Condition of Learning (3)
Study of both cognitive and traditional learning theories, their applications to instruction and the development of effective teaching strategies. In addition, information processing models are explored and their implications for instruction are addressed. Prerequisite: EPSY 121x or equivalent or consent of the instructor.

EPSY 285. Alcohol and Drug Dependency Counseling (1)
Course focuses on the etiology and treatment of substance abuse disorders. Emphasis is on theoretical considerations of causes and basis of treatment as related to theory. Topics will include an overview of rehabilitation and the dynamics of recovery. Emphasis is on the counselor’s role in treatment, working with families, relapse prevention and adjunctive resources.

EPSY 286. Child Abuse Counseling Issues (1)
Provides students of family therapy with an understanding of the nature of child abuse/molest and the dynamic implications for victims and perpetrators, reporting procedures and the law, as well as discussion of the manifestations of abuse in adulthood.

EPSY 287. Human Sexuality and Sexual Counseling (1)
This course provides the student of family therapy a focus on the study of the biological, social, cultural, personal and relational aspects of human sexuality. Course emphasis is on sexual dysfunction and therapy, current research on sexuality, varieties of sexual behavior and preference, and gender identity and gender role. Prerequisite: Consent of the instructor.

EPSY 288. Behavioral Intervention Strategies (3)
Designed primarily for graduate students enrolled in the Pupil Personnel Services credential programs in School Counseling and School Psychology. Course was designed to meet the CCTC required competencies for the PPS credential in School Counseling and School Psychology, but is appropriate for teachers. Prerequisite: Admission to school psychology program or consent of the instructor.

EPSY 291. Independent Graduate Study (1-3)
Prerequisite: Consent of the department chair.

EPSY 293. Special Project (1-3)
Prerequisite: Consent of the department chair.

EPSY 294B. School Psychology Fieldwork (1-4)
Advanced supervised field placement in preschool and/or K-12 setting(s). Instructor consent required for selection field site/supervisor.

EPSY 297. Graduate Research (1-3)
Graduate students with consent of the department chair.

EPSY 299. Master’s Thesis (4)

EPSY 300. Seminar: Introduction to School Psychology (1)
This course serves as an introduction to the specialization of school psychology. It is intended to give the student an overview of the field of school psychology focusing on the role and function of the school psychologist in the public schools and other settings. Topics include the history of school psychology, pupil personnel services in schools, service delivery models, school psychology, organizations, research traditions in school psychology, international school psychology, ethical and legal issues, publications and resources in school psychology. Prerequisite: Admission to school psychology program.
EPSY 301. Data-Based Decision Making (2)
This course introduces the graduate student to the systematic processes used by school psychologists to collect and analyze data. This course is accompanied by one unit of EPSY 294b School Psychology Field Work. Students will learn various methods of data collection, including interviews, systematic observations, and review of records. Prerequisite: Admission to school psychology program.

EPSY 302. Data-Based Decision Making II (2)
This course is a continuation of EPSY 301 Data-Based Decision Making I. This course is accompanied by one unit of EPSY 294b School Psychology Field Work. Students will learn various methods of data collection, including interviews, systematic observations, and review of records. Students are also introduced to the response-to-intervention model, and some of the basic curriculum-based assessment techniques. Prerequisites: Admission to school psychology program and successful completion of EPSY 301.

EPSY 306. Psychotherapeutic Interventions in School (3)
This course prepares school psychologists to design, implement, and evaluate wellness, prevention, intervention, and other mental health programs at the individual, group, and program level to school-aged children. Prerequisite: Admission to school psychology program.

EPSY 307. Group Counseling (3)
This course prepares school psychologists to use direct methods and techniques of group counseling for school-aged children. Prerequisite: Admission to school psychology program.

EPSY 308. History, Systems, and Indirect Interventions for the School Psychologist (3)
This course introduces students to issues of school and system organization, policy development, and climate. Students will gain a current professional knowledge base of school and systems structure and organization and of general education and regular education, with an emphasis on the importance of the PPS provider in providing leadership, vision, and operating as a systems change agent.

EPSY 309. Consultation Methods (3)
This course prepares school psychologists to provide mental health consultation to school personnel and parents. Various consultation methodologies will be studied with applications particularly appropriate to children in the public school system.

EPSY 310. Crisis Intervention (3)
This course helps prepare school psychologists to be able to work with school personnel, pupils, parents, and the general community in the aftermath of personal, school, and community crises.

EPSY 311. California Law and Professional Ethics (1)
Designed for students in credential and licensing graduate programs in human services. Students will study approaches to ethical decision-making in addition to learning relevant law and regulation and existing ethical codes of behavior.

EPSY 312. Child Psychology/Wellness Promotion (3)
This course will examine various programmatic approaches to the primary and secondary prevention of emotional disturbance and educational failure, and the promotion of health and mental health in public schools.

EPSY 315. Individual Assessment (3)
This course prepares school psychologists to use assessment information in a problem-solving process, and to use data-based decision making to improve outcomes for instruction, development of cognitive and academic skills, and the development of life competencies. Students will also be exposed to process and procedures identified in federal and state laws related to special education services.

EPSY 316. Behavior/Personality Assessment in School (3)
This course is designed to prepare school psychologists to gain proficiency in the administration, scoring, and interpretation of several instruments commonly used in behavioral and personality assessment in the schools. The writing of professional reports, theoretical aspects and measurement of behavior and personality, and legal and ethical issues will be addressed.

EPSY 317. Neuropsychology in the Schools (3)
This course provides a general overview of: brain-based behavior; neuroanatomy and physiology; conceptualizing psychoeducational assessment data from a neuropsychological perspective; the effects and uses of psychotropic agents; and information on neuropathology as it pertains to learner-centered problems.

EPSY 320A. Seminar: Advanced Human Development I (3)
This course, the first in a two-course sequence, focuses on the developmental periods of early and middle childhood. The course examines theoretical and research-based knowledge of the influences of biological, social, affective, cultural, ethnic, experiential, socioeconomic, gender-related, and linguistic factors in children’s development.

EPSY 320B. Seminar: Advanced Human Development II (3)
This course, the second in a two-course sequence, focuses on the developmental period of adolescence. Prerequisites: EPSY 320a.

EPSY 321. Seminar: Advanced Human Development III (3)
This course focuses on early childhood development, and will examine theoretical and research-based knowledge of the influences of biological, social, affective, cultural, ethnic, experiential, socioeconomic, gender-related, and linguistic factors in early childhood development.

EPSY 324. Seminar: Advanced Consultation and Supervision (3)
This course provides doctoral students with advanced training in and exposure to effective models of collaboration and supervision, with an emphasis on systems-level change with diverse populations in public schools.

EPSY 391. Graduate Independent Study (1-3)
Doctoral students with consent of the department chair.

EPSY 393. Special Topics (1-3)

EPSY 395C. Quantitative Research Design and Method (3)
This course exposes students to and develops their ability to conceptualize a broader range of research questions dealing with (a) significance of group differences; (b) degree of relationship among variables; (c) prediction of group membership; and/or (d) structure that quantitative design and analysis strategies might inform than those typically introduced in a first course (e.g., EPSY 201). Topics emphasized in the course relate to (a) the purpose and principles of research design; (b) the use of multivariate approaches and analysis; and (c) the construction and validation of measuring instruments. Prerequisite: EPSY 214.

EPSY 395E. Advanced Statistical Methods (3)
This course acquaints the student with the use of the general linear model as a data analytic tool. Students learn how to generate and interpret output produced by SPSS statistical software in conducting a) multiple regression analyses involving both continuous and categorical independent variables; b) logistic regression analyses involving categorical dependent variables; c) structural equation modeling; and d) other multivariate techniques. Prerequisite: EPSY 214.

EPSY 395J. Seminar: Promoting Cultural Competence Across Systems (3)
This course is designed to provide the doctoral student with advanced training in and exposure to effective models of promoting cultural competence in public schools, with an emphasis on systems-level change with diverse populations.
EPSY 395M. Measurement Theory and Practice (3)
This course is designed to solidify students’ understanding of classical test theory and introduce them to modern test theory, including Item Response Theory. Prerequisites: EPSY 204 and EPSY 215 or equivalent.

EPSY 397. Graduate Research (1-3)
Doctoral students with the consent of the department chair.

EPSY 398. School Psychology Internship (1-4)
Student will perform duties of a school psychologist in multicultural school settings at both elementary and secondary levels under the direct supervision of a credentialed school psychologist. Placement must be half-or full-time. Prerequisite: Students must have an intern credential and permission of the instructor before beginning an internship.

EPSY 399. Doctoral Dissertation (1-15)

Gladys L. Benerd School of Education Faculty

Harriett Arnold, 1994, Associate Professor, BA, San Francisco State College, 1968; MA, San Jose State University, 1974; EdD, University of San Francisco, 1984.

Norena N. Badway, 2003, Associate Professor, BA, University of Missouri, 1969; MA, University of the Pacific, 1986; PhD, University of California, Berkeley, 1998.

Lynn G. Beck, 2005, Dean and Professor of Education, BA, Bethaven College, 1974; MA, University of Mississippi, 1976; PhD, Vanderbilt University, 1991.

Dennis Brennan, 1980, Associate Professor, BS, Clarion State College, 1966; MEd, University of Pittsburgh, 1970; PhD, 1978.

Kellie Cain, 2002, Assistant Professor, Assistant Director of Field Experiences, BA, University of California, Davis, 1987; MA, University of the Pacific, 1999; EdD, 2005.

Marilyn E. Draheim, 1986, Associate Professor, BA, Luther College, 1972; MA, University of Iowa, 1974; EdS, 1974; PhD, University of California, Berkeley, 1986.

Michael Ellum, 2004, Associate Professor of Education, BA, Appalachian State University, 1975; MA, 1975; EdD, University of Alabama, Tuscaloosa, 1983.

Scott Evans, 1990, Instructor, Educational Resource Center, BA, California State University, Sonoma, 1976; MA, University of California, Davis, 1980.

Ann L. Go, 2005, Assistant Professor, BA, California State University, Sacramento, 1989; MA, 1993; PhD, University of California, Davis, 2003.

Rachelle Hackett, 1994, Associate Professor, BA, California State University, Fresno, 1982; MS, Stanford University, 1986; PhD, 1994.

Delores E. McNair, 2006, Assistant Professor, BA, Holy Names College, 1979; MPA, University of Southern California, 1988; EdD, Oregon State University, 2002.

Thomas G. Nelson, 1995, Assistant Professor, BA, California State University, Northridge, 1975; MA, California State University, Sacramento, 1988; PhD, University of Arizona, 1993.


Gregory R. Potter, 2002, Assistant Professor, BA, University of California, Davis, 1992; MS, 1996; PhD, 2000.

Joanna Royce-Davis, 2008, Associate Professor, BS, Indiana University, 1990; MA San Jose State University, 1994; PhD, Syracuse University, 2001.

Jonathan Sandovai, 2006, Professor, A.B., University of California, Santa Barbara, 1964; MA, University of California, Berkeley, 1966; PhD, 1969.

Claudia W. Schwartz, 1987, Instructor, BA, University of the Pacific, 1974; MA, 1981.

Amy N. Scott, 2007, Associate Professor, BA, University of California, Berkeley, CA, 2000; MA, Arizona State University, Tempe, AZ, 2002; PhD, Arizona State University, Tempe, AZ, 2006.

Antonio Sema, 2006, Assistant Professor, BA, California State University, Fresno, 1974; MA, Stanford University, 1978; EdD, University of the Pacific, 1990.


Linda Webster, 1996, Associate Professor, BA, California State University, Fresno, 1981; MA, University of California, Berkeley, 1984; PhD, 1988.
The MSES is designed to strengthen students’ technical, analytical, and professional breadth and depth. Students are introduced to techniques and best practices of professional research and learn the foundations for assessing the merits of published technical findings.

The goal of the graduate program in the School of Engineering and Computer Science is threefold: (1) to advance student professional standing, (2) to extend the curiosity, intellectual capacities, and knowledge of its students; (3) and to stimulate and support the products of intellectual inquiry. The Master of Science in Engineering Science (MSES) is designed to strengthen students’ technical, analytical, and professional breadth and depth. Students will be introduced to techniques and best practices of professional research and learn the foundations for assessing the merits of published technical findings. Students interested in eventually pursuing a PhD will want to build upon this training by engaging in research and completing a thesis. Other students interested in applied technology may prefer to enhance their studies with a graduate-level practicum experience in industry, or by taking additional coursework.

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Program Learning Objectives
Graduates will demonstrate:

- A broad understanding of problem-solving, design, and research skills necessary to operate in the interdisciplinary arena of engineering and computer science
- Sufficient depth in an area to be able to design increasingly complex systems or to pursue a more advanced degree
- Skills necessary to engage in lifelong careers as practicing professional engineers or computer scientists

Thesis and Non-thesis Options
The MSES program has two degree options: thesis and non-thesis plans, each requiring a minimum number of 30 units. The thesis plan will require students to perform independent research and will culminate in the completion of a thesis based on the findings of the research. The thesis plan is intended for students who plan to pursue a career in research or plan to pursue a PhD. The non-thesis option allows students to complete a project, engage in directed experiential learning, or complete all their units through coursework. Only students supported by external research grants are expected to undertake thesis as an option.
4 + 1 Blended Program Admission Criteria

School of Engineering and Computer Science undergraduates maintaining a minimum institutional GPA of 3.0 and a major GPA of 3.0 upon reaching senior status are given priority consideration for admission to the 4 + 1 Blended Program and if admitted may begin taking graduate level courses at that time, allowing the BS and MS degrees to blend together. Students who choose to withdraw from the program prior to completing all the requirements may be awarded the Bachelor of Science degree alone, contingent upon having completed all of the respective program requirements, including the co-op experience.

Graduate Program Admission Criteria

Prospective students with earned bachelor’s degrees must submit the following materials to the Research and Graduate Studies Office at the University of the Pacific. A completed application includes:
1. The Graduate School application form
2. Three letters of references
3. Transcripts from the institution where the BS degree was granted, if admitted may be taken for a letter grade.
4. Acceptable scores on the GRE General Exam
5. A 3.0/4.0 GPA on the last 60 units of undergraduate study
6. For students whose first language is not English, Test of English as a Foreign Language (TOEFL) is required. The minimum score for admission is 550 (paper) or 213 (computer) and the minimum score for a teaching assistantship award is 575 (paper) or 231 (computer)
7. A personal statement on professional goals and objectives
8. Three letters of recommendation
9. A completed application in engineering and computer science (or relevant degree) was granted
10. A completed application in engineering and computer science (or relevant degree) was granted
11. A completed application in engineering and computer science (or relevant degree) was granted
12. A completed application in engineering and computer science (or relevant degree) was granted
13. A completed application in engineering and computer science (or relevant degree) was granted
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19. A completed application in engineering and computer science (or relevant degree) was granted
20. A completed application in engineering and computer science (or relevant degree) was granted
21. A completed application in engineering and computer science (or relevant degree) was granted
22. A completed application in engineering and computer science (or relevant degree) was granted
23. A completed application in engineering and computer science (or relevant degree) was granted

General Academic Policies

Engineering and Computer Science Prerequisite Requirement
All engineering and computer science course prerequisites must be passed with a C or higher.

Courses Taken Pass/No Credit
All courses counting toward the MS of Engineering Science must be taken for a letter grade.

Graduate Independent Studies
Students who have an interest in a subject not offered as a regular course and who, by their overall performance at Pacific, have proven their ability to do independent work, may consider enrolling in a graduate independent study. The qualified student should initiate discussions with his/her adviser and with a professor who is knowledgeable in the subject. If both parties are in agreement, the student must complete the Individualized Study Form and submit it to the instructor and Office of the Registrar prior to the last day to add (see University Academic Calendar). Students on academic probation are not permitted to enroll in independent study courses in any department of the University. The following School of Engineering and Computer Science policies apply:
1. The course(s) may not be substituted for a regularly scheduled course unless approved by the department.
2. If the course is to be used as an elective, approval by the student’s adviser and the department chairperson is required.
3. All courses must be taken for a letter grade; the pass/no credit option is not allowed for independent study courses.
4. Each course may be taken for one (1), two (2), three (3), or four (4) units. The unit value for the course will be established between the student and the professor responsible for the course. The student’s adviser should be informed of this decision.

Course Substitutions
The substitution of course(s) from the printed degree program is discouraged. When extenuating circumstances warrant consideration, the student should meet with his/her adviser, and the final decision must have the approval of the department chair. Consideration should be given to the source of the problem (school, student, etc.), severity of the hardship case, and what the department considers best for the individual.

MS Engineering Science Curriculum

All students receiving an MSES will complete a set of core courses that cover the broader subjects of research and analysis. In addition, depending upon the option chosen, six units of thesis, project, directed experiential learning or coursework.

Core courses that cover the broader subjects of research and analysis:
Graduate Seminar, 2-3 units (required for thesis)
Techniques in Research, 3 units
Math or Computational Science Elective, 3 units
Breadth Elective, 3 units
Concentration Specified Courses, 12 units
Thesis, Project, Directed Experiential Learning, or Coursework, 6 units

Students must first choose whether they plan to complete the “Thesis Option” or the “Non-thesis Option.”

A. Thesis Option
1. Students must complete a minimum of 30 units.
2. All students must perform independent research which must culminate in the completion of a thesis based on the findings of the research. For successful completion of the thesis course, students must submit a research proposal, conduct the research, write the thesis, and successfully complete a final oral defense. Students who choose the Thesis Option may not get credit for directed experiential learning at the graduate level.
3. All students must enroll in the one-unit seminar course, ENGR 295, Graduate Seminar, a minimum of two terms, and a maximum of three.
4. All students complete six units of ENGR 299, Thesis Research.
**B. Non-thesis Option**

1. Students must complete a minimum of 30 units.

2. Students who choose the Non-thesis Option may choose to do a project, directed experiential learning, or they may satisfy all the unit requirements through coursework.

1. For the directed experiential learning option, the SOECS will assist students in securing engineering or computer science employment or a paid internship at a graduate engineer level. Students will work with the Co-op Director, their faculty adviser, and their worksite supervisor to develop a list of expected professional and technical learning objectives, with the experience culminating in the preparation of a report which documents the fulfillment of these objectives.

2. For the project option, students will need to be employed in an engineering or computer science capacity. They will come up with a special project in conjunction with their worksite supervisor and their faculty adviser. Upon completion of the project, the student will submit a comprehensive report outlining the project and documenting its completion. The success of the project will be judged by the faculty adviser, with input from the worksite supervisor.

3) Students may elect to satisfy the entire degree through courses.

**MS Engineering Science Program Requirements**

In order to earn the master of science in engineering science degree, students must complete a minimum of 30 units with a Pacific cumulative grade point average of 3.0.

Core courses that cover the broader subjects of research and analysis:

- ENGR 201 Techniques of Research (3)

Select one Math or Computational Science Elective (may be specified by concentration):

- ENGR 219 Numerical Methods for Engineering (3)
- ENGR 250 Probability & Statistics for Engineers & CS (3)

Breadth elective (One from approved list for concentration) (3-4)

Select one option:

a) Thesis Option

- ENGR 292 Graduate Seminar (2-3)
- ENGR 299 Thesis (6)

b) Project Option

- ENGR 291 Project/Independent Study (6)

c) Directed Experiential Learning Option

- ENGR 281-288 Directed Experiential Learning (6)

d) Course work Option

- Six units approved by adviser as coherent plan (6)

Concentration requirements

- Four electives approved by adviser as coherent plan (12-15)

**Course Descriptions**

Courses are numbered in accordance with the general University system.

**BENG 202. Biosensor (3)**

Course will provide a comprehensive introduction to the basic features of biosensors. Discussion topics include types of most common biological agents and the ways in which they can be interfaced with a variety of transducers to create a biosensor for biomedical applications. Focus on optical biosensors and systems (e.g., fluorescence spectroscopy, microscopy). Prerequisite: MS in Engineering Science major and BENG 103 or permission of the instructor.

**BENG 205. Advanced Biomaterials (3)**

The strategies and fundamental bioengineering design criteria behind the development of cell-based tissue substitutes, artificial skin, muscle, tendons, bone, and extracorporeal systems that use either synthetic materials or hybrid (biological-synthetic) systems. Topics include biocompatibility, biological grafts and bioreactors. Prerequisites: MS in Engineering Science major and BENG 103.

**BENG 291. Graduate Independent Study (1-4)**

Special individual projects are undertaken under the direction of one or more faculty. Prerequisite: MS in Engineering Science major or permission of the instructor.

**BENG 293. Special Topics (1-4)**

Special courses will be organized and offered from time to time to meet the needs or interests of a group of students.

**BENG 297. Graduate Research (1-4)**

Approval by the faculty supervisor and the department chairperson is required. Prerequisite: MS in Engineering Science major or permission of the instructor.

**BENG 299. Thesis (1-6)**

Minimum of six units will be required for Thesis Option students. Prerequisites: MS in Engineering Science major and permission of research adviser.

**CIVL 263. Earthquake Engineering (3)**

Overview of seismology. Determination of loads on structures due to earthquakes. Methods of estimating equivalent static lateral forces; response spectrum and time history analysis. Concepts of mass, damping and stiffness for typical structures. Design for inelastic behavior. Numerical solutions and code requirements. Prerequisite: MS in Engineering Science major or permission of the faculty member involved.

**CIVL 265. Advanced Structural Steel Design (3)**

Design of steel structural members, including composite beams, plate girders and connections following the AISC specifications, economy evaluation of building design, and design of frame structures including second order effects. Prerequisites: MS in Engineering Science major and CIVL 165 or permission of the instructor.

**CIVL 266. Advanced Reinforced Concrete Design (3)**

Design and proportioning of structural systems to satisfy design criteria for reinforced concrete and pre-stress design in concrete, including: retaining walls, slabs, footings, and other structural members. Prerequisites: CIVL 166 and MS in Engineering Science major or permission of the instructor.

**CIVL 267. Design of Timber Structures (3)**

The design and analysis of timber structures due to gravity, lateral and combined loadings. Both member and connection details are considered. The design procedures, material properties and allowable stress computations are based on UBC, NDS and other governing standards. Prerequisite: MS in Engineering Science major or permission of the faculty member involved.
CIVL 291. Graduate Independent Study (1-4)
Special individual projects are undertaken under the direction of one or more faculty. Prerequisite: MS in Engineering Science major or permission of the instructor.

CIVL 293. Special Topics (1-4)
Special courses will be organized and offered from time to time to meet the needs or interests of a group of students.

CIVL 297. Graduate Research (1-4)
Approval by the faculty supervisor and the department chairperson is required. Prerequisite: MS in Engineering Science major or permission of the instructor.

CIVL 299. Thesis (1-6)
Minimum of six units will be required for Thesis Option students. Prerequisites: MS in Engineering Science major or permission of research advisor.

COMP 241. Programming Language Semantics (3)
This course examines a variety of modern programming languages from a theoretical perspective. The focus will be on languages designed to support particular novel or interesting concepts. Formal techniques for the specification of the semantics of languages will be used to compare and contrast languages. Prerequisites: COMP 141 and MS in Engineering major.

COMP 251. Multi-Agent Systems (3)
This course will focus on distributed systems of intelligent agents particularly the interaction between multiple agents and between agents and humans. It will examine both theoretical models of multi-agent systems and practical applications. Course topics will include: logical and decision theoretic models of planning and teamwork, game theory, distributed constraint reasoning, combinatorial auctions, adjustable autonomy and agent modeling. Prerequisites: MS in Engineering Science major or permission of the instructor.

COMP 253. Virtual Reality (3)
This course will provide an overview of the field of virtual reality (VR). Topics to be covered include stereoscopic display, force feedback and haptic simulation, viewer tracking, virtual worlds, 3D user interface issues, augmented reality, and contemporary applications of VR in simulation, teaching, and training. Students will gain practical experience designing a virtual world. Prerequisite: COMP/ECPE 153 or MS in Engineering Science major.

COMP 291. Graduate Independent Study (1-4)
Special individual projects are undertaken under the direction of one or more faculty. Prerequisite: MS in Engineering Science major or permission of the instructor.

COMP 293. Special Topics (1-4)
Special courses will be organized and offered from time to time to meet the needs or interests of a group of students.

COMP 297. Graduate Research (1-4)
Approval by the faculty supervisor and the department chairperson is required. Prerequisite: MS in Engineering Science major or permission of the instructor.

COMP 299. Thesis (1-6)
Minimum of six units will be required for Thesis Option students. Prerequisites: MS in Engineering Science major or permission of research advisor.

ECPE 225. Digital Signal Processing with Applications (3)
Topics covered include discrete time signals, systems, spectral analysis (DFT), the discrete Fourier Transform and the Fast Fourier Transform algorithm, decimation and interpolation, multi-rate signal processing, and filtering random signals. Speech processing: speech models and characteristics, short time Fourier analysis, linear predictive coding. Image processing: 2D signals and systems, image coding, image enhancement. Prerequisites: ECPE 121 or equivalent and MS in Engineering Science major or permission of instructor.

ECPE 233. Quantum and Nano Devices (3)
Advanced topics related to the recent development of the emerging field of nano-electronics where the feature lengths of the electron devices are of the order of several nanometers. The transport phenomenon in nano-structures using quantum atomistic transport approach. Topics include: quantum confined effects, nanofabrication, quantum wells, quantum wires, quantum dots, and quantum optoelectronic devices. The purpose of this course is to prepare the framework for analyzing, modeling, and designing of these non-scale electron devices. Prerequisites: Light familiarity with physics of semiconductor devices, light exposure to quantum physics, ability to solve second order differential equations, and an exposure to complex analysis, or consent of instructor. Familiarity with MATLAB is a must. MS in Engineering Science major or permission of the instructor.

ECPE 253. Advanced Computer Graphics (3)
Advanced topics in computer-generated graphics such as procedural modeling, surface simplification, shaders, texture synthesis and mapping, volume rendering, ray tracing, photon mapping, image-based rendering techniques, non-photorealistic rendering, 3D hardware/GPUs and animation. Course includes programming projects and presentation of research topics. Prerequisites: COMP 153 or ECPE 153, C programming experience (C++ or Java is acceptable, but you will be expected to program in C), MS in Engineering Science major or permission of the instructor.

ECPE 263. Recent Topics in Renewable Energy (3)
Recent Trends in global warming and rising cost of energy has resulted in significant interest in renewable energy sources including solar thermal, solar photovoltaics, hydrogen fuel cells, biomass, geothermal, wind, hydraulic, and hybrid technologies. This course is a survey of the these energy sources and covers the theory, economic feasibility, current level of technological development, sustainability, abundance, and environmental impacts of the renewable sources and compares them to the non-renewable sources including, oil, gas, coal, nuclear, and other current energy technologies. The emphasis is given to research in these fields by the students and term papers and projects. Permission of instructor.

ECPE 291. Graduate Independent Study (1-4)
Special individual projects are undertaken under the direction of one or more faculty. Prerequisite: MS in Engineering Science major or permission of the instructor.

ECPE 293. Special Topics (1-4)
Special courses will be organized and offered from time to time to meet the needs or interests of a group of students.

ECPE 297. Graduate Research (1-4)
Approval by the faculty supervisor and the department chairperson is required. Prerequisites: MS in Engineering Science major or permission of the instructor.

ECPE 299. Thesis (1-6)
Minimum of six units will be required for Thesis Option students. Prerequisites: MS in Engineering Science major and permission of research advisor.

EMGT 250. Decision Techniques in Engineering (3)
This course is designed to introduce fundamental and advanced decision techniques applicable to engineering and business processes. The techniques discussed are applicable to complex problems in both professional and personal situations. The tools and techniques address deterministic and stochastic problems, trade-offs, non-linear preferences and group decision making. Class discussions will develop a theoretical framework as a foundation for practical application within the organization. Prerequisites: MS in Engineering Science major and ENGR 250.
EMGT 291. Graduate Independent Study (1-4)
Special individual projects are undertaken under the direction of one or more faculty. Prerequisite: MS in Engineering Science major or permission of the instructor.

EMGT 293. Special Topics (1-4)
Special courses will be organized and offered from time to time to meet the needs or interests of a group of students.

EMGT 297. Graduate Research (1-4)
Approval by the faculty supervisor and the department chairperson is required. Prerequisites: MS in Engineering Science major or permission of the instructor.

EMGT 299. Thesis (1-6)
Minimum of six units will be required for Thesis Option students. Prerequisites: MS in Engineering Science major and permission of research adviser.

ENGR 201. Techniques of Research (3)
Students will learn about research design, qualitative and quantitative research, and sources of data. The course will cover data collection procedures, measurement strategies, questionnaire design and content analysis, interviewing techniques, literature surveys, information data bases, probability testing, and inferential statistics. Students will prepare and present a research proposal as part of the course. Prerequisite: MS in Engineering Science major or permission of the instructor.

ENGR 219. Numerical Methods for Engineering (3)
The primary focus is algorithm implementation within the context of engineering applications. Course topics will include: sources of error and error propagation, eigenvalue/eigenvector computation, solution of linear systems via direct or iterative methods and issues of parallel implementation, least squares and approximation of tab/simulation data, solution of non-linear equations, spline interpolation in one and two dimensions, fast Fourier transforms, numerical differentiation and quadrature, and the numerical solution of ordinary and partial differential equations, including an introduction to finite element methods. Whenever appropriate, relevant aspects of parallel computation will be discussed. Prerequisites: MS in Engineering Science major. MATH 57 or the equivalent and some programming experience in Fortran 90, C, C++, or MATLAB.

ENGR 250. Probability and Statistics for Engineering and Computer Science (3)
This course is directed to the graduate student who has never had statistics course or whose last statistics course was taken some time ago and a refresher course is required. The overarching objective of this course is to provide a basic understanding of fundamental probability and statistics principles and their use in engineering and computer science. A fundamental tenet of the course is that probability and statistics are viewed as a tool for data analysis and problem solving. Prerequisite: MS in Engineering Science major.

ENGR 281-283. Directed Experiential Learning (1-6)
Directed Experiential Learning (DEXL) credit recognizes student attainment of professional as well as technical learning objectives acquired through a Cooperative Education placement. Upon completing the Professional Practice Seminar (School-to-work learning objectives) as well as a minimum of six MSES graduate units, student may accept a Co-op assignment with specific technical learning objectives.

ENGR 290. Engineering Project Management and Leadership (3)
This course is directed to the graduate student who has a basic knowledge of project management but seeks to explore the human side and strategic aspects of project management. The course introduces and describes the skills, qualities and attributes needed to successfully lead projects. Among the topics discussed are management styles, strategies, systems engineering, interpersonal competencies and other advanced topics not usually covered in a basic course on project management. Prerequisites: MS in Engineering Science major and EMGT 174.

ENGR 291. Graduate Independent Study (1-4)
Special individual projects are undertaken under the direction of one or more faculty. Prerequisite: MS in Engineering Science major or permission of the instructor.

ENGR 292. Managing Science Technology and Innovation (3)
Provide students with a fundamental understanding of research and development organizations and their categories, elements needed for a productive research organization, organization effectiveness, managing conflicts in organizations, dealing with diversity in research and scientific organizations, strategic planning, motivation and leadership in research and innovation, the innovation process, technology transfer, and science policy and ethics in science and engineering. Ethics and the Impact of Technology on Society. Two hours of lecture and one hour of discussion per week. Prerequisite: MS in Engineering Science major or permission of the instructor.

ENGR 293. Special Topics (1-4)
Special courses will be organized and offered from time to time to meet the needs or interests of a group of students.

ENGR 295. Graduate Seminar (1)
This course is a graduate paper-reading seminar. Students are expected to read classic and current technical papers and actively participate in class discussion. Each student will present at least one paper per semester. Prerequisite: MS in Engineering Science major.

ENGR 297. Graduate Research (1-4)
Approval by the faculty supervisor and the department chairperson is required. Prerequisite: MS in Engineering Science major or permission of the instructor.

ENGR 299. Thesis (1-6)
Minimum of six units will be required for Thesis Option students. Prerequisites: MS in Engineering Science major and permission of research adviser.

MECH 202. Polymer and Composite Materials (3)
Fundamental characteristics of polymers, fibers, and polymer-based composite materials will be studied. Advanced mechanics of materials will be used to develop tools for predicting the mechanical behavior of composite laminates. Experimental and analytical methods for characterizing the mechanical and thermal behavior of polymers will be studied, and laboratory-based experiences will be used to enhance the learning process. Design methods for using these advanced materials in engineering applications will be discussed. Prerequisites: ENGR 045, ENGR 121 and MS in Engineering Science major or permission of the instructor.

MECH 204. Advanced Mechatronics (3)
The design of mechatronic systems which integrate mechanical, electrical, and control systems engineering. Laboratories form the core of the course. They cover topics such as mechanism design, motors and sensors, interfacing and programming microprocessors, mechanical prototyping, and creativity in the design process. Project topics vary from year to year. Prerequisite: MECH 104 and MS in Engineering Science major or consent of the instructor.

MECH 262. Combustion (3)
Introduction to combustion processes and systems. Study of the conservation equations for reacting flows, chemical kinetics, conserved scalars, premixed flames, diffusion flames, and droplet burning. Primary applications studied are internal combustion engines and gas turbine combustors. Prerequisites: ENGR 122 and permission of the instructor.
MECH 291. Graduate Independent Study (1-4)
Special individual projects are undertaken under the direction of one or more faculty. Prerequisite: MS in Engineering Science major or permission of the instructor.

MECH 293. Special Topics (1-4)
Special courses will be organized and offered from time to time to meet the needs or interests of a group of students.

MECH 297. Graduate Research (1-4)
Approval by the faculty supervisor and the department chairperson is required. Prerequisites: MS in Engineering Science major or permission of the instructor.

MECH 299. Thesis (1-6)
Minimum of six units will be required for Thesis Option students. Prerequisites: MS in Engineering Science major and permission of research advisor.

School of Engineering and Computer Science Faculty

Ravi K. Jain, 2000, Dean and Professor, B.S., California State University, Sacramento, 1961; M.S., 1968; Ph.D., Texas Tech University, 1971; MPA, Management and Public Policy, Harvard University, 1980.


Bioengineering Program

Jeffrey S. Burmeister, 2002, Program Director and Associate Professor of Bioengineering, B.S., Mechanical Engineering, 1988, University of Delaware; Ph.D. 1995, Duke University, Biomedical Engineering.

James C. Eason, 2008, Assistant Professor of Bioengineering, B.S., Electrical Engineering, 1988, North Carolina State University; Ph.D. 1995, Duke University, Biomedical Engineering. Cardiovascular electrophysiology, computational modeling, system dynamics.


Douglas Modlin, 2005, Visiting Assistant Professor, B.S., California State Polytechnic University, 1975; M.S., Stanford University, 1978; Ph.D., Stanford University, 1983.

Camille Troup, 2005, Visiting Assistant Professor, B.A., University of Minnesota, 1986; Ph.D., University of California San Francisco, 1996.

Civil Engineering Department

Hector Estrada, 2006, Professor and Chair of Civil Engineering, B.S., University of Illinois, 1993; M.S., 1994; Ph.D., 1997. Registered Professional Engineer; structural engineering and engineering mechanics.


Luke Lee, 2008, Assistant Professor of Civil Engineering, B.S., University of California, Los Angeles, 1997; M.S., University of California, Berkeley, 1998, University of California, San Diego, 2005; structural engineering and rehabilitation and monitoring of infrastructure systems.


Computer Science Department


Emma Browning, 2007, Assistant Professor of Computer Science, B.S., University of Southern California, 2005; Ph.D., University of Southern California, 2007. Artificial Intelligence, multi-agent systems, computer science education.


Jinzhu Gao, 2008, Assistant Professor of Computer Science, B.S. Computer Science and Engineering, Huazhong University of Science and Technology, 1995; M.S. Mechanical Engineering, Huazhong University of Science and Technology, 1998; Ph.D. Computer and Information Science, Ohio State University, 2004. Scientific visualization, computer graphics, large scale data management, data analysis and visualization, data-intensive computing, remote visualization, Web-based applications.


Cath Schuler-Sawyer, 1993, Assistant Visiting Professor in Computer Science, B.A., University of California, Santa Barbara, 1974; MSW, California State University, Sacramento, 1976. Business software consulting and training, technical writing, Web development.


**Electrical and Computer Engineering Department**

- Computer Engineering Program
- Electrical Engineering Program
- Engineering Physics Program

**Chelanne Mathews**, 2005, Chair and Professor of Electrical and Computer, B.E. in Electrical Engineering, Anna University, Chennai, India, 1987; M.S. in Electrical Engineering, Purdue University, 1989; Ph.D. in Electrical Engineering, Purdue University, 1993, Statistical signal processing, Array signal processing, Direction of arrival estimation, Real-time digital signal processing using DSP processors, Microcontroller applications.

**James C. Eason**, 2008, Assistant Professor of Bioengineering, B.S., Electrical Engineering, 1988, North Carolina State University; Ph.D 1995, Duke University, Biomedical Engineering, Cardiovascular electrophysiology, computational modeling, system dynamics.

**Kenneth F. Hughes**, 1993, Associate Professor of Computer Engineering, B.S., Information and Computer Science, Georgia Institute of Technology, 1985; M.S., Computer Science, University of South Florida, 1989; Ph.D., Computer Science and Engineering, University of South Florida, 1994. Robotics, sensors and sensor fusion, computer vision, artificial intelligence, embedded systems, microprocessors and microcontrollers, digital systems.


**Engineering Management Department**


**Justin M. Reginato**, 2005, Assistant Professor of Civil Engineering and Engineering Management, B.S., Geological Engineering, University of Nevada, Reno, 1995; M.S., University of California, Berkeley, 1997; Ph.D., 2005. Registered Professional Engineer; Project management, project finance, management of technology, geotechnical and geological engineering.

**Mechanical Engineering Department**


**Ashland O. Brown**, 1991, Professor of Mechanical Engineering, B.S.M.E., Purdue University, 1966; M.S.M.E., University of Connecticut, 1968; Ph.D., 1974. Licensed Professional Engineer; fluid mechanics, thermal sciences and finite element analysis.

**Jeffrey S. Burmeister**, 2002, Associate Professor of Bioengineering, B.S., Mechanical Engineering, 1988, University of Delaware; Ph.D. 1995, Duke University, Biomedical Engineering.


**Jian Cheng Liu**, 2006, Assistant Professor of Mechanical Engineering, B.S., Taiyuan University of Technology (China), 1984; M.S., 1987; Ph.D., Himeji Institute of Technology, now named University of Hyogo (Japan), 1996. Manufacturing, machine design.

**Kyle A. Watson**, 2003, Assistant Professor of Mechanical Engineering, B.S.M.E., Villanova University, 1995; M.S., North Carolina State University, 1997; Ph.D., 2002. Thermal sciences, fluid mechanics, combustion.
The Master of Arts degree in Intercultural Relations (MAIR) is designed to provide students with the skills and understanding to respond appropriately to the challenges of working across cultures in both domestic and international organizations. Offered jointly by University of the Pacific’s School of International Studies and The Intercultural Communication Institute in Portland, Oregon, the MAIR prepares students to meet the demands of managing and harnessing complex cultural diversity in our increasingly multicultural society. This program offers a unique curriculum in a creative format.

The MAIR is designed for adult professionals who find the schedule and structure of a traditional full-time master’s program unsuitable for their situation, and wish to earn an advanced degree in a two-and-one-half to three-year period while maintaining employment or other commitments. In this limited-residency program, students complete the core courses in 18 months through attendance in 3 two-week residencies held in the Portland area every six months in January and July. Directed course assignments are completed at home between the residency periods.

The MAIR curriculum balances classroom instruction, extensive coursework assignments between residencies, independent study, and thesis research and writing. It emphasizes a theory-into-practice model, stressing the application of relevant theoretical frameworks and concepts to real-world contexts, including both domestic diversity and international settings. To the extent possible, the program attempts to directly link the ongoing professional aspirations and responsibilities of its adult learners with all their academic work, equipping them with practical tools and concepts to accomplish their goals.

Each student works with a faculty adviser who is responsible for overseeing a learner’s entire program and serving as a liaison between the student and the cooperating institutions. Students also work with a thesis committee composed of MAIR faculty members and other recognized, practicing professionals in the field of Intercultural Relations. Students form this committee, consisting of a chair, the faculty adviser, and one additional member, to help and support them during the thesis process.

The study of Intercultural Relations provides the opportunity to develop cultural competency, including the skills that will be essential to compete in the global workplace. Students and graduates work in areas such as business, government, nonprofit organizations, education, tourism and human services. Their occupations include positions in human resources, communication, teaching, diversity training, international transition assistance, consulting, marketing, counseling, program development, administration and health care.

The MAIR program partners with the Peace Corps Master’s International program, which allows students to combine Peace Corps service with graduate study to complete the requirements for the MAIR degree. Students must apply separately to both the MAIR program and the Peace Corps, and be accepted by both. They must satisfy specific course requirements before traveling overseas for Peace Corps service. While overseas, students complete a written project to obtain academic credit for their Peace Corps service. The Master’s International program allows students to apply their classroom learning to benefit a host country, and graduate with both an advanced degree and two years of substantive international work experience.

Applicants to the MAIR program must demonstrate previous successful academic performance; an understanding of the field of intercultural relations either through previous academic coursework and/or professional employment, volunteer service, or field experience; clear educational goals that are compatible with the program philosophy; sensitivity to intercultural situations; the ability to operate effectively in small learning groups; the ability to develop and manage personal distance learning strategies; and the ability to write and organize thoughts at a graduate level.
Degree Requirements

Central to the MAIR program is the notion that there is a core body of knowledge and theory that all students need to internalize as part of their graduate education, whether they are operating on the domestic or international level. Therefore, the program is built around a set of nine core courses. In the remainder of the program, students focus on areas of personal interest. The program requires the completion of 40 total units, including a thesis.

The core courses are taken during the residency portion of the program, with assignments completed at home during the six months following each residency. Each residency consists of three core courses. If students miss a residency or core course for some reason, they can normally reschedule appropriate coursework at the next, or any succeeding residency. The program consists customarily of five semesters, with eight units per semester. Additional semesters of continuing registration may be required until all program work is completed.

Master of Arts in Intercultural Relations

In order to earn the master of arts degree in intercultural relations, students must complete a minimum of 40 units with a Pacific cumulative grade point average of 3.0.

I. Required Core Courses

| Residence 1          | MAIR 200 Concepts of Intercultural Communication 3 |
| Residence 2          | MAIR 201 Ethnicity and Intergroup Relations 3 |
| Residence 2          | MAIR 202 Research 1 2 |
| Residence 3          | MAIR 220 Advanced Intercultural Communication Theory 3 |
| Residence 3          | MAIR 221 Research II 3 |
| Residence 3          | MAIR 222 Process of Change 2 |
| MAIR 240 Leadership and Adult Learning 3 |
| MAIR 241 Change-Agency 3 |
| MAIR 242 Culture in the Organizational Context 2 |

II. Electives

Complete a minimum of 8 units from the following: 8-9

| MAIR 223 Personal Leadership |
| MAIR 260 The Intercultural Context of Training |
| MAIR 291 Independent Study |

Note: 1) Eight total units of electives at the graduate level allow students to pursue individual interests. 2) In addition to the offerings noted above, elective units may take the form of graduate-level courses at other institutions, or courses taken at the Intercultural Communication Institute’s Summer Institute for Intercultural Communication (SIC). 3) No more than six (6) units total may be transferred in from either SIC or other institutions. Transfer units must represent regular, on campus graduate-level courses, countable by that institution toward its graduate degree, and have been completed with a B+ or better grade. Pass/fail grading is not transferable. 4) Extension or continuing education courses will not be accepted for credit toward the degree.

III. Research and Thesis

| MAIR 297 Graduate Research 4 |
| MAIR 299 Thesis 4 |

Note: Graduate research and a thesis are the last of the program requirements, and are targeted toward students’ own professional goals.

Course Offerings

MAIR 200. Concepts of Intercultural Communication (3)

This course will review the major concepts, theories, and models that contribute to a general process description of communication across cultures, and it will consider how cultures pattern communication. This work is intended to provide a vocabulary and framework for analysis and discussion throughout the program. Important topics in this course include: The dynamics of face-to-face interaction, conflict styles across cultures, societal influences on ethnocentrism and racism, cultural value orientations, nonverbal dimensions of communication, language interaction, stereotypes, relationship development, and intercultural adaptation.

MAIR 201. Ethnicity and Intergroup Relations (3)

Assuming an intercultural communication perspective on ethnic relations, this course will examine group theory with particular emphasis on dynamics common in domestic multicultural contexts. Topics include an examination of research on ethnic identity development, cross-cultural psychology, prejudice and stereotyping, and interaction patterns specific to particular ethnic groups. It will also consider models for managing diversity at the organizational level. Participants will review models for multicultural group behavior and learn approaches to facilitation that are applicable in both small groups and organizations.

MAIR 202. Research 1 (2)

In intercultural relations, practitioners face a crucial question: How do I know what is real? This is the central issue in what is called “ontology,” and intercultural researchers must be familiar with alternatives to the positivist research tradition in arriving at answers to the question. This course will explore, through a phenomenological perspective, cultural differences in the search for meanings. Symbolic interactionism and ethnography provide a foundation for exploring nonwestern ways of insight about human experience, via the paradigms of Consciousness, Transcendence, and Connectedness. Nonwritten channels for expression of learning will often be explored.

MAIR 220. Advanced Intercultural Communication Theory (3)

This course examines theories from the field of social science that have been influential in the development of intercultural communication concepts, with an emphasis on the contributions of constructivism. It provides an overview of major paradigms in scientific thought that are mirrored in social scientific theories, and of where intercultural communication fits into the scheme. We will review classic sources in the field of intercultural communication and examine current writings that pertain to the future of the field. We will specifically explore the body of theory that underlies the planning of programs and conducting of communication research—interpersonal, small group, and intercultural. We will also generally consider ethical questions that arise in intercultural encounters, in teaching and training, and in the conduct of research, especially across cultures.

MAIR 221. Research II (3)

In this course, both quantitative and qualitative research tools will be examined for their usefulness in the intercultural context. Exercises and readings will consider surveying, sampling, content analysis, depth interviewing, participant observation, personal document analysis, and unobtrusive methods, with equal attention paid to the disadvantages and advantages of each. Students will experience using a range of methods and designing research plans which address issues of bias and ethics as well as matching research strategies to the research question.

MAIR 222. Process of Change (2)

In the process of individual identity development, culture plays a primary role. This course will systematically examine the intrapsychic impact of cultural adaptation by reviewing theories of change, ethnic identity development, acculturation, and cultural marginality. Special topics include: loss and change, models of transition, adaptation, and acculturation, and culture shock and re-entry as developmental processes.
MAIR 223. Personal Leadership
This course focuses on exploring what it means to be a practicing interculturalist, specifically the internal states and external behaviors that promote appropriate and ethical interactions when working across cultural boundaries in professional and personal contexts. The course has three parts, sequenced over three residencies. Topics include the basic framework of Personal Leadership (two principles and six practices), crafting a vision of oneself as an effective interculturalist, and real-time application of the self-reflective process known as the Critical Moment Dialogue.

MAIR 240. Leadership and Adult Learning
This course provides an opportunity for learners to explore theories of leadership and adult learning from a developmental and intercultural perspective. First, leadership theories amenable to use across cultures are examined, including Jean Lipman-Blumen's leadership model and Belenky, Bond & Weinstock's work on community and developmental leadership. Global leadership and multiple intelligences frameworks are explored from a critical intercultural perspective. Second, the course explores theories and practices of adult and transformative learning, again within a critical framework informed by intercultural concerns. Students practice translation and interpretation of selected models for multicultural and intercultural contexts.

MAIR 241. Change Agency
Managing the transition process for people and human systems in an intercultural context requires expertise in planned change, innovation theory, and systems diagnosis and intervention. This course will review the nature of change in communities and cultures with special attention to social action research and organization development. It will also involve students in both critiquing and designing programs for planned change.

MAIR 242. Culture in the Organizational Context
The impact of culture in the organization occurs at multiple levels. Employees as well as clients may come from a variety of domestic or international cultures to participate in an organizational culture, which in itself requires adaptation. The interplay of cultural patterns affects management and leadership styles, decision-making, negotiation, conflict mediation, and team-building. This course provides an overview of modern organizational theory with a view to extracting principles and methods, which are relevant to this multicultural context.

MAIR 260. Intercultural Context of Training
This course explores the impact of culture on training design. Through application of specific frameworks from adult learning, instructional design, and student development, participants learn specific strategies for modifying training to take culture into account.

MAIR 291. Independent Study
This school is a unit of a nonprofit corporation authorized by the State of Oregon to offer and confer the academic degree described herein, following a determination that state academic standards will be satisfied under OAR 583-030. Inquiries concerning the standards of school compliance may be directed to the Office of Degree Authorization, 1500 Valley River Drive, Suite 100, Eugene, Oregon 97401.

MAIR 297. Graduate Research
MAIR 299. Thesis

School of International Studies Faculty
Margie M. Ensign, 1998, Associate Provost for International Initiatives, Professor and Dean, BA, New College, 1977; PhD, University of Maryland, 1982.

Laura Bathurst, 2005, Assistant Professor of Anthropology and International Studies, BA, Kansas State University, 1997; MA, University of California-Berkeley, 1999; PhD, 2005.

Bruce La Brack, 1975, Professor Emeritus, BA, University of Arizona, 1967; MA, M Phil, Syracuse University, 1975; PhD, 1979.

Affiliated Faculty
Janet M. Bennett, 2001, Executive Director of the Intercultural Communication Institute, BA, San Francisco State University, 1972; MA, University of Minnesota, 1976; PhD, 1985.

Milton J. Bennett, 2001Director of the Intercultural Communication Institute and Director of Graduate Studies, BA, Stanford University, 1967; MA, San Francisco State University, 1972; PhD, University of Minnesota, 1976.

LaRay Barna, 2001, BS, Northwestern University, 1944; MS, Portland State University, 1970.


Havva Houshmand, 2001, BA, Chapman University, 1963; MLA, St. John’s College, 1987; PhD, Amsterdam University, 1970.

Elizabeth Kirkhart, 2001, BA, University of Maryland, 1971; PhD, University of Southern California, 1991.

Larry Kirkhart, 2001, BBA, University of Missouri-Kansas City, 1964; MPA, University of Southern California, 1968; PhD, 1971.


Joyce S. Osland, 2001, BA, University of Minnesota, 1970; MSW, University of Washington, 1972; PhD, Case Western Reserve University, 1990.


Barbara F. Schaetti, 2003, BA, Trinity University, 1981; MA, Antioch University-Santa Barbara, 1984; PhD, The Union Institute, 2000.


Francisca Trujillo-Dalbey, 2001, BS, Marylhurst College, 1990; MS, Portland State University, 1997; PhD, 2006.

Kent Warren, 2001, Director of Graduate Program, BA, University of Southern California, 1964; MA, 1968; PhD, University of Minnesota, 1974.


Kathleen Wong, 2008, BA, California State University-East Bay, 1992; PhD, Arizona State University, 2007.

the thomas j. long school of pharmacy and health sciences

The mission of the Thomas J. Long School of Pharmacy and Health Sciences is to prepare students for lifelong success in health careers by providing an excellent, student-centered learning environment. We want to develop in our students leadership and a strong commitment to their professions and to society. We support outstanding professional and graduate teaching, research and other scholarly activity, and service as the means of achieving our mission.

The graduate programs offered by the Thomas J. Long School of Pharmacy and Health Sciences include the Doctor of Philosophy and Master of Science degrees in the Pharmaceutical and Chemical Sciences, the Doctor of Physical degree, and the Master of Science degree in Speech-Language Pathology. Each of these programs provides excellent education, training, and mentoring.

Pharmaceutical and Chemical Sciences

Phone: 209.946.2561  
Website: www.pacific.edu/pharmchem  
Phillip R. Oppenheimer, Dean  
Xiaoling Li, Associate Dean, Graduate Education & Research  
Eric G. Boyce, Associate Dean, Academic Affairs  
Donald G. Floriddia, Associate Dean, Student Affairs & Professionalism  
Nancy L. DeGuire, Assistant Dean, External Relations  
Linda L. Norton, Assistant Dean, Operations

The goal of the Pharmaceutical and Chemical Sciences Program (PCSP) curriculum is to prepare students for the challenges of both basic and applied research, to advance knowledge in an area of specialization, to encourage fundamental discovery in the chemical, pharmaceutical and healthcare sciences, and to attain advanced degrees. Faculty from the departments of chemistry, pharmaceutics and medicinal chemistry, physiology and pharmacology, and pharmacy practice bring their research interests and expertise to the program. Students are encouraged to combine the talents of the faculty into a unique, student-centered and interdisciplinary program that will meet their individual educational goals.

Admission Requirements

Entering students should have the equivalent of a Pacific Bachelor degree with at least a “B” average (3.0 GPA) in all upper-division coursework and GRE score (not older than 5 years) with a total of 1100 for Verbal and Quantitative and 3.0 for Analytical section. Depending on the research focus area, there are minimum undergraduate units required in the mathematical, physical, chemical, pharmaceutical and biological disciplines.

Students should also include an essay or personal statement focusing on their career objectives and personal ideals, and three letters of recommendation, no older than 1 year old.

International Students: In addition to meeting coursework, GPA and GRE requirements, International Students whose native language is not English must submit their TOEFL (Test of English as a Foreign Language) scores when applying to the program. The minimum acceptable score is 550 (paper-based), or 213 (computer-based), or 79 (Internet-based). Those students who want to be considered for a...
Teaching Assistantship must score at least 575 (paper-based test), 230 (computer-based test) or 90 (Internet) on TOEFL and are required to demonstrate English speaking skills by a telephone interview. TOEFL scores can be no older than 2 years old. Students must also provide financial supporting documentation which can be no older than 6 months old.

Please refer to the Admissions section of this catalog or visit www.pacific.edu for up-to-date admissions criteria or for more information concerning other required application materials and instructions.

**Master of Science in Pharmaceutical and Chemical Sciences**

In order to earn the master of science degree in pharmaceutical and chemical sciences, students must complete a minimum of 32 units with a Pacific cumulative grade point average of 3.0.

I. **Category I (minimum 8 units)**

- PCSP 201  Statistics and Experimental Design 3
- PCSP 203  Laboratory and Information Management 1
- PCSP 209  Technical Writing and Presentation 1

One of the following: 3-4

- PCSP 205  Instrumental Analytical Chemistry
- PCSP 207  Bioanalytical Techniques

II. **Category II (minimum 14 units)**

- PCSP 283  Multidisciplinary Project 1
- PCSP 295  Graduate Seminar 1
- PCSP 297  Graduate Research 1-4
- PCSP 299  Thesis 1-6

III. **Specialized Area (minimum 14 units)**

See Specialized Area section below

**Doctor of Philosophy in Pharmaceutical and Chemical Sciences**

In order to earn the doctor of philosophy degree in pharmaceutical and chemical sciences, students must complete a minimum of 45 units with a Pacific cumulative grade point average of 3.0.

I. **Category I (minimum 8 units)**

- PCSP 201  Statistics and Experimental Design 3
- PCSP 203  Laboratory and Information Management 1
- PCSP 209  Technical Writing and Presentation 1

One of the following: 3-4

- PCSP 205  Instrumental Analytical Chemistry
- PCSP 207  Bioanalytical Techniques

II. **Category II (minimum 14 units)**

- PCSP 283  Multidisciplinary Project 1
- PCSP 387  Internship 1-4
- PCSP 395  Graduate Seminar 3
- PCSP 397  Graduate Research 6
- PCSP 399  Dissertation 2

III. **Specialized Area (minimum 22 units)**

See Specialized Area section below

**Thesis Requirement**

Students conduct research, write a thesis and complete a final oral defense of their thesis. The thesis is based upon a research project that constitutes a contribution to knowledge, or the student must design and evaluate a unique procedure or program in their field. A minimum of two semesters of full-time residence at the University is required following the baccalaureate degree or the equivalent in part-time residence during summers. The average time to complete the program is approximately 2-3 years.

**Thesis Committee**

The committee is formed after a student selects an adviser for his/her research. The committee assists the student in designing a plan of study, providing the student with guidance in his/her thesis research, and monitoring the student’s research progress.
B. Drug Design/Discovery and Chemical Synthesis

PCSP 215 Molecular Modeling and Drug Design 4
PCSP 241 Advanced Organic/Bioorganic Chemistry 4
PCSP 244 High-Resolution NMR Spectroscopy 4

C. Clinical Pharmacy and Transitional Studies

Four or five of the following:
- PCSP 217 Drug Bioretransformation 3
- PCSP 223 Pharmacokinetics and Pharmacodynamics 4
- PCSP 255 Long Term Care Practice 3
- PCSP 257 Ambulatory Care Practice 3
- PCSP 259 Topics in Acute Care Practice 3
One or two courses from the following:
- PCSP 260 Advances in Neuropsychiatric Pharmaceutical Care 2-3
- PCSP 261 Advances in Cardiovascular Pharmaceutical Care 2-3
Elective courses PCSP 237, 245, 262 or other approved electives.

D. Drug Targeting and Delivery

PCSP 222 Thermodynamics of Pharmaceutical Systems 3
PCSP 223 Pharmacokinetics and Pharmacodynamics 3
PCSP 224 Diffusion in Pharmaceutical Sciences 3
Elective courses PCSP 207, 217, 226, 228, 229 or 237.

E. Molecular Cellular Pharmacology

PCSP 231 Mechanisms of Drug Action I 4
PCSP 232 Mechanisms of Drug Action II 4
PCSP 237 Cell Culture Techniques 3
Elective courses PCSP 205, 238 or other approved electives.

PharmD/MS and PharmD/PhD Programs

This dual-degree program combines the features of the professional PharmD degree with the teaching and research components of the MS and PhD. It offers a unique opportunity for students who intend to extend their professional pharmacy training into a career in teaching and/or research. The combined program trains outstanding teachers and researchers who are in high demand for employment by industry and academia.

Program Description: The PharmD/MS is usually completed in four years and the PharmD/PhD in five years. During the first two years, students concentrate on the PharmD curriculum, but take graduate level elective courses when possible. The Doctor of Pharmacy curriculum is described in the University's General Catalog. Students do not need to decide in which area of pharmaceutical science they will focus when applying to the program but are expected to choose an area of research concentration and a research advisor in their first year of study. The later years of the program are devoted to graduate coursework, experiential training in the Stockton area, research, and thesis or dissertation writing. The State Pharmacy Board Exam may be taken following completion of the Doctor of Pharmacy curriculum, usually in fourth year.

Admission Procedure: The minimum requirement for admittance to the program is a BA or BS degree with a GPA of 3.0 or greater. The application process requires separate applications to the PharmD professional program and the graduate programs. The application fee for the MS and PhD programs is waived. The Office of Admission will accept the two letters of recommendation and the transcripts submitted with the PharmD application. Four additional items are required for admission:

1. The completed graduate application form;
2. A personal statement from the applicant stating his/her goals relative to a research and/or teaching career;
3. GRE scores on the General Test;
4. A letter of recommendation from someone who is familiar with the student’s research abilities. If such a letter is already included in the PharmD application, a third letter from an academic person is acceptable.

Course Offerings

PCSP 201. Statistics and Experimental Design (3)
This course involves the study of the application and limitations of statistical methods of inference as they apply to the fields of chemistry and the pharmaceutical sciences. Topics include the use of parametric statistics for statistical inference, comparisons of means, analysis of variance and linear regression. Parametric statistics and nonparametric measures of association and elements of good experimental design are also included. Prerequisite: Graduate standing.

PCSP 203. Laboratory and Information Management (1)
This course covers basic knowledge of Information Management, Intellectual Property and Patenting, Research Laboratory Operations and Safety, Good Maintenance Practice (GMP) and Good Clinical Practice (GCP). Prerequisite: Graduate standing.

PCSP 204. Introduction to Nanotechnology (4)
Molecular nanotechnology (MNT) is a rather young discipline which came up in the 90s. Predictions say MNT will change our lives and society more than computer technology and electricity have done together. The course will provide a systematic overview of MNT. Applications of MNT, as they are already in use today and as they are planned for the future will be discussed. Also, the implications of MNT for our society will be considered. Prerequisite: Graduate standing or permission from the instructor.

PCSP 205. Instrumental Analytical Chemistry (4)
Lecture focuses on the theory and physical principles of instruments for the analysis of matter. Laboratory lecturer will describe the actual operation of instruments. Students gain hands-on experience on the operation of instruments. Prerequisite: Graduate standing.

PCSP 206. Models and Concepts in Chemistry (4)
The course focuses on a general understanding of chemistry in terms of models and concepts that describe structure, stability, reactivity and other properties of molecules in a simple, yet very effective way: many chemical problems from organic, inorganic, and transition metal chemistry and biochemistry will be presented and the applicability of the various models and concepts as well as their limitations will be demonstrated. Prerequisite: Graduate standing or permission from the instructor.

PCSP 207. Bioanalytical Techniques (3)
An introduction to techniques of bioanalysis for the pharmaceutical and chemical sciences. Course provides a conceptual understanding and practical familiarity with techniques used for analysis of proteins and nucleic acids. Prerequisite: Basic biochemistry recommended.

PCSP 209. Technical Writing and Presentation (1)
This course covers common written and oral forms of communication and scientific material. Prerequisite: Graduate standing.

PCSP 211. Drug Design (4)
A study of modern methods used in the design of new drugs. Target selection, lead compound discovery and molecular modifications to optimize activity will be studied. Prerequisites: Graduate standing or bachelor's degree and permission of the instructor.
PCSP 213. Biotransformation of Pharmaceutical Agents (3)
This course teaches the graduate students the chemical and biological principles of the transformations of pharmaceutical agents in the body and the impact of such transformations on pharmacokinetics, pharmacodynamics, toxicity, drug design and drug delivery. Prerequisite: Graduate student standing in Tj Long School of Pharmacy & Health Sciences or in Chemistry Department, or permission of the instructor.

PCSP 215. Molecular Modeling and Drug Design (4)
The course presents a thorough and in-depth overview of methods and techniques in computer assisted drug design (CADD) that are specially the needs of the pharmaceutical industry are considered. Its contents include topics such as famous examples of drug discovery and drug design, molecular recognition and docking, ligand-receptor interactions, pharmaphore searching, virtual screening, de novo design, molecular graphics, chemoinformatics, etc. Prerequisite: Graduate standing or permission of the instructor.

PCSP 217. Drug Biotransformation (3)
This course generally meets two times a week (two 75-min. lectures per week). In this course, a mechanistic approach is employed to study human drug metabolizing enzymes. Other topics related to the differential expression of these enzymes will be discussed. Students need to submit a research proposal at the end of the course. Prerequisite: Graduate standing or permission from the instructor.

PCSP 221. Fundamentals of Dosage Forms (3)
In this course the fundamental physicochemical properties and composition of various dosage forms will be taught. Prerequisite: Graduate standing.

PCSP 222. Thermodynamics of Pharmaceutical Systems (3)
This is a classical course on the applications of thermodynamics to the study of pharmaceutical systems. The course includes a review of the basic principles of thermodynamics. These principles are used to describe and study physical and chemical transformations of pure substances and mixtures in pharmaceutical systems. Prerequisite: Graduate standing or permission from the instructor.

PCSP 223. Pharmacokinetics and Pharmacodynamics (3)
This course teaches critical concepts and basic principles of pharmacokinetics and pharmacodynamics. Such concepts and principles are required for the students to understand the drug behavior in the body. Prerequisite: Graduate standing or permission from the instructor.

PCSP 224. Diffusion in Pharmaceutical Sciences (3)
Discussion of diffusion theories, experimental methods, and application to pharmaceutical/biological systems. Prerequisite: CHEM 161, MATH 033 or equivalent or permission from the instructor.

PCSP 225. Pharmaceutical Technologies (2)
A study of theory and practice in industrial pharmacy including pre-formulation, formulation and pharmaceutical manufacture. Prerequisites: Graduate standing, PHAR 114, PHAR 123, and PHAR 133.

PCSP 228. Mathematical Modeling in Pharmaceutical Research (3)
A study of mathematical modeling theory and application to problems in pharmaceutical research. Modeling will be applied to three major areas: drug delivery, metabolic/biological cascades and pharmacological response kinetics. Prerequisite: PHAR 113 or permission from the instructor. Recommended courses: MATH 057, PHAR 114, PHAR 134.

PCSP 229. Advances in Drug Delivery System (3)
In this course the design and formulation/fabrication of controlled release and other novel drug delivery systems for oral, transdermal, ocular and other routes of delivery will be covered. The biopharmaceutical rational and evaluation of such systems will also be discussed. Prerequisite: Graduate standing.

PCSP 230. Molecular Pharmacology of Nucleic Acid (3)
A study of the mechanisms by which drugs and other chemicals can affect gene expression and cell division through actions on DNA structure and nucleic acid and protein metabolism. Prerequisite: Graduate standing.

PCSP 231. Mechanisms of Drug Action I (4)
effects of therapeutic agents and the mechanisms whereby these effects are induced. Prototype medicinals will be presented to illustrate the effects of drug classes in the treatment of disease. Prerequisite: Graduate standing or permission from instructor.

PCSP 232. Mechanisms of Drug Action II (4)
A continuation of PCSP 231. Effects of therapeutic agents and the mechanisms whereby these effects are induced. Prototype medicinals will be presented to illustrate the effects of drug classes in the treatment of disease. Prerequisite: Graduate standing or permission from the instructor.

PCSP 234. Neurochemical Pharmacology (3)
A study of neurobiology of nerve cells and the neurochemical pharmacology associated with function of central and peripheral nervous systems. Prerequisite: Graduate standing.

PCSP 237. Cell Culture Techniques (3)
This course teaches students the basic techniques in mammalian cell culture. In addition, advanced topics of cellular techniques are demonstrated and discussed representative of current research methods. Prerequisite: Permission by PCSP Program Director.

PCSP 240. Molecular Spectroscopy (4)
The basic theory behind infrared, visible, ultraviolet, and magnetic resonance spectroscopy are studied. The course includes the quantum mechanics of light absorption, atomic absorption and emission spectroscopy, vibrational spectroscopy of diatomic and polyatomic molecules. Absorption and emission electronic spectroscopic and magnetic resonance spectroscopy.

PCSP 241. Advanced Organic/Bioorganic Chemistry (4)
Synthetically useful organic reactions not normally covered in the introductory courses are emphasized. The reactions are grouped according to their mechanistic type and discussed in terms of their reaction mechanisms and synthetic utility. Prerequisites: CHEM 121 and CHEM 123 with a “C” or better.

PCSP 242. Selected Topics: Advanced Organic Chemistry (4)
Topics presented at various times under this course description include: Physical organic, natural products and structure elucidation, stereochemistry, heterocycles and carbohydrate chemistry. Prerequisites: CHEM 121 and CHEM 123 with a “C” or better.

PCSP 244. High-Resolution NMR Spectroscopy (4)
A study of one and two dimensional FT-NMR techniques used for structure elucidation of organic molecules. Emphasis placed on understanding the capabilities and limitations of these techniques, the information they provide and the practical aspects of their implementation. Prerequisite: Permission from the instructor.

PCSP 245. Protons and Nucleic Acids (4)
Chemical, physical and biological properties of the protons and nucleic acids and their constituents; isolation, determination of composition, sequence and structure; correlation of structure and biological properties. Prerequisite: CHEM 151 with a “C” or better.

PCSP 247. Mass Spectrometry (4)
Fundamentals of mass spectrometry, theory, instrumentation and applications to organic and biological molecules. Prerequisite: PCSP 205.

PCSP 248. Enzymology (4)
This class gives an introduction into the biochemistry of the various classes of enzymes with emphasis on laboratory techniques. Prerequisite: CHEM 151 with a “C” or better.
PCSP 251. Advances in Drug Therapy (3)
A clinical pharmacy component on a long term facility with special emphasis on opportunities and research needs; a systematic approach to monitoring the drug therapy of the long term care patient. Prerequisite: Graduate standing.

PCSP 255. Long Term Care Practice (3)
Application of clinical pharmacy to ambulatory care settings in an affiliated clinic or community pharmacy, with special emphasis on opportunities and research needs. Prerequisite: Graduate standing.

PCSP 257. Ambulatory Care Practice (3)
Application of clinical pharmacy to ambulatory care settings in an affiliated clinic or community pharmacy, with special emphasis on opportunities and research needs. Prerequisite: Graduate standing.

PCSP 259. Topics in Acute Case Practice (3)
Application and investigation of clinical pharmacy in acute care setting with emphasis on medical management of common diseases and rational drug selection and dosing. Prerequisite: Graduate standing.

PCSP 260. Advances in Neuropsychiatric Pharmaceutical Care (2)
Pharmaceutical care for the patient with neurologic and psychiatric disorders, emphasizing appropriate use of drug therapy in the management of these disorders. Prerequisites: Graduate standing and permission of instructor.

PCSP 261. Advances in Cardiovascular Care (3)
Application of Drug Therapy to patient care with assignments expanding students’ knowledge of background material supporting therapeutic guidelines. Prerequisite: Permission of instructor.

PCSP 262. Vascular, Renal and Pulmonary Care (4)
Pharmaceutical care for the patient with cardiovascular, respiratory and renal diseases, emphasizing appropriate use of drug therapy in the management of the disease. Prerequisite: Successful completion of all courses in semesters 1-3 of the Doctor of Pharmacy Program.

PCSP 283. Multidisciplinary Project (1)
Students in the Pharmaceutical and Chemical Science Graduate Program will design an interdisciplinary project based upon the relevant contributions of their backgrounds. Prerequisite: Enrollment in PCS Graduate Program.

PCSP 287/387. Internship (1-4)
An experiential learning program at a pharmaceutical/ chemical/ biotechnological industry, research institute or a clinical site that entitles the students to learn advanced techniques and practical application of the theoretical principles learned in a number of courses. Prerequisite: Graduate students that have completed Category I course work, or obtained permission of the coordinator shall enroll in this course. For students in thesis/dissertation tracks, concurrence of thesis/dissertation adviser(s) is required.

PCSP 291/391. Independent Study (1-4)
Restricted to masters or doctoral (PhD) candidates. May be repeated with permission as progress warrants. No more than eight credits may be used toward doctoral degree requirements. Prerequisites: Graduate student in good standing, permission from the instructor, and completion and approval of the required contract for Independent Graduate Study.

PCSP 295/395. Graduate Seminar (1)
Seminar presentation on research-related topics given by both PCSP faculty and graduate students. Enrolled students are required to attend all seminars given throughout the pharmacy academic year and to give one seminar in that year. This course is required for all graduate students for the first three years of their tenure in the PCSP. Students who have already enrolled in this course for three years are encouraged to attend seminars without official enrollment. PCSP faculty members present a short talk on their research areas at the beginning of the fall semester each year. Prerequisite: Graduate standing.

PCSP297/ 397. Graduate Research (1-4)
Limited to masters or doctoral (PhD) candidates. May be repeated with permission as progress warrants. No more than eight credits may be used toward doctoral degree requirements. Prerequisites: Admission to the graduate program and permission from research director.

PCSP 299. Thesis (1-6)
One-to-one work by student with faculty research mentor to plan, organize, conduct, evaluate and write an original research project as a thesis for partial fulfillment of the M.S. degree. Prerequisites: Admission to M.S. thesis program (PCSP) and permission of research adviser.

PCSP 399. Dissertation (1-6)
Only open to doctoral (PhD) candidates. No more than eight credits may be used toward doctoral degree requirements. Prerequisites: Admission to PhD program (PCSP) and permission from research adviser.
**Physical Therapy**

Phone: (209) 946-2886  
Location: Rotunda; Thomas J. Long School of Pharmacy and Health Sciences  
Website: www.pacific.edu/pharmacy/dpt  
Cathy Peterson, Chair

**Programs Offered**  
Doctor of Physical Therapy

**Mission**

The mission of Pacific’s physical therapy program is to prepare lifelong learners who are skilled, reflective, autonomous practitioners. The program is committed to educating individuals who will be leaders within the profession advocating for optimal health, wellness and performance for all members of society.

- We accomplish this through a concise program of study emphasizing evidence-based reasoning and creative skills grounded in the basic and clinical sciences. Our academic program is enhanced by a wide variety of innovative clinical experiences and involvement in professional societies.

- Pacific’s Doctor of Physical Therapy program is committed to:
  - Producing high caliber, practice-ready graduates
  - Contributing to the body of knowledge of the profession
  - Providing leadership in the University and profession
  - Participating in on-going assessment to maintain currency and relevance in teaching and practice
  - Engaging in local, regional, national, and international service
  - Fostering diversity and cultural competence
  - Promoting life-long relationships with the Pacific Physical Therapy community

**The Doctor of Physical Therapy Degree**

The entry level Doctor of Physical Therapy (DPT) degree is a highly structured 25-month course of study, consisting of six consecutive trimesters. Coursework includes foundational sciences (anatomy, physiology, pathophysiology), clinical sciences, management of professional life and practice, clinical applications, and substantive clinical practical experiences.

A major element of the program is the opportunity for students to be involved in meaningful professional clinical experiences under the supervision of carefully selected practitioners. Opportunities include acute care facilities, skilled nursing facilities and rehabilitation sites in California, throughout the US, and internationally. All students must successfully complete the clinical internship requirements as an inherent part of the professional program.

**Prerequisites to participation in the clinical internships are:**

1. Satisfactory completion of all other required courses with a minimum GPA of 3.0 (in accordance with the Standards of Academic Success delineated in the Physical Therapy Student Handbook);
2. Advancement to degree candidacy; and
3. Permission of the department faculty.

To receive the Doctor of Physical Therapy degree, each student must demonstrate clinical competence as well as academic success. Academic success means:

1. Maintenance of a cumulative GPA of at least 3.0.
2. No grade below a C+ in any required course at the 300 level will be counted toward the degree program (See the Standards of Academic Success in the Physical Therapy Student Handbook).

**Clinical competence means:**

1. The ability to evaluate individuals with movement dysfunction and identify problems appropriate for physical therapy intervention.
2. The ability to establish appropriate treatment goals and plans, including specific physical therapy procedures or modalities.
3. The ability to effectively apply the various physical therapy procedures and modalities.
4. The ability to relate effectively to clients, their families and other health care providers.

Assessment of these competencies will be made by faculty before recommending the awarding of the degree.

**Accreditation and Licensing**

The Physical Therapy Program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association. Successful completion of an accredited program qualifies the graduate to take the licensing examination. Admission to the program is highly competitive and limited to 36 openings each year.

**Prerequisites**

Prerequisites for admission to the program include the following:

1. Bachelor’s degree with a major of student’s choice.
2. Successful completion of the listed prerequisite courses.
   a. Prerequisite courses must be completed with a grade of “C” or above.
   b. Courses are taken on a graded basis; pass/fail courses are not acceptable.
   c. Biological science, chemistry and physics courses must all include significant laboratory experiences. Prerequisite science courses must be taken within the last ten years.
   d. Correspondence, on-line or extension coursework is not acceptable without approval from the Admissions Committee or Department Chair. All coursework must have defined objectives, course description, an objective grading system, and meet the content expectations of the prerequisite.
3. At least 50 hours spent in one or more physical therapy practice settings, including at least 25 hours with inpatients in an acute care hospital setting.
4. GRE test scores must be less than 5 years old at the time of application.
5. A personal interview at the invitation of the selection committee is required.
**Prerequisite Coursework**

**General Biology with lab or Cell Biology:**
4 semester credits/5-6 quarter hours minimum. The course should include animal biology.

**Human Anatomy with lab:**
4 semester credits/5-6 quarter hours minimum. Vertebrate anatomy is acceptable if human anatomy is not available.

**Human Physiology with lab:**
4 semester credits/5-6 quarter hours minimum. Animal physiology is acceptable if human anatomy is not available.

**Medical Terminology:**
1-3 semester credits/2-4 quarter hours minimum. A basic course in bioscientific terminology, analyzing the Latin and Greek elements in scientific English.

**Doctor of Physical Therapy**

In order to earn the doctor of physical therapy degree, students must complete a minimum of 100 units with a Pacific cumulative grade point average of 3.0.

**I. First Year**

**Fall**
- PTHR 311 Gross Human Anatomy 6
- PTHR 312 Exercise Physiology in Physical Therapy 2
- PTHR 313 Clinical Kinesiology I 3
- PTHR 314 Introduction to Physical Therapy & Clinical Observations I 1
- PTHR 316 Physical Therapy Examination & Evaluation 4
- PTHR 318 Physical Therapy Patient Care Skills 1
- PTHR 319 Physical Agents 1

**Winter**
- PTHR 321 The Nervous System & Behavior 5
- PTHR 323 Clinical Kinesiology II 3
- PTHR 326 Therapeutic Exercise: Basic Theory & Application 4
- PTHR 327 Clinical Observations II 0
- PTHR 328 Research: Theory & Application 2
- PTHR 329 Pathophysiology 4

**Spring**
- PTHR 332 Electrotherapy 2
- PTHR 333 Analysis of Human Movement Through the Life Span 3
- PTHR 334 Medical Conditions and Screening for Medical Disease 4
- PTHR 335 Cardiovascular and Pulmonary Physical Therapy 4
- PTHR 336 Clinical Experience I 1
- PTHR 338 Clinical Experience II 1
- PTHR 339 Motor Learning and Motor Control 2
- PTHR 386 Research Literature Review 1

**II. Second Year**

**Fall**
- PTHR 341 Integumentary Physical Therapy 1
- PTHR 342 Administration & Management of Physical Therapy Services I 2
- PTHR 344 Neuromuscular Physical Therapy 5
- PTHR 345 Advanced Clinical Problems I 1
- PTHR 346 Seminar 2
- PTHR 347 Musculoskeletal Physical Therapy I 5
- PTHR 351 Prosthetics and Orthotics 1
- PTHR 391 Graduate Independent Study 1

**Winter**
- PTHR 343 Geriatric Physical Therapy 1
- PTHR 352 Administration and Management of Physical Therapy Services II 2
- PTHR 353 Diagnostic Imaging for Physical Therapists 2
- PTHR 354 Pediatric Physical Therapy 1
- PTHR 355 Advanced Clinical Problems II 1
- PTHR 356 Psychosocial Aspects of Illness & Disability 3
- PTHR 357 Musculoskeletal Physical Therapy II 2
- PTHR 358 Clinical Education and Professional Behavior 1
- PTHR 359 Clinical Internship I 4
- PTHR 391 Graduate Independent Study 1

**Spring**
- PTHR 368 Clinical Internship II 6
- PTHR 369 Clinical Internship III 6
- PTHR 391 Graduate Independent Study 1-3

**Application Information for the Entry Level Doctor of Physical Therapy Degree:**

For the most current information regarding the application process and requirements, please visit the web site: www.pacific.edu/pharmacy/dpt.

**Course Offerings**

**PTHR 311. Gross Human Anatomy**
(6)
Involved the detailed regional analysis of the structure of the human body including the lower extremity, head, neck and trunk, and thoracic, abdominal, and pelvic cavities. Functional correlates to the structures will also be presented and discussed. The course has a lecture component as well as a cadaver dissection-based laboratory/discussion component. **Prerequisite:** Admission into the DPT program or permission of instructor.

**PTHR 312. Exercise Physiology in Physical Therapy**
(2)
Designed to give the physical therapy student a strong foundational knowledge of the physiological response to exercise under normal and pathological conditions, and the mechanisms responsible for those changes. **Prerequisite:** Admission into the DPT program or permission of instructor.
PTHR 313. Clinical Kinesiology I (3)
Introduces students to the basic principles of kinesiology and biomechanics. It emphasizes the integration of basic science knowledge from multiple disciplines into an applied clinical approach to the study of human movement. Course content focuses on the basis of human movement from cells to systems, as well as normal and pathological movement of the lower extremity. Prerequisite: Admission into the DPT program or permission of instructor.

PTHR 314. Introduction to Physical Therapy and Clinical Observations I (1)
Introduces students to the principles and practice of physical therapy. Students explore the history of the profession of physical therapy and the role of physical therapists in the healthcare system and as a member of the healthcare team. Students begin to develop professional behaviors and communication skills required to function in that role. This course includes an introduction to the various practice areas of physical therapy. Prerequisite: Admission into the DPT program or permission of instructor.

PTHR 316. Physical Therapy Examination and Evaluation (4)
Lecture and laboratory provides an overview of basic examination procedures and clinical reasoning approaches used throughout the practice of physical therapy. Course content includes history-taking, vital signs, inspection, palpation, range of motion measurement, manual muscle testing, neurologic testing, selected special tests, and other functional tests. Prerequisite: Admission into the DPT program or permission of instructor.

PTHR 318. Physical Therapy Patient Care Skills (1)
Introduces the student to the basic principles and practice of patient care in physical therapy. Course content includes patient education, bed mobility and related techniques, transfers and body mechanics, gait devices, wheelchairs, documentation, and aseptic bandaging techniques. Additionally students are introduced to soft tissue mobilization. Prerequisite: Admission into the DPT program or permission of instructor.

PTHR 319. Physical Agents (1)
Designed to give the student an in depth understanding of the structure and functions of the organs and organ systems of the body. Functional correlates to physical therapy will be included. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 320. Physical Therapy Patient Care Skills II (1)
Enables the student to properly select and safely and competently apply various therapeutic devices. Topics will include physiological responses to and indications, contraindications and precautions for each modality. Case studies will be used to illustrate the principles of examination and evaluation planning. Prerequisite: Admission into the DPT program or permission of instructor.

PTHR 321. The Nervous System and Behavior (5)
Designed to give the student an in depth understanding of the structure and function of the nervous system, how it controls movement and behavior, and how deficits in the system affect movement and behavior. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 322. Clinical Kinesiology II (3)
Continuation of PTHR 313 and extends the examination of normal and pathological human movement to the upper extremities, trunk, and TMJ regions. Basic biomechanical and kinesiological principles are presented. The relationship of these principles to the clinical environment is stressed. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 326. Therapeutic Exercise: Basic Theory and Application (4)
Provides an introduction to the theory and application of therapeutic exercise in physical therapist practice. Students will gain an understanding of the physiological effects of training and de-training on the human body and develop the evaluative skills necessary to prescribe a therapeutic exercise plan. Students will learn therapeutic exercise techniques for addressing strength, power, endurance, balance, stability, motor control and neuromuscular re-education in a variety of patient populations. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 327. Clinical Observations II (0)
Students will observe and participate with supervision in clinical activities with volunteer participants. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 328. Research: Theory and Application (2)
Helps the student develop an understanding of the scientific method of inquiry, research design and methodologies, critical analysis of health science information including research articles and development of research projects through application of the basic principles of the scientific method. This course will provide the fundamental background to help students understand evidence-based practice in Physical Therapy. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 329. Pathophysiology (4)
Involves the detailed analysis of the structure, function and pathology of the organs and organ systems of the body. Functional correlates to physical therapy will be included. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 332. Electrotherapy (2)
Enables the student to properly select and safely and competently apply various therapeutic electrical devices. Topics will include physiological responses to, indications, contraindications, and precautions for the use of these electrical devices. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 333. Analysis of Movement Through the Life Span (3)
Focuses on the development and refinement of human movement from infancy to older adulthood. Students will develop visual observation skills and handling techniques used to facilitate normal movement in various patient populations. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 334. Medical Conditions and Screening for Medical Disease (4)
Focuses on the process of screening for medical referral in the practice of physical therapy. The students will learn the major signs and symptoms, and medical and pharmacologic management of various medical diseases and conditions. This course also covers the possible sources of referred pain from systemic diseases that may mimic or increase pain caused by neuromuscular or musculoskeletal pathology. The students will learn through the use of patient/client interview and other tests and measurements to recognize signs and symptoms that may require referral to other practitioners. During this process, the student will apply principles of professional communication to interactions with patients, physicians and other health care providers. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 335. Cardiovascular and Pulmonary Physical Therapy (4)
Addresses physical therapy examination, evaluation and intervention used with the individual with cardiovascular and/or pulmonary disease. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 336. Clinical Experience I (1)
Consists of a clinical experience under the supervision of a licensed, qualified physical therapist(s) for the purpose of practicing basic examination and intervention techniques and professional behaviors learned in the first two terms of the program. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.

PTHR 338. Clinical Experience II (1)
Consists of a clinical experience under the supervision of a licensed, qualified physical therapist(s) for the purpose of practicing basic examination and intervention techniques and professional behaviors learned in the first year of the program. Prerequisite: Successful completion of all previous DPT courses or permission of instructor.
PTHR 339.  Motor Learning and Motor Control  (2)
Focuses on current theories of motor learning and motor control. These the-
tories will provide a foundation for clinical diagnosis of movement and pos-
tural control disorders, as well as assessment and treatment interventions.
Prerequisite: Successful completion of all previous DPT courses or per-
mission of instructor.

PTHR 341.  Integumentary Physical Therapy  (1)
Serves as an introduction to the integumentary system with a primary focus
on wound and burn care. Topics include an in depth study of the healing
process, the affect of disease on the healing process, and integumentary
changes over the lifespan. Physical therapy evaluation and treatment options
for burns and wounds of vascular, traumatic, and surgical origin are pre-
sented as well as precautions and contraindications associated with these in-
terventions. Lab sessions will cover wound assessments, debridement,
adjunctive interventions, and dressings. Prerequisite: Successful completion
of all previous DPT courses or permission of instructor.

PTHR 342.  Administration and Management of Physical Therapy
Services I  (2)
Designed to provide an introduction to principles of management, with em-
phasis on the application of these principles in health care facilities and other
patient care settings. The application of these principles within various phys-
ical therapy practice settings, including the clinical practice of physical ther-
apy, is specifically addressed. As appropriate, discussion of issues facing the
profession of physical therapy is included. Prerequisite: Successful comple-
tion of all previous DPT courses or permission of instructor.

PTHR 343.  Geriatric Physical Therapy  (1)
Focuses on physical therapy management of the geriatric patient population.
Students will gain an understanding of age related changes in biology, phys-
iology, anatomy and function as well as psychological issues and pathologi-
ical changes associated with aging. Students will integrate this knowledge with
previous coursework to identify orthopedic, neurological, cardiopulmonary,
cardiovascular and integumentary treatment considerations for geriatric pa-
tients. Prerequisite: Successful completion of all previous DPT courses or
permission of instructor.

PTHR 344.  Neuromuscular Physical Therapy  (5)
Focuses on examination, evaluation and intervention for patients and clients
with neuromuscular dysfunction. This course will emphasize the establish-
ment of a diagnosis by a physical therapist, identification of a realistic prog-
nosis and selection of various intervention options based on best evidence.
Prerequisite: Successful completion of all previous DPT courses or per-
mission of instructor.

PTHR 345.  Advanced Clinical Problems I  (1)
Facilitates the integration of knowledge from all prior course work using case
studies and actual patient contacts to perform physical therapy examination,
evaluation, and intervention. Case studies and patient contacts may include
examples of patients/clients with orthopedic, neurological, integumentary,
cardiopulmonary, and multiple systems disorders. Students will perform all el-
ements of patient care under faculty supervision. Prerequisite: Successful com-
pletion of all previous DPT courses or permission of instructor.

PTHR 346.  Seminar  (2)
Students will have opportunities to practice the range of physical therapy
problem solving through analysis and discussion of various clinical scenar-
ios. The continuum from evaluation to diagnosis to prognosis for treatment se-
tection will be incorporated into each presented discussion, with emphasis on
clinical decision-making and systems interaction approach to patient man-
agement. Prerequisite: Successful completion of all previous DPT courses or
permission of instructor.

PTHR 347.  Musculoskeletal Physical Therapy I  (5)
Integrates and expands the student’s understanding of previous physical ther-
apy coursework as it applies to the musculoskeletal setting, and introduces the
student to manual therapy techniques. Students will apply concepts from pre-
vious coursework to the examination, evaluation, and intervention of pa-

tient/clients in the musculoskeletal/orthopedic setting with a regional
emphasis on the extremities. Additionally students will develop basic compe-
tencies in manual therapy techniques for the extremities. Prerequisite: Suc-
cessful completion of all previous DPT courses or permission of instructor.

PTHR 351.  Prosthetics and Orthotics  (1)
Provides the student with a basic understanding of the prescription, fitting
and use of various orthotic and prosthetic devices. Biomechanical properties
of normal and pathological gait for the user of lower extremity devices will be
discussed. Prerequisite: Successful completion of all previous DPT courses
or permission of instructor.

PTHR 352.  Administration and Management of Physical Therapy
Services I  (2)
Emphasizes the physical therapy profession and the practice of physical ther-
apy as it is affected by the health care delivery, professional organiza-
tions, State and Federal laws, professional ethics, professional issues and
societal trends. Prerequisite: Successful completion of all previous DPT
courses or permission of instructor.

PTHR 353.  Diagnostic Imaging for Physical Therapists  (2)
Covers basic principles and interpretation of diagnostic imaging modalities
as they apply to the physical therapist. This course will cover medical imag-
ing of musculoskeletal and neuromuscular/neurological systems. More com-
mon normal anatomical variants, as well as pathological variants and congenital anomalies will be addressed. A discussion of special imaging techni-
cues will also be presented with the emphasis on CT Scans and Magnetic Resonance Imaging (MRI). The course aims to prepare the students to rec-
ognize the importance of integrating imaging into clinical analysis of the
patient’s presentation and to incorporate the results of medical imaging stud-
es when making clinical judgments. Prerequisite: Successful completion
of all previous DPT courses or permission of instructor.

PTHR 354.  Pediatric Physical Therapy  (1)
Provides the student with a foundational understanding of issues and prob-
lems affecting the pediatric population addressed by the practice of physical
therapy. Students are expected to incorporate knowledge of previous course
work used in the evaluation and development of intervention strategies for pa-

tients in this population. Prerequisite: Successful completion of all previ-
ous DPT courses or permission of instructor.

PTHR 355.  Advanced Clinical Problems II  (1)
Provides for integration of all prior course work using case studies and actual
patient contacts to perform physical therapy examination, evaluation, and
intervention. Case studies and patient contacts may include examples of pa-

tients/clients with orthopedic, neurological, integumentary, cardiopulmonary,
and multiple systems disorders. Students will perform all elements of patient

care under faculty supervision. Prerequisite: Successful completion of all previ-
ous DPT courses or permission of instructor.

PTHR 356.  Psychosocial Aspects of Illness and Disability  (3)
Survey of psychological and social factors related to physical illness and dis-
ability. Scientific, theoretical and clinical literature is highlighted with em-
phasis on understanding the impact of illness and/or disability on the
individual, the family, and the health care professional. This course also cov-
ers stress management and professional burn-out. Prerequisite: Successful com-
pletion of all previous DPT courses or permission of instructor.
PTHR 357. Musculoskeletal Physical Therapy II  (3)
Continuation of PTHR 347. This course integrates and expands the student’s understanding of previous physical therapy coursework as it applies to the musculoskeletal setting, and extends the student’s knowledge of manual therapy techniques. Students will apply concepts from previous coursework to the examination, evaluation, and intervention of patient/clients in the musculoskeletal/orthopedic setting with a regional emphasis on the spine and TMJ. Additionally, students will develop basic competencies in manual therapy techniques for the spine and TMJ. Prerequisite: successful completion of all previous DPT courses or permission of instructor.

PTHR 358. Clinical Education and Professional Behavior  (1)
Prepares students for their full-time clinical experiences. Students are oriented to the performance instrument that will be used to evaluate their clinical performance. Teaching and learning methods used by clinical instructors are discussed, and students explore options for problem-solving and conflict resolution in the clinical setting. Through lectures, discussions, and group activities, students will identify the cognitive, psychomotor, and affective behaviors that will lead to success in the clinical environment. Prerequisite: Successful completion of all previous DPT courses or permission of instructor. (Graded P/NC only)

PTHR 359. Clinical Internship I  (4)
Consists of a full-time clinical experience under the supervision of a licensed physical therapist (designated as “Clinical Instructors” aka “CI”) at specified facilities. Students have the opportunity to perform clinical rotations in a variety of clinical settings. Three Clinical Internships occur between Winter/Spring/Fall sessions of the final graduate year. By conclusion of Clinical Internship III, students are required to complete one acute care experience and one outpatient clinical experience. A third experience is assigned according to student interest and clinic availability. Each rotation should be in a physically different clinical setting to provide the student with a well-rounded education and to prepare him/her for entry level practice, as recognized by Commission on Accreditation in Physical Therapy Education. Prerequisite: Successful completion of all previous DPT courses or permission of instructor. (Graded P/NC only)

PTHR 368. Clinical Internship II  (6)
Consists of a full-time clinical experience under the supervision of licensed physical therapists (designated as “Clinical Instructors” aka “CI”) at specified facilities. Students have the opportunity to perform clinical rotations in a variety of clinical settings. Three Clinical Internships occur between Winter/Spring/Fall sessions of the final graduate year. By conclusion of Clinical Internship III, students are required to complete one acute care experience and one outpatient clinical experience. A third experience is assigned according to student interest and clinic availability. Each rotation should be in a physically different clinical setting to provide the student with a well-rounded education and to prepare him/her for entry level practice, as recognized by Commission on Accreditation in Physical Therapy Education. Prerequisite: Successful completion of all previous DPT courses or permission of instructor. (Graded P/NC only)

PTHR 369. Clinical Internship III  (6)
Consists of a full-time clinical experience under the supervision of licensed physical therapists (designated as “Clinical Instructors” aka “CI”) at specified facilities. Students have the opportunity to perform clinical rotations in a variety of clinical settings. Three Clinical Internships occur between Winter/Spring/Fall sessions of the final graduate year. By conclusion of Clinical Internship III, students are required to complete one acute care experience and one outpatient clinical experience. A third experience is assigned according to student interest and clinic availability. Each rotation should be in a physically different clinical setting to provide the student with a well-rounded education and to prepare him/her for entry level practice, as recognized by Commission on Accreditation in Physical Therapy Education. Prerequisite: Successful completion of all previous DPT courses or permission of instructor. (Graded P/NC only)

PTHR 391. Graduate Independent Study  (1-3)
PTHR 393. Special Topics  (1-4)
PTHR 398. Research Literature Review  (1)
This course will help the student apply the basic principles of research methods to the professional literature and to critically analyze new concepts and findings in that literature. The student will choose a research topic in health science, perform a literature search of primary research articles related to their topic, critically analyze those research articles, and write a related literature paper summarizing and synthesizing the information gathered from their literature search.

Speech-Language Pathology

Phone: (209) 946-2381
Location: Health Sciences and Learning Center
Website: http://web.pacific.edu/~9613.xml
Robert Hanyak, Chair

Program Offered
Master of Science in Speech-Language Pathology

Mission
Study and research in this department focus on normal and abnormal speech, language and hearing processes. Students are prepared for professional careers in the field of Speech-Language Pathology. Clinical experience which supplements the students’ academic preparation is obtained in the University’s Speech, Hearing and Language Center, Scottish Rite Language Center, hospitals, clinics and schools. This program is designed to provide academic, clinical, and research experiences leading to the Master of Science degree, the Certificate of Clinical Competence in Speech-Language Pathology and California licensure in Speech-Language Pathology. Students may also qualify for the California Speech-Language Pathology Services Credential.

The Master’s degree program in Speech-Language Pathology is accredited by the Council of Academic Accreditation of the American Speech-Language-Hearing Association. All students must successfully complete clinical practicum requirements as an inherent part of the department program. A prerequisite to the participation in clinical practicum is admission to degree candidacy and/or permission of the departmental faculty. To receive a master’s degree in Speech-Language Pathology, each student must demonstrate clinical competence as well as academic success. Clinical competence means:
1. The ability to identify individuals with communication handicaps;
2. The ability to perform comprehensive evaluation of individuals with communication handicaps;
3. The ability to effect positive changes in the communication skills of individuals with communication handicaps;
4. The ability to relate effectively to clients, their families and fellow professionals. Assessment of these competencies will be made by the faculty before recommending award of the degree.
**Master of Science in Speech-Language Pathology**

In order to earn the master of science degree in speech-language pathology, students must complete a minimum of 55 units with a Pacific cumulative grade point average of 3.0.

**15-Month Program**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
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</tr>
<tr>
<td>Physical Science Course (Physics or Chemistry)</td>
<td>4</td>
</tr>
<tr>
<td>Child Development</td>
<td>4</td>
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<tr>
<td>Statistics</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to Psychology or Sociology</td>
<td>4</td>
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<tr>
<td>SLPA 201 Professional Issues</td>
<td>1</td>
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<tr>
<td>SLPA 209 Language Disorders II</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 211 Language Disorders III</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 213 Advanced Audiology</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 215 Aural Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 217 Voice Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 219 Phonological Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 221 Motor Speech Disorders</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 225 Public School Issues</td>
<td>1</td>
</tr>
<tr>
<td>SLPA 229 Dysphagia/Swallowing Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 231 Augmentative/Alternative Communication</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 233 Cleft Palate and Syndromes</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 237 Managed Care</td>
<td>1</td>
</tr>
<tr>
<td>SLPA 245 Disorders of Fluency</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 285 Colloquium in Speech-Language Pathology</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 287A Internship in Speech &amp; Hearing</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 287B Fieldwork in Speech &amp; Hearing</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 288 Externship</td>
<td>9</td>
</tr>
<tr>
<td>Complete one or both of the following:</td>
<td>1-2</td>
</tr>
<tr>
<td>SLPA 289A Advanced Clinic</td>
<td></td>
</tr>
<tr>
<td>SLPA 289B Advanced Clinic</td>
<td></td>
</tr>
</tbody>
</table>

The student may elect to complete one of the following tracks:
- A. Traditional (Clinical Focus) – Fulfilled by coursework above
- B. SLPA 299 Thesis (See Graduate Director for further information)

**24-Month Program**

Complete all the requirements above in the 15-month program and the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPA 121 Speech and Language Development</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 123 Language Disorders I</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 125 Articulation and Phonology</td>
<td>3</td>
</tr>
<tr>
<td>Complete one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 127 Audiology</td>
<td></td>
</tr>
<tr>
<td>XPDH 122 Audiometry for Nurses</td>
<td></td>
</tr>
<tr>
<td>SLPA 129 Anatomy and Physiology of Speech</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 131 Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 137 Speech and Hearing Science</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 139 Diagnostics</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 143 Multicultural Populations</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 189B Intermediate Clinic</td>
<td>1</td>
</tr>
</tbody>
</table>

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**Course Offerings**

**Undergraduate**

See General Catalog for course descriptions

**SLPA 051. Introduction to Speech-Language Pathology** (3)

**SLPA 053. Sign Language I** (3)

**SLPA 055. Sign Language II** (3)

**SLPA 101. Clinical Methods I** (1)

**SLPA 103. Clinical Methods II** (1)

**SLPA 105. Clinical Methods III** (1)

**SLPA 107. Clinical Methods IV** (1)

**SLPA 110A/B. Clinical Observations** (1)

**SLPA 121. Speech and Language Development** (3)

**SLPA 123. Language Disorders I** (3)

**SLPA 125. Articulation and Phonology** (3)

**SLPA 127. Audiology** (3)

**SLPA 129. Anatomy and Physiology of Speech** (3)

**SLPA 131. Phonetics** (3)

**SLPA 137. Speech and Hearing Science** (3)

**SLPA 139. Diagnostics** (3)

**SLPA 143. Multicultural Populations** (3)

**SLPA 145. Disorders of Fluency** (3)

**SLPA 151. Behavior Modification for SLPs** (3)

**SLPA 181. Diagnostic Observation** (1)

**SLPA 183. Diagnostic Laboratory** (1)

**SLPA 189A. Beginning Clinic** (1)

**SLPA 189B. Intermediate Clinic** (1)

**SLPA 191. Independent Study** (1-4)

**SLPA 193. Special Topics** (2 or 4)

---

**Course Offerings**

**SLPA 201. Professional Issues** (1)

Seminar in ethical and legal issues, practice standards, employment and business considerations for the practice of speech-language pathology.

**SLPA 205. Adult Neurological Disorders** (3)

Neurologically based speech and language disorders in adults will be investigated. The understanding and management of aphasia and similar language disorders are included. **Prerequisite: graduate standing.**

**SLPA 209. Language Disorders II** (3)

Assessment and treatment of children and adolescents with language disorders in the language-for-learning and advanced language stages. An overview of language disorders in children and adolescents and the relationship between language and literacy are also components of this course.

**SLPA 209. Language Disorders II** (3)

Assessment and treatment of children and adolescents with language disorders in the prelinguistic, emerging, and developing language stages. Causation, prevention, and early intervention issues, as well as considerations for special populations, are also covered in this course. **Prerequisites: SLPA 209 or permission of the instructor.**

**SLPA 211. Language Disorders III** (3)

Assessment and treatment of children with language disorders in the prelinguistic, emerging, and developing language stages. Causation, prevention, and early intervention issues, as well as considerations for special populations, are also covered in this course. **Prerequisites: SLPA 209 or permission of the instructor.**

**SLPA 213. Advanced Audiology** (3)

Audiologic tests for site of lesion, and central auditory dysfunction; test procedures include advanced speech, and auditory brain stem response testing. **Prerequisite: graduate standing.**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPA 225</td>
<td>Public School Issues</td>
<td>1</td>
</tr>
<tr>
<td>SLPA 226</td>
<td>School Nursing Issues</td>
<td>1 or 2</td>
</tr>
<tr>
<td>SLPA 229</td>
<td>Dysphagia/Swallowing Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SLPA 231</td>
<td>Augmentative/Alternative Communication</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 233</td>
<td>Cleft Palate and Syndromes</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 237</td>
<td>Managed Care</td>
<td>1 or 2</td>
</tr>
<tr>
<td>SLPA 245</td>
<td>Disorders of Fluency</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 285</td>
<td>Colloquium in Speech-Language Pathology</td>
<td>2</td>
</tr>
<tr>
<td>SLPA 287</td>
<td>Internship in Speech &amp; Hearing</td>
<td>2-4</td>
</tr>
<tr>
<td>SLPA 288</td>
<td>Fieldwork in Speech &amp; Hearing</td>
<td>2</td>
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<tr>
<td>SLPA 289</td>
<td>Internship</td>
<td>1</td>
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<tr>
<td>SLPA 290</td>
<td>Independent Study</td>
<td>1-4</td>
</tr>
<tr>
<td>SLPA 291</td>
<td>Special Topics</td>
<td>2-4</td>
</tr>
<tr>
<td>SLPA 292</td>
<td>Graduate Research</td>
<td>1-4</td>
</tr>
<tr>
<td>SLPA 293</td>
<td>Thesis</td>
<td>2 or 4</td>
</tr>
</tbody>
</table>

### Thomas J. Long School of Pharmacy and Health Sciences Faculty

**Pharmaceutics and Medicinal Chemistry**

- **Xin Guo**, 2003, Assistant Professor of Pharmaceutical Chemistry, BS, School of Pharmacy, Shanghai Medical University, 1993; MS, Duquesne University, 1995; PhD, University of California, San Francisco, 2001.
- **Bhaskara R. Jasti**, 2001, Chair, Department of Pharmaceutics and Medicinal Chemistry, Associate Professor of Pharmaceutics, PhD, University of the Pacific, 1995.
- **Xiaolong Li**, 1993, Associate Dean, Graduate Education and Research, Professor of Pharmaceutics, BS, 1982; MS, Shanghai First Medical College, People's Republic of China, 1985; PhD, University of Utah, 1991.
- **Miki Park**, 2004, Assistant Professor, BS, University of Texas-Austin, 1997, PhD, University of California, San Francisco.
- **Wade Russo**, 2005, Assistant Professor of Medicinal Chemistry, BS, Cal Poly-San Luis Obispo, 1992; MS, University of California, Santa Barbara, 1995; PhD, 2000.
- **James A. Uchizono**, 2001, Associate Professor of Pharmaceutics, Director of Pre-Pharmacy and Pre-Health Programs, BS, University of California, Irvine, 1985; PharmD, University of California, San Francisco, 1990; PhD, 2001.

**Pharmacy Practice**

- **Eric G. Boyce**, 2006, Associate Dean, Academic Affairs and Professor of Pharmacy Practice, BS Pharm, 1975, PharmD, University of Utah, 1984.
- **Sian M. Cane-Lopez**, 1990, Vice Chair, Professor of Pharmacy Practice, AA, Yuba College, 1982; PharmD, University of the Pacific, 1985.
- **William Kehoe**, 1995, Chair, Department of Pharmacy Practice, Professor of Clinical Pharmacy and Psychology, BA, University of California, Los Angeles, 1975; MA, University of Pacific, 1996; PharmD, University of California, San Francisco, 1981.
- **Myo-Kyong Kim**, 2003, Assistant Professor of Pharmacy Practice, BS, Chung-Ang University, South Korea, 1994; MS, 1995; PharmD, University of Minnesota, 1998.

Kate O’Dell, 2004, Assistant Professor, PharmD, University of Michigan, 1999.

Phillip R. Oppenheimer, 1997, Dean, School of Pharmacy and Health Sciences, Professor of Pharmacy Practice, PharmD, University of California, San Francisco, 1972.

Rajul Patel, 1999, Assistant Professor of Pharmacy Practice, BS, Johns Hopkins University, 1994; PharmD, University of the Pacific, 2001; PhD, 2007.

Marcus Raynan, 2000, Associate Professor of Pharmacy Practice, PharmD, University of the Pacific, 1994.

Jessica Song, 2001, Assistant Professor of Pharmacy Practice, BS, University of Washington, Seattle, 1988; MA Johns Hopkins University, Maryland, 1993; PharmD, University of California, San Francisco School of Pharmacy, 1998.

Paul J. Williams, 1982, Professor of Pharmacy Practice, PharmD, University of the Pacific, 1974; MS, University of North Carolina, 1980.

Joseph Woelfel, 2006, Assistant Professor of Pharmacy Practice, BS, University of the Pacific, 1970; MS, 1972; PharmD, 1978.

**Physical Therapy**

Sandra Bellamy, 2002, Assistant Professor, BA, University of the Pacific, 1997; MSPT, University of the Pacific, 1999; DPT, University of the Pacific, 2003.

Todd L. Davenport, 2007, Assistant Professor, BS, Willamette University, Salem, (OR), 1998; DPT University of Southern California, 2002.

Tamara L. Little, 2001, Associate Professor, BS, Tennessee State University, 1993; MS Ola Grimsby Institute, 1997; DMT, Ola Grimsby Institute, Inc., San Diego, CA 2000; EdD, University of the Pacific, 2008.

Jim K. Mansoor, 1992, Professor, BA, California State University, Sacramento, 1980; MS, 1986; PhD, University of California, Davis, 1996.

Katrin Mattern-Baxter, 2007, Assistant Professor, AB, Freiburg University, Germany, 1985; DPT A.T. Still University, Arizona, 2007.

Cathy Peterson, 2002, Chair and Associate Professor, BS, University of Iowa, 1989; MSPT, Des Moines University, 1991; EdD, University of San Francisco, 2002.

Kathleen Salamon, 2006, Assistant Professor, BA, University of California, Berkeley 1965; Certificate in Physical Therapy, Children’s Hospital School of Physical Therapy, Los Angeles, 1970; MPA California State University, Chico, 1999; DPT Clarke College, Dubuque, (IA), 2006.

Christine R. Wilson, 2003, Associate Professor, BS, State University of New York-Downstate Medical Center, 1978; MA, Columbia University, 1983; PhD, McGill University, 1995.

**Physiology and Pharmacology**

James W. Blankenship, 1977, Professor, BS, Texas A&M University, 1965; MS, 1967; PhD, University of Utah, 1972.

Jesika Faridi, 2004, Assistant Professor, BS, University of California, Davis, 1995; PhD, Loma Linda University, 2000.


John C. Livesey, 1994, Associate Professor of Physiology and Pharmacology, BS, Stanford University, 1977; PhD, University of Minnesota, 1982.

Roshanak Rahimian, 2001, Associate Professor of Physiology and Pharmacology, PharmD, Tehran University of Medical Sciences, Iran, 1988; MSc, University of Ottawa, Canada, 1995; PhD, University of British Columbia, Canada, 1998.

Timothy J. Smith, 1993, Chairman, Department of Physiology and Pharmacology, Professor of Physiology and Pharmacology, BS, Purdue University, 1978; PhD, University of Minnesota, 1983.

David W. Thomas, 2000, Pharmaceutical Sciences, Associate Professor of Physiology and Pharmacology, BS, California State University, Sacramento, 1985; MS, 1989; PhD, University of California, Davis, 1996.

**Speech-Language Pathology**

Jill Duthie, 2006, Assistant Professor, BA, University of California Santa Barbara, 1972; MA, California State University Northridge, 1976; PhD, University of Oregon, 2005.

Paul T. Fogle, 1979, Associate Professor, BA, California State University, Long Beach, 1970; MA, 1971; PhD, University of Iowa, 1976.

Robert E. Hanyak, 1985, Chair and Associate Professor, BA, University of the Pacific, 1979; MS, University of Utah, 1981; AuD, University of Florida, 2005.

Heidi Germino, 2007, Director; Scottish Rite Center, BA, University of the Pacific, 1990; MA, 1992.

Simalee Smith-Stubblefield, 1983, Associate Professor, BS, University of Wyoming, 1976; MA, University of the Pacific, 1982.

Michael Susca, 2001, Associate Professor, BS, University of California, Santa Barbara, 1975; MS, University of New Mexico, 1977; PhD, University of Nebraska-Lincoln, 2001.

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Assistant Dean .......................................................... David M. Chase
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Associate Dean, Undergraduate Programs ........................ Ray Sylvester
Associate Dean, Graduate Programs .............................. Cynthia Eakin
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Assistant Dean .......................................................... Gary R. Martin
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Director, Internal Audit ................................................ Winnie Ravinius
Director, Support Services ........................................... Scott Heaton
Purchasing Manager ..................................................... Ronda Marr
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Dining Services ......................................................... John Carvana
Compliance .................................................................. Carol Brodie
Community Engagement .............................................. John Carvana
Dining Services ......................................................... Steven Jacobson
Dining Services ......................................................... John Carvana

Office of Research and Graduate Studies

Pre-Award Manager, Research Administration and Compliance .......... Carol Brodie
Director, Graduate School Operations .................................. Cerena M. Sweetland-Gil
# Graduate Calendar 2009-2010

## Fall Semester 2009
- **International Student Orientation** ............. August 18
- **Orientation for New Teaching Assistants** ....... August 19 (9 am – noon)
- **Orientation for New Graduate Students** ...... August 20 (9 am – 11 am)
- **Registration** ........................................... August 24 – September 4
- **Classes Begin (3 p.m. start time)** ................. August 24
- **Deadline to file Application for Graduation Form** (December 2009 Graduates) .................. September 4
- **Last Day to Add Classes** ........................... September 4
- **Last Day for Pass/No Credit or Letter Grade Option** ........ September 4
- **Labor Day Holiday** .................................... September 7
- **Last Day to Drop Classes without a “W” grade** September 18
- **Fall Student Break** ....................................... October 22
- **Last Day for Pro-Rated Refund** .................... October 19
- **Last Day to Withdraw** ................................. October 30
- **Early Registration for Spring 2010 for continuing students** ............................................ October 30-November 13
- **Deadline for Thesis/Dissertation Review by the Graduate School (December 2009 Graduates)** ................. November 13
- **Thanksgiving Vacation** .............................. November 25-27
- **Classes Resume** ........................................ November 30
- **Deadline for Submission of Thesis/Dissertation to Dean (December 2009 Graduates)** .............. December 4
- **Classes End** .............................................. December 11
- **Final Examination Period** ......................... December 14-18

## Spring Semester 2010
- **Deadline to file Application for Graduation Form** (May 2010 Graduates) ...................... December 2, 2009
- **Deadline to file Petition to Participate in Commencement Ceremonies (May 2010 Graduates)** ........ December 2, 2009
- **International Student Orientation** .................. January 7
- **New Student Registration** ........................... January 8
- **Classes Begin** ............................................. January 11
- **Registration Reopens** ................................. January 11
- **Martin Luther King Jr. Holiday** ...................... January 18
- **Last Day to Add Classes** ............................. January 22
- **Last Day for Pass/No Credit or Letter Grade Option** ........ January 22
- **Last Day to Drop Classes without a “W” grade** .................. February 8
- **President’s Day Holiday** ............................. February 15
- **Last Day for Pro-Rated Refund** .................... March 9
- **Spring Break** ........................................... March 8-12
- **Last Day to Withdraw** ................................. March 26
- **Deadline for Masters Written/Oral Exams and Thesis or Dissertation Defense (May 2010 Graduates)** ............. March 29
- **Study Day** .................................................. April 5
- **Classes Resume** ......................................... April 6
- **Early Registration for Fall 2010 for continuing students** ................................................. April 14-28
- **Deadline for Thesis/Dissertation Review by the Graduate School (May 2010 Graduates)** ................. April 12
- **Deadline for Submission of Thesis or Dissertation to Dean (May 2010 Graduates)** ................. May 3
- **Classes End** .............................................. May 4
- **Study Day** .................................................. May 5
- **Final Examination Period** ......................... May 6, 7, 10 - 12
- **Commencement Weekend** .......................... May 15

## Summer Sessions 2010
- **Deadline to file Application for Graduation Form** (August 2010 Graduates) ...................... April 2
- **Summer Session I (five weeks)** ..................... May 17-June 18
- **Summer Session II (five weeks)** .................. June 21-July 23
- **Summer Session III (four weeks)** ................. July 26-August 20
- **Deadline for Masters Written/Oral Exams and Thesis or Dissertation Defense (August 2010 Graduates)** ........ June 18
- **Deadline for Thesis or Dissertation Review by the Graduate School (August 2010 Graduates)** ........ July 2
- **Deadline for Submission of Thesis or Dissertation to Dean (August 2010 Graduates)** ........ July 17
CAMPUS MAP LEGEND

Campus Buildings and Facilities

Alex G. Spanos Center (I,2)
Albright Auditorium (Wendell Phillips Center: H,6)
Alpha Phi (E,7)
Amos Alonzo Stagg Memorial Stadium (G,1)
Anderson Hall (F,7)
  1st floor: President’s Office, Presidents Room, Regents Dining Room, Engineering Lab, Pacificard office
  2nd floor: Provost’s Office, Engineering
Anderson Lawn (F,7)
Aquatics Center (H,2)
Art Center, Jeannette Powell (K,3)
ASUOP Office (DeRosa University Center: E,6)
Atchley Clock Tower (I,8)
Bannister Hall (F,8)
  1st floor: SUCCESS, Community Involvement Program, Education Resource Center, Supportive and Disabled Services
  2nd floor: Residential Life & Housing
Baun Hall (F,7)
Baun Fitness Center (E,8)
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