Pacific Union College
General Catalog

2010-2012

129th-130th Academic Years

Mailing address:
One Angwin Avenue
Angwin, CA 94508-9707
(707) 965-6311

Pacific Union College is an equal opportunity educational institution.
Pacific Union College

Is accredited by:
The Accreditation Association of Seventh-day Adventist Schools, Colleges and Universities
The Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (985 Atlantic Ave., Ste. 100, Alameda, CA 94501; (510) 748-9001)
State of California Department of Education

Offers programs accredited by:
Commission on Teacher Credentialing
Council on Social Work Education (Baccalaureate)
International Assembly for Collegiate Business Education
National Association of Schools of Music (Baccalaureate)
National League for Nursing Accrediting Commission (Baccalaureate and Associate Degree Programs)

Is a member of:
American Association of Collegiate Registrars and Admissions Officers
American Association of Presidents of Independent Colleges and Universities
Association of American Colleges and Universities
Association of Governing Boards of Universities and Colleges
Association of Independent California Colleges and Universities
California Council on the Education of Teachers
College Placement Council
Council of Independent Colleges
Independent Colleges of Northern California
National Association of Independent Colleges and Universities
National League for Nursing

North American Association of Summer Sessions
Western Association of Graduate Schools

Is approved by:
The Attorney General of the United States for nonimmigrant students
California Board of Registered Nursing
California Commission on Teacher Credentialing

Equal Opportunity Commitment
Pacific Union College is committed to equal opportunity for qualified men and women of any handicap, race, color, national or ethnic origin. It extends to them all the rights, privileges, programs and activities generally accorded or made available to members of the college community. It does not discriminate against qualified persons on the basis of handicap, sex, race, color, national or ethnic origin in administration of its educational and admissions policies, financial affairs, employment programs, student life and services, or any other college-administered program.

Accreditation documents may be viewed in the Office of the Vice President for Academic Administration.
Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.
Areas of Study

* Denotes an Emphasis or Concentration

Baccalaureate Degree Programs (see pp. 22-23)
Art (Fine), pp. 181, 182
Aviation, p. 47
Biology, pp. 51, 52
Biomathematics, p. 130
Biophysics, p. 160
Business Administration, pp. 60, 61, 62, 63
* Accounting, p. 60
* Finance, p. 60
* General Business, p. 60
* Information Systems, p. 61
* International Business, p. 61
* Management, p. 61
* Marketing, p. 62
Chemistry, pp. 75, 76
* Biochemistry, p. 76
Communication, pp. 79, 80
* Communication Studies, p. 79
* Journalism, p. 80
* Public Relations, p. 80
Computer Science, pp. 85, 86
Early Childhood Education, p. 90
Engineering, p. 161 (Affiliated Program)
English, pp. 111-112
* British and American Literature, p. 112
* Writing, p. 112
* Drama, p. 112
* Teaching English to Speakers of Other Languages (TESOL), p. 112
* English Education, p. 112
Environmental Studies, p. 52
Exercise Science, p. 118
Film and Television Production, p. 183
Graphic Design, pp. 182, 183
* Design, p. 182
* Illustration, p. 183
* Web, p. 183
History, pp. 123, 124
* American History p. 123
* European History p. 124
Intercultural Communication, p. 80, 81
* French, p. 81
* German, p. 81
* Italian, p. 81
* Spanish, p. 81
Liberal Studies, p. 92
Mathematics, p. 129
Music, pp. 140, 141, 142
* Music Education, p. 140
* Music Performance, p. 141
Natural Science, pp. 53, 76, 160
* Biology, p. 53
* Chemistry, p. 76
* Physics, p. 160
Nursing, pp. 155, 156
Photography, p. 183
Physical Education, p. 117
* Teacher Education, p. 117
Physics, p. 159
Psychology, pp. 165, 166
Religion, pp. 174, 175
* Biblical Studies, p. 174
* Health Professions, p. 175
* Theology and Christian History, p. 175
Social Studies, p. 124
Social Work, p. 166
Spanish, p. 135
Theology, p. 173

Baccalaureate Degree-Completion Programs (see pp. 22-23, 64, 95)
Early Childhood Education, p. 95
Management, p. 64

Associate Degree Programs (see p. 22)
Aviation, p. 48
Business Administration, p. 63
Early Childhood Education, p. 90
Emergency Services, p. 109

Film & Theater Studies
* Narrative/Writing, pp. 113, 185
* Performance, pp. 113, 185
* Technical, pp. 113, 185

Graphic Design, p. 184
Music, p. 142
Nursing, pp. 149, 152
Photography, p. 184

Credential Programs (see p. 22)
California Multiple Subject (Elementary) Teaching Credential, p. 90
California Single Subject (Secondary) Teaching Credential, p. 90
Clear Credential Program, p. 92
SDA Elementary Teaching Credential, p. 90
SDA Secondary Teaching Credential, p. 90

Master of Education Degree Program (see p. 23, 94)
Education, p. 95

Certificate (see p. 112)
Teaching English to Speakers of Other Languages (TESOL), p. 112

Minors (see p. 23)
Art, p. 184
Art History, p. 185
Aviation, p. 48
Biblical Languages, p. 175
Biology, p. 53
Business Administration, p. 64
Chemistry, p. 77
Communication, p. 81
Computer Science, p. 86
English, p. 113
Environment Studies, p. 53
French, p. 136
German, p. 136
History, p. 124
Italian, p. 136
Mathematics, p. 131
Physical Education, p. 118
Physics, p. 161
Psychology, p. 167
Public Relations/Journalism, p. 81
Religion, p. 175
Spanish, p. 136
Writing, p. 113

Preprofessional Curricula (see p. 21)
Art Therapy
Chiropractic
Clinical Laboratory Science
Communication Sciences & Disorders
Cytotechnology
Dental Hygiene
Dentistry
Health Information Administration
Law
Medical Radiography
Medicine
Nutrition & Dietetics
Occupational Therapy
Optometry
Osteopathy
Pharmacy
Physical Therapy
Physical Therapy Assisting
Physician’s Assistant
Public Health
Radiation Sciences
Respiratory Care
Veterinary Medicine
Pacific Union College, a distinctive Seventh-day Adventist college in the liberal arts tradition, is characterized by the intentional integration of faith and learning. As such, the College’s curriculum is designed to provide its students with the type of essential learning outcomes that all students will need to both survive and thrive in the twenty-first century. The Association of American Colleges and Universities, the leading association concerned with the quality, vitality, and public standing of undergraduate liberal arts education, defines these essential learning outcomes:

• Knowledge of human cultures and the physical and natural world through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts, focused by engagement with big questions, both contemporary and enduring.

• Intellectual and practical skills, including inquiry and analysis, critical and creative thinking, written and oral communication, quantitative literacy, information literacy, teamwork and problem solving, practiced extensively across the curriculum in the context of progressively more challenging problems, projects, and standards for performance.

• Personal and social responsibility, including civic knowledge and engagement – local and global, intercultural knowledge and competence, ethical reasoning and action, foundations and skills for lifelong learning, anchored through active involvement with diverse communities and real-world challenges.

• Integrative and applied learning, including synthesis and advanced accomplishment, across general and specialized studies demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems.*

At PUC, however, all of these exciting essential learning outcomes are mediated through the teaching of caring and committed Christian professors who present their disciplines through the lens of faith. Furthermore, this profound intellectual and spiritual journey takes place in a magnificent natural environment designed to draw our students even closer to a loving Creator. So, welcome to Pacific Union College, a very special place that you will find to be “academically outstanding and spiritually authentic.

Let the learning begin!

* Aim High and Make Excellence Inclusive
Strategic Plan, 2008-2012
Association of American Colleges and Universities, p. 3.
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### 2010-2011

**Fall Quarter (2010)**
- W-Su September 15-19: New Student Orientation
- M 20: Instruction begins
- M 27: Last day to enter or delete courses
- W-S October 6-9: Fall Revival
- F-Su 15-17: Parents Weekend
- M November 15: Last day to withdraw from courses
- F 19: Thanksgiving recess begins (4:00 p.m.)
- Su 28: Thanksgiving recess ends (10:00 p.m.)
- M-Th December 6-9: Final examinations

**Winter Quarter (2011)**
- Su January 2: New Student Orientation
- M 3: Instruction begins
- M 10: Last day to enter or delete courses
- M 17: Martin Luther King Day; no classes/labs
- W-S 19-22: Winter Revival
- F February 4: Mid-quarter vacation; no classes/labs
- M 28: Last day to withdraw from courses
- M-Th March 14-17: Final examinations

**Spring Quarter (2011)**
- Su March 27: New Student Orientation
- M 28: Instruction begins
- M 9: Last day to enter or delete courses
- T 10: 2011-12 registration begins/Seniors
- F-Su 15-17: Alumni Weekend
- M 18: 2011-12 registration begins/All students
- M-S May 2-7: Week of Prayer
- M 23: Last day to withdraw from courses
- M 30: Memorial Day; no classes/labs
- M-Th June 6-9: Final examinations
- F-Su 10-12: Commencement

**Summer Quarter (2011)**
- M June 13: Instruction begins
- M July 4: Independence Day; no classes/labs
- Th August 11: End of Summer Quarter

### 2011-2012

**Fall Quarter (2011)**
- W-Su September 21-25: New Student Orientation
- M 26: Instruction begins
- M October 3: Last day to enter or delete courses
- W-S 12-15: Fall Revival
- F-Su 21-23: Parents Weekend
- F November 18: Thanksgiving recess begins (4:00 p.m.)
- Su 27: Thanksgiving recess ends (10:00 p.m.)
- M 28: Last day to withdraw from courses
- M-Th December 12-15: Final examinations

**Winter Quarter (2012)**
- Su January 8: New Student Orientation
- M 9: Instruction begins
- M 16: Martin Luther King Day; no classes/labs
- T 17: Last day to enter or delete courses
- W-S 25-28: Winter Revival
- F February 10: Mid-quarter vacation; no classes/labs
- M March 5: Last day to withdraw from courses
- M-Th March 19-22: Final examinations

**Spring Quarter (2012)**
- Su April 1: New Student Orientation
- M 2: Instruction begins
- M 9: Last day to enter or delete courses
- T 10: 2012-13 registration begins/Seniors
- F-Su 20-22: Alumni Weekend
- M 23: 2012-13 registration begins/All students
- M-S May 7-12: Week of Prayer
- M 28: Memorial Day observed; no classes/labs
- T 29: Last day to withdraw from courses
- M-Th June 11-14: Final examinations
- F-Su 15-17: Commencement

**Summer Quarter (2012)**
- M June 18: Instruction begins
- W July 4: Independence Day; no classes/labs
- Th August 16: End of Summer Quarter
Using this Catalog

You should become acquainted with this catalog before you begin your studies at Pacific Union College and should consult it throughout your college career. It is an important resource which describes the policies you must follow and the requirements you must meet in order to achieve your academic goals.

You should use this catalog to find information regarding the academic program that you have selected. Even if you have not yet decided on a major, you should become familiar with the general education program and plan a schedule of courses based on its requirements. Though an academic advisor is provided to offer guidance and advice, you have the ultimate responsibility for meeting the requirements of the program you choose.

Every effort has been made to ensure that the information in this catalog is correct at the time of publication. Altered circumstances and policy changes, however, may affect the accuracy of the information it contains. Consequently, should any regulations or program requirements be in conflict with information in this catalog, current regulations and requirements govern.

The catalog presents only an overview of college policies and regulations. Other existing requirements are equally binding, though not published in this catalog.
History

The Seventh-day Adventist Church has a heritage of strong commitment to education. Its members expressed this commitment during the late 1800s and early 1900s by establishing schools and colleges near major population centers across North America. In 1874 the Church founded its first college in Battle Creek, Michigan. A few years later the rapidly growing California church began looking for a good location for a school in Northern California.

In the vineyards of Healdsburg, fifteen miles north of Santa Rosa, the searchers found an ideal property. Total cost of the imposing brick structure and its furnishings, just off Healdsburg’s main street, was thirty gold coins. The new school, to which Pacific Union College traces its roots, opened April 11, 1882, with two teachers and twenty-six students. In 1899, to reflect more accurately the school’s purpose and its expanding curriculum, the school’s name was changed to Healdsburg College; it became Pacific Union College in 1906.

When the Angwin Resort on Howell Mountain, above Napa Valley’s St. Helena, became available, the College Board sensed the opportunity to secure more adequate space for the growing school and the associated businesses that had been established to provide student employment. They bought the buildings and land for $60,000. On September 29, 1909, Pacific Union College was dedicated at its present Angwin site. The resort’s hotel, bowling alleys, and cottages became dormitories, classrooms, and faculty homes. Students and faculty worked together building other structures, often using lumber harvested from college property.

The Campus

Today the institution occupies a 200-acre main campus surrounded by approximately 1800 acres of college-owned agricultural and forested land. The school’s estate includes 60 major structures as well as faculty homes, necessary utilities, and other buildings. Fifteen academic buildings house the library, classrooms, laboratories, and offices. West Hall, the oldest, dates from 1917. The newest, Chan Shun Hall, is a modern science complex, in use since 1986. It includes 55,000 square feet of classroom, laboratory, and office space. Four women’s residence halls can accommodate approximately 700 students; three men’s halls, approximately 600.

The Area

The college is located on Rancho La Jota, whose title is based on an old Mexican land grant. It is surrounded by places of historic significance in the development of the American West: Sonoma, the northernmost Spanish mission in California and the scene of the Bear Flag Revolution; Fort Ross, the southernmost Russian outpost on the continent; Sutter’s Fort and the California gold diggings; and the routes of early explorers, traders, and immigrant groups.

Howell Mountain, the school’s site, is a junction point for the life zones of north and south, coast and interior, and is recognized as an unusually rich area for studying plant and animal life. About one hundred miles from the campus, at Albion in Mendocino County, the college owns fourteen acres where it operates the Albion Field Station. This primitive region, where the Albion River empties into the Pacific Ocean, presents unusual opportunities to study marine biology and botany.

The San Francisco, Oakland, and Sacramento International Airports are within a two-hour drive from the campus. Bus service from St. Helena to Napa, Berkeley, Oakland, San Francisco, and other cities brings the cultural opportunities of large urban communities within reach of the student body.
Pacific Union College is a Christian liberal arts college sponsored by the Seventh-day Adventist Church. Its mission is to prepare its students for fellowship with God and service to Him through service to humanity. To achieve its mission, the college offers an excellent education, informed by a distinctive Seventh-day Adventist Christian point of view, to all who appreciate the school’s unique values and its integration of faith and learning. Paying special attention to Christianity’s role in civilization, the college considers liberal arts study with a Christian perspective to be uniquely valuable not only for its own sake, but also as a basis for career training and professional life.

Christian Liberal Education
Liberal arts education with a Christian perspective prepares one to live in responsible human freedom. Such study promotes a balanced self-development. It frees one from the confines of personal experience and immediate interests and encourages entering with understanding into the experience of others. It advocates at once a tolerance of differing views, the respect those views deserve, and vigorous engagement with them. It fosters those lifelong habits of curiosity and serious inquiry that sustain the growth of the human spirit. It develops creative self-expression, including the ability to speak and write articulately. It provides breadth and flexibility for coping and adapting in a changing world.

The Major
As an essential part of their liberal arts education, students choose majors for specialized study in harmony with their personal interests and as preparation for successful entry into their chosen careers or into graduate study. The college regularly reviews all programs to maintain their quality and to ensure that they respond to current student demand and to the changing needs of the Church and the larger community.

General Education Core
The structured general-education core gives scope of knowledge. The liberal arts emphasis in both the major and the general-education core promotes quality of understanding. The graduate should therefore have a growing knowledge and an enlightened appreciation of the major areas and modes of learning. A personally appropriated Christian view of the origin and purpose of human life should give this knowledge coherence for each student.

Independent, Critical Thinking
Beyond giving information, the disciplines of the liberal arts create the environment for students to develop their abilities to think analytically, critically, and independently. Students are challenged to find original solutions for a variety of problems. Such study teaches not only the different modes of inquiry and their valid uses, but also their limitations.

Faith and Learning
In a church-related college, tensions may sometimes occur between the claims of a religious belief system and those of academic pursuits. But because faith without thought is not an acceptable alternative to thought without faith, such unresolved tensions should never force the sacrifice of one to protect the other. Ideally, they should energize creative study of the valid claims of both faith and learning and of their interrelationships. A foundation of knowledge and understanding strengthens faith. Because the challenge of resolving ambiguities and uncertainties often produces the most valuable new insights, such study should
both preserve intellectual honesty and enhance a faith worth holding. Knowing truth does indeed bring freedom.

**Responsible Freedom**

Students are urged through their total college experience to evaluate their own convictions and to infuse them with enduring cultural values and essential Christian principles. They are invited to recognize that changing times require a fresh statement of this heritage, but not its compromise. They are challenged to blend these timeless values and principles in a distinctive lifestyle that includes responding helpfully to human need, wherever encountered, in a natural expression of their own Christian calling. As Jesus showed, the finest incarnation of responsible freedom is in compassionate human service.

**The Mission Realized**

The mission of the college is therefore partly realized when its students leave the campus well prepared for advanced study and for selfless service to humanity in productive careers marked by uncompromising personal integrity. The mission is more perfectly realized when these same students are set on their way free to approach their potential as persons restored in the image of God and as agents of His grace in the world.
**Orientation for New Students**

Prior to fall quarter, the college provides an orientation program to acquaint new students with various aspects of campus life. Activities include a weekend retreat, familiarization with the use of campus facilities and services, and social gatherings to provide opportunity for becoming acquainted with other students and with faculty members.

Prior to winter and spring quarters, an orientation information session is held to acquaint new and transfer students with various aspects of campus life.

**Student Housing**

As a Pacific Union College student, you must register your housing in the Student Services Office. Housing policies also apply if you are enrolled in summer sessions or working full or part time on campus during summer sessions.

**Residence Halls**

Pacific Union College affirms the values to be gained from being primarily a residential college. If you are an unmarried student age 22 or younger who accepts admission to the college, you agree to live in a residence hall—unless you apply for and are granted an exception.

Residence halls are available to students currently enrolled at Pacific Union College who meet eligibility requirements. If you are age 24 or older you may live in a residence hall on a “space-available” basis upon application.

**Off-Campus Housing**

If you are an unmarried student in good standing, your request for off-campus housing may be approved if you are:

1. age 23 or older,
2. age 22 and will be turning 23 during the current academic year,
3. a fifth-year senior (Student Missionary and Taskforce years may count as one year),
4. a holder of an earned bachelor’s degree,
5. a single parent,
6. divorced or widowed,
7. living with parents or other immediate relatives (grandparents, aunts, uncles, siblings at least 25 years old) in their primary residence,
8. a student with significant financial need and are offered room and board at substantial savings (you are required to live in the host family’s home), or
9. a part-time student enrolled for six or fewer credits.

Requests for off-campus housing are considered and acted upon annually. You should secure approval before signing a lease for off-campus housing. Unmarried community students are not to live in “coed” groups.

**Dining**

Bon Appétit at PUC Café provides a selective menu and a variety of services to satisfy the needs and tastes of a cosmopolitan campus community. The college provides a lacto-ovo-vegetarian menu on the à la carte plan. If you have any special dietary needs, you should visit the General Manager to make any necessary special arrangements.

If you live in a residence hall, you are expected to take your meals in the PUC Café and are charged a minimum fee each quarter. For further information, see the section entitled “Financial Information” in this catalog.

Bon Appétit caters for small-group activities, picnics, and banquets. Small groups and organizations may reserve four auxiliary dining rooms in the Dining Commons (all food is to be prepared by Bon Appétit). Reservations are made at the Bon Appétit office.

**Telephone Information**

One telephone line is provided in each residence hall room for on-campus calling. You are to provide your own telephone—either touch-tone or pulse. Optional local calling and direct-dial long distance calling are available through the Telecommunications Department located in ITSS. These services operate on a prepaid system that is accessed via a Personal Security Code (PSC) given to you upon request.
To arrange for off-campus telephone service, you request and obtain your PSC from the Telecommunications Department and, at the Cashier’s Office, make a deposit of $5.00 or more on your PSC account. When the deposit is exhausted, local and long-distance calls are discontinued until you make a further deposit. You are not charged for calls to toll-free numbers (such as calling card numbers), but a PSC with a credit balance is required to place the call.

Telephone service does not permit you to accept collect calls or order any “outside” telephone service that is billed to your dorm room telephone number. If you do accept a collect call, you must pay for the call plus a $500.00 per-call service charge. Also, local telephone company features, such as “Call Waiting”, “Caller ID”, etc., are not compatible with college telephone equipment. Any damage or misuse of the telephone system or equipment will result in a $500.00 fee per violation.

Billing for collect calls and/or inappropriate telephone behavior will be added to your college account.

**Computer Resources**

It is your responsibility to be aware of computer usage policies on campus prior to using the computing resources that are provided by the college. For policies and additional information, please refer to the web site located at [www.puc.edu/campus-services/itss/current-students](https://www.puc.edu/campus-services/itss/current-students).

The computing resources provided by Pacific Union College are to be used for academic purposes, although incidental and occasional personal use of the internet is permitted. Since your internet usage can be accessed by Pacific Union College personnel without prior notice, you should not use the system in any way that you would not want to be published.

It is prohibited to use these systems for soliciting or advertising for commercial ventures, religious or personal causes, or outside organizations, or other similar nonacademic solicitations.

Any downloading, distributing, copying, or sharing of copyrighted or proprietary material is illegal without the written authorization of the owner of the rights (17USC 204(a)). If you are sharing, downloading, or receiving copyrighted materials such as music, video, television programs, or software without written authorization of the owner of the rights, you must immediately stop in order to avoid legal penalties including fines of thousands of dollars from the RIAA and MPAA. Please note that downloading copyrighted materials is not anonymous and your computer can be identified.

Pacific Union College reserves the right to access and disclose all records of internet usage sent over its system as necessary. If the college discovers that you are misusing the network, you may be subject to disciplinary action, including, but not limited to, termination of computer privileges.

**Health Services**

Health Services is a health care provider offering a wide range of services to the campus population. Health Services offers direct medical care for common medical conditions and referrals to outside medical providers/specialists when needed. You must provide proof of primary billable insurance. For additional information, please refer to the web site located at [www.puc.edu/healthservices](https://www.puc.edu/healthservices).

**Library Services**

The W. E. Nelson Memorial Library provides the information resources and technology for the research needs of students and faculty. Library holdings include over 150,000 books and more than 57,000 DVDs, CDs, music scores, and other media material. The library subscribes to over 33,000 electronic journals and 639 print periodicals. The Heritage Room in the library houses the Pitcairn Islands Study Center, one of the world’s largest collections of material about the Pitcairn Islands, as well as the College Archives, the Maxwell Collection, the Walter Utt Collection, the Veltman Collection, and several other collections from individuals who have played prominent roles in the Seventh-day Adventist Church and/or Pacific Union College.

**Teaching and Learning Center**

The Teaching and Learning Center (TLC) is dedicated to helping you transition from high school to college. The Center also provides a variety of academic support services to help you develop your abilities for a successful college experience. The TLC services include free tutoring and mentoring; opportunities to develop note-taking skills, study skills, and other effective learning strategies; programs to enhance student persistence; accommodation for learning disabilities; and academic advising for undeclared students.

**Disability Support Services**

Pacific Union College complies with Section 504 of the 1973 Rehabilitation Act, the Americans with Disabilities Act of 1990, and the applicable state and local regulations regarding students with disabilities. The college is committed to promoting and achieving equitable learning opportunities and participation for students with documented disabilities.

The Disabilities Coordinator at the Teaching and Learning Center organizes the support services for students with documented disabilities. It is your re-
sponsibility to provide current documentation (no more than three years old) of your disability.

If you have formal documentation of a disability and are enrolled at Pacific Union College, you are responsible for notifying the Disabilities Coordinator for academic accommodation.

You are not eligible to receive disability accommodations from the college if you do not provide valid disability documentation, self-prescribe your condition, or have not requested accommodation.

**Student Veteran Services**

As a Yellow-Ribbon school, Pacific Union College enthusiastically welcomes student veterans as they enter or return to college.

The Veterans Services Coordinator at the Teaching and Learning Center provides college orientation, advocacy, and problem-solving strategies for student veterans’ unique needs. If you are a veteran student, you are encouraged to contact the Veterans Services Coordinator so that you may learn about the resources available to you.

A Student Veterans’ Club is available to support student veterans and their families. The club focuses on social activities, community service, and education. The club also provides resources about veteran needs and services. Additionally, a Veteran and Family Support Group is available to assist in the transition to Pacific Union College, provide information, and refer participants to community and veteran resources.

Information regarding credit for military training and GI Bill benefits may be found in the sections of this catalog entitled “Academic Information and Policies” and “Financial Information”.

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**Career and Counseling Center**

The Career and Counseling Center is an important resource for personal and academic success. You may schedule appointments for personal and career counseling. Referral service to other professionals in the immediate vicinity is also available through the Center.

The Career and Counseling Center provides the following services:

**Counseling Services**

Professional, confidential support is available on an individual, couple, family, or group basis. Counselors want to help you deal with any anxiety, depression, stress, situational difficulties, or other personal problems that might interfere with your academic performance or seriously compromise your quality of life.

**Testing Services**

The Career and Counseling Center is an official non-Saturday test site for college and graduate school admissions. Test application forms, national testing dates and deadlines are available.

Additionally, the center coordinates CLEP and DSST examinations and other institution-based examinations.

**Career Services**

Career testing and personality testing are available through the Career and Counseling Center. Career counseling is also available so that you may explore career options, self-assessment, skills, interests, values, goals, and job-seeking strategies. Additionally, the Center offers assistance in writing résumés, application letters, and developing effective interview skills.

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**Internship and Graduate School Exploration**

The Career and Counseling Center coordinates on-campus resources for internship and graduate school exploration. Representatives from professional schools, businesses, industries, technological firms, human services, educational organizations, and government agencies visit Pacific Union College to attend campus events and recruit students. Interviews are conducted on campus, usually in the Career and Counseling Center.

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**Student Life**

Pacific Union College is an independent, coeducational institution, operated in harmony with the beliefs, practices, and educational philosophy of the Seventh-day Adventist Church. In keeping with the special character of the college, you are encouraged to relate your academic study to your understanding of the Christian faith.

The college emphasizes the development of sound Christian character and makes a continuous effort to maintain an atmosphere that encourages commitment and growth in a personal relationship with Jesus Christ. Thus faith and learning combine to prepare you for a life of Christian service.

**College Standards for Student Conduct**

In harmony with the purposes of the college, you are expected to consistently avoid all forms of personal conduct that are scholastically deleterious or spiritually or morally destructive. You are expected to refrain from the use of drugs, alcoholic beverages, tobacco, and improper sexual conduct, and to respect the facilities of the college and the property of others.
Applicants unwilling to pledge compliance with these standards will not knowingly be accepted or retained at Pacific Union College. If you find yourself out of harmony with these standards and social policies, or your conduct and attitude show evidence of a negative or noncooperative influence, you may expect dismissal from the college.

The Student Services Office publishes the Student Handbook (www.puc.edu/studenthandbook/), which presents in detail the standards of conduct referred to above. Application to and enrollment in the college are viewed as evidence that you have chosen to abide by the practices and regulations that appear in official college publications.

**Religious Life**

In keeping with the special character of this Christian college, you are expected to attend a specified number of worship and vesper services, all of which are planned to stimulate growth and maturity in Christian living.

You may participate in a variety of other religious activities: small group meetings, cell groups, the Student Missionary program, short-term mission opportunities, off- and on-campus service groups, and retreats. These activities provide opportunities for you to be active in service to God and humanity.

**Cultural Activities**

Cultural activities include a Fine Arts Series featuring guest artists and members of the music faculty in classical music concerts; the Heubach Lecture Series and the Longo Lecture series, each of which offers outstanding presentations by distinguished guest speakers; and Rasmussen Art Gallery exhibitions featuring guest artists, members of the art faculty, and student art work. These events are provided to the campus and surrounding community free of charge.

**Recreational Facilities**

College recreational facilities include a lounge and game room in the Campus Center (Dining Commons, first floor); a gymnasium with three full-size basketball courts where basketball, volleyball, futsal and badminton are available; a fitness center with cardio machines and weight rooms containing free weights and weight machines; an Olympic-size swimming pool; lighted outdoor tennis courts; and athletic fields for softball, soccer, volleyball, flagball, and running track. Recreational areas near the college offer skiing, golfing, scuba diving, and boating.

**Student Association**

Every student enrolled for a minimum of six quarter hours is automatically a voting member of the Student Association. The Association is responsible for promoting and conveying the ideals and objectives of the college and coordinates a number of social and religious activities and other services on campus. These include producing the campus newspaper (Campus Chronicle), the student-faculty directory (Funnybook), the yearbook (Diogenes Lantern), and the video yearbook.

The main purpose of the Student Association is to serve as a liaison with college administrators. The SA Senate is an additional forum for addressing relevant campus issues.

You are invited and encouraged to participate in the various opportunities the Association provides for activities and leadership. A detailed description of the organization of the Student Association appears in the Association’s Constitution and Bylaws.

**Family Rights and Privacy Act (FERPA)**

In maintaining student records, Pacific Union College complies with the Family Educational Rights and Privacy Act of 1974 (FERPA). This act affords students certain rights with respect to their education records. For a full description of these rights, see “Appendix B: Student Rights Under FERPA” in this catalog.

**Grievance Policies and Procedures**

The college has developed grievance policies and procedures to ensure that members of its constituent groups are not being treated in an unjust, unethical, or discriminatory manner. Statements detailing these policies and procedures are in the Student Handbook.
4. Submit the necessary references:
   a) This requirement is automatically met if you apply directly from a constituent Seventh-day Adventist academy in the Pacific Union.
   b) Bachelor of Science in Nursing students need to provide the references required as part of their application to the nursing program.
   c) All others applicants must have one completed reference form sent to the Admissions Office (the form is available online at www.puc.edu/enrollment).

5. International applicants must meet the additional requirements detailed in the following sections of this catalog: “Admission of International Students” under ADMISSION and “International Students” under FINANCIAL INFORMATION.

6. Wait for a decision letter. When all pertinent documents are on file (application form, transcripts, and recommendation), the application will be processed and you will promptly be notified in writing of the action taken.

   No student should at any time come to the college for the purpose of registering without having first received a formal notification of acceptance.

Acceptance Follow-Up Procedures

   The letter of acceptance outlines further steps necessary before registration:

1. If you will be a residence hall student, complete the room reservation form and send it, together with a $150 room reservation fee, to the Admissions Office. Alternatively, fill out the form and pay the fee online at www.puc.edu/residencehallreservation.
   The room reservation fee is refundable if your notice of cancellation is received by September 1. No refunds are made for cancellations after September 1 or for failure to appear for registration.
2. Take the required college entrance examination and be sure that scores are on file in the Admissions Office. Pacific Union College participates in the American College Testing Program (ACT) as an essential element in academic advising. Each first-year and transfer applicant with fewer than 30 quarter credits must provide ACT (or SAT) scores. You may be accepted without these test scores, but you must take the test before you attend your first courses.

3. The college’s Health Services Department is required to have on file basic medical information to meet county requirements. The minimum information necessary is:
   a) Current personal and family medical history
   b) Recent physical examination including TB testing
   c) Childhood immunization records
   d) Current health insurance.
   Forms can be downloaded at www.puc.edu/healthservices.

Reapplication Procedures
1. If your residence as a student at Pacific Union College has been broken for three or more consecutive quarters, you must follow regular application procedures in order to re-establish student status.
2. If your residence as a student at Pacific Union College has been broken for less than three consecutive quarters, you may contact the Admissions Office to have your original application updated and re-activated.

Academic Preparation

Applicants to Pacific Union College need to be prepared to participate in a rigorous academic program. It is strongly recommended that you complete the following courses as part of your secondary-school education. Students who have not successfully completed these courses during secondary school may be required to take additional courses in college.

- 4 years of English
- 3 years of Mathematics, including Algebra II and Geometry
- 3 years of Science, including laboratory sciences in the areas of Biology, Chemistry and Physics
- 2 years of History, including U.S. and World History
- 2 years of Foreign Language
- Computer Literacy
- Religion coursework, if offered at your secondary school

Admission to Regular Undergraduate Standing

You may have regular admission status if you have an acceptable recommendation and qualify in one of the following categories:
1. Students having secondary-school graduation, or its equivalent, and a GPA of at least 2.3 (C+) in the following required courses:
   - 4 years of English
   - 2 years of Mathematics, including Algebra
   - 2 years of Science, including Algebra
   - 2 years of History
2. Students lacking secondary-school graduation who have passed the Test of General Educational Development (GED) with a standard score of 400 or above on each of the five tests and an average standard score of 500 for all five tests.
3. Students seeking early entrance to college and lacking secondary-school graduation who have passed the California High School Proficiency Examination (CHSPE). You are expected to have met the following requirements:
   a) Successful completion of a minimum of two years of secondary school.
   b) A personal interview of applicant and parents by an admissions officer of the college or a designated representative.
   c) A letter from the applicant stating the rationale for early entrance into college.
   d) Recommendation by the faculty of the secondary school last attended, including an evaluation of social and academic readiness for college.
4. Home school applicants who have contacted the Admissions Office and discussed their individual situation. Home school applicants should anticipate providing ACT or SAT scores plus transcripts or GED scores, or other evidence of secondary school completion.
5. Transfer students who have completed at least 45 quarter hours of transferable college credit with a minimum cumulative GPA of 2.0.
6. Transfer students who have completed less than 45 quarter hours of college credit must meet the admission standards for first-year freshmen.
7. Reapplicants who have both a minimum cumulative and a Pacific Union College GPA of 2.0 and have maintained an acceptable citizenship record.
Other Types of Admission

In addition to admission on regular academic standing, there are other types of admission at Pacific Union College.

Admission by Advanced Enrollment

Advanced Enrollment status is for secondary-school students of superior ability who wish to enroll in some college courses while completing secondary-school graduation requirements. For admission to this status, you must meet the following criteria:

1. Completion of your sophomore year of secondary-school with a GPA of at least 3.5.
2. Recommendation from the secondary-school faculty supporting your ability to benefit from early college enrollment and specifying your remaining requirements for graduation and the method of fulfilling them.
3. Written rationale for early entrance into the college program and evidence of superior motivation.

Students in this category are granted regular admission, subject to secondary-school graduation.

Admission of International Students

If you are an international student, you will be considered for admission when you have:

1. met all requirements for regular admission;
2. provided certified English translations of transcripts;
3. provided the required reference, written in English;
4. met all financial requirements for international students, including the submission of a $1,000 deposit, as described in the section of this catalog entitled “International Students” under FINANCIAL INFORMATION; and
5. demonstrated ability to pursue studies in the English language by presenting a satisfactory score on one of the following exams:
   Minimum score of 70
   TOEFL (Test of English as a Foreign Language), Internet Based
   Minimum score of 14
   ACT, English Section
   Minimum score of 360
   SAT, Critical Reading Section
   Minimum score of 5.5
   IELTS (International English Language Testing System), Academic Version
   Minimum score of 48
   PTE (Pearson Test of English), Academic Version

Admission on First Quarter Academic Probation

You may be admitted on first quarter academic probation status if you qualify in one of the following categories:

1. Applicants for admission as first-year students who meet the requirements of one of the categories above, but whose GPA in the courses listed as “minimum requirements” is at least 2.0 but less than 2.3.
2. Applicants for admission as first-year students who have taken the GED test with standard scores of not less than 350 on each of the five tests and an average standard score of at least 450 for all five tests.
3. Transfer students who are granted admission by special action of the Admissions Committee even though they do not meet the GPA requirements stated above.

If you are admitted on academic probation, you may take up to 15 hours each quarter, including any required remedial courses, until you achieve regular enrollment status. (For further information, see the section entitled “Academic Information and Policies” in this catalog.)

Admission as a Guest Student for Transfer Credit

If you have been accepted for study in another college or university and wish to earn credit at Pacific Union College for transfer, you are not required to follow regular admission procedures. You need only apply to Enrollment Services at least one month prior to the beginning of the quarter for which you expect to register at Pacific Union College.

Admission as a Special Non-Degree or Audit Student

If you do not meet college entrance requirements or do not wish to qualify for a degree, but do wish to take certain courses at the college level on either a credit or an audit basis, you may apply for admission as a special non-degree student. On this basis you are permitted to select courses for study without reference to the requirements of any prescribed curriculum. Enrollment in any particular course is subject to the approval of the instructor and to your meeting any course prerequisites.

Applicants for admission as special students are expected to follow the same procedures for application and registration as regular applicants. Ordinarily, a special student may register for one to six quarter hours at any one time.
Institutional Student Learning Outcomes

The outcomes for the Academic Program* and for General Education**, together with these Institutional Student Learning Outcomes, comprise a Christian liberal arts education at Pacific Union College.

“Joyful is the person who finds wisdom, the one who gains understanding” (Proverbs 3:13)

- **Wholeness**
  PUC graduates will make mature, independent choices integrating the needs of body, mind, and spirit.

- **Integrity**
  PUC graduates will live lives based on the highest ethical standards.

- **Service and Stewardship**
  PUC graduates will practice the Biblical imperatives to serve humanity, resist injustice, and care for the created world.

- **Diversity**
  PUC graduates will value and learn from diversity.

- **Our Adventist Heritage**
  PUC graduates will understand and value the major tenets of Seventh-day Adventist Christian thought, including the blessing and significance of the Sabbath.

- **Maintaining Lifelong Learning**
  PUC graduates will continue to practice the intellectual skills and curiosity necessary to learn and grow creatively throughout life.

*The Academic Program Student Learning Outcomes can be found online at http://www.puc.edu/academics/degrees-programs.

**The General Education Student Learning Outcomes can be found in the section entitled “General Education” in this catalog.
Pacific Union College is a Christian liberal arts institution of higher education offering studies and activities designed to promote the harmonious development of each student—spiritually, mentally, socially, and physically.

Through religious services, classroom instruction, and a varied program of social and cultural activities, the college seeks to assist in the development of both character and intellect. A sincere attempt is made to create an environment in which each student may freely arrive at a realistic and satisfying concept of human nature and of humanity’s relation to the universe.

Character as a code of moral and spiritual values, and intellect as the tool of reason, are integrated in the learning experience in order to provide a firm base for effective, ongoing contributions to the church and society.

In essence, the college seeks to

- promote the development of a sense of values and a personal philosophy of life as an outgrowth of commitment to the Christian faith;
- stimulate intellectual curiosity essential to the discovery of truth;
- encourage creativity in thought and expression;
- demonstrate that learning is both discipline and pleasure and that meaningful, lasting benefits accrue to those who throughout life continue to experience the satisfaction of learning;
- introduce students to the great body of knowledge by which people understand and relate to their physical and social environments;
- develop certain basic skills and abilities that contribute to satisfactory social and occupational relationships; and
- nurture our learning community by meeting weekly at Campus Colloquy.

While Pacific Union College is primarily a four-year liberal arts institution, it also offers two-year programs leading to associate degrees, professional four-year degrees, a graduate program in education, and preprofessional programs.

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**Degrees and Curricula**

**Degrees Offered**

- **Associate Degree:**
  Associate of Science (A.S.)

- **Baccalaureate Degrees:**
  Bachelor of Arts (B.A.)
  Bachelor of Science (B.S.)

- **Professional Baccalaureate Degrees:**
  Bachelor of Business Administration (B.B.A.)
  Bachelor of Music (B.Mus.)
  Bachelor of Social Work (B.S.W.)
  Bachelor of Science in Nursing (B.S.N.)
  Bachelor of Science in Management (B.S.M.)
  Bachelor of Science in Early Childhood Education (B.S.E.C.E.)

- **Graduate Degree:**
  Master of Education (M.Ed.)

**Teacher Education Program**

Teacher education at Pacific Union College is a two-step, five-year program involving preparation in subject-matter areas and professional education courses required for Seventh-day Adventist and California State teaching credentials. For further information, see the section entitled “Education” in this catalog.

**Preprofessional Curricula**

Preprofessional curricula and advising are offered to prepare students for admission to certain types of professional schools. For a list of available curricula, see p. 4 of this catalog.

**Certificate**

A TESOL (Teaching English to Speakers of Other Languages) Certificate is available. For further information, see the section entitled “English” in this catalog.
The Academic Program

Completion of Degree Requirements

It is the responsibility of each student to satisfy degree requirements. You are expected to acquaint yourself with the various policies and requirements published in the catalog and, in consultation with your advisor, to plan your course of study accordingly.

Catalog Requirements

You normally meet the graduation, general education, and major course requirements of the catalog current the year you first enter Pacific Union College. You have the option of qualifying under any catalog in effect during the time you are in continuous residence. You may choose the requirements for your major and for general education from separate qualifying catalogs if you wish.

If your residence as a student at Pacific Union College is broken by a period of more than three consecutive quarters (excluding summer quarter), you must meet the requirements of the catalog under which you return to the college, or of a subsequent catalog.

Degree Candidacy

You should apply for degree candidacy when you begin the academic year during which it will be possible to complete all requirements for graduation. To begin this process, meet with your advisor to review your remaining degree requirements and register for all remaining classes. Once registered, print out a copy of your completed Degree Audit/Program Evaluation from WebAdvisor and have your advisor sign it.

The completed and signed Degree Audit/Program Evaluation should be submitted to the Records Office along with an Application to Graduate and a signed Graduation Contract. The Assistant Registrar will review these documents for completeness and will work with you to resolve any remaining requirements. Upon the satisfactory completion of this process, you will be considered a degree candidate and will be placed on the official graduating list for the academic year.

You should complete the degree candidacy application process before the beginning of winter quarter and you must complete the degree candidacy application process before the beginning of spring quarter of the academic year during which it will be possible to complete all requirements for graduation.

All transfer coursework must be completed and officially filed at the Records Office at least a full quarter before your expected graduation. Any exceptions must be approved through the Records Office in harmony with established guidelines.

Degree Conferral

Degrees are conferred at the end of each quarter. Information regarding the degree conferral procedures can be found in the section entitled “Academic Policies and Information”.

Commencement Information

Information regarding the commencement ceremony, graduation with academic distinction, and diplomas can be found in the section entitled “Academic Policies and Information”.

Multiple Degrees

Multiple degrees may be conferred concurrently or subsequently if you have met all the major and general-education requirements for each degree and the requirements for multiple majors.

The Associate Degree Program

The two-year associate degree program is designed for students interested in occupations requiring a limited amount of training.

Graduation Requirements for the Associate Degree

Candidates for associate degrees must satisfy the following requirements:

- **Residence Requirements:**
  You must satisfy the following minimum residence requirements on the Angwin campus or in an extension program.
  1. A minimum of 24 quarter hours.
  2. The last 12 hours of the major.

- **General Requirements:**
  You must satisfy the following general requirements to earn the associate degree.
  1. A minimum of 90 quarter hours of course work.
  2. A minimum resident and cumulative GPA of 2.0 (C). Some departments have additional GPA requirements, as outlined in the departmental listings.
  3. Completion of the general education requirement specified for the degree sought.
  4. Completion of an associate-degree major according to the specified guidelines.
  5. Completion of application for degree candidacy.

- **The Associate Degree Major:**
  The specific requirements for each major are given under the departmental listings, and the following requirements apply to all majors:
  1. No course, including required cognates, with a grade below C- may apply toward the major.
2. You must maintain a minimum GPA of 2.0 (C) in the major. Some departments have additional requirements, as outlined in the departmental listings.

You may earn more than one major, provided that you complete all courses and cognates required for both. However, a minimum of 30 quarter hours in the second major must not overlap those in the first.

The Baccalaureate Degree Program

Preparation for a career involves both general and specialized education. Courses of study leading to a baccalaureate degree are designed to give a general understanding of the major academic disciplines and to provide for specialization in the field of your major interest.

If you have not yet selected a major, you may pursue a general program of education while exploring several fields of knowledge. One can usually do this without loss of time or credit if the program is carefully planned in consultation with your faculty academic advisor.

Graduation Requirements for the Baccalaureate Degree

Candidates for baccalaureate degrees must satisfy the following requirements:

- **Residence Requirements:**
  You must satisfy the following minimum residence requirements on the Angwin campus or in an extension program.
  1. 36 of the last 48 quarter hours immediately preceding conferral of your degree.
  2. 30 quarter hours of upper-division course work.
  3. One-half the upper-division hours in your major.
  4. For students taking a minor, 6 upper-division hours for the minor.

- **General Requirements:**
  You must satisfy the following general requirements to earn the baccalaureate degree.
  1. A minimum of 192 quarter hours of coursework, including 60 hours at the upper-division level. (Within the hours required for a baccalaureate degree, most students will find room for elective courses that will also enrich their general preparation).
  2. A minimum resident and cumulative GPA of 2.0 (C). Some departments have additional GPA requirements, as outlined in the departmental listings.
  3. Completion of the general education requirement specified for the degree sought.

  4. Completion of a baccalaureate-degree major according to the specified guidelines.
  5. Completion of application for degree candidacy.
  6. Completion of GNST 401, Senior Assessment Seminar, including any discipline-specific requirements for each major or degree. For further information, see the course description in the section entitled “General Courses” in this catalog.

- **The Baccalaureate Degree Major:**
  A major consists of a minimum of 45 quarter hours. The specific requirements for each major are given under the departmental listings, and the following requirements apply to all majors:
  1. No course, including required cognates, with a grade below C- may apply toward the major.
  2. You must maintain a minimum GPA of 2.0 (C) in the major.
  3. Some departments may have additional requirements, as outlined in the departmental listings.
  4. You may earn more than one major or emphasis, provided that you complete all courses and cognates required for both. However, a minimum of 30 quarter hours in the second major or emphasis must not overlap those in the first.

- **The Baccalaureate Degree Minor:**
  You may choose to earn a minor if you earn a baccalaureate degree. However, a minor is not required for graduation.
  A minor consists of a minimum of 30 quarter hours. The specific requirements for each minor are given under the departmental listings, and the following requirements apply to all minors:
  1. No course, including required cognates, with a grade below C- may apply toward the minor.
  2. You must maintain a minimum GPA of 2.0 (C) in the minor.
  3. A minimum of 20 hours in the minor must not overlap those in the major.
  4. The minor must have a name different from the major.
  You should consult with your academic advisor about a minor if you plan to teach, if you desire teaching credentials, or if you anticipate attending a graduate or professional school that requires a concentration in a discipline other than the major.

The Master Degree Program

A program leading to a Master of Education is available. If you are interested in this degree, you should consult the section entitled “Education” in this catalog. Address specific questions to the chair of the Education Department.
The Academic Program

General Education

Regulations Governing General Education
1. Unless expressly excluded by a statement in the departmental course listings, a general education course in the field of your major may both satisfy the general education requirement and apply toward your major.
2. Credit hours from any given course may be applied to only one area of general education.
3. No course with a grade below D- may apply toward general education.
4. The general-education program contains prerequisite requirements (IV.A and VIII) that may be met through the satisfactory completion of certain courses at a regionally-accredited secondary institution. If you complete such courses through home school or at an unaccredited secondary institution, you may elect to validate each course by passing departmental challenge examinations.

IGETC
The Intersegmental General Education Transfer Curriculum (IGETC) is a series of courses offered in the California community colleges for students who plan to transfer to baccalaureate-level institutions. There are two options: UC and CSU:

UC  Completion of the UC IGETC will satisfy all requirements for areas I, II, III, and IV in the PUC baccalaureate general education package EXCEPT for requirement I.B, Oral Communication. Students who complete the UC IGETC will still be required to meet this requirement.

CSU  Completion of the CSU IGETC will satisfy all requirements for areas I, II, III, and IV in the PUC baccalaureate general education package.

Students who complete the IGETC will still be required to meet all requirements for areas V, VI, VII, and VIII in the PUC baccalaureate general education package.

Completion of the IGETC must be certified by a community college counselor and submitted to Pacific Union College with the student’s final transcript prior to the first term of enrollment.

Transfer Students
The main objective of the general education program is not so much to require a prescribed list of courses as it is for students to achieve the purposes of general education as stated in each section. The courses listed are those by which Pacific Union College students achieve the purposes of the program. Acceptable transfer courses for meeting requirements may not in every case be identical, but they must achieve the purposes of each section.

English Course Placement
English course placement is determined by the score you received on the English subsection of the ACT exam (ACTE) or the verbal subsection of the SAT exam (SATV):

ENGL 099: Students with ACTE scores of 0-14
Students with SATV scores of 0-370

ENGL 100: Students with ACTE scores of 15-18
Students with SATV scores of 380-460
Students who have completed ENGL 099

ENGL 101: Students with ACTE scores of 19-36
Students with SATV scores of 470-800
Students who have completed ENGL 100

If you do not submit ACT or SAT scores, you will be placed in ENGL 099 (international students) or ENGL 100 (all other students). This placement may be modified upon receipt of scores or upon completion of a placement test at the English Department. If you are placed into ENGL 099 or ENGL 100, you will be required to take the appropriate English course during the first quarter of your enrollment at Pacific Union College.

Algebra Course Placement
If you did not complete a full year of Algebra II with semester grades of C- or better at an accredited secondary institution, you will be required to take algebra at Pacific Union College in order to meet the algebra requirement.

You will be placed in the algebra courses based on the score you received on the mathematics subsection of the ACT exam (ACTM) or the mathematics subsection of the SAT exam (SATM):

MATH 019: Students with ACTM scores of 0-18
Students with SATM scores of 0-490

MATH 096: Students with ACTM scores of 19-36
Students with SATM scores of 500-800

Students who have completed MATH 019

If you do not submit exam scores, you will be placed in MATH 019. This placement may be adjusted upon receipt of scores or upon completion of a waiver test available at the Mathematics Department.
The Purpose of General Education at Pacific Union College

The general education program at Pacific Union College seeks to provide students with the knowledge, values, and skills they need to live Christ-centered productive lives of integrity and service in a complex world.
> A knowledge of human cultures and the natural world;
> Seventh-day Adventist Christian values, including integrity, justice, compassion, and wholeness;
> The following skills:
  • To communicate effectively in both written and spoken English;
  • To think critically and creatively about information, ideas, and arguments;
  • To locate and use appropriately a broad variety of resources and information; and
  • To learn and work collaboratively.

The purposes of General Education are more specifically defined in each of the subsections.

I. Foundations of Learning

A. College Writing
> ENGL 101* College English
This requirement should be completed by the end of the freshman year and must be completed by the end of the sophomore year.

B. Oral Communication
> One of the following courses:
  COMM 105 Intro to Communication (Freshmen only)
  COMM 226 Public Speaking (Non-freshmen only)

C. Statistics
> STAT 222 Introduction to Statistics

B. Oral Communication
> One of the following courses:
  COMM 105 Intro to Communication (Freshmen only)
  COMM 226 Public Speaking (Non-freshmen only)

Students who complete this requirement will be able to think and read critically; learn collaboratively; write clearly; and find, evaluate, and use secondary sources.

* See facing page for course placement guidelines.
** Selections are to be made from courses that meet baccalaureate degree general education requirements (see the following section).
II. History and Social Sciences

A. History:

- One of the following sequences:
  - HIST 101-102  History of World Civilizations
  - HIST 134-135  History of the United States

_Students who complete this requirement will be able to apply the methods of the historian to think critically about historical developments and ideas within a broad cultural context._

B. Social Sciences:

- Two of the following courses; one course from anthropology (ANTH), psychology (PSYC), or sociology (SOCI) and a second course with a prefix different from that of the first:
  - ANTH 124  Cultural Anthropology
  - ECON 261  Macroeconomics
  - ECON 265  Microeconomics
  - GEOG 210  World Regional Geography
  - HIST 351  History of Culture
  - MKTG 360  Consumer Behavior
  - PLSC 124  Introduction to American Government
  - PLSC 328  Critical World Issues
  - PSYC 121  General Psychology
  - PSYC 390  Gender Issues
  - SOCI 121  Introduction to Sociology
  - SOCI 214  The Family
  - SOCI 232  American Social Problems
  - SOCI 355  “Racial” and Ethnic Relations

_Students who complete this requirement will be able to employ the methods of the social scientist to think critically about human behavior and interaction, including how humans create and are influenced by social, cultural, economic, and political structures._

III. Arts and Humanities

A. Literature:

- ENGL 301  Great Books (Juniors and seniors only)

_Students who complete this requirement will be able to read literature for pleasure and understanding, and think, read, and write critically about literary texts within a broad cultural context._

B. Visual Arts, Music, Philosophy, Language and Culture:

- B.S. Students: Three of the following courses, each from a different subsection.
- B.A. Students: Three of the following courses- one from subsection 1, one from subsection 2, one from subsection 3.

1. Visual Arts:
   - ARTH 107  America in Art
   - ARTH 115  History of Western Art I
   - ARTH 116  History of Western Art II
   - ARTH 278  Women in Art

2. Music:
   - MUHL 105  Survey of Music
   - MUHL 245  World Music and Culture

3. Philosophy:
   - PHIL 101  Introduction to Philosophy
   - PHIL 390  History and Philosophy of Science
   - PHIL 485  Issues in Science and Religion
   - PLSC 274  Introduction to Political Thought
   - RELT 320  Philosophy of Religion

4. Language and Culture

Demonstrated beginning-level language proficiency will not be applied to meet this requirement. It may only be met through an approved college-level language and culture course, such as one of the following:

- CHIN 111  Beg Chinese I (Language & Culture)
- FREN 111  Beg French I (Language & Culture)
- GRMN 111  Beg German I (Language & Culture)
- ITAL 111  Beg Italian I (Language & Culture)
- SPAN 111  Beg Spanish I (Language & Culture)

_Students who complete this requirement will be able to think critically about the development of human knowledge and expression, appreciate the perspectives and contributions of people of other cultures and historical periods, and identify standards of aesthetic value._
IV. Science and Mathematics

A. Algebra:
   ➤ One of the following options:
   1. A full year of Algebra II with semester grades of C- or better at an accredited secondary institution
   or
   2. MATH 019** Introductory Algebra (or waiver test) and MATH 096** Intermediate Algebra (or waiver test)

This requirement should be completed by the end of the freshman year and must be completed by the end of the sophomore year.

B. Science:
   ➤ Two of the following courses, each from a different section. At least one of the courses must include a laboratory.

   1. Physical Science:
      ASTR 115 Astronomy
      CHEM 101 Introductory Chemistry
      CHEM 102 Survey of Organic Chemistry
      CHEM 111 General Chemistry
      GEOL 233 Geology
      PHYS 105 Introduction to Physics
      PHYS 111 General Physics
      PHYS 211 Physics with Calculus

   2. Life and Environmental Science:
      BIOL 101 Human Anatomy
      BIOL 102 Human Physiology
      BIOL 105 Introduction to Biology
      BIOL 111 Biological Foundations
      BIOL 112 Biological Foundations
      BIOL 113 Biological Foundations
      BIOL 227 Natural History of California
      CHEM 481 Biochemistry I
      ENVR 360 Conservation Biology
      ENVR 361 Energy and Climate Change
      ENVR 362 Pollution and Environmental Quality
      MICR 134 General Microbiology

C. Applications of Scientific and Mathematical Reasoning:
   ➤ One course from one of the following sections.

   1. Science Engaging Society:
      BIOL 355 Issues on Origins
      GSCI 205 Scientific Discoveries
      PHYS 390 History and Philosophy of Science
      PHYS 485 Issues in Science and Religion

   2. Mathematical Reasoning
   Note: Calculus I is a prerequisite for the following courses.
   MATH 132 Calculus II
   MATH 265 Elementary Linear Algebra
   MATH 275 Logic and Sets
   MATH 451 History of Mathematics

Students who complete these requirements will be able to demonstrate knowledge of basic science, to explain various methods of scientific inquiry, and to reason critically about the applications of scientific information.

** See course placement guidelines listed previously.
V. Revelation, Belief, and Action

Students will explore the nature, forms, and uses of belief; the relationship between Christian belief and revelation; and the applications of belief to life, emphasizing Christian expression of faith in service. Since the Bible records selected revelations of God through centuries of human experience, students will be asked to use it as the central text of study for approaching an understanding of God's will and of the Christian tradition.

A. Studies in Religion
   - At least 18 hours from RELB, RELH, RELL, RELP, and RELT courses, including at least 6 hours from RELB courses. A maximum of 9 lower-division hours may apply. Up to 2 hours of credit may be chosen from section B below to apply to this requirement.

B. Religious Issues in Other Disciplines:
   - This section is optional. Students may elect one course from the following list, and 2 hours of credit will apply to the section A requirement above:
     - BIOL 355 Issues on Origins
     - BIOL 450 Philosophy of Origins
     - PHYS 485 Issues in Science and Religion
     - PSYC 435 Psychology of Religion
     - PSYC 490 Issues in Religion, Ethics, and the Human Sciences (also listed as SOWK 490)
     - SOCI 435 The Sacred and Profane in Society
    These courses provide an opportunity for students to examine the meeting points between a specific discipline and Christian faith. Because of the integrated nature of these courses, departments other than Religion are involved in their delivery.

Note: Requirement in Religion for Transfer Students:
Students who transfer from public colleges and universities must complete the following minimum requirement in religion (sections A and B) at Pacific Union College:
   - 0-44 hours of transfer credit: Take the full requirement.
   - 45-89 hours of transfer credit: Take at least 14 hours, including at least 6 hours from RELB courses. A maximum of 9 lower-division hours may apply.
   - 90-134 hours of transfer credit: Take at least 10 hours, including at least 6 hours from RELB courses. A maximum of 9 lower-division hours may apply.
   - 135+ hours of transfer credit: Take at least 6 hours, including at least one RELB course.

VI. Health and Fitness

In order to achieve a comprehensive, balanced education, students should acquire and develop the knowledge, skills and habits necessary to sustain a sound mind in a sound body.

A. Health:
   - One course from the following:
     - FDNT 235 Nutrition
     - HLED 162 Fitness for Life
     - HLED 166 Health Education
     - HLED 169 Current Health Concerns

Students will understand major health issues such as nutrition, stress management, substance abuse, and Seventh-day Adventist health principles and their application.

B. Fitness:
   - One activity course for each year in residence, with a maximum of four courses. One must be a course designated as an aerobic activity course (course number ends with A).

Note: Requirement in Fitness for Transfer Students:
Students who transfer must complete the following minimum requirement in fitness (section B):
   - 0-44 hours of transfer credit: Take the full requirement.
   - 45-89 hours of transfer credit: Take at least three activity courses, including one aerobic activity course.
   - 90-134 hours of transfer credit: Take at least two activity courses, including at least one aerobic activity course.
   - 135+ hours of transfer credit: Take at least one aerobic activity course.
VII. Practical and Applied Arts

A truly liberal education is comprehensive, affecting the whole person. In the courses listed below, students will broaden their applied and manual skills.

At least 4 hours, to be selected from two or more of the following subsections:

A. Practical Arts:
AGRI 212  Home Greenhouse Gardening (2)
AGRI 213  Home Vegetable Gardening (2)
ARTF 121  Drawing Fundamentals (2)
ARTF 212  Ceramics I (2)
ARTP 150  Black & White Photography (3)
DRMA 141  Performance Credit (1)
DRMA 341  Performance Credit (1)
MUEN (Any) Music Ensembles (1)
MUSP 120-124 Music Lessons (class instruction) (1)
MUSP 320-324 Music Lessons (class instruction) (1)
MUSP 162  Music Lessons (general) (1-2)
MUSP 362  Music Lessons (general) (1-2)

Students will participate in activities which lead to skills that are both useful and enriching.

B. Information Management:
CPTR 105  Introduction to Computers (3)
CPTR 115  Introduction to Computer Programming (4)
INFS 144  PC Operating Systems (1)
INFS 148  PC Spreadsheets (1)
INFS 149  PC Databases (1)
OFAD 201  PC Word Processing (2)

Students will acquire the basic knowledge and skills necessary to use computers to manage information.

C. Management of Personal Finance:
ACCT 121  Financial Accounting I (3)
BUAD 118  Personal Money Management (3)
BUAD 223  Personal Law (2)
BUAD 335  Real Estate (4)

Students will learn to manage personal financial resources.

D. Personal Skills:
COMM 223  Interpersonal Communication (3)
PSYC 126  Assertive Behavior (2)
PSYC 227  Conflict Resolution & Relationship Skills (3)

Students will develop skills for dealing with personal relationships and life crises.

VII. Foreign Language (B.A.)

This section is required of all B.A. students and is recommended for students in other curricula.

1. Prerequisite:

One of the following options:

a) Two full years of a foreign language with semester grades of C- or better at an accredited secondary institution

b) Satisfactory completion of an elementary-level college sequence in a foreign language such as one of the following:

FREN 111-112-113  Beginning French I-II-III
GRMN 111-112-113  Beginning German I-II-III
ITAL 111-112-113  Beginning Italian I-II-III
RELL 125-126-127  Beginning Greek I-II-III
RELL 427-428/ RELB 445  Biblical Hebrew I-II/ Hebrew Exegesis
SPAN 111-112-113  Beginning Spanish

2. Requirement*:

A language-cultural experience in a foreign language through one of the following options:

a) An intermediate-level college sequence in a foreign language such as one of the following:

RELL 235-236/ RELB 335  Intermediate Greek I-II/ Greek Exegesis
SPAN 132-133  Intensive Intermediate Spanish I-II
SPAN 151-152-153  Intermediate Spanish I-II-III

b) An elementary-level college sequence in a foreign language not previously studied.

Students who complete this requirement will be able to read and communicate at the intermediate level in a foreign language or at the beginning level in two foreign languages. They also will be able to appreciate and think critically about another culture.

* This requirement may be waived (with no college credit) for students who demonstrate one of the following:

1) Completion of at least four years of formal schooling conducted in a foreign language with a C average or better in a country where that language is the native tongue. (Contact the Records Office)
2) Intermediate-level proficiency on an exam approved by the Modern Languages Department. (Contact the department chair)
## The Honors Program

The Honors Program offers an alternative baccalaureate-level general education program for academically motivated students. It is built around a series of “great books,” or core texts, illustrating significant themes in the liberal arts. These works are supplemented by selected contemporary works, including films.

Students who complete the Honors Program have **no other general education requirements.** Students who fulfill the Honors Program requirements graduate “With Honors,” as designated on the official transcript, graduation program, and diploma.

Students with passing grades may transfer out of the Honors Program into the regular General Education program. Consult with the Honors director for specific details.

### The Goal of the Honors Program

The goal of the Honors seminars is to create an atmosphere in which students feel free to experiment with ideas and to test them in open debate with classmates and teachers. The program presents significant books, films, art, and music in a Christian context. Each student, regardless of educational goals, is encouraged to seek truth and to act upon it.

### Admission to the Honors Program

Students with the following qualifications may apply for admission to the Honors Program: a strong academic record in secondary school, including four years of English, two years of history, three years of mathematics (including Algebra II*), a year each of biology, chemistry, and physics; a “solid” subject GPA of at least 3.5; and standardized test scores (SAT, ACT, or equivalent) at the 80th percentile or higher.

Transfer students: Students with adequate freshman G.E. credit may be admitted to the Honors Program as late as fall quarter of the sophomore year, from which point they must complete 9 of the 12 required seminars. Juniors may apply for transfer into the program only if 1) they are willing to complete 9 seminars, or 2) they have been in an Honors program elsewhere, in which case they normally will be required to complete 6 seminars, including the summer term abroad. Transfer students must meet the Honors entrance requirements and provide two letters of recommendation from college teachers supporting their ability to do superior academic work. All transfer students must complete the Honors Project and cognate requirements.

*If a student is admitted without having successfully completed this course in secondary school, the student will need to complete the appropriate college course prior to graduation (see Section IV, Part A, of the General Education Requirements).*

### Honors Program Requirements

Students must maintain at least a 3.3 cumulative GPA while in the Honors Program.

Students complete 67 general education hours as follows*:

#### Freshman Seminars:

- HNRS 110  Foundations (5)
- HNRS 120  Liberty and America (5)
- HNRS 130  Scripture I (5)

#### Sophomore Seminars:

- HNRS 210  Cosmos (4)
- HNRS 220  Self and Society (4)
- HNRS 230  Scripture II (4)

#### Summer Term Abroad:

- HNRS 300  Beauty (5)

#### Junior Seminars:

- HNRS 310  Virtue (4)
- HNRS 320  Christianity (4)
- HNRS 349  Pattern (4)

#### Senior Seminars:

- HNRS 410  Alterity (4)
- HNRS 420  Progress (4)

#### Senior Project:

- HNRS 498  Honors Project (3)

#### Language Study

- 12 hours of language study, which may be fulfilled by Biblical Greek (RELL 125, 126, 127, 235, 236) or by completion of a year-long intermediate college-level sequence in a foreign language (Spanish, French, German, etc). Waived upon demonstrated intermediate-level proficiency in a foreign language.

For course descriptions, see the section entitled “Honors Courses” in this catalog.

Students should be aware of several additional features of the Honors Program:

1. The freshman seminars have a particularly strong writing component.
2. The Summer Term Abroad involves a month of study outside the United States.
3. The Honors Project allows students to examine an issue or problem of their own choosing. In consultation with a faculty advisor and the Honors director, students submit an Honors Proposal by the end of the junior year. A public presentation of the project must occur no later than two weeks prior to graduation.
Changes in academic policies made and announced during the school year have the same force as if they were published in this catalog. Policies may not be waived or amended except by petition to and approval by the Academic Standards and General Education Committee. If you wish to petition for an exception to an academic policy, complete a Special Request form (available at the Records Office), ask the appropriate department chair to endorse your request, and return it to the Records Office.

Registration and Enrollment

You are expected to register online through Lantern/Web Advisor (accessible from the college web site) for all your courses during the registration periods as announced in this catalog.

Financial Clearance

A financial restriction is placed on each student’s registration account 30 days prior to the start of each quarter. During this period, students are required to obtain financial clearance from the Student Financial Services Office. For further information, see the section entitled “Financial Information” in this catalog. If, at the end of the second day of courses, you have not received financial clearance, your registration will be cancelled and your reserved spot in your courses will no longer be guaranteed. After clearing finances, you may re-register for any available courses until the last day to add courses.

Changes in Registration

To avoid changes in registration, you should plan your program carefully. You may add courses or withdraw from them before the published deadlines. You are responsible for checking your Lantern schedule to make sure that it is correct.

Late Registration

You must complete registration for each quarter by the last day to add courses (one week after instruction begins). You may not register for a course after the last day to add courses except by petition to and approval by the Academic Standards and General Education Committee. To request late registration for a course, you must complete a Late Add Request form (available at the Records Office), ask both the course instructor and your academic advisor to endorse your request, and return it to the Records Office. If your request is approved, you will be charged a late registration fee of $25 cash payable at the Records Office or $35 charged to your account.

Even if emergency circumstances make it impossible to complete your registration as described above, you may not under any conditions continue attending a course after the fifth week of the quarter unless you are officially enrolled. No grade is issued or recorded on the transcript, or credit awarded, for any course for which you are not officially enrolled by the end of the fifth week of the quarter. (For summer quarter and other courses scheduled for durations other than the standard ten-week quarter, this policy applies with the phrase “fifth week of the quarter” replaced by the phrase “midpoint of the quarter.”)

Prerequisites

You must complete all prerequisites prior to taking a course. Exceptions may be made only by the permission of the instructor. Prerequisites are indicated in the course description. Some courses have recommended prerequisites. While you are not required to complete the recommended prerequisites prior to taking a course, you are encouraged to do so in order to maximize your learning experience in the course.

Corequisites

You must take all corequisites concurrently with a course. Exceptions may be made only by the permission of the instructor. Corequisites are indicated in the course description. Some courses have recommended corequisites. While you are not required to take the recommended corequisites concurrently with a course, you are encouraged to do so in order to maximize your learning experience in the course.
Restriction on Lower-Level Courses After Upper-Level Courses
You may not take lower-level courses after you have earned credit in a more advanced course in the same area. Each department will identify those advanced courses that preempt lower-level courses in its area.

Class Attendance
You are responsible for all material and assignments presented in class, and you are expected to maintain regular attendance at all class sessions of the courses in which you are enrolled. While there is no general college attendance requirement, each instructor has the right to establish specific policies best suited to a given course.

Audited Courses
If you wish to attend a course but do not wish to complete all regular assignments, you may, with the consent of the instructor, register on an audit basis. Applications to change registration from “Audit” to “Credit” or from “Credit” to “Audit” are not approved after the end of the first week of the quarter. Fees for audited courses are charged at half the regular tuition rate, except for private music lessons, ensembles, and other participation-type courses, which are charged at the full tuition rate. On the transcript, audited courses carry the notation “AU.”

Course Load
The academic course load is described in terms of quarter hours (credits/units). One quarter hour represents one hour of class per week throughout the academic quarter or the equivalent for a non-lecture course. (See also “Credit Hours”.)

If you have regular academic standing, a full course load is 12-17.5 quarter hours per regular quarter and a half course load is 6-11.5 quarter hours per regular quarter. During the summer session, a full course load is 9-12 quarter hours.

To enroll for a course load in excess of 17.5 quarter hours, you must complete a Request for Overload form (available at the Records Office) and obtain the approval of your academic advisor and the registrar. There is an extra charge per credit hour for overloads. For further information, see the section entitled “Financial Information” in this catalog.

If you are on Academic Probation, your maximum course load is reduced to 15 quarter hours during the school year and 9 during the summer session.

Withdrawal from Courses
You may withdraw from a course through Lantern any time before the last day to withdraw. On the transcript, withdrawn courses carry the notation “W”. A course from which you withdraw before the last day to delete courses (one week after instruction begins) will not appear on your transcript.

You may not withdraw from a course after the last day to withdraw except by petition to and approval by the Academic Standards and General Education Committee. To request late withdrawal from a course, you must complete a Late Withdraw Request form (available at the Records Office), ask both the course instructor and your academic advisor to endorse your request, and return it to the Records Office.

If withdrawal from a course will result in a credit load of less than 12 credit hours, consult with your financial counselor prior to withdrawing in order to determine how your financial package will be affected. International students should not drop below 12 credit hours without consulting with the international student advisor in the Student Services Office.

Withdrawal from the College
To withdraw from the college, complete a Notice of Withdrawal form (available at the Records Office). The completed form must be signed by your residence-hall dean (for residence-hall students) or the vice president for student services, your financial counselor, and the retention coordinator. Withdrawal is official when the form with the signatures has been submitted to the Records Office.

The date of official withdrawal from the college will appear on your transcript. If you choose to withdraw after the eighth week of the quarter, a grade of “F” will be recorded for all courses in which you are registered.

Study-Work Program
If you are employed either on or off campus, you are expected to adjust your course load in harmony with the following schedule to achieve a reasonable balance in study and work:

<table>
<thead>
<tr>
<th>Course Load (Quarter Hours)</th>
<th>Maximum Work Load per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>16 hours</td>
</tr>
<tr>
<td>14</td>
<td>20 hours</td>
</tr>
<tr>
<td>12</td>
<td>26 hours</td>
</tr>
<tr>
<td>10</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

If you have a record of average scholastic achievement, you should plan a study-work program involving less than the maximum labor load suggested. It is recommended that you work with your advisor to determine an appropriate work load for your individual situation.

Cancellation of Scheduled Courses
The college administration, in consultation with the respective department chair, reserves the right to cancel any course listed in the course schedule if enrollment is four students or fewer or if a qualified instructor is not available because of unavoidable changes in personnel.
Academic Information and Policies

Advisory Services

As a new student, you will work with an enrollment counselor, a departmental advisor, and/or a transfer credit analyst in order to plan your first quarter schedule and complete your initial registration.

Your academic advisor(s) will be assigned based on your declared academic program; assignment occurs directly prior to the start of your first quarter. Thereafter, you should plan to meet with your academic advisor(s) regularly for consultation and support.

In April, an advising restriction is placed on each student’s registration account. You are required to clear this restriction prior to registration for the next academic year; clearance will be granted by your academic advisor(s) once you have met for a satisfactory advisory session.

In planning your studies, you should carefully follow the degree requirements outlined in this catalog. At any time during your enrollment at Pacific Union College you may run a Degree Audit as a tool to make sure all the degree requirements are being met. Such planning helps to ensure that you meet all graduation requirements in an orderly, logical, and timely sequence.

Undeclared Students

Students who are not ready to declare a major are assigned to an advisor who will help them structure their course schedules in a way that provides an appropriate foundation for their future major course work. The advisor also assists students in looking at course options that will be helpful in making a decision about the major.

Teaching Credential Advising

If you have chosen a career in teaching, you should consult with the chair of the Education Department as early as possible in your curriculum planning.

Academic Integrity

Academic integrity is highly valued and is expected. Academic dishonesty is an extremely serious offense and is cause for disciplinary action. Students involved in cheating, plagiarizing, fabrication, multiple submissions, abuse of academic materials, deception, misrepresentation, electronic dishonesty, and other types of academic dishonesty, including production of materials for other students, are ordinarily subject to dismissal from the course with a failing grade.

Situations involving academic dishonesty are dealt with by the instructor of the course in consultation with the department chair. A record of any verified instance of dishonesty is forwarded to the academic dean and is kept in the student’s personal file. Whenever such filing occurs, the student involved is notified. Established appeal and grievance procedures provide the student with the opportunity to respond to the situation. A pattern of serious or habitual dishonesty is dealt with by the academic dean and may result in failing grades or dismissal from the college. (For further details, see “Appendix A: Code of Academic Integrity” in this catalog.)

Dean’s List

When you complete a minimum of 12 college-level credits with a GPA of at least 3.85 during a term at Pacific Union College, you are honored as a member of the Dean’s List for that term.

Ownership of Written Work and Classroom Materials

Written work you present in fulfillment of course requirements becomes the property of the college. The instructor or the college, however, may not publish the written work for any reason without your permission. The original copy is returned to you at the discretion of the instructor. When it is not returned, you have the right to request and be given a copy of work turned in. You should request a copy not later than the end of the quarter following that during which you took the course.

Use of Classroom Materials

Federal and state privacy and intellectual property laws, including the Copyright Protection Act of 1976, prohibit students or other persons from publishing, publicizing, or selling classroom materials, including lecture notes or audio/visual recordings of lectures, without permission. This would include disseminating such materials over the internet.

Pacific Union College and its faculty reserve the right to take any available legal action under federal and state law against any person publishing, publicizing, or selling such materials without permission. In addition, Pacific Union College and its faculty reserve the right to take any available legal action under federal and state law against any person using such materials in a way that would be highly offensive to a reasonable person and gives a false impression about the college or its employees or constituents.
Grading System

Grades are posted on Lantern at the end of each quarter. Once grades have been posted, grade changes are permitted only if it can be established that a clerical error was made, resulting in an inaccurate grade submission on your official record.

To raise a grade once it has been recorded, you must repeat the course at Pacific Union College. Late work is not accepted after the end of the term.

Grades

Grades are recorded by letters and are assigned point values as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
</tr>
<tr>
<td>AU</td>
<td>Not computed</td>
</tr>
<tr>
<td>IP</td>
<td>Not computed</td>
</tr>
<tr>
<td>NR</td>
<td>Not computed</td>
</tr>
<tr>
<td>S</td>
<td>Not computed</td>
</tr>
<tr>
<td>W</td>
<td>Not computed</td>
</tr>
</tbody>
</table>

Grade Point Average (GPA)

The GPA is computed by dividing the total number of points earned by the total number of hours attempted. Grades earned for remedial coursework are not included in the GPA.

Audit

The grade “AU” is assigned to a course taken on an audit basis. A course for which you register for audit but do not attend regularly is assigned a “W.”

Incomplete

A grade of “I” is assigned in exceptional situations when unavoidable circumstances prevent completion of a course.

If you are granted a grade of “I”, you must complete the missing coursework by the time your instructor specifies, but no later than six calendar weeks from the beginning of the following quarter. An “I” not completed before this deadline reverts to a grade of “F” unless the instructor submits a different grade computed without the missing coursework.

When the final grade is recorded, it will appear on your transcript behind the notation “I/” to indicate that the grade was originally incomplete. The grade will be computed in the GPA in the same way as a standard letter grade.

In Progress

The “IP” grade is available when the requirements of a course extend beyond the quarter for which you are registered. For such courses, the course description notes that the course “Qualifies for IP grading”. If you are granted a grade of “IP”, you must complete the missing coursework by the time your instructor specifies, but no later than one calendar year from the end of the quarter (one quarter for all AVIA courses).

Not Reported

The grade “NR” is administratively assigned to a course for which the instructor does not report a grade. An “NR” not removed by the end of the second week of the following quarter becomes an “F.”

Satisfactory

A grade of “S” signifies that you earned the equivalent of “C-” or higher for a course graded on a Satisfactory/Fail (S/F) basis. The “S” grade is used only when a course is “Graded S/F” as specified in the course description.

Withdrawal

A grade of “W” is assigned to a course from which you officially withdraw between the beginning of the second week and the end of the eighth week. You may not withdraw from a course after the eighth week.

Repeating Courses to Improve the Grade

The following regulations govern course repeats to improve the grade:

1. If you wish to repeat a course to improve the grade, you must repeat the course in residence at Pacific Union College in order for your GPA to be recomputed.
2. If you take a course at Pacific Union College and then repeat the course in residence in order to improve the grade, both instances of the course with grades will still appear on your official Pacific Union College transcript. However, the course with the lower grade will be marked clearly as a repeated course on the transcript, and only the course with the higher grade is included in the grade-point calculation and the total credits earned.
3. If you transfer a course and then repeat the course while in residence to improve the grade, the transfer course will no longer apply at Pacific Union College.
4. When repeating a course to improve the grade, you must repeat all the class work. If the course includes a laboratory, you may be required to repeat all laboratory requirements at the discretion of the instructor.
5. You may repeat a course only if you have not taken a more advanced course in the same subject.
6. If you earned an unsatisfactory grade in a course required for your program and you have taken a more advanced course in the same subject, you may, on the advice of your major advisor, take another course in the same general area to meet graduation requirements.
Final Examinations

No off-campus field trips, major examinations, or extracurricular activities requiring student participation may be scheduled during the week prior to the first day of final examinations ("dead week") in order that you may devote full time to completing course projects and preparing for final examinations. Exceptions are made for laboratory courses and for those courses meeting once a week only and for which there is no contact during the normal final exam week. Additional exceptions include take-home exams, skills tests in activity courses, and quizzes.

You must take the final examination in each course in which you are enrolled at the time listed in the official examination schedule or you will receive the grade earned without the final examination. All travel, work, medical appointments and other plans must be arranged early to avoid an examination conflict.

Exceptions to the schedule will be granted by the academic dean for the following circumstances:
1. A death in the immediate family;
2. A documented medical emergency demanding immediate attention; or
3. An examination schedule with four examinations in one day or three consecutive examinations in one day (a request for an examination schedule change must be filed with the academic dean before the end of the ninth week of the quarter).

You should expect no other exceptions to the published schedule unless you can provide proof to the academic dean of an emergency situation beyond your control. If exceptions are granted for other reasons, you will be charged a fee of $100 for each rescheduled examination.

Academic Renewal

When academic renewal is granted, your permanent Pacific Union College transcript is annotated so that it is readily evident to all users of the record that no work taken during the disregarded terms, even if satisfactory, may apply toward degree requirements. All work will remain legible on the record, ensuring a true and complete academic history.

Option 1:
You may petition the registrar for up to three quarters or two semesters of previous undergraduate coursework, taken at any college or university, to be disregarded from the GPA and from all considerations associated with degree requirements.

It is expected that you will have demonstrated that work completed in the terms under consideration is substandard and not representative of your current academic ability and level of performance.

The final decision to disregard one or more terms of coursework is based upon careful review of evidence by the registrar and is made when:
1. at least one year has elapsed since the most recent work to be disregarded was completed; and
2. you have completed at Pacific Union College at least 15 quarter units with at least a 3.0 GPA.

Option 2:
If your GPA is lower than 2.0, you may petition the registrar to have exclusions from your record all prior college credit and to have no GPA. To qualify, you must
1. be at least 25 years of age;
2. have been out of a degree program of college studies for at least four years; and
3. demonstrate ability to progress in college work.

Veteran Student Enrollment and Satisfactory Progress

The veterans certifying official in the Records Office submits official certifications of enrollment to the Veterans Administration so that educational benefits can be awarded.

If you are a veteran or the dependent of a veteran, you must apply for certification by contacting the certifying official at the Records Office. The certifying official will supply the necessary forms and advise you of the procedures you must complete in order to receive the benefits to which you are entitled. It is recommended that you submit your paperwork at least two months prior to the date you expect to enroll.

The Department of Veterans Affairs (VA) determines eligibility for benefits. Monthly payments are made by the VA directly to you, the student, with the following exception: the school receives payments for tuition and fees directly from the VA if you are receiving benefits under the Post-9/11 G.I. Bill. These payments will be placed directly on your student accounts.

To qualify for maximum benefits, you must enroll for a full course load (See “Course Load”). If you enroll for less than a full course load, your benefit payments will be adjusted accordingly by the VA.

According to VA policy, veterans’ educational benefits are discontinued for a veteran (or eligible person) who remains on academic probation for more than three quarters. If you should come into this category, the VA will be notified that your certification has been terminated for “Unsatisfactory Attendance, Conduct, Or Progress”. There will be no further certification for benefits until your academic standing reflects improvement to a cumulative 2.0 GPA.
**Academic Standing**

Academic standing is determined at the end of each quarter based on academic performance. When evaluating “consecutive” or “subsequent” quarters to determine academic standing, the quarters to be considered are your most recent quarters at Pacific Union College. This applies whether or not that period of quarters was interrupted for any reason by one or more breaks in enrollment.

*For the purposes of determining academic standing, the GPA is computed including grades earned for remedial coursework.*

Academic standing for a particular term is not retroactively changed if that term GPA is impacted by repeating a course for a better grade in a later term.

**First Quarter Academic Probation**

You will be placed on first quarter academic probation at the end of any quarter when your GPA for that quarter or your Pacific Union College cumulative GPA falls below 2.0. Occasionally, a new student may be admitted on first quarter academic probation.

While on first quarter academic probation, you may enroll in a maximum of 15 quarter hours of course work. You will not be eligible for any office in student activities, and you will be required to meet regularly with an assigned Academic Mentor in the Teaching and Learning Center. If you are placed on first quarter academic probation as a freshman, you will be required to register for and successfully complete the student seminar sequence (GNST 104-105).

At the end of the quarter, your academic performance will be evaluated. Your quarter GPA and your Pacific Union College cumulative GPA each must be at least 2.0 to achieve regular standing, otherwise you will be placed on second quarter academic probation.

**Second Quarter Academic Probation**

You will be placed on second quarter academic probation at the end of the second consecutive quarter when either your GPA for that quarter or your Pacific Union College cumulative GPA is below 2.0.

While on second quarter academic probation, you are subject to the same guidelines for students on first quarter academic probation (as described above).

At the end of the quarter, your academic performance will be evaluated. Your quarter GPA and your Pacific Union College cumulative GPA each must be at least 2.0 to achieve regular standing, otherwise you will be placed on academic suspension.

**Academic Suspension**

You will be placed on academic suspension at the end of the third consecutive quarter when either your GPA for that quarter or your Pacific Union College cumulative GPA is below 2.0. *Academic suspension is recorded on the transcript.*

While on academic suspension, you may not continue your studies at Pacific Union College. You may reapply for readmission after you complete at least 45 quarter hours of transferable coursework at another accredited college or university for which you earn a GPA of at least 2.25.

If you are readmitted to Pacific Union College following academic suspension, your academic performance will be evaluated after each successive quarter: 1. If you have a Pacific Union College cumulative GPA below 2.0 upon readmission after suspension: You must achieve a minimum GPA of 2.25 for each successive quarter until you have completed at least 2 successful quarters and your Pacific Union College cumulative GPA has reached 2.0. You will achieve regular standing after at least two quarters have been successfully completed and your cumulative GPA has reached 2.0, otherwise you will be placed on Academic Dismissal.

2. If you have a Pacific Union College cumulative GPA of 2.0 or above upon readmission after suspension: You must achieve a minimum GPA of 2.0 for each of your next two quarters. You will achieve regular standing after these two quarters have been successfully completed, otherwise you will be placed on academic dismissal.

**Academic Dismissal**

You will be placed on academic dismissal if you are readmitted to Pacific Union College following academic suspension and then fail to earn a satisfactory GPA (as described above) during any subsequent quarter. *Academic dismissal is recorded on the transcript.*

While on academic dismissal, you may not continue your studies at Pacific Union College. You may reapply for readmission after you complete at least 45 quarter hours of transferable coursework at another accredited college or university for which you earn a GPA of at least 2.25.

If you are readmitted to Pacific Union College following academic dismissal, your academic performance will be evaluated after each subsequent quarter. You must earn a GPA of at least 2.0 each quarter of your enrollment at Pacific Union College, otherwise you will be placed on permanent academic dismissal.

**Permanent Academic Dismissal**

You will be placed on permanent academic dismissal if you are readmitted to Pacific Union College following academic dismissal and then your GPA falls below 2.0 in any quarter. *Permanent academic dismissal is recorded on the transcript.*

Students on permanent academic dismissal are ineligible for readmission to Pacific Union College.
Academic Credit

Pacific Union College operates on the quarter system. One quarter credit normally represents one fifty-minute class per week throughout an academic quarter and approximately two hours of preparation for each fifty-minute session. One laboratory period of approximately three hours is considered equal in credit value to one lecture/discussion period and the expected preparation.

When evaluating credit, Pacific Union College considers 1 semester credit to be equivalent to 1.5 quarter credits.

Armed Forces Credit

Although “blanket” credit is not awarded for military service, some training courses provided by the armed forces may be the equivalent of college courses. Pacific Union College awards credit for military training in accordance with the American Council on Education’s Guide to the Evaluation of Education Experiences in the Armed Services.

Transfer Credit

If you have attended other institutions of higher education, you must provide complete official transcripts from each college or university attended, even where you earned no credit. Such transcripts should be filed before you register for the quarter following the completion of the work. This policy applies also if you are regularly enrolled at Pacific Union College but take summer work, correspondence, or other work elsewhere. Failure to file all transcripts may result in delay of registration until the transcripts are received.

Transcripts from institutions accredited by regional accrediting associations are evaluated to allow equivalent courses from the transfer institution to satisfy specific course requirements at Pacific Union College. Transfer credit is accepted only for courses with a grade of C- or higher. The college reserves the right to require repetition of courses that have become outdated.

If you have transcripts from an institution without regional accreditation, you may request a transcript evaluation after you have completed a minimum of 16 quarter hours in residence at Pacific Union College with a GPA of at least 2.0. The transcript from the unaccredited institution will be analyzed on a course-by-course basis; occasionally credit is established for those courses that appropriately apply to your program at Pacific Union College. In most instances you will be asked to validate courses taken at an institution without regional accreditation by passing challenge examinations before credit will be granted.

Credit is allowed for college course work completed before secondary-school graduation if such work has been taken in a regionally-accredited college and is shown by transcript as college credit.

The maximum credit transferable from a recognized junior (community) college is 108 quarter hours (72 semester hours). Upper-division credit is not allowed for junior college courses or for courses numbered as lower-division credit at another senior college or university.

Pacific Union College reserves the right to accept or reject credit earned at other institutions. Prior to taking courses at other institutions, you should obtain approval from the Records Office at Pacific Union College in order to ensure that the credit will be accepted. Pacific Union College normally accepts a maximum of 18 semester hours per semester or 18 quarter hours per quarter for all transfer credit for both traditional and non-traditional students. Any exception to this policy must be approved by the appropriate department chair and by the registrar.

Pacific Union College is regionally accredited. However, other institutions reserve the right to accept or reject credit earned at Pacific Union College. Prior to taking courses at Pacific Union College for the purpose of transferring credit to another institution, you should obtain approval from the other institution in order to ensure that the credit will be accepted.

Repeating Courses for Duplicate Credit

The following regulations govern course repeats for duplicate credit:

1. In general, courses may not be repeated for duplicate credit. However, some courses have been determined to be repeatable for credit due to the nature of the material covered. If a course is repeatable for credit, this information will be indicated within the course description, along with any special regulations governing the repeats for the particular course.

2. You may repeat a course for credit only if you have not taken a more advanced course in the same subject.

3. When repeating a course for credit, you must repeat all the class work and all laboratory requirements.

Reserving Courses for Post-Degree or Graduate Credit for Education

If you have taken upper-division courses that were not needed to fulfill graduation requirements, you may request that specific ones be reserved for post-baccalaureate or graduate credit by making arrangements with the Education Department and the Records Office. To be fully credentialed by California and the SDA denomination, students must complete an approved fifth year or master’s degree of 45 quarter hours beyond a bachelor’s degree.
Independent Study

Independent Study refers to advanced study or research you may do on an individual basis under the direction of a faculty member with regular appointment. You may use Independent Study for your major, minor, free electives or cognates, but not to meet general-education requirements. You may earn up to twelve hours in Independent Study.

To be eligible for Independent Study in any department, you must have reached junior or senior standing, have met all departmental prerequisites, and have earned a minimum GPA of 3.0 in the proposed area of study. In order to register for an independent study, you must complete and submit a Request for Independent Study form (available at the Records Office). In order to complete the form, you will negotiate a contract with the instructor and the chair of the supervising department specifying the number of hours of credit to be earned, the detailed requirements of the course, the grading criteria, and a schedule of meetings.

Independent Study should not take the place of courses regularly available. It should not be confused with courses offered through Directed Study.

Credit for Student Missionaries and Taskforce Volunteers

You may earn academic credit in connection with field experience (GNRL 350) during appointment as a Student Missionary or Task Force volunteer. To qualify, you must have previously taken courses at Pacific Union College, and you must register for the class before the experience begins. Credit—elective only—is available on a Satisfactory/Fail basis. You may earn 6 hours per quarter to a maximum of 12 hours.

More information about credit for field experience is available from the Campus Ministries Office or the registrar.

Regulations Governing Credit by Examination

You may earn academic credit by successfully writing certain AP (Advanced Placement), IB (International Baccalaureate), CLEP (College Level Examination Program), DSST (DANTES Subject Standardized Tests), Excelsior, and college-prepared examination credit. The following regulations apply to all credit earned through examinations:

1. No credit by examination is available for remedial (0-level) courses.
2. The maximum credit applicable to a four-year degree is 45 hours of AP, IB, CLEP, DSST, and/or Excelsior examination credit and 18 hours of college-prepared examination credit.
3. The maximum credit applicable to a two-year degree is 24 hours of AP, IB, CLEP, DSST, and/or Excelsior examination credit and 9 hours of college-prepared examination credit.
4. Pacific Union College awards credit for selected examinations only. You may get further information at the Records Office regarding which examinations are accepted for credit by Pacific Union College.
5. Credit earned by examination will be placed on your transcript with the credit hours earned and a grade of “S” (satisfactory).
6. You may not earn credit by examination if the course in questions is a prerequisite to one in which you have already earned credit.
7. If you have taken or attempted a course, you may not raise the grade for that course through credit by examination.

The following regulations govern credit earned through AP and IB examinations:

1. The credit is subject to the Regulations Governing Credit by Examination listed above.
2. In order to earn credit through the AP program, you must pass the examination with a score of 3, 4, or 5. To earn credit through the IB program, you must pass the Higher Level examination with a score of 4, 5, 6, or 7. No credit is awarded AP or IB courses or for Standard Level IB examinations.
3. You will be granted 4 or 8 quarter hours of General Education or elective credit for each passed AP examination. You will be granted 8 quarter hours of General Education or elective credit for each passed IB Higher Level examination. Information regarding exact credit amounts and equivalencies for each test may be obtained from the Records Office.
4. GE and elective credits granted for AP and IB examinations do not necessarily apply to major requirements. Some professional or graduate schools may not accept AP and IB credit. Check with your advisor to determine the applicability of AP and IB credit to your major or pre-professional program.

CLEP, DSST, and Excelsior Examinations

CLEP, DSST, and Excelsior examinations are intended as a means of establishing academic credit for persons who, through extensive independent study, specialized training, etc., have gained knowledge equivalent to that gained by regular study in formal college courses.

The following regulations govern credit earned through CLEP, DSST, and Excelsior examinations:

1. The credit is subject to the Regula-
Pass a proficiency examination. The student who
1. The credit is subject to the Regulations Governing Credit by Examination listed above.
2. The CLEP, DSST, and Excelsior examinations are open to all classifications of students, but are directed towards freshmen and sophomores.
3. CLEP, DSST, and Excelsior examinations are prepared and administered by outside testing agencies. The Pacific Union College Counseling Center is an official testing site; you may get further information regarding examination procedures at the Counseling Center.
4. To earn credit for a CLEP, DSST, or Excelsior examination, you must achieve the credit granting score recommended by the American Council on Education.

College-Prepared Examinations

College-prepared examinations are prepared and administered by Pacific Union College faculty members. They are intended as a means of establishing academic credit for persons who have gained knowledge to that equivalent to that gained by regular study in formal college courses through activities such as independent study, work experience, and specialized training.

The following special regulations govern credit earned through college-prepared examinations:
1. The credit is subject to the Regulations Governing Credit by Examination listed above.
2. No college-prepared examination may be taken until a completed Request for Credit Examination form is on file at the Records Office. The form can be obtained from the Records Office and requires the signatures of the course instructor, the department chair, and the registrar as well as proof of payment for examination fees. For examination fees, see the section entitled “Financial Information” in this catalog.
3. A course for which credit may be earned by examination is normally a lower-division course in a four-year curriculum or a first-year course in a two-year curriculum. Its content is such that it can be measured by a written, oral, or manipulative test.
4. To be eligible for credit by examination, you must demonstrate superior competence by such evidence as the following:
   a) a GPA of at least 3.0 in similar courses;
   b) a percentile score of at least 75 on an ACT test in the same area;
   c) similar course work in a non-academic institution; or
   d) work experience sufficient to develop course competencies.
5. To earn credit for a college-prepared examination, you must score a C+ or better on the graded examination.
6. If you have audited a course, you may earn credit by examination for the course by paying one half the regular tuition fee.
7. Examinations for credit cannot be repeated.

Waiver Examinations

You may waive certain course requirements provided that you fulfill one of the following conditions:
1. Present credit in courses substantially equivalent in purpose, scope, context, and credit value to the required course from which you request exemption.
2. Pass a proficiency examination. The examination is administered by the department concerned and approved by the Records Office.

Qualifying for course exemption through waiver examination does not involve the awarding of credit, nor does it reduce the total number of hours to be earned for a degree. Its only effect is to increase the number of elective hours available as part of your degree program. For examination fees, see the section entitled “Financial Information” in this catalog.

Credit by Life-Learning Portfolio Assessment

You may earn up to 18 hours of credit through assessment of documentation provided in a Life-Learning Portfolio. The Academic Standards and General Education Committee administers this program in harmony with established Pacific Union College guidelines and standards. Additional information is available at the Records Office.

Class Standing

Class standing is calculated based on quarter hours of credit completed. New transfer students will have their official class standing calculated within one quarter after all official transfer transcripts have been submitted to Pacific Union College.

Freshman: A beginning first-year student or one who has completed fewer than 45 quarter hours of credit.
Sophomore: A student who has completed at least 45 quarter hours.
Junior: A student who has completed at least 90 quarter hours of credit.
Senior: A student who has completed at least 135 quarter hours of credit.
Graduated: A student who has completed an undergraduate degree at Pacific Union College and is pursuing a second undergraduate degree.
M.Ed. Degree Student: A student who holds a baccalaureate degree from an accredited college or university and has been accepted into the Master of Education degree program.
Graduation Information

At the end of spring quarter, commencement is held for all students who have completed all requirements for a degree. If you complete your requirements during a summer, fall or winter quarter, you are eligible to participate in the following spring commencement.

In order to be eligible for participation in spring commencement, you are expected to successfully complete an application for degree candidacy before the beginning of spring quarter. Information regarding degree candidacy can be found in the section entitled “The Academic Program”.

Graduation In Absentia

You are expected to participate in the commencement service for which you are eligible unless you notify the Records Office in advance that you plan to graduate in absentia. You should make written application for exemption not later than one week prior to commencement. A fee of $25 is assessed if you are absent from graduation without having given prior notice.

Graduation Recognition for Nurses

All nursing students are expected to participate in the recognition (pinning) service. Requests for exemption may be submitted to the Nursing Department.

Honors Program Graduation

The Honors Program is designed to enrich the studies of exceptionally well-prepared students. Only students fulfilling all requirements of the Honors Program will graduate “With Honors,” a designation that appears on the graduation program and on the student’s transcript and diploma. (See “The Honors Program.”)

Graduation with Academic Distinction

Students who have earned both a Pacific Union College and an over-all GPA of 3.5-3.749 will be graduated cum laude; those with 3.75-3.899, magna cum laude; and those with 3.9-4.0, summa cum laude. For the spring commencement program, academic distinction status is calculated based on all coursework completed up through the winter quarter. However, your academic distinction status may change based on your academic performance during your final quarter. Therefore the official academic distinction which appears on your academic records will be calculated based on all coursework completed for the degree.

Official Degree Conferral Date

As described above, commencement is held only once each year. However, the official date of degree conferral appearing on your academic records is that of the last day of the quarter during which you actually completed the degree requirements.

For the 2010-2012 academic years, the official degree conferral dates are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Requirements Completed</th>
<th>Degree Conferred</th>
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<tr>
<td>2010-2011</td>
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<td>Fall 2010</td>
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<td>Winter 2011</td>
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<td>Spring 2011</td>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Requirements Completed</th>
<th>Degree Conferred</th>
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<td>2011-2012</td>
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<td></td>
<td>Fall 2011</td>
<td>December 15, 2011</td>
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<td></td>
<td>Winter 2012</td>
<td>March 22, 2012</td>
</tr>
<tr>
<td></td>
<td>Spring 2012</td>
<td>June 17, 2012</td>
</tr>
</tbody>
</table>

Transcripts and Diplomas

No transcripts or diplomas are issued until all of your financial obligations have been met. The college reserves the right to withhold all information concerning your record if you are in arrears in payment of accounts or other charges, including student loans.

Transcripts

At your written and signed request, the Records Office will provide transcripts of your credits. For transcript fees, see the section entitled “Financial Information” in this catalog. You should allow two weeks for processing your request and mailing the transcript.

Diplomas

Diplomas for graduates will be mailed approximately one month after:
1. The commencement ceremony has been completed;
2. Final grades have been recorded;
3. Final academic evaluations have been completed; and
4. Financial clearance has been obtained.

One diploma is provided free of charge for each degree earned. If a replacement diploma is requested, a fee of $25 per diploma is assessed. The phrase “Reissued on date” is recorded on the replacement diploma.

Documents from other Institutions

Documents (including transcripts) from other institutions which have been presented for admission and evaluation of credit become the property of the college and are not reissued or copied for release.
Quarter System
Each quarter has approximately 11 weeks. Quarters are designated as Fall F; Winter, W; Spring, S; and Summer, Su.

Credit Hours
One quarter hour normally represents one fifty-minute class per week throughout an academic quarter and approximately two hours of preparation for each fifty-minute session. One laboratory period of approximately three hours is considered equal in credit value to one lecture/discussion period and the expected preparation.

Variations may include independent study, directed study, research courses, individualized studio instruction, music lessons, special workshops, and other “nontraditional” academic events.

Prefix
The three- or four-letter prefix to each course number indicates the subject area.

Numbering and Classification of Courses
Courses are numbered and classified as follows:

001-099 Remedial Courses
For students with inadequate academic skills. Credit earned through remedial courses may not apply towards any degree or towards the GPA.

100-299 Lower-division Courses
Normally taken by freshmen and sophomores.

300-499 Upper-division Courses
Normally taken by juniors and seniors. Freshmen may register for these courses only with special permission of the registrar and with the approval of the academic advisor and the course instructor.

500-599 Graduate Courses
Primarily for graduate students. With the approval of the major professor, a senior whose preparation is adequate may take graduate courses for undergraduate credit.

Special Course Information
Any special information for a course is designated at the end of the course description as follows:
1. Laboratories- Three hours in length unless specified otherwise.
2. Prerequisites*
3. Corequisites*
4. Repeatability for Credit*
5. Special Grading*
6. Alternate Year Courses- Odd/even designation based on the end of the academic year.
    Odd year 2010-2011
    Even year 2011-2012

Directed Study
You may take a catalog-listed course on an individual basis only under the most unusual circumstances and at the discretion of the instructor and department chair. Any such course will be offered only for the number of hours listed in the catalog and will adhere to the catalog description and standard course syllabus. Consult with the Records Office for request forms and applicable criteria.

When Directed Study is approved, the course will be listed as follows:
1. Alpha prefix of the course
2. Course number 097, 297 or 497
3. The title Directed Study
4. The name of the course as subtitle

Hyphenated Courses
Course numbers separated by hyphens indicate an integrated sequence. Though they are generally taken consecutively, a student may receive credit for any quarter or quarters without the others provided that any prerequisites have been met.

Directed Group Study
A course is offered as a Directed Group Study when a department chooses to
1. list a course with a before it is entered in the catalog, or
2. offer the course, on a one-time basis, for enrichment purposes when sufficient student interest is indicated.

A specific title is assigned when the course is offered and the course is listed as follows:
1. Alpha prefix of the course
2. Course number 296 or 496
3. The title Directed Group Study
4. The name of the course as subtitle

* See the section entitled “Academic Information and Policies” for more information.
### Prefix

The three- or four-letter prefix to each course number indicates the department or subject area as follows:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Subject</th>
<th>Department</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT</td>
<td>Accounting</td>
<td>Business Administration &amp; Economics</td>
<td>66</td>
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<tr>
<td>AGRI</td>
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<tr>
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<td>Education (Degree Completion Program)</td>
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<td>General</td>
<td>Non-departmental Courses</td>
<td>44</td>
</tr>
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<td>Academic Administration</td>
<td>44</td>
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<td>Honors Program</td>
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<td>69</td>
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<td>Mathematics</td>
<td>134</td>
</tr>
</tbody>
</table>
General Courses

(Nondepartmental Courses)

Lower-Division Courses:

GNRL 100 .1 F, W, S
Campus Colloquy
A weekly gathering of the Pacific Union College community. Students, faculty, and staff meet to worship, learn and exchange ideas and information. Required for all undergraduate students each quarter (unless specially exempted). To pass, a student must attend a minimum of six meetings each quarter. Repeatable for credit. Graded S/F.

GNRL 104 1 Su
Pacific Quest
A week-long program of course work, projects, and investigations in science, mathematics, humanities and the arts. Prerequisite: Admission to the Pacific-Quest summer program for talented and gifted students. Repeatable for credit. Graded S/F.

GNRL 204 2 S
Introduction to Dentistry
Dental anatomy, morphology, and related aspects of dentistry as a career. One lecture and one laboratory per week.

Upper-Division Course:

GNRL 350 6 F, S
Field Experience
Enrollment limited to students in the Pacific Union College Student Missionary and Task Force programs. Consists of academic work that is done in connection with the service appointment, including a weekly journal, a reflective paper, and a public presentation. Registration qualifies students to maintain part-time enrollment status at the college during the fall and spring quarters. Further information is available at the Campus Ministries Office or from the registrar. Repeatable to a maximum of 12 credits. Qualifies for IP grading. Graded S/F.

Honors Courses

The honors courses are interdisciplinary; several are team-taught. Enrollment is open to students in the honors program. For a description of the honors program, see the section entitled “The Honors Program” in this catalog.

Note: For each of the following courses, core texts are listed. Some seminars also list supplemental texts. The core lists tend to be stable from year to year. Occasionally, texts not currently listed will be used. Texts for Beauty, in particular, will vary depending on where the course is being taught.

Freshman Seminars:

HNRS 110 5 F
Foundations
Examines various foundational texts of western culture in that it looks at ancient texts that still inform our views of the world.
Core texts:
The David Story
Gilgamesh
Hesiod, Theogony and Works and Days
Homer, The Odyssey
Ovid, Metamorphoses (Selections)
Plato, The Last Days of Socrates
Sophocles, Antigone

HNRS 120 5 W
Liberty and America
Explores themes of intellectual history, liberty and the roles and responsibilities of citizens in their communities with emphasis on the American experience and questions of democracy.
Core texts:
Atwood, The Handmaid’s Tale
The Constitution of the United States of America
The Declaration of Independence

General Studies

Lower-Division Courses:

GNST 104-105 2-1 F, W, S
Student Seminar I-II
GNST 104 examines the college learning process in academic areas and encourages skill development in strengths exploration, goal setting, learning styles, note taking and test-taking strategies. These and other topics related to learning and retaining college material are explored.
GNST 105 is designed to immediately follow GNST 104. Academic progress is tracked on a weekly, one-on-one basis, although one or more group sessions and tutorials may be required.
Registration for and successful completion of the sequence is required for freshmen who are admitted to Pacific Union College on academic probation and for current freshmen as soon as they are placed on academic probation.

Upper-Division Course:

GNST 401 1 F, W, S
Senior Assessment Seminar
Designed for baccalaureate seniors only. Assesses student learning outcomes in general education and in the field of study so that the college may determine how well it is reaching its educational goals. May include a major field examination, other standardized examinations, and various Pacific Union College-developed tests and surveys. Required for, and restricted to, students during their final quarter of residency for the B.A., B.S., B.B.A., B.Mus., and B.S.W. programs. Qualifies for IP grading.
Lincoln, *Speeches and Letters*
Locke, *Second Treatise on Government*
Mill, *On Liberty*
Plato, *The Republic*
Toqueville, *Democracy in America*

**HNRS 130 5 S**

*Scripture I*

Includes history, art, music, and literature in an interdisciplinary approach to six Old Testament books. Also looks at an Eastern sacred text. There is focus on themes, their relationships to various disciplines, and their modern applications to contemporary life.

**Core texts:**
- *Bhagavad Gita*
- Blake, engravings of Job and Genesis
- Genesis
- Hosea
- Job
- Jonah
- Mendelssohn, *Elijah* (oratorio)
- Micah
- Michelangelo, Sistine Chapel paintings
- Ruth

**Supplemental texts:**
- Additional Old Testament Books
- C.S. Lewis, *Perelandra*

**Sophomore Seminars:**

**HNRS 210 4 F**

*Cosmos*

Provides for a study of western philosophical approaches to science and the scientific method, with a particular emphasis on the investigation of physical and biological origins. Examines the metaphysical and epistemological underpinnings of science, as well as the relationship of science to religion and other fields which make claims about origins.

**Core texts:**
- Bacon, *Novum Organum*
- Galileo, *Dialogue Concerning the Two Chief World Systems*
- Hawking, *A Brief History of Time*
- Kuhn, *The Structure of Scientific Revolutions*
- Lewis, *The Discarded Image*

**Supplemental texts:**
- *Godspell* (film)
- *Jesus of Montreal* (film)
- Selected art on Gospel themes
- Selected Gnostic texts
- Selected NT Apocryphal texts
- Selected texts from the Apostolic Fathers

**HNRS 220 4 W**

*Self and Society*

Probes the questions that come from asking, “Who am I?” Looks at the idea of the self and how the individual is shaped by and relates to society as a whole.

**Core texts:**
- St. Augustine, *Confessions*
- Austen, *Persuasion*
- Durkheim, *The Elementary Forms of Religious Life*
- James, *Varieties of Religious Experience*
- White, *Spiritual Gifts, Volume II*
- Woolf, *A Room of One’s Own*

**HNRS 230 4 S**

*Scripture II*

Examines how the New Testament canon was developed and explores the historical and cultural context out of which the New Testament was formed. Also looks at the literary qualities of New Testament texts and how those texts have influenced art and music.

**Core texts:**
- Acts
- Bach, *St. John Passion* (music)
- Mark
- Pasolini, *Il Vangeolo Matteo* (film)
- Revelation
- Romans
- Synoptic Nativity texts

**Supplemental texts:**
- *Colossians* and/or *I John*
- *Godspell* (film)
- *Jesus of Montreal* (film)
- Selected art on Gospel themes
- Selected Gnostic texts
- Selected NT Apocryphal texts
- Selected texts from the Apostolic Fathers

**Summer Term Abroad:**

**HNRS 300 5 Su**

*Beauty*

Explores questions of aesthetics as developed within western culture. Explores how beauty shapes views of us and our views of the world. The class is specifically designed to explore such questions in another country while exposing students to great works of art.

**Core texts:**
- Aristotle, *Poetics*
- Burke, *A Philosophical Inquiry into the Origins of Our Ideas of the Sublime and the Beautiful*
- De Bottom, *The Art of Travel* (selection)
- Greenberg, *Modernist Painting* (essay)
- Plato, *Ion and The Republic* (selection)
- Vasari, *Lives of the Artists*
- Winterson, *Art Objects* (selection)

**Junior Seminars:**

**HNRS 310 4 F**

*Virtue*

Deals with the moral calculus of human virtue. The subject of God and the Divine, the role of the individual and of the group, and the miasma of moral reckoning in the modern and post-modern world are explored through classical, non-Western, mystical and expressionist texts. Rather than a course on formal ethics, the seminar approaches a broader field of meaning, righteousness and judgement, cross-culturally, diachronically, and from a variety of genres.
Core texts:
- Aristotle, *Nicomachean Ethics*
- Confucius, *Analects*
- Conrad, *The Heart of Darkness*
- Fletcher, *Situation Ethics*
- Nietzsche, *The Genealogy of Morals*

**HNRS 320**  
**Christianity**  
An exploration of the historical origins, core beliefs and modern relevance of Christianity through the study of core texts, ranging from ancient apologetics and epics to modern theology.

Core texts:
- Athanasius, *On the Incarnation*
- Bull & Lockhart, *Seeking a Sanctuary*
- Dante, *The Divine Comedy*
- Dostoevsky, *The Brothers Karamazov*
- Milton, *Paradise Lost*
- *Requiem Mass* (selected musical score)

**HNRS 349**  
**Pattern**  
Explores the pervasive quest for pattern often associated with mathematical thought and the idea that patterning is characteristic of thinking in general. Also looks at how humans contemplate and communicate abstract ideas and the creative process involved in that undertaking. Questions are asked about why metaphors and similes are such powerful thinking tools, and whether computers will ever truly be able to think.

Core texts:
- Abbott, *Flatland*
- Bach (selected works)
- Dunham, *Journey through Genius*
- Euclid, *Elements* (selections)
- Hofstadter, *Godel, Escher, Bach*
- Stoppard, *Arcadia*

Supplemental texts:
- Seckel, *Masters of Deception*

**Senior Seminars:**

**HNRS 410**  
**Alterity**  
An intense examination of challenging perspectives of the ways we structure “otherness” and being “different.” Examines the ways hatred, fear, race, gender, economics, religion and love are used to define, classify and claim an understanding of peoples and cultures who are other than what we in the west believe ourselves to be.

Core texts:
- Berlin, *The Crooked Timber of Humanity*
- DeBeauvior, *The Second Sex*
- Fanon, *Black Skin, White Masks*
- Foster, *Passage to India*
- Said, *Orientalism*
- Sartre, *Anti-Semite and Jew: An Exploration of the Etiology of Hate*

**HNRS 420**  
**Progress**  
This capstone seminar is an examination of ideas of progress on both external and internal levels. The seminar engages perspectives on ways of dealing with disparities in the world including ideas on the distribution of wealth. Personal progress is also explicitly examined and interrogated. The question is asked, “After taking Honors, how should one live one’s life?”

Core texts:
- Huxley, *Brave New World*
- Marx, *Capital*
- McLuhan, *The Medium is the Message*
- Tsu, *Tao Te Ching*
- Voltaire, *Candide*
- Wright, *A Short History of Progress*

**HNRS 498**  
**Honors Project**  
An individual research or creative project designed to explore issues, ideas, or art forms encountered in the Honors seminars. Qualifies for IP grading.
Faculty
Kaye Varney, director
Departmental Office: Flight Center; 965-6219

Degrees and Programs
Aviation, B.S. ........................................................................... 47
Aviation, A.S. ........................................................................... 48

The Aviation Program prepares students for positions as private and commercial pilots, mission and medical pilots, and others. Training includes theory, ground and flight instruction leading to pilot certificates and ratings from Private Pilot through Commercial Pilot and Flight Instructor.

Students transferring into the aviation program with previously earned FAA certificates or ratings should apply to the Aviation Program director for course credit at the time of initial registration. Course credit for FAA certificates or ratings earned earlier at other locations is not available and will not be awarded after the student has begun aviation courses at Pacific Union College. A copy of FAA certificates must be presented to the departmental representative at the Flight Center. Grades issued in recognition of FAA certificate validations are recorded as “S” (Satisfactory). For complete aviation policies and procedures, consult the Flight Policies and Procedures Handbook, available at the Flight Center. For financial information about flight training, see the section entitled “Financial Information” in this catalog.

Additional Fees:
Aviation students should expect and plan for approximately $7,000 per year in airplane rental fees. They are advised to identify themselves to the Student Financial Services Office as aviation students to explore the possibility of financial assistance with this expense.

Major in Aviation, B.S.
A minimum of 68 hours (33 upper-division hours)

Required Core Courses (60 hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVIA 172</td>
<td>Electronics and Fuel Systems</td>
<td>2</td>
</tr>
<tr>
<td>AVIA 173</td>
<td>Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>AVIA 175</td>
<td>Private Pilot Theory</td>
<td>4</td>
</tr>
<tr>
<td>AVIA 176</td>
<td>Private Flight Training</td>
<td>2</td>
</tr>
<tr>
<td>AVIA 177</td>
<td>Intermediate Private Flight Training</td>
<td>2</td>
</tr>
<tr>
<td>AVIA 178</td>
<td>Advanced Private Flight Training</td>
<td>2</td>
</tr>
<tr>
<td>AVIA 275</td>
<td>Instrument Pilot Theory</td>
<td>4</td>
</tr>
<tr>
<td>AVIA 276</td>
<td>Instrument Flight Training</td>
<td>3</td>
</tr>
<tr>
<td>AVIA 278</td>
<td>Advanced Instrument Flight Training</td>
<td>4</td>
</tr>
<tr>
<td>AVIA 305</td>
<td>Aircraft Systems</td>
<td>4</td>
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<tr>
<td>AVIA 375</td>
<td>Commercial, ATP and CFI Theory</td>
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<tr>
<td>AVIA 376</td>
<td>Commercial Flight Training</td>
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<tr>
<td>AVIA 377</td>
<td>Intermediate Commercial Flight Training</td>
<td>2</td>
</tr>
<tr>
<td>AVIA 378</td>
<td>Advanced Commercial Flight Training</td>
<td>2</td>
</tr>
<tr>
<td>AVIA 379</td>
<td>Aerodynamics</td>
<td>2</td>
</tr>
<tr>
<td>AVIA 460</td>
<td>Professional Skills for Pilots</td>
<td>2</td>
</tr>
<tr>
<td>AVIA 470</td>
<td>Fundamentals of Flight Instruction</td>
<td>1</td>
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<tr>
<td>AVIA 471</td>
<td>Flight Instructor Flight Training</td>
<td>6</td>
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<tr>
<td>AVIA 476</td>
<td>Add-on Class Rating</td>
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<td>AVIA 477</td>
<td>Human Factors in Aviation</td>
<td>2</td>
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<tr>
<td>AVIA 478</td>
<td>Add-on CFI Rating</td>
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<tr>
<td>ELEC 141</td>
<td>Applied Electronics</td>
<td>3</td>
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Required Core Electives (8 hours):
At least 8 hours from the following:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>AVIA 273</td>
<td>Practicum in Flight (1-6)</td>
</tr>
<tr>
<td>AVIA 350</td>
<td>Mission Flying Theory and Practice (2)</td>
</tr>
<tr>
<td>AVIA 450</td>
<td>Advanced Aircraft Systems (2)</td>
</tr>
<tr>
<td>AVIA 472</td>
<td>Instrument Instructor Flight Training (3)</td>
</tr>
<tr>
<td>AVIA 473</td>
<td>Advanced Practicum in Flight (1-6)</td>
</tr>
</tbody>
</table>

Recommended Minor:
A minor in Business Administration is recommended for aviation majors.
**Aviation**

**Recommended Courses:**
For students with a given interest, the following courses are recommended:

**Mission Aviation:**
ANTH 124, AVIA 350, COMM 330, EMER 101, PREL 337, RELH 311, RELP 235, 319, SOWK 121

**Commercial Aviation:**
AVIA 450, COMM 223, 330, ECON 261, 332, MGMT 261, 361, 465

**Recommended Field Experience:**
It is recommended that all students majoring in Aviation should have completed, by the end of winter quarter of their senior year, 500 hours of flight time.

The objective of this program is to prepare graduates for such positions in the aviation industry as the following: mission pilots, company pilots, medical evacuation, teaching positions, pipeline patrol, border patrol, police, pilot training, forestry, fishing industry, air taxi operator, accident investigation, FAA specialist, major airline pilot, commuter airline pilot, cargo operations (FEDEX, UPS), fixed-base operator, traffic controller, and airport manager.

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**Aviation**

**Service Course:**
(Not applicable to a major or minor in this department)

**AVIA 101** 1 F, W, S
**Introduction to Flight**
An introduction to the elements and science of flight. Flight instruction on basic maneuvers of flight and landings. Survey of aircraft types, design considerations, and role applications. Brief history of aviation and its safety programs.

**Lower-Division Courses:**

**AVIA 172** 2 W
**Electronics and Fuel Systems**
The components of the charging system, electrical storage, and starting systems. Battery-driven ignition systems, magnetos, engine combustion principles, and diagnosis of failures. Wiring, fuses, bus bar and grounding systems. Fuel systems section covers storage, fuel formulation, pumping, carburation, and electronic and mechanical fuel injection and turbo charging. **Even years.**

**AVIA 173** 3 F
**Meteorology**
An introduction to the causes of weather phenomena and patterns. Meteorological theory, the best ways to obtain current weather reports and forecasts, how to interpret meteorological reports, how to predict changes in weather, how to recognize dangerous weather patterns, and how to react to difficult situations caused by adverse weather. For both pilots and nonpilots. Recommended corequisite: AVIA 175.

**AVIA 175** 4 F, S
**Private Pilot Theory**
The theory necessary for safe flight in today’s environment. Includes aerodynamics, the airspace system, aircraft performance and design, basic weather, maps, navigation, and aeromedical factors. Prepares the future private pilot for the FAA private pilot written exam. Corequisite: AVIA 176.

**AVIA 176** 2 Su, F, W, S
**Private Flight Training**
Covers all flight training up through solo flight. Includes training in preflight, taxi, take-off, flight maneuvers, stalls,
emergency procedures, normal and crosswind landings, federal regulations, traffic procedures, and communications. Qualifies for IP grading.*

AVIA 177 2 Su, F, W, S Intermediate Private Flight Training
Includes five hours of solo practice of take-offs, air maneuvers, and landings. Special training in short-field and soft-field landings, emergency procedures, slips, diversions, and cross-country flying techniques with a certificated flight instructor completing a minimum of two dual cross-country flights. Prerequisite: AVIA 176. Qualifies for IP grading.*

AVIA 178 2 Su, F, W, S Advanced Private Flight Training
Flight with reference to instruments, night flying, VOR navigation, filing flight plans, pilotage, dead reckoning, and solo practice in preparation for the FAA private pilot flight examination. Prerequisite: AVIA 177. Qualifies for IP grading.*

AVIA 273 1-6 Su, F, W, S Practicum in Flight
A minimum of forty hours of practice in cross-country flying as pilot-in-command to assigned destinations in preparation for the instrument pilot rating. Practice with cockpit management skills and use of attitude instrument flying. Prerequisite: AVIA 178. Repeatable to a maximum of 6 credits. Qualifies for IP grading.*

AVIA 275 4 W Instrument Pilot Theory
From basic attitude instrument flying to getting around in the modern airspace system on an IFR flight plan. Preparation for the FAA instrument written examination and the instrument instructor written examination. Prerequisite: AVIA 175.

AVIA 276 3 Su, F, W, S Instrument Flight Training
Basic attitude instrument flying theory and skills. Developing proficiency in scan of the attitude instruments, interpretation of the instruments, and control of the aircraft with an additional work load that includes such factors as communications, copying clearances, using a timing device, and reading charts in flight. Also includes VOR and ADF navigation, DME arcs, and holding-patterns of all types. Prerequisite or corequisite: AVIA 175, 176, 177, 178. Qualifies for IP grading.*

AVIA 278 4 Su, F, W, S Advanced Instrument Flight Training
Cross-country instrument flying making use of all former instrument training. Use of acquired instrument skills in cross-country flights to large airports. Includes a comprehensive review and preparation for the FAA instrument flight examination. Prerequisite: AVIA 276. Qualifies for IP grading.*

Upper-Division Courses:

AVIA 305 4 W Aircraft Systems
Major aircraft systems on both small and large aircraft, including theory and troubleshooting techniques. Includes engine theory, propellers, governors, hydraulics, pneumatics, anti-ice and de-ice systems, pressurization, flight controls and landing gear. Special emphasis on turbine engine theory and systems for transition to large transport category aircraft. Corequisite: AVIA 175. Even years.

AVIA 350 2 S Mission Flying Theory and Practice
Advanced mountain flying, operations at small unimproved airports, high altitude operations, and advanced short field landing techniques. Prerequisite: AVIA 476. Qualifies for IP grading.* Odd years.

AVIA 375 4 S Commercial, ATP, and Certificated Flight Instructor Theory
Aircraft performance, weight and balance, theory of flight, the federal airspace system, air traffic control, and navigation. Prepares pilots for the Commercial, Fundamentals of Instruction, and Certificated Flight Instructor FAA written examinations. Prerequisites: AVIA 175, 275.

AVIA 376 2 Su, F, W, S Commercial Flight Training
The systems, performance, and procedures necessary for operating a complex aircraft. Approximately fifty percent of the instruction treats flight competency in a complex aircraft. Includes high-performance flight experience in IFR and night operations. Prerequisite: AVIA 278. Qualifies for IP grading.*

AVIA 377 2 Su, F, W, S Intermediate Commercial Flight Training
The maneuvers and skills required for the commercial certificate. Involves instruction and practice in all types of operations essential for an advanced commercial pilot. Special emphasis on in-flight emergencies. Prerequisite: AVIA 376. Qualifies for IP grading.*

AVIA 378 2 Su, F, W, S Advanced Commercial Flight Training
How to work in remote areas and in foreign lands as a bush or mission pilot; operations in very cold weather; survival techniques. Conventional gear (tail-wheel) operations, mountain flying, off-airport procedures, very short field landings and take-offs. (Course offering depends on availability of aircraft.) Prerequisite: AVIA 377. Qualifies for IP grading.*
AVIA 379  2 W  
Aerodynamics
Aerodynamics and aerodynamic devices used on various types of modern aircraft. Encompasses the basic concepts of flight as well as more advanced studies than a pilot would normally receive in preparation for pilot certificates. Recommended prior to commercial and flight instructor flight classes. Prerequisite: AVIA 175. Even years.

AVIA 450  2 S  
Advanced Aircraft Systems
Transport aircraft systems specializing in the CRJ, automatic flight controls, auxiliary power units, environmental control systems, and high altitude operations. Prerequisite: AVIA 305. Odd years.

AVIA 460  2 W  
Professional Skills for Pilots
Essential elements of being an aviation professional. Emphasizes professional etiquette, resume writing, business writing, interviews, job search, time management, and organizational skills. Prerequisite: AVIA 378. Odd years.

AVIA 470  1 S  
Fundamentals of Flight Instruction
Basic principles of education that may be applied to flight instruction. Practice ground instruction covering various private and commercial maneuvers. Discussion of the best teaching techniques and how to avoid pitfalls common to many students and flight instructors during flight training. Required for instructor certification. Prerequisite: AVIA 278.

AVIA 471  6 Su, F, W, S  
Flight Instructor Flight Training
Flight training and practice teaching in preparation for flight-instructor certificate. Requires perfecting teaching techniques for the flight instructor. Includes comprehensive review of private and commercial aeronautical knowledge; flight maneuvering skill from the right-hand seat. Awareness of obligations and privileges of a certificated flight instructor. Mastery of FAA documentation and certification procedures. Prerequisites: AVIA 378. Qualifies for IP grading.*

AVIA 472  3 Su, F, W, S  
Instrument Instructor Flight Training
Preparation for the instrument flight instructor oral and practical examination. Review of skills and procedures required for instrument rating. Develops instrument flight proficiency from the right-hand seat and instructional skills necessary for teaching an instrument student in flight and on the ground. Prerequisites: AVIA 471. Qualifies for IP grading.*

AVIA 473  1-6 Su, F, W, S  
Advanced Practicum in Flight
Additional involvement in instruction or advanced flight operations into high-density traffic areas under instrument conditions. Special reports or research projects may be required in conjunction with these assignments. Prerequisite: AVIA 273. Repeatable to a maximum of 6 credits. Qualifies for IP grading.*

AVIA 476  2 Su, F, W, S  
Add-on Class Rating
Dual instruction in aircraft systems, maneuvers, and emergency procedures toward developing proficiency in multi-engine aircraft. Prepares student for the multi-engine private or multi-engine commercial practical test. (Course offering depends on availability of aircraft.) Prerequisites: AVIA 378; private pilot certificate. Recommended prerequisite: commercial certificate. Qualifies for IP grading.*

AVIA 477  2 S  
Human Factors in Aviation
The pilot’s thought processes enabling detection and prevention of potentially hazardous aeronautical decision-making. Emergency procedure planning and crew resource management are role-played to promote teamwork and redundancy for multi-crew cockpits. Odd years.

AVIA 478  2 Su, F, W, S  
Add-on CFI Rating
Prepares the applicant to meet the experience requirements and give flight instruction in a multi-engine aircraft. Directed toward acquiring teaching skills and safety procedures to meet the demanding multi-engine training environment. Prerequisites: instrument rating, commercial certificate. (Course offering depends on availability of aircraft.) Prerequisite: AVIA 471. Qualifies for IP grading.*

Electronics

Lower-Division Course:

ELEC 141  3 W  
Applied Electronics
A non-mathematical approach to electronics. Electronic components and component combinations to make useful equipment. Experiments include building and testing burglar alarms, photo strobes, power supplies, light dimmers, intercom systems, electronic doorbells, timers, clocks, and other circuits. For the general student. Two lectures and one three-hour laboratory per week. Odd years.
Biologists seek to understand the complexity of the living world through observation and experiment. By offering course work and laboratory experience concerning microorganisms, plants, animals (including humans), and the interrelationships among these living things, the Biology Department encourages the student to consider the study of life an exciting and continuing challenge, whether at the level of molecules, cells, organisms, populations, or ecosystems.

The biology major prepares students for careers in the practice or teaching of the life sciences, for graduate study, or for entering professional schools in dentistry, medicine, and veterinary medicine.

The biology curriculum may be enriched by research (BIOL 412) either on or off campus, and by the marine courses offered during the summer session at the Rosario Beach Marine Station in Washington.

Major in Biology, B.S.

A minimum of 100 hours (52 upper-division hours)

Required Core Courses (40 hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 111-112-113</td>
<td>Biological Foundations</td>
<td>5-5-5</td>
</tr>
<tr>
<td>BIOL 222</td>
<td>Introduction to Research Methods</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 233</td>
<td>Principles of Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 320</td>
<td>Cellular and Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 348</td>
<td>Systems Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 354</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 396</td>
<td>Seminar (4 quarters)</td>
<td>.5-.5-.5-.5</td>
</tr>
<tr>
<td>BIOL 450</td>
<td>Philosophy of Origins</td>
<td>4</td>
</tr>
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</table>

Required Core Electives (21 hours):

At least 21 hours from the following:

<table>
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<tr>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOL 323</td>
<td>Vertebrate Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 325</td>
<td>Flowering Plants (3)</td>
<td></td>
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<tr>
<td>BIOL 328</td>
<td>Animal Behavior (4)</td>
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<tr>
<td>BIOL 331</td>
<td>Marine Science (4)</td>
<td></td>
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<tr>
<td>BIOL 366</td>
<td>Medical Microbiology (5)</td>
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<tr>
<td>BIOL 400*</td>
<td>Topics in Biology (5)</td>
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</tr>
<tr>
<td>BIOL 403*</td>
<td>Ornithology (5)</td>
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<tr>
<td>BIOL 412</td>
<td>Research in Biology (1-3)</td>
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<tr>
<td>BIOL 417*</td>
<td>Behavior of Marine Organisms (5)</td>
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<tr>
<td>BIOL 419</td>
<td>Developmental Biology (3)</td>
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<tr>
<td>BIOL 422</td>
<td>Advanced Human Anatomy (4)</td>
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<tr>
<td>BIOL 426</td>
<td>Histology (5)</td>
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<tr>
<td>BIOL 430</td>
<td>Neurobiology (4)</td>
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<td>BIOL 445</td>
<td>Biotechnology (3)</td>
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<tr>
<td>BIOL 458*</td>
<td>Marine Biology (5)</td>
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<tr>
<td>BIOL 460*</td>
<td>Marine Ecology (5)</td>
<td></td>
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<tr>
<td>BIOL 463*</td>
<td>Marine Phycology (5)</td>
<td></td>
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<tr>
<td>BIOL 469</td>
<td>Immunology (4)</td>
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<tr>
<td>BIOL 475*</td>
<td>Marine Invertebrates (5)</td>
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<tr>
<td>CHEM 481</td>
<td>Biochemistry I (4)</td>
<td></td>
</tr>
<tr>
<td>ENV 360/L</td>
<td>Conservation Biology &amp; Lab (4)</td>
<td></td>
</tr>
</tbody>
</table>

*Only offered during the summer at the Rosario Beach Marine Station.
Required Cognate Courses (39 hours):
CHEM 111-112-113 General Chemistry 5-5-5
CHEM 371-372-373 Organic Chemistry 4-4-4
PHYS 111-112-113 General Physics 4-4-4

Recommended Cognate Courses:
CHEM 481 Biochemistry I (4)
MATH 131 Calculus I (4)

Pre-medical and pre-dental students:
The B.S. degree curriculum, including recommended cognates, exceeds all undergraduate science requirements for pre-medical and pre-dental students applying to Loma Linda University and many other schools.

Major in Biology, B.A.
A minimum of 88 hours (40 upper-division hours)
Required core courses and cognate courses are the same as those for the B.S. degree. Core electives: Select 9 hours in biology from the core electives listed above for the B.S. degree. BIOL 412 is not applicable toward the B.A. degree.

Major in Environmental Studies, B.S.
A minimum of 91 hours (30 upper-division hours)
Required Core Courses (61 hours):
BIOL 111-112-113 Biological Foundations 5-5-5
BIOL 222 Introduction to Research Methods 2
BIOL 233 Principles of Ecology 4
BIOL 450 Philosophy of Origins 4
CHEM 111-112-113 General Chemistry 5-5-5
ENVR 360 Conservation Biology 3
ENVR 360L Conservation Biology Laboratory 1
ENVR 361 Energy and Climate Change 3
ENVR 361L Energy and Climate Change Laboratory 1
ENVR 362 Pollution and Environmental Quality 3
ENVR 362L Pollution and Environmental Quality Laboratory 1
ENVR 396 Seminar (4 quarters) 5-5-5
ENVR 450 Internship 4
RELT 240 Eco-theology 3

Required Core Electives (30 hours):
At least 30 hours from the following:
AGRI 212 Home Greenhouse Gardening (2)
AGRI 213 Home Vegetable Gardening (2)
BIOL 227 Natural History of California (4)
BIOL 323 Vertebrate Biology (4)
BIOL 325 Flowering Plants (3)

Recommended courses for students interested in specific areas:
The following courses are recommended to help students become better prepared for a job or for graduate school in more specialized areas of environmental studies. These courses are not intended to provide students with the specific skills required for a job.

Air Quality:
CHEM 324, 324L, 325, 325L, 371-372-373, 450L, 451-452, MATH 131-132, PHYS 111-112-113

Conservation Biology:
BIOL 227, 323, 325, 328

Energy:

Environmental Economics:
ACCT 121-122-123, ECON 261, 265, MATH 131-132

Environmental Policy:
PLSC 124, 274, SOWK 232

Marine Resources:
BIOL 331 or 458, 417, 460, 463, 475

Solid Waste Management:
CHEM 324, 324L, 325, 325L, 371-372-373, 450L, 451-452, PHYS 111-112-113

*Only offered during the summer at the Rosario Beach Marine Station.
Water Management:

Wildlife Management:
BIOL 227, 323, 328, 403

**Major in Natural Science, B.S. Biology Emphasis**

A minimum of 100 hours (26 upper-division hours)

This major provides appropriate preparation for teaching science at the secondary level. The core requirement of 65 quarter hours of course work corresponds to science subjects commonly taught in California public schools, and the emphasis treats the subject matter at a depth more than adequate for teaching the higher secondary science courses in biology. Emphases may also be obtained in chemistry or physics. For further information, see the sections entitled “Chemistry” and “Physics” in this catalog.

**Required Core Courses (65 hours):**

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<tr>
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<th>Hours</th>
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<tr>
<td>ASTR 115</td>
<td>Astronomy</td>
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<tr>
<td>ASTR 173</td>
<td>Meteorology</td>
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<tr>
<td>BIOL 111-112-113</td>
<td>Biological Foundations</td>
<td>5-5-5</td>
</tr>
<tr>
<td>BIOL 331</td>
<td>Marine Science</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 335</td>
<td>Issues on Origins</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111-112-113</td>
<td>General Chemistry</td>
<td>5-5-5</td>
</tr>
<tr>
<td>GEOL 233</td>
<td>Geology</td>
<td>4</td>
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<tr>
<td>PHYS 390</td>
<td>History and Philosophy of Science</td>
<td>3</td>
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</table>

At least one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENVR 360</td>
<td>Conservation Biology</td>
<td>3</td>
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<tr>
<td>ENVR 361</td>
<td>Energy and Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 362</td>
<td>Pollution and Environmental Quality</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 111-112-113</td>
<td>General Physics (4-4-4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 211-212-213</td>
<td>Physics with Calculus (4-4-4)</td>
<td></td>
</tr>
</tbody>
</table>

**Biology Emphasis (35-36 hours)**

**Required Core Courses (27-28 hours):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 233</td>
<td>Principles of Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 320</td>
<td>Cellular and Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 354</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 396</td>
<td>Seminar (4 quarters)</td>
<td>.5-.5-.5-.5</td>
</tr>
<tr>
<td>MICR 134</td>
<td>General Microbiology</td>
<td>5</td>
</tr>
</tbody>
</table>

At least one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 102</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 348</td>
<td>Systems Physiology</td>
<td>5</td>
</tr>
</tbody>
</table>

**Teaching Credential**

Students desiring to enter a program of studies leading to a California teaching credential in science with a concentration in biology should take the B.S. degree in Natural Science, Biology Emphasis. Students will need to pass the science (biology concentration) portion of the CSET exam one quarter prior to doing full-time student teaching. Students are invited to discuss the program with their major advisor in the Biology Department. Those who plan to teach on the secondary level should consult with the credential analyst in the Education Department and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the section entitled “Education” in this catalog.

**Minor in Biology**

A minimum of 30 hours (12 upper-division hours)

**Required Courses (18 hours):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 111-112-113</td>
<td>Biological Foundations</td>
<td>5-5-5</td>
</tr>
<tr>
<td>BIOL 355</td>
<td>Issues on Origins</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Electives (12 hours):**

At least 12 hours from the following (9 upper-division):

Additional non-service BIOL courses

**Minor in Environmental Studies**

A minimum of 31 hours (12 upper-division hours)

**Required Courses (31 hours):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 233</td>
<td>Principles of Ecology</td>
<td>4</td>
</tr>
<tr>
<td>ENVR 360</td>
<td>Conservation Biology</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 360L</td>
<td>Conservation Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENVR 361</td>
<td>Energy and Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 361L</td>
<td>Energy and Climate Change Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENVR 362</td>
<td>Pollution and Environmental Quality</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 362L</td>
<td>Pollution and Environmental Quality Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

At least one of the following sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 111-112-113</td>
<td>Biological Foundations (5-5-5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 111-112-113</td>
<td>General Chemistry (5-5-5)</td>
<td></td>
</tr>
</tbody>
</table>
Lower-Division Courses:

**AGRI 212**  
**Home Greenhouse Gardening**  
2 W  
The greenhouse as a solar energy source for the home. Growth and multiplication of plants for food and home beautification. One lecture and one laboratory per week.

**AGRI 213**  
**Organic Vegetable Gardening**  
2 S  
Developing a home vegetable garden using all-natural methods for preparing, growing, maintaining, protecting, and harvesting garden crops. One lecture and one laboratory per week.

**Biology**

Service Courses:  
*(Not applicable to a major or minor in this department)*

**BIOL 101**  
**Human Anatomy**  
5 F, W  
Human structure as the expression of basic principles of morphology. Each functional system considered in terms of its cell, tissue, and organ types. Four lectures and one laboratory per week.

**BIOL 102**  
**Human Physiology**  
5 W, S  
The function of human body systems, emphasizing the relationships among these systems; the role of each system in normal body function and health. Four lectures and one laboratory per week. Prerequisite: BIOL 101.

**BIOL 105**  
**Introduction to Biology**  
5 W  
The organization and complexity of living organisms. The central questions of biology: the relationship between form and function, acquisition and use of energy, continuity between generations, and biodiversity. Enrollment limited to non-science majors; not available to students who have had a college biology course. Four lectures and one laboratory per week.

**BIOL 223**  
**Medical Terminology**  
2 S  
The terminology of science and medicine.

**BIOL 227**  
**Natural History of California**  
4 S  
Plants and animals of California as they relate to its diverse topography and geography. Three lectures and one laboratory per week.

**BIOL 233**  
**Ecology**  
4 F  
The interaction of physical and biological factors in maintaining balance within the ecosystem. Survey of world biomes and aquatic ecosystems. Laboratories examine and compare biotic communities and their structure. Three lectures and one laboratory per week. Prerequisite: BIOL 111-112-113.

Lower-Division Courses:

**BIOL 111-112-113**  
5-5-5 F-W-S  
**Biological Foundations**  
An integrated foundation in life science principles for biology majors and preprofessional students in the biomedical sciences. Prerequisite to most biology courses with higher numbers. Should be taken in sequence. Four lectures and one laboratory per week.

**BIOL 111**: The cell as the structural and functional unit of life; organelles and their functions; structure and function of essential biomolecules; and an introduction to molecular genetics. Prerequisite: CHEM 101 or CHEM 111

**BIOL 112**: Mendelian genetics, biodiversity, ecology, and evolution.

**BIOL 113**: The form and function of plants and animals.

**BIOL 222**  
**Introduction to Research Methods**  
2 W  
The tools of biological research, including the choice of a model system, statistical tests, data recording and analysis, interpretation and presentation of experimental results, and the writing of research proposals. One lecture and one laboratory per week. Prerequisites: BIOL 111-112-113. Prerequisite or corequisite: STAT 222.

**BIOL 355**  
**Issues on Origins**  
3 F  
Scientific and biblical models regarding the origin and history of life. Special reference to the impact of origins philosophy on the interpretation of biological, geological, and paleontological evidence. Enrollment is limited to students in majors other than biology and environmental studies.

*Exceptions: BIOL 102 is applicable to the B.S. in Natural Science, emphasis in Biology, and BIOL 227 is applicable to the B.S. in Environmental Studies.*
Upper-Division Courses:

**BIOL 320**  
**Cellular and Molecular Biology**  
Composition, structure, and function of the cell and its organelles; emphasis on intracellular and intercellular communication and control principles. Prerequisites: BIOL 111-112-113; CHEM 371.

**BIOL 323**  
**Vertebrate Biology**  
Biology of the vertebrates, including their relationship to the physical environment and to other species and their social and reproductive patterns. The laboratory emphasizes the vertebrates in northern California. Three lectures and one laboratory per week. Prerequisite: BIOL 111-112-113.

**BIOL 325**  
**Flowering Plants**  
Structure of typical flowers; methods of analyzing, collecting, identifying, and preserving representative specimens. Two lectures and one laboratory per week. Prerequisite: BIOL 113 or BIOL 227.

**BIOL 328**  
**Animal Behavior**  
Diversity of animal behavior including instinct, learning, communication, socio-biology, and the genetic, physiological, and ecological aspects of behavior. Three lectures and one laboratory per week. Prerequisite: BIOL 111-112-113 or consent of the instructor.

**BIOL 331**  
**Marine Science**  
Introduction to oceanography, marine life, and humanity’s impact on the marine environment. Three lectures and one laboratory per week. Prerequisites: BIOL 111-112-113 or consent of the instructor.

**BIOL 348**  
**Systems Physiology**  
Functions of the nervous, muscular, endocrine, cardiovascular, respiratory, renal, and reproductive systems with emphasis on regulatory mechanisms and integration. Examines processes used by animals in adjusting to their external environment and controlling their internal environment. Laboratories involve firsthand analysis of selected aspects of the major functional systems. Four lectures and one laboratory per week. Prerequisites: BIOL 111-112-113 or BIOL 101-102.

**BIOL 354**  
**Genetics**  
Genetics of bacteria, plants, and animals. Chromosome mapping, population and evolutionary genetics, prokaryotic and eukaryotic genetic control, and molecular genetics. Emphasis on the study of modern molecular genetic techniques and concepts. Three lectures and one laboratory per week. Prerequisites: BIOL 111-112-113, 320.

**BIOL 366**  
**Medical Microbiology**  
Major groups of bacteria, viruses, and fungi that are pathogens or normal flora of humans. Laboratory work emphasizes the culture, characterization, and identification of unknown bacteria of medical importance. Four lectures and one laboratory per week. Prerequisite: BIOL 111-112-113 or MICR 134.

**BIOL 395**  
**Special Topics in Biology**  
Additional laboratory or library studies correlated with biology courses.

**BIOL 396**  
**Seminar**  
(See also CHEM 396, CPTR 396, ENVR 396, PHYS 396)  
Single topics of current interest in the natural sciences are presented by guest lecturers. To pass, a student must be on time and attend five course appointments. Biology majors are required to enroll in the course two out of three quarters in each of their junior and senior years. Credit earned only during the junior and senior years counts toward the Seminar requirement for a degree in biology. Repeatable to a maximum of 2 credits. Graded S/F.

**BIOL 412**  
**Research in Biology**  
Original investigation in selected areas of biology. The research topic is selected and the work done under direction of a faculty advisor. Scholarly presentation of research results is encouraged. Prerequisites: BIOL 111-112-113, 222 and approval of the Biology faculty. Repeatable to a maximum of 6 credits applied to the Biology major. Qualifies for IP grading.

**BIOL 419**  
**Developmental Biology**  

**BIOL 422**  
**Advanced Human Anatomy**  
Intensive study of the structure of the human body. The laboratory requires extensive cadaver dissection. Two lectures and two laboratories per week. Prerequisite: BIOL 111-112-113 or BIOL 101 with a grade of B or better.
BIOL 426  5 W  
Histology  
Microscopic structure of the fundamental tissues and organs of humans and other mammals with functional correlations. Three lectures and two laboratories per week. Prerequisite: BIOL 111, 112, 113. Recommended prerequisite: BIOL 320.

BIOL 430  4 F  
Neurobiology  
The neural basis of behavior with emphasis on the human nervous system. Includes cellular approaches to neural function, neuroanatomy, development of neurons and circuits, and neuroendocrine mechanisms. Three lectures and one laboratory per week. Prerequisite: BIOL 111-112-113. Recommended prerequisite: BIOL 348.

BIOL 445  3 F  
Biotechnology  
Advanced molecular genetics techniques, including isolation of DNA, cloning, PCR and DNA sequencing. Ethics and politics of genetic testing, cloning, gene therapy, stem cell research, and transgenic organisms. Two lectures and one laboratory per week. Prerequisite: BIOL 111-112-113. Recommended prerequisite: BIOL 354.

BIOL 450  4 W  
Philosophy of Origins  
Historical and current issues relating to special creation and evolution models of origins. Biological, geological, and paleontological evidence and potential explanations along with the theological and scientific implications of various interpretations. Limited to students with senior standing majoring in biology and environmental studies. Applies to the Science and Society general education requirement. Prerequisite: BIOL 111-112-113.

BIOL 469  4 S  
Immunology  
The lymphoid system and its response to foreign substances by humoral or cellular mechanisms that may protect or injure the host. Immunogens, immunoglobulins, complement, antigen-antibody reactions, phagocytosis, inflammation, immediate and delayed allergy, autoimmunity, and the immunology of transplantation, cancer and tolerance. Three lectures and one laboratory per week. Prerequisites: BIOL 111-112-113, 320

Upper-Division Courses:

BIOL 400  5 Su  
Topics in Biology  
Investigation of various specialties in Biology. Repeatable for credit in different content areas. Examples of recent content areas include Limnology, Plant Ecology and Entomology.

BIOL 403  5 Su  
Ornithology  
Study of native birds of North America, with emphasis on physiology, identification, migration, and life histories.

BIOL 417  5 Su  
Behavior of Marine Organisms  
Study of inter- and intraspecific behaviors of marine animals and their behavioral responses to the physical environment. Involves laboratory experiences, field observations, and a research project. Prerequisite: a course in animal behavior, organismal biology, deep-sea biology, and shallow-water marine communities.

BIOL 458  5 Su  
Marine Biology  
Understanding the marine environment primarily from an ecological perspective. Included are principles of basic oceanography, plankton biology, deep-sea biology, and shallow-water communities.

Courses offered at the Rosario Beach Marine Station

Lower-Division Courses:

BIOL 115-116-117  4-4-4 Su  
General Biology  
Study of the basic principles of biology including animals, plants, and microorganisms. Topics include the cell, physiology, genetics, development, taxonomy, and ecology. Must be taken in sequence. Includes laboratory. Introductory chemistry (from secondary school or college) is strongly recommended as a pre-requisite. Completion of BIOL 115-116-117 satisfies the requirement for BIOL 111-112-113.

Each summer, four upper-division courses are taught at the Rosario Beach Marine Station, chosen from courses such as the ones listed below. BIOL 111-112-113 or a full sequence General Biology equivalent is the prerequisite for all courses. Courses are 5 credits and include credit for a research problem.
**Biology**

**BIOL 460**  
*Marine Ecology*  
5 Su  
Interspecific, intraspecific, and community relationships demonstrated by marine organisms.

**BIOL 463**  
*Marine Phycology*  
5 Su  
Marine algae, covering the principles of their classification, natural history, ecology, physiology, and practical use.

**BIOL 475**  
*Marine Invertebrates*  
5 Su  
The biology of selected groups of marine invertebrates.

**Environmental Studies**

**Upper-Division Courses:**

**ENVR 360**  
*Conservation Biology*  
3 F  
Conservation ethics, population biology, biodiversity, threats to biodiversity, conserving biodiversity, and the interplay of human populations, economics, and politics. Required corequisite for biology majors and minors and for environmental studies majors and minors: ENVR 360L.

**ENVR 360L**  
*Conservation Biology Laboratory*  
1 F  
Laboratory activities coordinated with ENVR 360. Prerequisite: BIOL 111-112-113.

**ENVR 361**  
*Energy and Climate Change*  
3 W  
Fossil fuels, alternative energy sources, energy conservation, energy politics, atmosphere and climate, natural climate changes, and global warming. Required corequisite for environmental studies majors and minors: ENVR 361L.

**ENVR 361L**  
*Energy and Climate Change Laboratory*  
1 W  
Laboratory activities coordinated with ENVR 361. Prerequisite: BIOL 111-112-113.

**ENVR 362**  
*Pollution and Environmental Quality*  
3 S  
Air pollution, ozone depletion, acid rain, water quality, water pollution, wastewater treatment, solid waste management, food production, pest control, and various environmental hazards. Required corequisite for environmental studies majors and minors: ENVR 362L.

**ENVR 362L**  
*Pollution and Environmental Quality Laboratory*  
1 S  
Laboratory activities coordinated with ENVR 362. Prerequisite: BIOL 111-112-113.

**ENVR 366**  
*Seminar*  
.5 F, W, S  
(See also BIOL 396, CHEM 396, CPTR 396, PHYS 396)  
Single topics of current interest in the natural sciences are presented by guest lecturers. To pass, a student must be on time and attend five course appointments. Environmental studies majors are required to enroll in the course two out of three quarters in each of their junior and senior years. Credit earned only during the junior and senior years counts toward the Seminar requirement for a degree in environmental studies. Repeatable to a maximum of 2 credits. Graded S/F.

**ENVR 412**  
*Research in Environmental Studies*  
1-3 F, W, S  
Original investigation in selected areas of environmental studies. The research topic is selected and the work done under direction of a faculty advisor. Scholarly presentation of research results is encouraged. Prerequisite: BIOL 222. Repeatable to a maximum of 6 credits.

**ENVR 450**  
*Internship*  
1-4 F, W, S  
Volunteer service or employment with an environmental government agency or non-government organization. Intended to provide students with experience relevant to future employment or graduate studies. A report must be submitted summarizing duties performed and skills learned. Repeatable to a maximum of 4 credits.

**Geology**

**Lower-Division Course:**

**GEOL 233**  
*Geology*  
4 F  
The materials, structure, and internal conditions of the earth; the physical and chemical processes at work upon it. Three lectures and one laboratory per week.
**General Science**

Service Course:  
(Not applicable to a major or minor in this department)

**GSCI 205**  
Science Discoveries  
3 F, S  
Major developments in biology, chemistry, and physics that have led to new ways of thinking in the sciences, with a synthesis of modern scientific thought and methods. Enrollment is limited to students in programs other than the natural sciences. Prerequisite: MATH 019 or equivalent.

**Microbiology**

Service Course:  
(Not applicable to a major or minor in this department)*

**MICR 134**  
General Microbiology  
5 F, S  
An introduction to microorganisms—the bacteria, viruses, and fungi; the usefulness of microorganisms in nature and manufacturing; pathogenesis and immunity. Consideration of each major infectious disease with respect to its causative agent, characteristics, diagnosis, transmission, and prevention. Four lectures and one laboratory per week.

* Exception: MICR 134 is applicable to the B.S. in Natural Science, emphasis in Biology.
Faculty
Wally Lighthouse, chair; David Bell, Rodney Hardcastle, Keith Neergaard, John Nunes, Lary Taylor, Marcia Toledo
Departmental Office: 317 Irwin Hall; 965-6238

Degrees and Programs
Business Administration, B.B.A.................................60
Business Administration, B.A.................................62
Business Administration, B.S.................................63
Business Administration, A.S.................................63
Teaching Credential .................................................64
Bachelor of Science in Management, B.S.M.............................64

The degree programs offered by the Business Administration & Economics Department are fully accredited by the International Assembly for Collegiate Business Education (IACBE). As part of a Seventh-day Adventist college, the department intends not only to prepare students to successfully meet the everyday challenges of a career in business, but also to prepare its graduates to give effective Christian influence in their communities. To meet these goals, the department offers several programs of study:

The B.B.A. (Bachelor of Business Administration) is a professional degree designed for the student who intends to enter the job market upon completing the four-year program or to be well prepared for graduate studies. This program offers the following emphases: Accounting, Finance, General Business, Information Systems, International Business, Management, and Marketing.

The B.A. (Bachelor of Arts) degree program in Business Administration is a traditional curriculum for those interested in taking a program that includes the study of a foreign language. This major affords more flexibility than do the B.B.A. and the B.S.

The B.S. (Bachelor of Science) in Business Administration is a degree designed for those who plan to enter a postgraduate or graduate program, specifically, in medicine, law, dentistry, or business. Since most graduates of such professional programs will ultimately have their own business, this degree is particularly useful for them.

The department also offers a two-year A.S. (Associate of Science) degree in Business Administration. The A.S. curriculum is structured so that a student may continue to complete any bachelor’s program in Business Administration.

The preparation offered in the four-year programs (B.B.A., B.S., and B.A.) differs considerably. However, the first two years are similar enough so that in the process of choosing a field for concentration students have ample time to explore a variety of professions in consultation with departmental faculty and others. Many opportunities and avenues for service are thus available to students majoring in business.

Degree Completion Program
The Business Administration & Economics Department also offers an off-campus degree-completion program leading to the Bachelor of Science in Management (B.S.M.). This program is designed for the working adult and is offered in the evening.

Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.
Bachelor of Business Administration, B.B.A.

A minimum of 106 hours (58 upper-division hours)

> Required Core Courses (66-68 hours):

- ACCT 121 Financial Accounting I 3
- ACCT 122 Financial Accounting II 4
- ACCT 123 Managerial Accounting 3
- ACCT 391 Accounting Systems in Small Businesses 2
- BUAD 279 Business Communication/Data Presentation 3
- BUAD 295/395 Colloquium/Distinguished Speaker Srs 2**
- BUAD 325 Business Law I 3
- BUAD 326 Business Law II 3
- BUAD 490 Seminar in Business 1
- ECON 261 Macroeconomics 4
- ECON 265 Microeconomics 4
- FIN 341 Finance 5
- MGMT 361 Management 4
- MGMT 465 Organizational Behavior 3
- MGMT 491 Strategic Management 3
- MKTG 351 Marketing 4
- OFAD 111 Personal/Beginning Keyboarding 0-2***
- STAT 222 Introduction to Statistics 4
- STAT 322 Statistical Methods 3

At least one of the following courses:

- MATH 106 College Algebra (4)
- MATH 130 Precalculus (5)
- MATH 131 Calculus I (4)

At least three courses and 4 hours from the following:

- INFS 144 PC Operating Systems (1)
- INFS 148 PC Spreadsheets (1)
- INFS 149 PC Databases (1)
- OFAD 201 PC Word Processing (2)

Recommended Supporting Courses:

- BUAD 118 Personal Money Management (3)
- BUAD 223 Personal Law (2)

> Emphases (choose one):

1. **Accounting Emphasis** (39-40 hours)
   - ACCT 307 Government & Nonprofit Accounting 3
   - ACCT 311-312-313 Intermediate Accounting 3-3-3
   - ACCT 321-322 Cost Accounting I-II 3-3
   - ACCT 341 Individual Taxation 4

   At least 14 hours from the following:

   - ACCT 343 Business Taxation (4)
   - ACCT 345 Estate Planning, Gifts & Trust Taxation (3)
   - ACCT 451 Advanced Accounting (3)
   - ACCT 453 Auditing (5)
   - ACCT 461 Accounting Theory (4)
   - MGMT 328 Management Information Systems (3)

   Additional hours from the following:

   - 3-4*
   - Additional hours (at least 3 upper-division hours) from ACCT, BUAD, ECON, FIN, INFS, MGMT, and MKTG courses to total at least 106 hours in the major (core courses and emphasis).

   Recommended Courses:
   - BUAD 434 Entrepreneurship (3)
   - INFS 377 Electronic Commerce (3)

2. **Finance Emphasis** (39-40 hours)
   - ACCT 311-312-313 Intermediate Accounting 3-3-3
   - FIN 488 Problems in Finance 3
   - MGMT 466 Business and Society 3

   At least 21 hours from the following:

   - BUAD 335 Real Estate (4)
   - BUAD 371 Insurance and Risk Management (3)
   - ECON 371 Money and Banking (3)
   - ECON 457 International Economics (3)
   - FIN 380 Capital Markets/Financial Institutions (3)
   - FIN 419 Personal Financial Planning (3)
   - FIN 436 Real Estate Finance (3)
   - FIN 444 Investments (3)
   - FIN 457 International Finance (3)
   - FIN 463 Financial Planning and Forecasting (3)

   Additional hours from the following:

   - 3-4*
   - Additional hours (at least 3 upper-division hours) from ACCT, BUAD, ECON, FIN, INFS, MGMT, and MKTG courses to total at least 106 hours in the major (core courses and emphasis).

3. **General Business Emphasis** (38-40 hours)
   - MGMT 466 Business and Society 3
   - BUAD 434 Entrepreneurship 3
   - INFS 377 Electronic Commerce 3

   At least 9 hours from the following:

   - ACCT 311-312-313 Intermediate Accounting (3-3-3)

* Courses used to fulfill requirements in these sections may not also fulfill requirements in another emphasis or business program.

** This course is required each year/quarter when registered as a business major, up to a maximum of 2 credits. The requirement may be reduced for transfer students.

*** This requirement may be met by completion of course or satisfactory performance on departmental waiver examination. The waiver option is available only to students with fewer than 75 credit hours or to transfer students if taken within their first year at Pacific Union College.
4. Information Systems Emphasis (40 hours)

ACCT 322  Cost Accounting II 3
CPTR 115  Introduction to Computer Programming 4
INFS 149  PC Databases 1
INFS 229  Business Programming 3
INFS 377  Electronic Commerce 3
INFS 380  Database Analysis and Design 3
INFS 465  Fundamentals of Data Communication 3
INFS 470  Management Science 4
INFS 482  Systems Analysis and Design 4
MGMT 328  Management Information Systems 3
MKTG 371  Marketing Research 3

Additional hours from the following: 6*
Additional hours (at least 4 upper-division hours) from ACCT, BUAD, CPTR, ECON, FIN, INFS, MGMT, and MKTG courses to total at least 106 hours in the major (core courses and emphasis).

Recommended Courses:
ACCT 311-312  Intermediate Accounting (3-3)
CPTR 131  Survey of Computer Science (4)

5. International Business Emphasis (38-50 hours)

ECON 457  International Economics 3
FIN 457  International Finance 3
MGMT 457  International Management 3
MGMT 466  Business and Society 3
MKTG 371  Marketing Research 3
MKTG 458  International Marketing 3

At least 9 hours from the following: 9
ACCT 311-312-313  Intermediate Accounting (3-3-3)
ACCT 321-322  Cost Accounting I-II (3-3)
ACCT 341  Individual Taxation (4)
ACCT 343  Business Taxation (4)
ACCT 345  Estate Planning, Gifts & Trust Taxation (3)
ACCT 451  Advanced Accounting (3)

6. Management Emphasis (38-40 hours)

MGMT 457  International Management 3
MGMT 466  Business and Society 3
MGMT 481  Operations Management 3

At least 12 hours from the following: 12*

INFS 470  Management Science (4)
INFS 482  Systems Analysis and Design (4)
MGMT 328  Management Information Systems (3)
MGMT 472  Human Resources Management (3)
MGMT 473  Labor Law and Legislation (3)
MGMT 486  Supply Chain Management (3)

At least 9 hours from the following: 9
ACCT 311-312-313  Intermediate Accounting (3-3-3)
ACCT 321-322  Cost Accounting I-II (3-3)
ACCT 341  Individual Taxation (4)
ACCT 343  Business Taxation (4)
ACCT 345  Estate Planning, Gifts & Trust Taxation (3)

Additional hours from the following: 8-10*
Additional hours (at least 6 upper-division hours) selected from ACCT, BUAD, ECON, FIN, INFS, MGMT, and MKTG courses to total at least 106 hours in the major (core courses and emphasis).

*Note: Courses used to fulfill requirements in these sections may not also fulfill requirements in another emphasis or business program.

Competence at the intermediate level in a language other than English.

This requirement may be met by one of the following options:
1. One-year sequence in college intermediate language course.
2. Study for a minimum of one quarter in a college abroad where classes are conducted in a foreign language. Successful completion of at least 12 quarter units with a grade equal to or higher than C.
3. Passing a competency test in a foreign language.
4. Graduation from a secondary school in a non-English-speaking country in which classes were conducted in the language of that country.

Additional hours from the following that complements, where possible, the foreign language: 6-8

ANTH 124  Cultural Anthropology (4)
COMM 330  Intercultural Communication (3)
GEOG 210  World Regional Geography (3)
HIST 332  Europe Since Napoleon (4)
HIST 358  Recent America (4)
HIST 412  Seminar in Asian History (4)

Additional hours from the following: 3-5*
Additional hours (at least 3 upper-division hours) from ACCT, BUAD, FIN, ECON, INFS, MGMT, MKTG, and Modern Languages to total at least 106 hours in the major (core courses, emphasis and modern language courses).
7. Marketing Emphasis (38-40 hours)
MGMT 466  Business and Society  3
MKTG 360  Consumer Behavior  3
MKTG 371  Marketing Research  3
MKTG 374  Advertising  3
MKTG 481  Marketing Problems  3
At least 9 hours from the following:  9*
INFS 377  Electronic Commerce (3)
MKTG 372  Retailing Management (3)
MKTG 377  Sales Management (3)
MKTG 417  Services Marketing (3)
MKTG 458  International Marketing (3)

At least 6 hours from the following:  6
ACCT 311-312-313  Intermediate Accounting (3-3-3)
ACCT 321-322  Cost Accounting I-II (3-3)
ACCT 341  Individual Taxation (4)
ACCT 343  Business Taxation (4)
ACCT 345  Estate Planning, Gifts & Trust Taxation (3)

Additional hours from the following:  8-10*
Additional hours (at least 4 upper-division hours) from ACCT, BUAD, ECON, FIN, INFS, MGMT, and MKTG courses to total at least 106 hours in the major (core courses and emphasis).

General-Education Requirements:
The general-education requirements for the B.B.A. are the same as for the B.S. degree except for the changes described below:
1. Only one course is required for III.B, to be chosen from either III.B.1 (Visual Arts) or III.B.2 (Music).
2. Only two courses are required from IV.B (Science) and IV.C (Applications of Scientific and Mathematical Reasoning). The courses must come from separate subsections and one course must include a laboratory.

* Courses used to fulfill requirements in these sections may not also fulfill requirements in another emphasis or business program.
** This course is required each year/quarter when registered as a business major, up to a maximum of 2 credits. The requirement may be reduced for transfer students.
*** This requirement may be met by completion of course or satisfactory performance on departmental waiver examination. The waiver option is available only to students with fewer than 75 credit hours or to transfer students if taken within their first year at Pacific Union College.
## Major in Business Administration, B.S.

A minimum of 76 hours (40 upper-division hours)

- **Required Core Courses (72-75 hours):**
  - ACCT 121 Financial Accounting I 3
  - ACCT 122 Financial Accounting II 4
  - ACCT 123 Managerial Accounting 3
  - ACCT 391 Acc. Systems in Small Businesses 2
  - BUAD 295/395 Colloquium/Distinguished Speaker Srs 2
  - BUAD 325 Business Law I 3
  - BUAD 326 Business Law II 3
  - BUAD 490 Seminar in Business 1
  - ECON 261 Macroeconomics 4
  - ECON 265 Microeconomics 4
  - FIN 341 Finance 5
  - MGMT 361 Management 4
  - MGMT 465 Organizational Behavior 3
  - MGMT 491 Strategic Management 3
  - MKTG 351 Marketing 4
  - OFAD 111 Personal/Beginning Keyboarding 0-2
  - STAT 222 Introduction to Statistics 4
  - STAT 322 Statistical Methods 3
  - At least one of the following courses: 3-4
    - BUAD 335 Real Estate (4)
    - BUAD 434 Entrepreneurship (3)
    - FIN 419 Personal Financial Planning (3)
    - FIN 444 Investments (3)
    - INFS 470 Management Science (4)
    - MGMT 457 International Management (3)
    - MKTG 417 Services Marketing (3)
    - MKTG 458 International Marketing (4)
  - At least 6 hours from the following: 6
    - ACCT 311-312-313 Intermediate Accounting (3-3-3)
    - ACCT 321-322 Cost Accounting I-I (3-3)
    - ACCT 341 Individual Taxation (4)
    - ACCT 343 Business Taxation (4)
    - ACCT 345 Estate Planning, Gifts & Trust Taxation (3)

* Courses used to fulfill requirements in these sections may not also fulfill requirements in another emphasis or business program.

** This course is required for each year when registered as a business major, up to a maximum of 2 credits (1 credit for the AS degree). The requirement may be lessened for transfer students.

*** This requirement may be met by completion of course or satisfactory performance on departmental waiver examination. The waiver option is available only to students with fewer than 75 credit hours or to transfer students if taken within their first year at Pacific Union College.

### At least three courses and 4 hours from the following:
- INFS 144 PC Operating Systems (1)
- INFS 148 PC Spreadsheets (1)
- INFS 149 PC Databases (1)
- OFAD 201 PC Word Processing (2)

** Required Core Electives (1-4 hours):** 1-4*

Additional hours selected from ACCT, BUAD, ECON, FIN, INFS, MGMT, and MKTG courses to total at least 76 hours in the major.

## Major in Business Administration, A.S.

A minimum of 54 hours

- **Required Core Courses (47 hours):**
  - ACCT 114 Small Business Accounting 3
  - ACCT 121 Financial Accounting I 3
  - ACCT 122 Financial Accounting II 4
  - ACCT 123 Managerial Accounting 3
  - ARTD 253 Publication Technology 3
  - BUAD 223 Personal Law 2
  - BUAD 279 Business Communication/Data Presentation 3
  - BUAD 295/395 Colloquium/Distinguished Speaker Srs 1
  - ECON 261 Macroeconomics 4
  - ECON 265 Microeconomics 4
  - ENGL 134 Review of English Syntax 1
  - INFS 144 PC Operating Systems 1
  - INFS 148 PC Spreadsheets 1
  - INFS 149 PC Databases 1
  - MATH 096 Intermediate Algebra (or equivalent) 0
  - MGMT 160 Small Business Management 3
  - MGMT 261 Introduction to Management 3
  - MGMT 328 Management Information Systems 3
  - OFAD 121 Intermediate Keyboarding 2
  - OFAD 201 PC Word Processing 2

* Required Core Electives (7 hours): 7

Courses selected from ACCT, BUAD, ECON, FIN, INFS, MGMT, MKTG, and OFAD to total at least 57 hours in the major.

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* This course is required each year when registered as a business major, up to a maximum of 2 credits (1 credit for the AS degree). The requirement may be lessened for transfer students.

** This requirement may be met by completion of course or satisfactory performance on departmental waiver examination. The waiver option is available only to students with fewer than 75 credit hours or to transfer students if taken within their first year at Pacific Union College.
General-Education Requirements:

The general-education requirements for the A.S. degree are listed in the section entitled “The Academic Program” in this catalog. ENGL 101 (College English), COMM 105 (Introduction to Communication), and PSYC 121 (General Psychology) are required for this A.S. degree and fulfill applicable general-education requirements.

Teaching Credential

Students interested in teaching business-related subjects at the secondary level should consult with their advisor in the Business Administration & Economics Department and with the credential analyst in the Education Department. They may generally take any bachelor’s degree program in business and the specific education courses required. They will then need to pass the PRAXIS and SSAT competency examinations to obtain the secondary teaching credential.

Minor in Business Administration

A minimum of 30 hours (9 upper-division hours)

- Required Courses (18 hours):
  - ACCT 121 Financial Accounting I 3
  - ACCT 122 Financial Accounting II 4
  - ACCT 123 Managerial Accounting 3
  - ECON 261 Macroeconomics 4
  - ECON 265 Microeconomics 4

- Required Electives (12 hours):
  At least 12 hours (9 upper-division) from the following: 12
  Additional ACCT, BUAD, ECON, FIN, INFS, MGMT, and MKTG courses.

Bachelor of Science in Management, B.S.M.

In harmony with its mission of excellence in Christian education, the Business Administration & Economics Department offers a quality academic program accessible to an adult student population through non-traditional formats, times, and locations in the region surrounding the college. The department currently offers the B.S.M. program in Napa and at the Clearlake campus of Yuba College.

The Bachelor of Science degree in Management builds on personal experience and previous college credit. The program is especially designed for working adult students. Classes meet one evening a week for four hours and are tailored for a mature, interactive learning style. The curriculum is a series of upper-division courses that take approximately 23 months to complete.

A minimum of 192 quarter credits, including 61 hours of upper-division credit, is required for obtaining a degree. Students enrolled in this program must maintain a cumulative GPA of 2.0 (C) or above.

Additional information about the Bachelor of Science in Management degree is available by contacting the Business Administration & Economics Department’s Degree Completion Programs Office at (888) 311-4782 (toll free), (707) 965-6505, www.finishcollege.org, or by e-mail dcp@puc.edu.

To be admitted into the program, a student will typically have completed 60 transferable semester credits (90 quarter credits) of college work, will have at least two years of work experience, and will be at least 23 years old.

This major and these courses are available only through the Business Administration & Economics Department Degree Completion Program held off campus.

- Core Requirements (61 hours)
  - MGT 320 Business Law 4
  - MGT 330 Economics 4
  - MGT 340 Marketing 4
  - MGT 350 Data Presentation 2
  - MGT 375 Organizational Behavior 3
  - MGT 390 Organizations and Environments 3
  - MGT 410 Accounting 5
  - MGT 420 Management 4
  - MGT 430 Human Resource Management 4
  - MGT 434 Entrepreneurship 3
  - MGT 450 Financial Management 5
  - MGT 477 Electronic Commerce 4
  - MGT 480 International Business 4
  - MGT 491 Strategic Management 4
  - RELB 305 Biblical Perspectives 4
  - RELT 310 Ethics and Personal Values 4
General Education Program for Degree Completion

Since the majority of adult students in the degree completion program will be transferring nearly two thirds of their credits from other institutions, Pacific Union College has a modified general education program for these students. A total of 68 quarter hours of general education credit in seven different areas is required. 17 of these hours are met by core major requirements, and the remaining 51 hours are to be distributed as described below. Students must satisfy the minimum general education requirements prior to graduating.

All courses that are applied to the general education requirements must be approved by Pacific Union College. Articulation agreements with local community colleges define acceptable courses in other institutions that will meet Pacific Union College’s general education requirements.

A description of the intents and purposes of each general education requirement area can be found in the section entitled “The Academic Program” in this catalog.

I. Foundations Of Learning (15 hours)
   A. Rhetoric and College Writing (11):
      Two-course college English sequence  4-4
      One public speaking course  3
   B. Reasoning from Data (4):
      One introductory statistics course  4

II. History and Social Sciences (11 hours)
   A. History (8):
      Two history courses  4-4
   B. Social Sciences (3):
      Met by the core major requirements

III. Arts and Humanities (6 hours)
   A. Literature
   B. Visual Arts History/Appreciation
   C. Music History/Appreciation
      One course each from two different areas listed above  3-3

IV. The Natural World (4 hours)
   A. Intermediate Algebra (0):
      A full year of secondary school Algebra II (with grades of C- or higher) or an intermediate algebra course
      This is a non-credit requirement
   B. Science with Laboratory (4):
      One laboratory course in natural science  4
      May be in astronomy, biology, chemistry, geology, physics, or a comparable area

V. Revelation, Belief, and Action (8 hours)
   A. Studies in Religion (8):
      Met by the core major requirements

VI. Health and Fitness (2 hours)
   A. Health (2):
      One course in nutrition or health education  2

VII. Practical and Applied Arts (0 hours)
   The students in the B.S.M. program are independent working adults who have demonstrated their ability to succeed in the work world. Therefore this requirement is automatically met.

General Education Electives (22 hours)

Students must complete 22 quarter hours of general education electives (in addition to the specific requirements described above) in order to earn a total of 68 hours of general education coursework.

Six of these hours are met by core major requirements. The remaining 16 hours must be earned as described below:

- The electives must be distributed over at least four of the seven general education areas listed above and may not include more than ten quarter hours in any one area.
- The general education electives are to be chosen from the requirements for the Pacific Union College B.S./B.A. general education program. Options for each of the seven areas are listed in the section entitled “The Academic Program” in this catalog.
Accounting

Lower-Division Courses:

ACCT 114 3 S
Small Business Accounting
The accounting procedures and practices necessary for efficient and effective small business operation. Not applicable toward a baccalaureate major in the department. Credit may not be earned in both ACCT 114 and ACCT 391.

ACCT 121 3 F, W
Financial Accounting I
Accounting practices and procedures needed in various types of ownership entities for financial reporting. No prior accounting knowledge necessary.

ACCT 122 4 W, S
Financial Accounting II
A continuation of ACCT 121 with particular emphasis on the partnership and the corporate form of organization; income statement and balance sheet analysis. Three lectures and one laboratory per week. Prerequisite: ACCT 121.

ACCT 123 3 S
Managerial Accounting
Use of accounting data for managerial planning, control, and decision-making. Particular emphasis on entities which produce a product. Prerequisite: ACCT 121.

Upper-Division Courses:

ACCT 307 3 W
Government and Nonprofit Accounting
Accounting principles and practices unique to state and local units, educational, health care, charity, religious, and other not-for-profit organizations. Financial reporting and record keeping. Prerequisite: ACCT 121, 122. Even years.

ACCT 311-312-313 3-3-3 F-W-S
Intermediate Accounting
Accounting theory and practice relating to the valuation and presentation of assets, liabilities, net worth, revenue, and expense accounts. Prerequisites: ACCT 121, 122.

ACCT 321 3 F
Cost Accounting I
Key concepts of cost planning and control. Includes c-v-p analysis, job costing, activity-based costing, budgeting and variances, cost behavior, strategic decision-making, and pricing. Prerequisites: ACCT 121, 122, 123; Recommended prerequisite: STAT 222.

ACCT 322 3 W
Cost Accounting II
Key concepts of cost planning and control. Includes balanced scorecard, cost allocation, joint products, process costing, inventory, capital budgeting, transfer pricing, and performance measurement. Prerequisite: ACCT 121, 122, 123.

ACCT 341 4 W
Individual Taxation
Federal income taxation and tax planning for individuals. Designed for non-majors as well as for business majors and minors.

ACCT 343 4 S
Business Taxation
Federal taxation and tax planning in relationship to corporations and partnerships. Even years.

ACCT 345 3 F
Estate Planning, Gifts and Trust Taxation
Federal taxation and tax planning for gifts, estates, and trusts. Odd years.

ACCT 391 2 S
Accounting Systems in Small Businesses
Setting up and maintaining accounting records for a variety of unincorporated businesses. Practice sets illustrate single-entry, double-entry, cash-basis, and hybrid cash-accrual-basis accounting systems; periodic financial statements, payroll, sales, and income-tax returns. Prerequisites: ACCT 121, 122.

ACCT 451 3 S
Advanced Accounting
Specialized topics including partnerships, branches, consolidated statements, segment reporting. Recommended prerequisites: ACCT 311-312. Odd years.

ACCT 453 5 W
Auditing
The internal independent auditor’s functions; pronouncements of the American Institute of Certified Public Accountants. Prerequisites: ACCT 311-312-313; STAT 222, 322.

ACCT 461 4 S
Accounting Theory
Survey of contemporary financial accounting theory. Emphasis on both current literature and official pronouncements. Prerequisites: ACCT 311-312-313.

ACCT 495 1-3 F, W, S
Independent Study
Designed for students qualified to undertake an advanced and independent project. The project must be approved by the chair of the department. Repeatable to a maximum of 3 credits.
Business Administration & Economics

**Business Administration**

**Lower-Division Courses:**

**BUAD 118**  
*Personal Money Management*  
3 F, W, S  
Financial decisions facing individuals in society, including installment buying and borrowing, insurance, home ownership, saving, budgeting expenditures, investments, and trusts. Not available to business majors for business credit during the junior or senior year.

**BUAD 200**  
*Internship*  
0-1 F, W, S  
Contract arrangement between student, faculty, and a cooperating organization or business that provides practical experience to tie in with the student’s major. The internship may be taken for credit or no credit. Repeatable to a maximum of 2 credits towards a business major.

**BUAD 223**  
*Personal Law*  
2 F, S  
Topics include dealing with an attorney, the court systems, crimes, torts, minors and the law, consumer law, landlord/tenant relationships, the legal responsibilities of owning a motor vehicle, employment relationships, and planning an estate. Not available to business majors for business credit during the junior or senior year.

**BUAD 279**  
*Business Communication and Data Presentation*  
3 S  
Integrates presentation software with written and oral techniques for ethical communication in the business setting. Emphasis on effective presentation of a variety of documents. Prerequisites: ENGL 102, COMM 105.

**BUAD 295**  
*Colloquium/Distinguished Speaker Series*  
0-.5 F, W, S  
Topics of current interest to business majors. Guest speakers and others will give presentations relating to their experiences, current business issues, and academic considerations. Issues relating to advising, research, and other Business Department activities will be part of the course. Meets a maximum of three times per quarter. Each business major must register for this course each quarter while enrolled at Pacific Union College. No grade or credit is given during the fall and winter quarters; the grade and credit for the year is given in the spring quarter. A total of .5 credits may be earned each year. Repeatable to a maximum of 2 credits towards a baccalaureate degree in business.

**Upper-Division Courses:**

**BUAD 300**  
*Internship*  
0-1 F, W, S  
(See description of BUAD 200.)

**BUAD 325**  
*Business Law I*  
3 F  
A study of the legal system, with emphasis on common-law contracts, sales under Article II of the Uniform Commercial Code and negotiable instruments.

**BUAD 326**  
*Business Law II*  
3 W  
The legal system in the United States, emphasizing agency relationships, business entities, government regulation and property.

**BUAD 329**  
*Fraud Examination*  
3 S  
The principles of fraud detection and deterrence. Topics include the nature of fraud and the types of people who commit fraud, fraud investigation and types of fraudulent schemes, including a discussion of skimming, cash larceny, check tampering, register disbursement schemes, billing schemes, payroll and expense reimbursement schemes, non-cash misappropriations, corruption, and fraudulent financial statements. Odd years.

**BUAD 335**  
*Real Estate*  
4 F  
The various aspects of real-estate principles, practices, and ownership. Preparation for the California licensing examination. Designed for the general student.

**BUAD 371**  
*Insurance and Risk Management*  
3 F  
Recognition and evaluation of property, liability, and personal insurable risks facing a business firm, family, or other economic unit. Basic tools of risk management, loss prevention, selecting and dealing with an insurer and fire, marine, casualty, liability, life, and health insurance. Odd years.

**BUAD 395**  
*Colloquium/Distinguished Speaker Series*  
0-.5 F, W, S  
(See description of BUAD 295.)

**BUAD 434**  
*Entrepreneurship*  
3 F  
BUAD 490  1 F
Seminar in Business
A discussion of topics relating to the transition from student to worker, including personality typing, career choice, interviewing techniques, resume preparation, and interpersonal relations among supervisors, peers and subordinates. May be taken by sophomores with the permission of the instructor.

BUAD 493  1-3 F, W, S
Special Topics
An enrichment course treating specific topics not normally covered in the department’s Accounting, Business Administration, Economics, Finance, Information Systems, Management, Marketing, and Office Administration courses. A specific title is given to the course when it is taught. Repeatable for credit under different titles.

BUAD 495  1-3 F, W, S
Independent Study
Designed for students who are qualified to undertake an advanced and independent project. The project must be approved by the chair of the department. Repeatable to a maximum of 3 credits.

ECON 265  4 W, S
Microeconomics
An economic analysis of the workings of the market system in the United States. The factors that determine prices, costs, elasticity, utility, demand, supply, and the factors of production (land, labor, capital) when monopoly and pure competition exist and when conditions between these two models of competition exist.

ECON 321  3 S
Managerial Economics
Uses of primarily microeconomic theory in managerial decision-making. Prerequisite: ECON 265. Odd years.

ECON 332  3 S
Government and Business
Government policies, regulations, and legislation that attempt to maintain competition in the economy and that affect the decisions and the operations of business organizations. Even years.

ECON 371  3 W
Money and Banking
Money and the way it affects and is affected by central and commercial banking. Emphasis on the monetary policy of the Federal Reserve System. Prerequisite: ECON 261. Odd years.

ECON 457  3 F
International Economics
Theory and principles of international trade and monetary and fiscal policies. Topics include comparative advantage, standard theory, H-O theory, imperfect competition, tariff and nontariff barriers, protectionism, and economic integration. Prerequisites: ECON 261, 265. Even years.

ECON 495  1-3 F, W, S
Independent Study
Designed for students who are qualified to undertake an advanced and independent project. The project must be approved by the chair of the department. Repeatable to a maximum of 3 credits.

Finance

Upper-Division Courses:

FIN 341  5 F
Finance
Financial policies of corporations in the management of assets, liabilities, and owners’ equity. Major topics include risk and return, time value of money, present value, capital budgeting, cost of capital, valuation, leverage, long-term financing, and working capital management. Prerequisites: ACCT 121, 122, 123; ECON 261, 265; INFS 148; STAT 222.

FIN 380  3 S
Capital Markets and Financial Institutions
Evolution, structure, role, regulation and deregulation of financial institutions in the U.S. economy. Prerequisites: ECON 261, 265; FIN 341. Even years.

FIN 419  3 W
Personal Financial Planning
Introduction to personal financial planning and its role in the financial services industry. Emphasis on developing, implementing, and monitoring personal financial plans. Credit may not be earned in BUAD 118 after FIN 419 is taken. Prerequisites: ACCT 341. Recommended prerequisite: FIN 341. Odd years.
FIN 436  3 W  
**Real Estate Finance**  
Principles and methods of investing and financing in real estate. Sources of funds, qualifications of investors, property analysis, and settlement procedures. Prerequisites: ECON 261. Odd years.

FIN 444  3 S  
**Investments**  
Investment alternatives and the development of rational objectives and investment philosophies. Topics include risks, returns, evaluation concepts, technical approaches, portfolio development, the efficient market hypothesis, and decisions relating to different types of investments. Recommended prerequisites: ECON 261, FIN 341. Even years.

FIN 457  3 S  
**International Finance**  
Financial management in the international environment. Includes coverage of the IMS, foreign exchange, futures and options markets, managing exposure, banking, direct foreign investment, political risk, import/export operations, and working capital management. Recommended prerequisite: FIN 341. Odd years.

FIN 463  3 W  
**Financial Planning and Forecasting**  

FIN 488  3 W  
**Problems in Finance**  
Study and discussion of selected topics in finance through readings and case studies. Topics include working capital management, capital budgeting, financing decisions, dividend policy, cost of capital, and capital structure decisions. Prerequisite: FIN 341. Even years.

FIN 495  1-3 F, W, S  
**Independent Study**  
Designed for students qualified to undertake an advanced and independent project. The project must be approved by the chair of the department. Repeatable to a maximum of 3 credits. Prerequisite: CPTR 115. Odd years.

### Information Systems

**Lower-Division Courses:**

**INFS 144  1 W**  
**PC Operating Systems**  
An introduction to the Microsoft Windows family of operating systems for PC's. File and folder manipulation, terminology, disaster prevention and recovery, performance optimization, network commands, and other routine computer work functions.

**INFS 148  1 F, S**  
**PC Spreadsheets**  
Class/laboratory instruction in Microsoft Excel software for microcomputers, combining an electronic spreadsheet with graphics and a database system. Creating and modifying worksheets, graphs and macros.

**INFS 149  1 F, W**  
**PC Databases**  
Class/laboratory instruction in Microsoft Access database management software for microcomputers. Topics include creating, maintaining, modifying and querying a database, and generating reports and labels.

**INFS 229  3 W**  
**Business Programming**  

**Upper-Division Courses:**

**INFS 377  3 F**  
**Electronic Commerce**  

**INFS 380  3 W**  
**Database Analysis and Design**  
**INFS 465**  
Fundamentals of Data Communication  
Various methods of data communication: networking, telephony, communications hardware and software. Even years.

**INFS 470**  
Management Science  
Formal modeling approaches in managerial decision-making. Topics include linear programming, integer programming, decision-making under uncertainty, utility theory, queuing theory, Markov processes, network diagrams, and inventory models. Prerequisites: MATH 106, 130, or 131. Odd years.

**INFS 482**  
Systems Analysis and Design  
Concepts, skills, methodologies, techniques, tools, and perspectives essential for systems analysts to successfully develop information systems. Even years.

**Upper-Division Courses:**

**MGMT 328**  
Management Information Systems  
Basic concepts of using information systems in organizations; the role of data processing; fundamental design considerations. Odd years.

**MGMT 361**  
Management  
The basic concepts and theory of management with particular emphasis on planning, organizing, leading, and controlling.

**MGMT 457**  
International Management  
An analysis of problems encountered in operating businesses across national boundaries. Odd years.

**MGMT 465**  
Organizational Behavior  
Emphasis on the human aspects in organizations, including motivation, power, job enrichment, interpersonal and intergroup processes and relationships, perception, leadership, and organizational change and design.

**MGMT 472**  
Human Resources Management  
Contemporary objectives and problems relating to personnel management in organizations. Recruitment, selection, performance appraisal, training and development, supervision, compensation, pensions, grievances, and disciplinary actions. Odd years.

**MGMT 473**  
Labor Law and Legislation  
History and development of labor legislation, including analysis of leading court decisions. Historical background of labor-management relations, unfair labor practices of management and unions, collective bargaining, strikes and lockouts, the National Labor Relations Board, and labor legislation. Even years.

**MGMT 481**  
Operations Management  
Optimal approaches to the production of goods and services. Planning, scheduling, plant layout, production standards, quality, and cost controls. Even years.

**MGMT 486**  
Supply Chain Management  
Practices, problems and approaches related to purchasing in profit and nonprofit institutions. Sources of supply, market information, product specifications, inspection, control records, legal aspects of purchasing, and the interrelationships among purchasing, prices, quality control, and inventory control. Even years.

**MGMT 491**  
Strategic Management  
A capstone course integrating various functional areas of business and applying this knowledge to a study of business and institutional problems primarily through the case method. Should be taken during the senior year. Prerequisites: FIN 341; STAT 322; MGMT 361; MKTG 351.

**MGMT 495**  
Independent Study  
Designed for students qualified to undertake an advanced and independent project. The project must be approved by the chair of the department. Repeatable to a maximum of 3 credits.

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**Management**

**Lower-Division Courses:**

**MGMT 160**  
Small Business Management  
Managerial considerations in owning and operating a small business. Not applicable toward a baccalaureate major or minor in the department.

**MGMT 261**  
Introduction to Management  
Introduction to management in profit and nonprofit institutions. Emphasis on the role of the manager. Not applicable toward a baccalaureate major or minor in the department.

**MGMT 328**  
Management Information Systems  
Basic concepts of using information systems in organizations; the role of data processing; fundamental design considerations. Odd years.

**MGMT 361**  
Management  
The basic concepts and theory of management with particular emphasis on planning, organizing, leading, and controlling.

**MGMT 457**  
International Management  
An analysis of problems encountered in operating businesses across national boundaries. Odd years.

**MGMT 465**  
Organizational Behavior  
Emphasis on the human aspects in organizations, including motivation, power, job enrichment, interpersonal and intergroup processes and relationships, perception, leadership, and organizational change and design.

**MGMT 472**  
Human Resources Management  
Contemporary objectives and problems relating to personnel management in organizations. Recruitment, selection, performance appraisal, training and development, supervision, compensation, pensions, grievances, and disciplinary actions. Odd years.
Business Administration & Economics

Marketing

Upper-Division Courses:

MKTG 351  4 F, S
Marketing
Marketing institutions and marketing decisions in relationship to the achievement of institutional goals. Management issues relating to product, price, promotion, and distribution; effects of marketing decisions on the environment and of the environment on marketing decisions.

MKTG 360  3 W
Consumer Behavior
The application of research findings and concepts from such academic disciplines as psychology, anthropology, sociology, economics, and marketing to consumer buying behavior. Even years.

MKTG 371  3 S
Marketing Research
Introduction to basic research concepts and techniques useful for determining information needs, conducting research, and making appropriate reports of research findings. Prerequisites: STAT 222, 322. Odd years.

MKTG 372  3 S
Retailing Management
The structure and environment in which retailing management occurs. Areas of special emphasis include operation of stores, merchandise decisions, layout, pricing, and promotion decisions. Even years.

MKTG 374  3 F
Advertising
The advertising function in profit and nonprofit enterprises from management’s point of view. The purpose of advertising, media planning, budgeting for advertising, and an evaluation of the effectiveness of advertising.

MKTG 377  3 W
Sales Management
The role of the sales manager in planning, organizing, developing, directing, controlling, and evaluating the sales force. Personal selling is also emphasized. Odd years.

MKTG 417  3 F
Services Marketing
Application of marketing concepts and principles in service and nonprofit institutions. Identification and study of various constraints, clients, and publics; the special requirements, needs, and desires of those associated with and affected by the organization. Prerequisite: MKTG 351. Odd years.

MKTG 458  3 S
International Marketing
Problems and perspectives when marketing across national boundaries. Differences caused by cultural, social, institutional, political, and economic factors. Managerial emphasis on market entry strategies, monitoring and controlling marketing management functions in the international arena. Even years.

MKTG 481  3 W
Marketing Problems
Selected areas in marketing, illustrating practical solutions to situations likely to confront marketing managers. Emphasis on developing an understanding of marketing problems and developing approaches to effective decision-making in marketing. Should be taken during the senior year. Prerequisite: MKTG 351.

MKTG 495  1-3 F, W, S
Independent Study
Designed for students qualified to undertake an advanced and independent project. The project must be approved by the chair of the department. Repeatable to a maximum of 3 credits.

Office Administration

Lower-Division Courses:

OFAD 111  2 F, W
Personal/Beginning Keyboarding
For beginners and reviewers. For beginners: touch-typing on the keyboard and document processing. For reviewers: emphasis on development of speed in both straight-copy and production work. Placement by waiver examination or first-week testing in class.

OFAD 121  2 W
Intermediate Keyboarding
Develops and enhances the typewriting skills of speed, accuracy and proof-reading for personal and vocational uses. Prerequisite: Keyboarding placement test with a speed of at least forty words per minute or OFAD 111. Offered on sufficient demand.

OFAD 201  2 F, S
PC Word Processing
Applications designed to increase knowledge of word processing concepts and working skills with the Microsoft Word software. One lecture and one laboratory per week.

Upper-Division Course:

OFAD 495  1-3 F, W, S
Independent Study
Designed for students qualified to undertake an advanced and independent project. Projects must be approved by the department chair. Repeatable to a maximum of 3 credits.
Degree Completion Courses: Management

The following courses are available only in the Bachelor of Science in Management (B.S.M.) curriculum, an off-campus degree-completion program.

Upper-Division Courses:

MGT 320 4
Business Law
Laws regulating business activities, principles governing contracts, negotiable instruments, sales of goods, agencies, partnerships, and corporations.

MGT 330 4
Economics
The market system and the structure and functioning of the economy in the United States. Macroeconomics concepts, including growth, inflation, employment, interest rates, fiscal policy and monetary policy, supply, demand, and opportunity costs. Microeconomic concepts and tools are used to study market power (perfect competition, monopoly, monopolistic competition, and oligopoly), elasticity, income distribution, environment and other social areas.

MGT 340 4
Marketing
Markets, consumer behavior, pricing, promotion, and distribution of products and services. Management issues related to enabling an organization profitably to acquire and satisfy customers and matching the wishes and desires of the customers with those of the organization.

MGT 350 2
Data Presentation

MGT 375 3
Organizational Behavior
Emphasis on group and individual behavior and their influence on each other and on an organization’s effectiveness. Focus on human aspects in organizations, including leadership, groups, conflict, and decision-making.

MGT 390 3
Organizations and Environments
The organization as an open system. Organizational diagnosis, using a systems approach, examines organizational structure, design, governing regulations that shape business operations, contingency theory, and the impact of the environment on organizational effectiveness.

MGT 410 5
Accounting
How managers use accounting data in financial decision-making and in delineating alternative courses of action. Emphasis on both financial and managerial data and on preparing and using financial statements and reports.

MGT 420 4
Management
Concepts and theory of management with emphasis on planning, organizing, staffing, motivation, and control. Within these areas, vision, mission and objectives of organizations are covered. Also included: motivational theories and their application to individual and group functioning in organizations.

MGT 430 4
Human Resource Management
Objectives and problems relating to human resources management in public and private organizations. Includes recruitment, selection, performance appraisal, training and development, compensation, grievances, and discipline.

MGT 434 3
Entrepreneurship

MGT 450 5
Finance
Principles of managing and controlling the finances of corporate enterprises. Includes financial institutions and markets, financial statement analysis, the time value of money, risk and return, cost of capital, valuation, capital budgeting, management of working capital, and financial planning. Prerequisites: MGT 330, 410.

MGT 477 4
Electronic Commerce
MGT 480  
**International Business**

Introduction to and summary of doing business in the international marketplace. Includes globalization, political economy, trade theory, investment in foreign countries, and global monetary systems; and entry, organizational strategies and business operations in the global environment.

MGT 491  
**Strategic Management**

A capstone course integrating knowledge and theories from a variety of business disciplines; applications to a study of organizational problems, primarily through the case study method. Prerequisites: MGT 320, 330, 340, 350, 375, 390, 410, 420, 430, 450.

*The following required courses are general education courses and are taught by members of the Religion Department faculty.*

RELB 305  
**Biblical Perspectives**

Designed to foster knowledge and understanding of those historical concepts and themes of the Bible that relate most directly to effectiveness in business practices and public life.

RELT 310  
**Ethics and Personal Values**

Examination of how personal values in business and public life are shaped by world views, ethics, and spiritual formation.

The following four Management Information Systems courses may be offered as option courses. These courses will only be offered if there is sufficient demand from students who have a prior working knowledge of computer operations and systems, and who have completed courses in both accounting and economics.

MGT 487  
**Management Science**

Quantitative methods for managerial decision-making. Includes linear programming, integer programming, decision-making under uncertainty, utility theory, waiting line and inventory models, simulation, transportation and assignment problems.

MGT 380  
**Database Analysis and Design**

Analysis and design of databases for business. File systems; database management functions; hierarchical, network, relational, and object-oriented data models; normalization; SQL queries, entity-relationship diagramming. Explores issues in distributed databases and simultaneous access. Use of Oracle DBMS software.

MGT 482  
**Systems Analysis and Design**

Concepts, skills, methodologies, techniques, tools, and perspectives essential for systems analysts to successfully develop information systems. Includes project identification and selection, project initiation and planning, analysis, logical design, physical design, implementation, and maintenance.

MGT 486  
**Information Systems Management**

An overview of information systems in organizations. Strategic issues, organizational structure for information systems (IS), ethical and societal issues. Also included: hardware and software for business, data organization, telecommunications and networking, internet and intranet, and IS system types in various organizations. Variable credit depends on needs of a given class, not of an individual student.
Faculty
Kent Davis, chair; Richard Clark, Pablo Hilario, Denise Lee-Haye, Marie Pak,
Departmental Office: 355 Chan Shun Hall; 965-7597

Degrees and Programs
Chemistry, B.S. ................................................................. 75
Chemistry, B.A. .............................................................. 76
Chemistry, with an Emphasis in Biochemistry, B.S. .......... 76
Natural Science, B.S. ....................................................... 76
Teaching Credential ....................................................... 77

The Chemistry Department serves students with a primary interest in chemical science as well as students in other fields for which chemistry is an important foundation. The department has the following objectives:

- To give a thorough grounding in the principles of chemistry, both in theory and in practical experience with instrumentation currently in use.
- To help the student develop problem-solving abilities through a careful analysis of problems and the application of chemical principles.
- To provide an atmosphere where Christian values are integrated into the learning experience.

The department offers several degree options. For students intending to enter a graduate chemistry program or directly enter the profession, both the B.S. in Chemistry and the B.S. in Chemistry with a Biochemistry emphasis are suitable programs. Students who intend to enter a professional program in one of the medical sciences will find the B.S. in Chemistry with a Biochemistry emphasis provides a very good preparation. Students are encouraged to work closely with their major advisor to select suitable electives regardless of their career choice.

Students whose interests include the liberal arts and languages as well as chemistry may choose the B.A. in Chemistry. Those interested in a primary or secondary school teaching career may choose the B.S. in Natural Science.

Major in Chemistry, B.S.
A minimum of 88 hours (45 upper-division hours)

- Required Core Courses (53-54 hours):
  - CHEM 111-112-113 General Chemistry 5-5-5
  - CHEM 324 Analytical Chemistry I 3
  - CHEM 324L Analytical Chemistry I Laboratory 2
  - CHEM 325 Analytical Chemistry II 3
  - CHEM 371-372-373 Organic Chemistry 4-4-4
  - CHEM 373L Adv. Organic Chemistry Laboratory 1
  - CHEM 396 Seminar (4 quarters) .5-.5-.5-.5
  - CHEM 414 Inorganic Chemistry 3
  - CHEM 451-452-453 Physical Chemistry 3-3-3
  - CHEM 499 Introduction to Research 1
  - At least two of the following courses: 2-3
    - CHEM 325L Analytical Chemistry II Laboratory (1)
    - CHEM 450L Physical Chemistry Laboratory (1)
    - CHEM 484L Biochemistry Laboratory (2)

- Required Core Electives (6-7 hours):
  - At least 6-7 hours from the following: 6-7
    - (To be selected in consultation with the major advisor.)
      Additional upper-division CHEM courses

- Required Cognate Courses (28 hours):
  - MATH 131-132-133 Calculus I-II-III 4-4-4
    One of the following sequences: 4-4-4
      - PHYS 111-112-113 General Physics (4-4-4)
      - PHYS 211-212-213 Physics with Calculus (4-4-4)
    - At least one of the following courses: 4
      - MATH 265 Elementary Linear Algebra (4)
      - MATH 267 Multivariable Calculus (4)
      - MATH 269 Elementary Differential Equations (4)
      - MATH 375 Numerical Analysis (4)

Recommended Cognate Courses:
- CPTR 115 Intro. to Computer Programming (4)
- PHYS 314 Elementary Modern Physics (4)
Chemistry

Major in Chemistry, B.A.
A minimum of 69 hours (34 upper-division hours)

> Required Core Courses (49-50 hours):
CHEM 111-112-113 General Chemistry 5-5-5
CHEM 324 Analytical Chemistry I 3
CHEM 324L Analytical Chemistry I Laboratory 2
CHEM 325 Analytical Chemistry II 3
CHEM 371-372-373 Organic Chemistry 4-4-4
CHEM 373L Adv. Organic Chemistry Laboratory 1
CHEM 396 Seminar (4 quarters) .5-.5-.5-.5
CHEM 414 Inorganic Chemistry 3
CHEM 451-452 Physical Chemistry 3-3

At least two of the following courses:
CHEM 325L Analytical Chemistry II Laboratory (1)
CHEM 450L Physical Chemistry Laboratory (1)

> Required Cognate Courses (20 hours):
MATH 131-132 Calculus I-II 4-4
PHYS 111-112-113 General Physics 4-4-4

Recommended Cognate Courses:
CPTR 115 Intro. to Computer Programming (4)
MATH 133 Calculus III (4)
PHYS 314 Elementary Modern Physics (4)

Major in Chemistry with an Emphasis in Biochemistry, B.S.
A minimum of 95 hours (45 upper-division hours)

> Required Core Courses (55 hours):
CHEM 111-112-113 General Chemistry 5-5-5
CHEM 324 Analytical Chemistry I 3
CHEM 324L Analytical Chemistry I Laboratory 2
CHEM 371-372-373 Organic Chemistry 4-4-4
CHEM 373L Adv. Organic Chemistry Laboratory 1
CHEM 396 Seminar (4 quarters) .5-.5-.5-.5
CHEM 451-452 Physical Chemistry 3-3
CHEM 481-482-483 Biochemistry I-II-III 4-4-3
CHEM 484L Biochemistry Laboratory 2

At least one of the following courses:
CHEM 325L Analytical Chemistry II Laboratory (1)
CHEM 450L Physical Chemistry Laboratory (1)

> Required Core Electives (5 hours):
At least 5 hours from the following:
(BTo be selected in consultation with the major advisor.)
BIOL 320 Cellular and Molecular Biology (4)
Additional upper-division CHEM courses

> Required Cognate Courses (35 hours):
BIOL 111-112-113 Biological Foundations 5-5-5
MATH 131-132 Calculus I-II 4-4
PHYS 111-112-113 General Physics 4-4-4

Pre-medical and pre-dental students:
See advisor for recommended cognates.

Major in Natural Science, B.S.
Chemistry Emphasis
A minimum of 100 hours (40 upper-division hours)

This major provides appropriate preparation for teaching science at the secondary level. The core requirement of 65 quarter hours of course work corresponds to science subjects commonly taught in California public schools, and the emphasis treats the subject matter at a depth more than adequate for teaching the higher secondary science courses in chemistry. Emphases may also be obtained in biology or physics. For further information, see the sections entitled “Biology” and “Physics” in this catalog.

> Required Core Courses (65 hours):
ASTR 115 Astronomy 5
ASTR 173 Meteorology 1
BIOL 111-112-113 Biological Foundations 5-5-5
BIOL 331 Marine Science 4
BIOL 355 Issues on Origins 3
CHEM 111-112-113 General Chemistry 5-5-5
GEOL 233 Geology 4
PHYS 390 History and Philosophy of Science 3

At least one of the following courses:

At least one of the following sequences:
PHYS 111-112-113 General Physics (4-4-4)
PHYS 211-212-213 Physics with Calculus (4-4-4)

Chemistry Emphasis (35 hours)

> Required Core Courses (27 hours):
CHEM 324-324L Analytical Chemistry I, Laboratory 3-2
CHEM 371-372-373 Organic Chemistry 4-4-4
CHEM 373L Adv. Organic Chemistry Laboratory 1
CHEM 396 Seminar (4 quarters) .5-.5-.5-.5
CHEM 451 Physical Chemistry 3
CHEM 481 Biochemistry I 4

> Required Cognate Courses (8 hours):
MATH 131-132 Calculus I-II 4-4
Teaching Credential

Students desiring to enter a program of studies leading to a California teaching credential in science with a concentration in chemistry may take the B.S. degree in Natural Science, Chemistry Emphasis. Students will need to pass the science (chemistry concentration) portion of the CSET exam one quarter prior to doing full-time student teaching. Students are invited to discuss the program with their major advisor in the Chemistry Department.

Those who plan to teach on the secondary level should consult with the credential analyst in the Education Department and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the section entitled “Education” in this catalog.

Minor in Chemistry

A minimum of 30 hours (15 upper-division hours)

> Required Courses (20 hours):
CHEM 111-112-113 General Chemistry 5-5-5
CHEM 324 Analytical Chemistry I 3
CHEM 324L Analytical Chemistry I Laboratory 2

> Required Electives (10 hours):
At least 10 hours from the following: 10
Additional upper-division CHEM courses

Chemistry

Service Courses:
(Not applicable to a major or minor in this department)

CHEM 101 Introductory Chemistry 4 F

An elementary introduction to fundamental principles of chemistry. Primarily for students preparing to enter an allied health or related field or to enroll in CHEM 102 and 111. Three lectures and one laboratory per week. Prerequisite: Secondary-school Algebra I or MATH 019.

CHEM 102 Survey of Organic Chemistry 4 W

The important classes of organic compounds. Emphasis is given to topics related to the health sciences and biochemistry. Three lectures and one laboratory per week. Prerequisites: Secondary-school chemistry or CHEM 101.

CHEM 103 Survey of Biochemistry 4 S

The chemistry of living organisms emphasizing the normal processes occurring in the human body. Three lectures and one laboratory per week. Prerequisite: CHEM 102.

Lower-Division Courses:

CHEM 111-112-113 General Chemistry 5-5-5 F-W-S

A complete introduction to the fundamental principles of chemistry. Includes the following topics: atomic and molecular orbital theory, stoichiometry, gas laws, thermodynamics, kinetics, chemical equilibrium, acid-base theory, pH and introductions to nuclear, inorganic, and organic chemistry. Intended for chemistry majors and preprofessional students in medicine, dentistry and other technical fields. Must be taken in sequence. Four lectures and one laboratory per week. Prerequisites: Algebra II or MATH 106. A score of 19 on the mathematics section of the ACT (or 500 on the SAT) is expected. Secondary school chemistry (or CHEM 101) and physics are highly recommended.

Upper-Division Courses:

CHEM 324 Analytical Chemistry I 3 F

The quantitative study of chemical reactions occurring in the aqueous phase, including solubility, acid base equilibria and complex formation. Methods of data recording and manipulation, error analysis and statistical treatment of data are also included. Prerequisite: CHEM 113.

CHEM 324L Analytical Chemistry I Laboratory 2 F

A series of laboratory experiments to determine unknown quantities of selected chemical substances. The chemical principles in CHEM 324 are reiterated; emphasis, however, is on laboratory technique. Six hours laboratory per week. Prerequisite or corequisite: CHEM 324.

CHEM 325 Analytical Chemistry II 3 W

The theoretical basis of chemical analysis using electrochemical, spectrophotometric and chromatographic methods. Introduction to principles of operation of current analytical instrumentation. Prerequisites: CHEM 324L, 373, MATH 132. Strongly recommended corequisite: CHEM 325L.
CHEM 325L  
**Analytical Chemistry II Laboratory**  
Laboratory coordinated with CHEM 325. Prerequisite or corequisite: CHEM 325.

CHEM 344  
**Nuclear Physics and Chemistry**  
Radioactivity, properties of radioactive nuclei, nuclear structure, nuclear reactions, and nuclear fission with applications to the cosmos. Prerequisites: CHEM 113, MATH 132, and PHYS 113.

CHEM 371-372  
**Organic Chemistry**  
The physical and chemical properties of compounds of carbon. A mechanistic approach to the study of organic reactions with an emphasis on spectroscopic methods of analysis. Must be taken in sequence. Three lectures and one laboratory per week. Prerequisite: CHEM 113.

CHEM 373  
**Organic Chemistry**  
A continuation of CHEM 372 and an introduction to biochemistry (carbohydrates, proteins, and lipids). Prerequisite: CHEM 372. Corequisite: 373L required of all chemistry majors.

CHEM 373L  
**Advanced Organic Chemistry Laboratory**  
Laboratory coordinated with CHEM 373. Required of all chemistry majors.

CHEM 396  
**Seminar**  
(See also BIOL 396, CPTR 396, ENVR 396, PHYS 396)  
Single topics of current interest in the natural sciences are presented by guest lecturers. Student must be on time and attend all five course sessions. Prerequisite: CHEM 373. Enrollment limited to upper-division students. Repeatable to a maximum of 2 credits. Graded S/F.

CHEM 414  
**Inorganic Chemistry**  
A systematic study of inorganic chemistry with emphasis on chemical theory and bonding, the descriptive chemistry of the elements, and transition-metal chemistry. Prerequisite: CHEM 372, MATH 132. Even years.

CHEM 450L  
**Physical Chemistry Laboratory**  
Laboratory activities exploring aspects of thermodynamics, kinetics, quantum chemistry, and spectroscopy. Prerequisite or corequisite: CHEM 451, 452 or 453.

CHEM 451  
**Physical Chemistry: Thermodynamics**  
The laws of thermodynamics and their application to chemistry. Prerequisites: CHEM 113, MATH 131, and PHYS 113.

CHEM 452  
**Physical Chemistry: Dynamics**  
Kinetic theory, chemical kinetics, including enzyme kinetics, transport properties. Introduction to the basic ideas of quantum mechanics. Prerequisites: CHEM 113, MATH 132, and PHYS 113.

CHEM 453  
**Physical Chemistry: Structure**  
An introduction to the Schrödinger wave equation with applications to chemical systems and spectroscopy. Prerequisite: CHEM 452.

CHEM 481  
**Biochemistry I**  
An introduction to the chemistry of biologically-relevant molecules. Includes attention to biological oxidations, energy relationships, and enzyme kinetics. Prerequisite: CHEM 373.

CHEM 482  
**Biochemistry II**  
The intermediary metabolism of carbohydrates, lipids and proteins, and an introduction to the replication and transmission of genetic information. Prerequisite: CHEM 481.

CHEM 483  
**Biochemistry III**  
The signaling processes of cells, including the structure and function of signaling molecules. Includes the mechanism of signal processing, coordination by information transducing pathways, and consequences of signaling pathways defects. Prerequisite: CHEM 482.

CHEM 484L  
**Biochemistry Laboratory**  
Laboratory discussions and activities introducing the basic experimental techniques of biochemistry. One lecture and one laboratory per week. Prerequisite: CHEM 482.

CHEM 499  
**Introduction to Research**  
A directed research project intended to acquaint students with research problems of current interest. A suitable problem is undertaken with the direction of the faculty. Open to upper-division majors in chemistry and, by permission, to other upper-division students. Repeatable to a maximum of 4 credits in Bachelor of Science curricula.
The Communication Department serves the communication needs of students in every department, offering instruction in a variety of communication skills and principles that apply in mass media, public speaking, small group, and interpersonal settings. The department provides curricula leading to a variety of communication-related careers, with specific preparation for careers in public relations, journalism, intercultural communication and speech pathology. Communication courses also provide valuable learning opportunities for those preparing for careers which incorporate public speaking, such as business, law, medicine, pastoral or evangelistic ministry, broadcasting, and others.

**Major in Communication, B.S.**

A minimum of 71 hours (39 upper-division hours)

- **Required Core Courses (23 hours):**
  - COMM 134  Mass Media Communication 3
  - COMM 223  Interpersonal Communication 3
  - COMM 226  Public Speaking 3
  - COMM 330  Intercultural Communication I 3
  - COMM 424  Communication Research I 2
  - COMM 425  Communication Research II 2
  - COMM 450  Senior Seminar in Communication Disciplines 2
  - JOUR 141  Newswriting and Reporting 3
  - JOUR 244  Copyediting 2

- **Emphases (choose one):**

  1. **Communication Studies Emphasis** (48 hours)

     - **Required Emphasis Courses (26 hours):**
       - COMM 225  Oral Interpretation 3
       - COMM 328  Small Group Communication 3
       - COMM 329  Organizational Communication 3
       - COMM 423  Communication Theory 2
       - COMM 426  Argumentation 3
       - COMM 427  Persuasive Communication 3
       - COMM 494  Communication Internship 3
       - JOUR 434  Media Law and Ethics 3
       - PREL 231  Public Relations I: Introduction 3

     - **Required Emphasis Electives (17 hours):**
       - At least 17 hours from the following (8 upper-division) 17
         Additional non-service COMM, PREL, or JOUR courses
         DRMA 229  Acting I: Fundamentals (3)

     - **Required Cognate Courses (5 hours):**
       - ARTD 253  Publication Technology 3
       - RELT 330  The Christian and the Media 2
2. Journalism Emphasis (49 hours)

- **Required Emphasis Courses (35 hours):**
  
  - COMM 328  Small Group Communication 3
  - COMM 329  Organizational Communication 3
  - COMM 340  Visual Communication & Semiotics 3
  - COMM 423  Communication Theory 2
  - JOUR 242  Photojournalism 3
  - JOUR 341  Advanced Newswriting 3
  - JOUR 434  Media Law and Ethics 3
  - JOUR 443  Investigative Reporting 3
  - JOUR 494  Journalism Internship 3
  - PREL 231  Public Relations I: Introduction 3
  - PREL 350  Promotional Writing for the Media 3
  
  At least one of the following courses:
  - COMM 426  Argumentation (3)
  - COMM 427  Persuasive Communication (3)

- **Required Emphasis Electives (6 hours):**
  
  At least 6 hours from the following:
  - Additional upper-division COMM, PREL, or JOUR courses

- **Required Cognate Courses (8 hours):**
  
  - ARTD 253  Publication Technology 3
  - ARTP 150  Black & White Photography 3
  - RELT 330  The Christian and the Media 2

3. Public Relations Emphasis (49-50 hours)

- **Required Emphasis Courses (35 hours):**
  
  - COMM 328  Small Group Communication 3
  - COMM 329  Organizational Communication 3
  - COMM 340  Visual Communication & Semiotics 3
  - COMM 423  Communication Theory 2
  - JOUR 434  Media Law and Ethics 3
  - PREL 231  Public Relations I: Introduction 3
  - PREL 339  Public Relations III: Campaigns and Practices 3
  - PREL 350  Promotional Writing for the Media 3
  - PREL 494  Public Relations Internship 3
  
  At least one of the following courses:
  - COMM 426  Argumentation (3)
  - COMM 427  Persuasive Communication (3)

- **Required Emphasis Electives (6 hours):**
  
  At least 6 hours from the following:
  - Additional upper-division COMM, PREL, or JOUR courses

- **Required Cognate Courses (8-9 hours):**
  
  - ARID 253  Publication Technology 3
  - RELT 330  The Christian and the Media 2

4. Required Major Courses (26 hours):

- COMM 134  Mass Media Communication 3
- COMM 223  Interpersonal Communication 3
- COMM 225  Oral Interpretation 3
- COMM 226  Public Speaking 3
- COMM 330  Intercultural Communication I 3
- COMM 424  Communication Research I 2
- COMM 425  Communication Research II 2
- COMM 450  Senior Seminar in Communication Disciplines 2
- JOUR 141  Newswriting and Reporting 3
- JOUR 244  Copyediting 2

5. Required Major Electives (6 hours):

- At least 6 hours from the following:
  - Additional upper-division COMM, PREL, or JOUR courses

6. Required Cognate Courses (8 hours):

- ARID 253  Publication Technology 3
- ARTP 150  Black & White Photography 3
- RELT 330  The Christian and the Media 2

**Major in Communication, B.A.**

A minimum of 60 hours (37 upper-division hours)

- **Required Core Courses (23 hours):**
  
  - COMM 134  Mass Media Communication 3
  - COMM 223  Interpersonal Communication 3
  - COMM 225  Oral Interpretation 3
  - COMM 226  Public Speaking 3
  - COMM 330  Intercultural Communication I 3
  - COMM 424  Communication Research I 2
  - COMM 425  Communication Research II 2
  - COMM 450  Senior Seminar in Communication Disciplines 2
  - JOUR 141  Newswriting and Reporting 3
  - JOUR 244  Copyediting 2

- **Required Major Courses (26 hours):**
  
  - COMM 134  Mass Media Communication 3
  - COMM 223  Interpersonal Communication 3
  - COMM 225  Oral Interpretation 3
  - COMM 226  Public Speaking 3
  - COMM 330  Intercultural Communication I 3
  - COMM 424  Communication Research I 2
  - COMM 425  Communication Research II 2
  - COMM 450  Senior Seminar in Communication Disciplines 2
  - JOUR 141  Newswriting and Reporting 3
  - JOUR 244  Copyediting 2

- **Required Major Electives (6 hours):**
  
  At least 6 hours from the following:
  - Additional upper-division COMM, PREL, or JOUR courses

- **Required Cognate Courses (8 hours):**
  
  - ARID 253  Publication Technology 3
  - ARTP 150  Black & White Photography 3
  - RELT 330  The Christian and the Media 2

**Major in Intercultural Communication, B.A.**

A minimum of 85 hours (44 upper-division hours)

- **Required Core Courses (23 hours):**
  
  - COMM 134  Mass Media Communication 3
  - COMM 223  Interpersonal Communication 3
  - COMM 225  Oral Interpretation 3
  - COMM 226  Public Speaking 3
  - COMM 330  Intercultural Communication I 3
  - COMM 424  Communication Research I 2
  - COMM 425  Communication Research II 2
  - COMM 450  Senior Seminar in Communication Disciplines 2
  - JOUR 141  Newswriting and Reporting 3
  - JOUR 244  Copyediting 2

- **Required Major Courses (26 hours):**
  
  - COMM 134  Mass Media Communication 3
  - COMM 223  Interpersonal Communication 3
  - COMM 225  Oral Interpretation 3
  - COMM 226  Public Speaking 3
  - COMM 330  Intercultural Communication I 3
  - COMM 424  Communication Research I 2
  - COMM 425  Communication Research II 2
  - COMM 450  Senior Seminar in Communication Disciplines 2
  - JOUR 141  Newswriting and Reporting 3
  - JOUR 244  Copyediting 2

- **Required Major Electives (6 hours):**
  
  At least 6 hours from the following:
  - Additional upper-division COMM, PREL, or JOUR courses

- **Required Cognate Courses (5 hours):**
  
  - ARID 253  Publication Technology 3
  - RELT 330  The Christian and the Media 2
Communication

COMM 330  Intercultural Communication I  3
COMM 424  Communication Research I  2
COMM 425  Communication Research II  2
COMM 450  Senior Seminar in Communication Disciplines  2
JOUR 141  Newswriting and Reporting  3
JOUR 244  Copyediting  2

Required Major Courses (11 hours):
COMM 430  Intercultural Communication II  2
PREL 337  Fundraising for Non-Profits  3
At least one of the following courses:
COMM 328  Small Group Communication (3)
COMM 329  Organizational Communication (3)
At least one of the following courses:
COMM 426  Argumentation (3)
COMM 427  Persuasive Communication (3)

Required Major Electives (3 hours):
Additional upper-division COMM, JOUR, or PREL courses  3

Required Cognate Courses (24-25 hours):
ANTH 124  Cultural Anthropology  4
HIST 101-102  History of World Civilizations  4-4
RELH 311  World Religions  3
SOCI 355  “Racial” and Ethnic Relations  3
At least one of the following courses:
MGMT 361  Management (4)
MGMT 457  International Management (3)
At least one of the following courses:
GEOG 210  World Regional Geography (3)
GEOG 220  Geography of the Americas (3)
PLSC 328  Critical World Issues (3)
PLSC 485  Foreign Relations of the United States (3)

Emphases (choose one):

1. French Emphasis (24 hours)
At least 24 hours of intermediate- and advanced-level French
(including at least 12 upper-division hours) at an approved international French-language institution (typically Séminaire Adventiste du Salève, Collonges, France).

2. German Emphasis (24 hours)
At least 24 hours of intermediate- and advanced-level German
(including at least 12 upper-division hours) at an approved international German-language institution (typically Seminar Schloss Bogenhofen, Austria, or Friedensau Adventist University, Germany).

3. Italian Emphasis (24 hours)
At least 24 hours of intermediate- and advanced-level Italian
(including at least 12 upper-division hours) at an approved international Italian language institution (typically Instituto Avventista Villa Aurora, Italy).

4. Spanish Emphasis (24 hours)
At least 12 hours from the following:
SPAN 367  Spanish and Latin American Culture & Civ. (4)
SPAN 382  Applied Spanish Linguistics (4)
SPAN 385  Business Spanish (4)
SPAN 440  Spanish and Latin American Film (4)
SPAN 441  Readings in Spanish Literature (4)
SPAN 442  Readings in Latin American Literature (4)
At least 12 hours from the following:
Upper-division Spanish courses at an approved international Spanish-language institution (typically Colegio Adventista de Sagunto, Spain; or at Universidad Adventista del Plata, Villa Libertador St. Martin, Argentina).

Minor in Communication
A minimum of 30 hours (12 upper-division hours)

Required Courses (17 hours):
COMM 223  Interpersonal Communication  3
COMM 330  Intercultural Communication  3
COMM 423  Communication Theory  2
At least one of the following courses:
COMM 225  Oral Interpretation (3)
COMM 226  Public Speaking (3)
At least one of the following courses:
COMM 328  Small Group Communication (3)
COMM 329  Organizational Communication (3)
At least one of the following courses:
COMM 426  Argumentation (3)
COMM 427  Persuasive Communication (3)

Required Electives (13 hours):
At least 13 hours from the following (1 upper-division):
Additional non-service COMM, JOUR or PREL courses
DRMA 229  Acting I: Fundamentals (3)

Minor in Public Relations/Journalism
A minimum of 30 hours (12 upper-division hours)

Required Courses (11 hours):
COMM 134  Mass Media Communication  3
JOUR 141  Newswriting and Reporting  3
Communication

Service Course:
(Not applicable to a major or minor in this department)

COMM 105   3 F, W, S
Introduction to Communication
Develops skills in oral communication, surveys the human communication process, and encourages responsible speaking and listening. Focuses on intrapersonal, interpersonal, small group, and public communication. Enrollment limited to freshmen who are not taking a major within the Communication Department. (All other students see COMM 226.)

Lower-Division Courses:

COMM 134   3 F
Mass Media Communication
The academic discipline and career opportunities currently available in the context of mass media. Based on the transactional model of communication. Includes the study of the ways in which advertising, public relations, and research contribute to the accurate transmission of mass media messages. Designed to be taken in the freshman year.

COMM 223   3 F
Interpersonal Communication
Transactional nature of interpersonal communication, including the roles of both verbal and nonverbal communication, empathic listening, and self-disclosure as means of building trusting relationships and developing rhetorical sensitivities.

COMM 225   3 S
Oral Interpretation
Skills in reading aloud from prose, poetry, plays, and expository material. Emphasis on developing the ability to create and sustain mood and on learning the various methods of creating meaning through vocal expression.

COMM 226   3 F, W, S
Public Speaking
Composing speeches and delivering them before groups. Enrollment limited to sophomores, juniors, and seniors. Freshmen taking a major within the Communication Department may also enroll.

Upper-Division Courses:

COMM 328   3 W
Small Group Communication
Effective use of communication in small groups; analysis of the nature of group productivity, cohesiveness, and leadership; group problem-solving within various contexts.

COMM 329   3 F
Organizational Communication
Communication problems and variables unique to the organizational environment. Current and traditional theories are reviewed and applied to various communication studies.

COMM 330   3 W
Intercultural Communication I
Variables and effects of both verbal and nonverbal communication between cultures. Practical applications for careers in all communication fields (domestic and international), business, international relations, international relief and development, language-translation, foreign affairs, social work, and education.

COMM 340   3 S
Visual Communication and Semiotics
The visual, symbolic, classificatory, and meaning-making practices at the heart of all cultural production, consumption, and communication.

Speech Pathology
Pacific Union College offers a preprofessional program in Speech Pathology which is affiliated with the School of Allied Health at Loma Linda University. The Speech Pathology faculty at LLU provide regular assistance and counseling to students interested in this program.

The first two years of a baccalaureate degree in Speech Pathology, taken on the Pacific Union College campus, include the following course:

SPPA 164   Introduction to Speech Pathology   4
Approved courses in general education complete the preprofessional curriculum.
COMM 423  Communication Theory  2 F
Communication Theory includes types of theories and models used in communication research. Explores variables relevant to human communication behavior. Applies theory to the scientific method in communication research. Prerequisites: COMM 134, 223.

COMM 424  Communication Research I  2 F
Planning communication research, designing research instruments, and writing a research plan. Includes overview of ethical issues involved in research. Intended for graduating seniors.

COMM 425  Communication Research II  2 W
Implementing a communication research plan, survey techniques, tabulation procedures, and simple statistical tests. Includes interpreting survey results, as well as writing and presenting research in a professional, ethical, and credible fashion. Prerequisite: COMM 424, STAT 222.

COMM 426  Argumentation  3 F
Logical reasoning, fallacies in reasoning, the structure of arguments, and methods of analyzing and evaluating arguments for critical decision making. Emphasis includes both oral and written arguments.

COMM 427  Persuasive Communication  3 S
Rhetorical principles of ethical persuasion in public speaking, interpersonal relationships, public relations, and advertising. Development of skills in logical argument, emotive influence, and psychological appeal and in achieving source credibility. Even years.

COMM 430  Intercultural Communication II  2 S
Intercultural Communication II moves beyond the survey of intercultural communication concepts to incorporate primary research and theory frameworks from the field of communication. Employs a case-study format to integrate political science, history, anthropology, world religions, and business management with communication theory and practice. Prerequisite: COMM 330.

COMM 450  Senior Seminar in Communication Disciplines  2 W
Senior Seminar in Communication Disciplines is a capstone course emphasizing professional skills, ethics, creation of portfolio, and career planning.

COMM 490  Issues in Communication  1-3 F, W, S
Issues in Communication is a study of a specific issue in an area of communication such as rhetoric and public address, small group communication, interpersonal communication, intercultural communication, organizational communication, journalism, public relations, and speechwriting. Repeatable for credit under different subtitles.

COMM 494  Communication Internship  3 F, W, S
Communication Internship is supervised work experience in a communication-related environment. Skills in the practice of communication are used. Enrollment limited to department majors. Advance approval of the department required. May not be taken before the end of the sophomore year. Prerequisites: COMM 134, 226; JOUR 141; PREL 231. Qualifies for IP grading.

COMM 495  Independent Study  1-3 F, W, S
Independent Study is an opportunity for the advanced student to investigate special interests under the direction of departmental faculty.

COMM 430  Intercultural Communication II  2 S
Intercultural Communication II includes types of theories and models used in communication research. Explores variables relevant to human communication behavior. Applies theory to the scientific method in communication research. Prerequisites: COMM 134, 223.

COMM 450  Senior Seminar in Communication Disciplines  2 W
Senior Seminar in Communication Disciplines is a capstone course emphasizing professional skills, ethics, creation of portfolio, and career planning.

COMM 490  Issues in Communication  1-3 F, W, S
Issues in Communication is a study of a specific issue in an area of communication such as rhetoric and public address, small group communication, interpersonal communication, intercultural communication, organizational communication, journalism, public relations, and speechwriting. Repeatable for credit under different subtitles.

COMM 494  Communication Internship  3 F, W, S
Communication Internship is supervised work experience in a communication-related environment. Skills in the practice of communication are used. Enrollment limited to department majors. Advance approval of the department required. May not be taken before the end of the sophomore year. Prerequisites: COMM 134, 226; JOUR 141; PREL 231. Qualifies for IP grading.

COMM 495  Independent Study  1-3 F, W, S
Independent Study is an opportunity for the advanced student to investigate special interests under the direction of departmental faculty.
## Communication

### JOUR 434 3 F
**Media Law and Ethics**
Current issues involving personal rights and corporate responsibilities as related to concepts of free speech and responsible journalism.

### JOUR 443 3 W
**Investigative Reporting and Writing**
Tools, techniques, and skills for conducting journalistic investigations, with an emphasis on ethics, research development of sources, and interviews. The use of public records and “the paper trail” to document complex issues. Assignments include developing and writing a significant, accurate, and comprehensive investigative news story. Prerequisites: JOUR 141, 242, 244. Odd years.

### JOUR 494 3 F, W, S, Su
**Journalism Internship**
Supervised opportunity for the student to accrue direct experience in a professional journalistic setting as approved by the department. Enrollment restricted to department majors. Prerequisites: JOUR 141, 244; PREL 231, 232; ARTD 253. Qualifies for IP grading.

### JOUR 495 1-3 F, W, S, Su
**Independent Study**
Offers the advanced student opportunity to pursue investigation in fields of special interest under the direction of departmental faculty.

## Public Relations

### Lower-Division Courses:

#### PREL 231 3 W
**Public Relations I: Introduction**
Fundamental values and procedures of the public-relations profession. Research techniques, communication theory, public relations management, writing, and media relations.

#### PREL 332 3 S
**Public Relations II: Applications and Crises**
Applications of public relations to specific publics including employees, multicultural communities, consumers, and government. Management of public relations in crises; exploiting public relations opportunities created by crisis situations. Prerequisite: PREL 231.

### Upper-Division Courses:

#### PREL 337 3 S
**Fundraising for Non-Profits**
Philosophy of philanthropic giving and the techniques that lead to successful fundraising. Creation of a writing portfolio including: case statement, direct mail letter, brochure, and press release. Regular guest presentations from fundraising professionals.

#### PREL 339 3 F
**Public Relations III: Campaigns and Practices**
The media of public relations and their incorporation into an integrated marketing communications plan, including the elements, development, and structuring of the plan.

#### PREL 350 3 W
**Promotional Writing for the Media**
Principles of and practice in journalistic writing for the electronic and printed media with emphasis on appropriate media selection and usage. Development of writing skills for a variety of internal and external applications, including print, broadcast, and social media. Pre-requisites: JOUR 141, 244; PREL 231 or permission of the instructor.

#### PREL 494 3 F, W, S, Su
**Public Relations Internship**
Supervised experience in public relations. Under the direction of a public relations professional, the student accrues direct experience in a professional public relations setting as approved by the department. Enrollment restricted to department majors. Prerequisites: JOUR 141, 244; PREL 231, 232; ARTD 253. Qualifies for IP grading.

#### PREL 495 1-3 F, W, S, Su
**Independent Study**
Offers the advanced student opportunity to pursue investigation in a field of special interest under the direction of department faculty.

## Speech Pathology

### Lower-Division Course:

#### SPPA 164 4 S
**Introduction to Speech Pathology**
Introduction to speech and language disorders, their etiology and treatment. For students pursuing the preprofessional program in speech pathology and audiology and for those entering professions in education, behavioral science, social welfare, and related fields who may encounter persons with speech disorders.

### Upper-Division Course:

#### SPPA 310 3 S
**Speech and Language of Young Children**
(See EDUC 310.)
Computer Science

Faculty
Lloyd Best, chair; Bruce Ivey, Roberto Ordonez
Departmental Office: 238 Chan Shun Hall; 965-7269

Degrees and Programs
Computer Science, B.S. ....................................................85
Computer Science, B.A. ........................................................86

Computer Science is the study of solving problems with the aid of computers. It deals with the design of algorithms (i.e., effective procedures) for the solution of problems, with the structures of languages for the efficient expression of these algorithms, and with computer systems, both hardware and software, for implementing these languages.

Two degree options are offered. The B.S. in Computer Science is designed to prepare the student for graduate study in computer science or for a career in scientific computation or software development. The B.A. in Computer Science prepares the student to be a knowledgeable user of computers in business or other applications. The department also offers a minor in computer science.

Major in Computer Science, B.S.
A minimum of 76 hours (40 upper-division hours)

> Required Core Courses (55 hours):
CPTR 115 Introduction to Computer Programming 4
CPTR 131 Survey of Computer Science 4
CPTR 132 Data Structures and Algorithms I 4
CPTR 224 Assembly Programming 4
CPTR 246 Object-Oriented Design 3
CPTR 326 Computer Languages 4
CPTR 346 Data Structures and Algorithms II 4
CPTR 347 Database Systems 4
CPTR 357 Computer Architecture 4
CPTR 367 Communications and Networking 4
CPTR 396 Seminar (2 quarters) .5-.5
CPTR 398 Indiv. Programming Language Study 2
CPTR 426 Software Engineering 4
CPTR 447 Operating Systems 3
CPTR 455 Theory of Computing 3
CPTR 466 Senior Project 3

> Required Core Electives (5 hours):
At least 5 hours from the following: 5
Additional non-service CPTR courses
MATH 265 Elementary Linear Algebra (4)
MATH 331 Probability Theory (3)
MATH 332 Mathematical Statistics (3)
MATH 351-352 Introduction to Abstract Algebra I-II (3-3)
MATH 354 Number Theory (3)
MATH 375 Numerical Analysis (4)

> Required Cognate Courses (16-18 hours):
MATH 131-132 Calculus I-II 4-4
MATH 275 Logic and Sets 4
MATH 355 Combinatorics and Graph Theory 4
OFAD 111 Personal/Beginning Keyboarding* 0-2

* See footnote, next page.
Computer Science

Recommended Cognate Courses:
MATH 133 Calculus III (4)
PHYS 211-212-213 Physics with Calculus (4-4-4)

This curriculum follows the guidelines of the ACM (Association for Computing Machinery).

Major in Computer Science, B.A.
A minimum of 57 hours (28 upper-division hours)

Required Core Courses (43 hours):
- CPTR 115 Introduction to Computer Programming 4
- CPTR 131 Survey of Computer Science 4
- CPTR 132 Data Structures and Algorithms I 4
- CPTR 224 Assembly Programming 4
- CPTR 246 Object-Oriented Design 3
- CPTR 326 Computer Languages 4
- CPTR 346 Data Structures and Algorithms II 4
- CPTR 347 Database Systems 4
- CPTR 367 Communications and Networking 4
- CPTR 396 Seminar (2 quarters) .5-.5
- CPTR 426 Software Engineering 4
- CPTR 447 Operating Systems 3

Required Core Electives (2 hours):
- Additional non-service CPTR or INFS courses
- MATH 265 Elementary Linear Algebra (4)
- MATH 275 Logic and Sets (4)
- MATH 331 Probability Theory (3)
- MATH 351-352 Introduction to Abstract Algebra I-II (3-3)
- MATH 355 Combinatorics and Graph Theory (4)
- MATH 375 Numerical Analysis (4)

Required Cognate Courses (12-14 hours):
- MATH 131 Calculus I 4
- MATH 265 Elementary Linear Algebra (4)
- OFAD 111 Personal/Beginning Keyboarding* 0-2

Recommended Cognate Courses:
- MATH 132-133 Calculus II-III (4-4)
- PHYS 111-112-113 General Physics (4-4-4)

Minor in Computer Science
A minimum of 30 hours (15 upper-division hours)

Required Courses (12 hours):
- CPTR 115 Introduction to Computer Programming 4
- CPTR 131 Survey of Computer Science 4
- CPTR 132 Data Structures and Algorithms I 4

Required Electives (18 hours):
- At least 18 hours from the following (15 upper-division): 18
- Additional non-service CPTR or INFS courses
- MATH 265 Elementary Linear Algebra (4)
- MATH 275 Logic and Sets (4)
- MATH 331 Probability Theory (3)
- MATH 351-352 Introduction to Abstract Algebra I-II (3-3)
- MATH 355 Combinatorics and Graph Theory (4)
- MATH 375 Numerical Analysis (4)

Required Cognate Course (0-2 hours):
- OFAD 111 Personal/Beginning Keyboarding* 0-2

Recommended Cognate Course:
- MATH 131 Calculus I (4)

* This requirement may be met by completion of a course or satisfactory performance on a departmental waiver examination. The waiver option is available only to students with fewer than 75 credit hours and to transfer students if taken during their first quarter at Pacific Union College.
Computer Science

Service Course:
(Not applicable to a major or minor in this department)

CPT 105 3 F, S
Introduction to Computers
For the liberal arts student; introductory exploration of the principles of computing and the function, history, and use of computers. No prerequisites, but a knowledge of mathematics equivalent to high-school algebra is assumed. Two lectures and one laboratory per week.

Lower-Division Courses:

CPT 115 4 F
Introduction to Computer Programming
Introduction to the principles necessary for writing clear, well-designed and efficient computer programs. Three lectures and one laboratory per week. No prerequisites, but a knowledge of mathematics equivalent to high-school algebra is assumed.

CPT 131 4 W
Survey of Computer Science
Overview of the main topics that make up the field of computer science, including computer architecture, operating systems, algorithms, programming languages, software engineering, data structures, databases, artificial intelligence, and theory of computation. Three lectures and one laboratory per week. Prerequisites: CPT 115, MATH 106

CPT 132 4 S
Data Structures and Algorithms I
Topics include: Abstract data types, lists, stacks, queues, trees, sets, recursion, heaps, priority queues, graphs, and algorithms for sorting and searching.

Three lectures and one laboratory per week. Prerequisite: CPT 131

CPT 224 4 F
Assembly Programming
Techniques of assembly language programming for both Intel and Motorola processors; low-level program interaction with embedded systems and with the operating system. Emphasis on low-level data manipulation and implementation of structured programming forms in assembly language. Three lectures and one laboratory per week. Prerequisite: CPT 115

CPT 234 3 W
Programming in C++
Programming in the C++ computer language. Topics include control structures, basic input/output, classes, constructors and destructors, inheritance, polymorphism, operator overloading, and templates. Two lectures and one laboratory per week. Prerequisite: CPT 115

CPT 246 3 S
Object-oriented Design
Methodology of object-oriented analysis, design, and implementation. Includes basic UML. Two lectures and one laboratory per week. Prerequisite: CPT 132.

Upper-Division Courses:

CPT 326 4 F
Computer Languages
Principles underlying the design of programming languages using examples from different language paradigms. Topics include syntax, semantics, types, scope, and parameters. Prerequisites: CPT 132, CPT 224. Odd years.

CPT 346 4 W
Data Structures and Algorithms II
An advanced look at data structures and algorithms. Topics include asymptotic analysis, recurrences, sorts, balanced trees, dynamic programming, spanning trees, shortest-paths, networks, string matching, and NP-completeness. Prerequisites: CPT 132, MATH 355. Even years.

CPT 347 4 W
Database Systems
Objectives and methods of organizing information into databases. Relationship modeling; normal forms and the relational model; data description, query processing, query optimization, and security. Three lectures and one laboratory per week. Prerequisites: CPT 132, MATH 275. Odd years.

CPT 348 3 S
Programming for the Internet
Server-side and client-side programming for the Internet, including connecting to databases. The use of Perl, CGI scripts, Javascript, Java, HTML, DHTML, and XML. Prerequisite: CPT 347. Odd years.

CPT 357 4 F
Computer Architecture
Elements of digital computer organization. Implementation of combinational logic, gates, decoding, and arithmetic functions. Storage of information, registers, and memory; addressing modes, the ALU, clocking, and control; input/output interrupts, and DMA. Three lectures and one laboratory per week. Prerequisite: CPT 224. Even years.
CPTR 367  4 F
Communications and Networking
Topics include: network topologies, routing, reliability, security, data transmission, communications protocols, error detection/correction, and the Internet. Three lectures and one laboratory per week. Prerequisite: CPTR 132. Even years.

CPTR 396  .5 F, W, S
Seminar
(See also BIOL 396, CHEM 396, ENVR 396, PHYS 396)
Single topics of current interest in the natural sciences are presented by guest lecturers. To pass, a student must be on time and attend all five course sessions. Some quarters there is a computer science-specific seminar that is independent from the joint sciences seminar. Repeatable to a maximum of 2 credits. Graded S/F.

CPTR 398  1-3 F, W, S
Individual Programming Language Study
Supervised individual study of a particular programming language not normally taught in an existing course. The study typically consists of developing solutions to a series of programming problems that are then implemented in the selected language. Languages suitable for this course include, but are not limited to, LISP, SCHEME, Ada, Smalltalk, Prolog, Perl, PHP, Turing, Visual Basic, and Python. A minimum of 30 hours of programming activity is expected for each unit of credit. Repeatable for credit. Prerequisites: CPTR 132, 224.

CPTR 426  4 F
Software Engineering
Principles of organization and execution of a multiperson programming project, including issues in managing and organizing people. Tools and language features available to aid the development of large projects; classical and agile methods, including XP and scrum; ethics in the software area. A suitable project is undertaken by the class as a whole. The project varies from year to year depending upon class size, background, and interest. Two lectures and two laboratories per week. Prerequisite: CPTR 246. Odd years.

CPTR 437  3 S
Computer Graphics
Covers the basic algorithms and techniques of displaying and manipulating three-dimensional graphics. Topics include: applied geometry, rotations, translations, scaling, perspective, hidden-face elimination, curves, and surfaces. Two lectures and one laboratory per week. Prerequisites: CPTR 132, MATH 265. Even years.

CPTR 447  3 W
Operating Systems
Multiprogramming and time-sharing system-design principles. Topics include processes and process communication, control of input-output, memory management, scheduling, file systems, protection, and resource allocation. Prerequisites: CPTR 132, 224, MATH 131. Odd years.

CPTR 455  3 W
Theory of Computation
Theoretical models of computation. Topics include: grammars, languages, automata, the Church-Turing thesis, and computability. Prerequisite: MATH 355. Even years.

CPTR 466  3 S
Senior Project
An independent project arranged in consultation with the computer science faculty. Ideally there will be several students, perhaps from multiple departments, working on different aspects of the project. Designed to demonstrate competence in computer science. Requires a public presentation of the project.

CPTR 485  1-4, Arr.
Special Topics in Computer Science
Computer science-related topics of interest to the general student. Format depends on the particular topic selected but usually consists of several lectures over approximately two or three weeks. With approval of the department chair, credit may apply toward a computer science major.

CPTR 494  1-3 F, W, S, Su
Computer Science Internship
Supervised work experience in a computer science-related field. Skills in the application of computer science principles are used. Enrollment limited to department majors. Advanced approval of the department is required. May not be taken before the end of the sophomore year. Prerequisite: CPTR 246. Qualifies for IP grading. Graded S/F.

CPTR 495  1-3 F, W, S
Independent Study
With the approval of the department chair, qualified students majoring in computer science may undertake independent study of a problem suited to their background and experience. Repeatable to a maximum of 3 credits.
Faculty
Thomas Lee, chair; Jean Buller, Marsha Crow (credential analyst), Jim Roy
Departmental Office: 203 Education Building; 965-7265

Degrees and Programs
Early Childhood Education, A.S. .........................................90
Early Childhood Education, B.S. .........................................90
General Requirements for Credentials ................................90
Clear Credential Program ..............................................92
Liberal Studies, B.S. .........................................................92
Education, M.Ed. ..............................................................92
Early Childhood Education, B.S.E.C.E. ...............................95

The Early Childhood Education major prepares individuals for teaching or directing in a center for children from infancy to six years of age. An off-campus degree-completion program leading to the Bachelor of Science in Early Childhood Education (B.S.E.C.E.) is offered in the evening for working adults.

An SDA Basic Certificate and a California Preliminary Credential may be earned by the completion of the credential requirements. The second stage of credentialing may be met by the approved Clear Credential Program which is completed during the summers after employment in an SDA school as a full-time teacher of record. The Liberal Studies degree is the recommended degree for individuals wishing to be elementary teachers.

A Master of Education is available to students who would like to earn a master’s degree during the certification process.

Students should consult the credential analyst in the Education Department for information regarding these programs.

Mission
The mission of the Education Department is to develop professional, dedicated, committed, Christian teachers who have the skills and teaching strategies necessary to create a rigorous, stimulating, and caring classroom climate where learning takes place for all students.

Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.

Vision
As a Seventh-day Adventist institute of higher education, we believe education should restore human beings into the image of God. Our vision is to prepare teacher candidates who can lead their students into saving, transforming relationships with Jesus Christ through the development of the whole child: spiritual, physical, intellectual, and socio-emotional. In so doing, we and they will be helping to fulfill the commission of preaching the gospel to all the world.

To achieve our mission to prepare pre-service candidates for a successful teaching career, a career that reflects their commitment to the profession, to children and their families, and to the future, we are committed to inspiring and supporting our candidates to be knowledgeable and skilled in the following elements:

• Intentional friendship
  Candidates will understand the importance of positive relationships between all those involved with student success—students with other students, teachers with students, and teachers with other teachers.

• Relevant, engaging curriculum leading to competence and mastery
  Candidates will understand how to create relevant learning experiences for students, and evaluate them through effective assessments.

• Non-coercive, well-managed classrooms
  Candidates will understand how to manage classrooms effectively and to do so without reliance on coercive or manipulative strategies.

• Applied Christianity
  Candidates will recognize the value of applying the principles of a Christian life within the classroom setting and supporting students as they find their way on their personal Christian journeys.

The Teacher Education Program is approved by the California Commission on Teacher Credentialing and by the Office of Education, General Conference of Seventh-day Adventists.
Major in Early Childhood Education, A.S.

A minimum of 50 hours

**Required Core Courses (37 hours):**
- ECED 181 Introduction to Early Childhood Education 2
- ECED 184 Health, Safety and Nutrition 2
- ECED 185 Art, Music, and Movement for Young Children 3
- ECED 189 Constructive Guidance and Classroom Management I 2
- ECED 215 Observation and Evaluation of Early Childhood Programs 2
- ECED 216 Observation and Evaluation of Early Childhood Programs - Practicum* 1
- ECED 220 Curriculum Planning, Play and Environments 4
- ECED 221 Curriculum Planning, Play and Environments - Practicum* 1
- ECED 230 Child, Family, and Community 4
- ECED 251 Early Literacy 3
- ECED 276 Student Teaching I* 8
- ECED 277 Student Teaching Seminar 1
- ECED 334 Child Development 3
- ECED 335 Child Development - Practicum 1

**Required Cognate Courses (13 hours):**
- BIOL 227 Natural History of California 4
- HLED 166 Health Education 2
- PSYC 121 General Psychology 4

At least one of the following courses:
- COMM 105 Introduction to Communication (3)
- COMM 226 Public Speaking (3)

**Additional Requirements:**
A valid Red Cross Standard First Aid Certificate
A valid certificate in Basic Life Support Cardiopulmonary Resuscitation

Major in Early Childhood Education, B.S.

A minimum of 91 hours (42 upper-division hours)

**Required A.S. Courses (50 hours):**
All courses required for the A.S. degree as described above

**Required Core Courses (38 hours):**
- ECED 361 Administration and Supervision of Early Childhood Programs I 4
- ECED 362 Administration and Supervision of Early Childhood Programs II 4
- ECED 363 Administration and Supervision of Early Childhood Programs - Practicum 1
- ECED 370 Math for the Young Child 3
- ECED 371 Science for the Young Child 3
- ECED 380 Program Planning for Infants and Toddlers 3
- ECED 381 Program Planning for Infants and Toddlers - Practicum 1
- ECED 482 Student Teaching II 3
- ECED 483 Student Teaching Seminar II 1
- ECED 489 Constructive Guidance and Classroom Management II 2
- EDUC 310 Speech and Language of Young Children 3
- EDUC 336 The Multicultural Classroom 3
- EDUC 350 Exceptional Children in the Classroom 3
- ENGL 330 Literature for Children 4

**Required Cognate Course (3 hours):**
- ACCT 114 Small Business Accounting 3

**General Requirements for both Elementary and Secondary Credentials**
The Education Department at Pacific Union College offers a teacher education program which leads to the following credentials:

1. SDA Basic Elementary and/or Secondary certificate
2. California SB20 4.2 Preliminary Multiple Subject and/or Single Subject Credential.

To be recommended for a teaching credential, candidates must hold a bachelor’s degree from an accredited institution, and have completed all the course work, field work, and examinations required by the professional education program.

**Steps to a Teaching Credential**

1. Select a bachelor’s degree in the content area of the desired credential.
   a) For elementary credentials: It is highly recommended that candidates for the Multiple Subject credential complete the B.S. in Liberal Studies as this degree prepares the candidate to pass the CSET and gives the subject matter content needed to teach elementary school.
   b) For secondary credentials: Complete a degree in a content area commonly taught at the secondary level. This will prepare the candidate to pass the CSET.

2. Complete EDUC 101–Introduction to Teaching and EDUC 101L- Classroom Observations prior to making application to the program. These courses should be completed during the freshman and sophomore years as they are prerequisites to program admission. They must be taken concurrently.
Program admission by the end of the sophomore year is highly recommended.

3. Meet the Basic Skills Proficiency requirement for reading, writing, and math. This requirement must be met in order to be eligible for admission to the credential program, and before methods courses and field experiences may begin. Candidates should meet this requirement as soon as they make a decision to become a teacher. There are three options for meeting this requirement: CBEST, CSET plus writing, or submission of an approved out-of-state basic skills test.

4. Make formal application to the credential program once program prerequisites are completed. See “Requirements for Admission to the Credential Program” below. The application packet may be obtained from the Credential Office.

5. Meet the California subject matter competency requirement by passing the California Subject Exam for Teachers (CSET). The CSET must be passed one full quarter prior to student teaching. (Exception: If a single subject candidate is earning a bachelor's degree in a content area different from the content area of the credential, then the CSET must be passed prior to taking EDUC 361 and the related first field experience.)

   • Elementary candidates must pass the CSET: Multiple Subjects, Tests 1,2,3.
   • Secondary candidates must pass the CSET in their content area.

6. Pass the California Teaching Performance Assessment (CALTPA), which assures that teacher candidates have the knowledge, skills, and abilities required of a beginning teacher. The CALTPA provides the candidate with a series of four performance tasks, each of which increases in complexity. The tasks are embedded within the teacher preparation program methods courses sequence and are administered and scored by the calibrated assessors. The four performance tasks are Subject-Specific Pedagogy, Designing Instruction, Assessing Learning, and Culminating Teaching Experience. All candidates admitted to the credential program on or after 07/01/2008 must pass the CALTPA in order to be eligible for a California Multiple or Single Subject Teaching credential.

7. Meet the following requirements for certification.

Requirements for both Multiple Subject/Elementary AND Single Subject/Secondary Candidates:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 101</td>
<td>Introduction to Teaching</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 101L</td>
<td>Classroom Observations</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 238</td>
<td>Computer Technology for Teachers</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 238L</td>
<td>Computer Technology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 333</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 335</td>
<td>Ethical Dimensions of Teaching and Learning</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 336</td>
<td>The Multicultural Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 337</td>
<td>ELL Pedagogy</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 350</td>
<td>Exceptional Children in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 480</td>
<td>Classroom Management</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 490</td>
<td>Student Teaching Seminar: Subject Specific</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 491</td>
<td>Student Teaching Seminar: Designing Instruction</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 492</td>
<td>Student Teaching Seminar: Assessing Learning</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 498</td>
<td>Student Teaching Seminar: Culminating Teaching Experience</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 335</td>
<td>Survey of Linguistics</td>
<td>4</td>
</tr>
<tr>
<td>HLED 166</td>
<td>Health Education</td>
<td>2</td>
</tr>
<tr>
<td>U.S. Constitution requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPR course (infant/child/adult)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passage of the California Teaching Performance Assessment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Requirements for Multiple Subject/Elementary Candidates:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 345</td>
<td>Teaching Math and Science in the Elementary School</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 353</td>
<td>Beginning Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 356</td>
<td>Intermediate Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 408</td>
<td>Social Studies and the Arts</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 476</td>
<td>PE for Children</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 493</td>
<td>Beginning Reading Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 493</td>
<td>Math Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>Pre-Session Student Teaching</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>EDUC 493</td>
<td>Full-Time Student Teaching</td>
<td>12</td>
</tr>
</tbody>
</table>

Passage of the California Subject Exam for Teachers: Multiple Subjects

Passage of the Reading Instruction Competence Assessment (RICA)

Additional Requirements for Single Subject/Secondary Candidates:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 358</td>
<td>Literacy in the Content Areas</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 361</td>
<td>Middle School Teaching Strategies</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 362</td>
<td>Secondary Content Area Teaching Strategies</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 494</td>
<td>Middle School Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 494</td>
<td>High School Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>Pre-Session Student Teaching</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>EDUC 494</td>
<td>Full-Time Student Teaching</td>
<td>12</td>
</tr>
</tbody>
</table>

Passage of the California Subject Exam for Teachers: Content Area
Additional Requirements for Candidates for a Seventh-day Adventist Certificate:

1) EDUC 390 & 390L, K-12 Bible & Practicum (required for Elementary, optional for Secondary)
2) 16 hours of religion coursework, including the following specific courses:
   • RELT 331 or 332 or 333 (choose one) 3
   • RELH 360 4
   • 6 hours of RELB religion coursework 6

Requirements for Admission to the Credential Program

1. A minimum GPA of 2.5
2. Completion of EDUC 101 - Introduction to Teaching and EDUC 101L - Classroom Observations
3. Residence requirement: One successful quarter at Pacific Union College or acceptance from another teacher education program
4. CBEST verification card on file in Credential Office
5. Submission of complete application packet:
   a) Application form
   b) Advisor Interview
   c) Personal Statement
   d) Recommendation
   e) Verification of Subject Matter Competency
   f) Official transcripts from all high school and college work
   g) Certificate of Clearance (criminal record check)
   h) SDA church membership verification
6. Admission Interview

Candidates must be formally admitted to the credential program before they will be admitted to methods courses or field experiences.

Prerequisites for Student Teaching

1. Acceptance into the credential program
2. Minimum cumulative GPA of at least 2.5
3. Clearance from vice-president for student life
4. Satisfactory completion of subject matter competency requirement:
   • Multiple Subject/Elementary: Passage of CSET-Multiple Subjects, Subtests 1, 2, 3 (The CSET must be passed one full quarter prior to student teaching.)
   • Single Subject/Secondary: Passage of CSET in content area of credential (The CSET must be passed one full quarter prior to student teaching.)
5. Complete the following coursework and field experience requirements:
   • Multiple Subject/Elementary: EDUC 337, 345, 350, 353, 356, 490, 491, 492, 493 - Math, 493 - Reading, and Pre-

Session Student Teaching
   • Single Subject/Secondary: EDUC 337, 350, 358, 361, 362, 490, 491, 492, 494 - Middle School, 494 - High School, and Pre-Session Student Teaching
6. Successful passage of the following Teaching Performance Assessments: Subject-Specific Pedagogy, Designing Instruction, and Assessing Learning

Restrictions on Courses Accepted for Transfer into Preliminary Program

1. Methods courses with fieldwork may not be taken by correspondence or directed study. Methods courses with fieldwork being transferred will require the fieldwork to be completed at Pacific Union College.
2. Methods courses without fieldwork may be taken by correspondence or directed study if approved by the department. Limit of one approved course.

Clear Credential Program

A program leading to professional certification is available as a Clear Credential Program. The program results in both a California SB2042 Clear Credential and a Seventh-day Adventist Professional Teaching Certificate. Completion of the program does not culminate in a post-baccalaureate degree.

Prerequisites for the Clear Credential Program

Applicants must meet the following prerequisites before being considered for admission to the Clear Credential Program:
1. Hold a bachelor’s degree from an accredited institution
2. Hold a California Preliminary SB2042 teaching credential
3. Have a minimum cumulative GPA of 2.5
4. Submit an application for program admission
5. Submit two satisfactory professional recommendations
6. Verify full-time employment in an SDA school where a California Induction/BTSA program is unavailable.

Course Requirements for the Clear Credential Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 580B</td>
<td>Clear Cred. Orientation &amp; Review, Part 2</td>
<td>.5</td>
</tr>
<tr>
<td>EDUC 581</td>
<td>Clear Cred. Standard 5: Pedagogy</td>
<td>1.5</td>
</tr>
<tr>
<td>EDUC 581L</td>
<td>Clear Cred. Standard 5: Fieldwork</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 582</td>
<td>Clear Cred. Standard 6: Universal Access</td>
<td>1.5</td>
</tr>
<tr>
<td>EDUC 582L</td>
<td>Clear Cred. Standard 6: Fieldwork</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 583</td>
<td>Clear Cred. Capstone</td>
<td>1</td>
</tr>
</tbody>
</table>

Once started, the 9 units of coursework for this program must be completed within a scheduled two-year cycle.

Further information regarding can be obtained from the Credential Analyst in the Education Department.
**Liberal Studies Major, B.S.**

*A minimum of 82 hours (40 upper-division hours)*

The Liberal Studies major is highly recommended for all individuals seeking elementary level teaching credentials. The coursework in the degree is designed specifically to:

1. Provide a strong content knowledge base in the various subjects taught in the elementary classroom; and
2. Prepare the elementary credential candidate to pass the California Subject Exam for Teachers: Multiple Subjects, passage of which is required of all candidates for the California Multiple Subject credential.

> **Required Core Courses (82-83 hours):**

**Arts and Humanities***

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTD 124-125</td>
<td>Design and Composition I-II</td>
<td>3-3</td>
</tr>
<tr>
<td>DRMA 229</td>
<td>Acting I: Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 310</td>
<td>Speech and Language of Young Children</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 337</td>
<td>ELL Pedagogy</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 330</td>
<td>Literature for Children</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 335</td>
<td>Survey of Linguistics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Natural Science and Mathematics***

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 115</td>
<td>Astronomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 101</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 105</td>
<td>Introduction to Biology</td>
<td>5</td>
</tr>
<tr>
<td>MATH 211-212</td>
<td>Foundations of School Math</td>
<td>3-3</td>
</tr>
</tbody>
</table>

**Social and Behavioral Science***

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 134-135</td>
<td>History of the United States</td>
<td>4-4</td>
</tr>
<tr>
<td>PSYC 334</td>
<td>Child Development</td>
<td>3</td>
</tr>
</tbody>
</table>

*At least one of the following courses:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 210</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 220</td>
<td>Geography of the Americas</td>
<td>3</td>
</tr>
</tbody>
</table>

**Education***

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 101</td>
<td>Introduction to Teaching</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 333</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 345</td>
<td>Elementary School Math and Science</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 350</td>
<td>Exceptional Children in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 353</td>
<td>Beginning Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 356</td>
<td>Intermediate Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 408</td>
<td>Social Studies and the Arts</td>
<td>2</td>
</tr>
</tbody>
</table>

**Interdisciplinary or Integrative Course***

*At least one of the following courses:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 352</td>
<td>English Theme Course</td>
<td>3-4</td>
</tr>
<tr>
<td>MUHL 105</td>
<td>Survey of Music</td>
<td>3</td>
</tr>
</tbody>
</table>

**General-Education Requirements (84-92 hours):**

Students who wish to obtain the Liberal Studies major must complete specific general education courses as follows**:

**I. Foundations of Learning** (15 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101-102</td>
<td>College English</td>
<td>4-4</td>
</tr>
<tr>
<td>STAT 222</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Communication course (one of the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 105</td>
<td>Introduction to Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 226</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**II. History and Social Sciences** (15-16 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101-102</td>
<td>History of World Civilizations</td>
<td>4-4</td>
</tr>
<tr>
<td>PSYC 121</td>
<td>General Psychology</td>
<td>4</td>
</tr>
</tbody>
</table>

*1 additional course from Section II-B: Social Sciences* | Hours |

**III. Arts and Humanities** (14 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 301</td>
<td>Great Books</td>
<td>4</td>
</tr>
</tbody>
</table>

*Art history course (one of the following):*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 107</td>
<td>America in Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 115</td>
<td>History of Western Art I</td>
<td>4</td>
</tr>
<tr>
<td>ARTH 116</td>
<td>History of Western Art II</td>
<td>4</td>
</tr>
<tr>
<td>ARTH 278</td>
<td>Women in Art</td>
<td>3</td>
</tr>
</tbody>
</table>

**Music history course (one of the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUHL 105</td>
<td>Survey of Music</td>
<td>3</td>
</tr>
</tbody>
</table>

**Philosophy course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 101</td>
<td>Introduction to Philosophy</td>
<td>4</td>
</tr>
</tbody>
</table>

**IV. The Natural World** (10 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSCI 205</td>
<td>Scientific Discoveries</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>Survey of Organic Chemistry</td>
<td>4</td>
</tr>
</tbody>
</table>

**Science and Society course (one of the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 355</td>
<td>Issues on Origins</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 360</td>
<td>Conservation Biology</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 361</td>
<td>Energy and Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 362</td>
<td>Pollution and Environmental Quality</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 390</td>
<td>History and Philosophy of Science</td>
<td>3</td>
</tr>
</tbody>
</table>

---

*Courses used to satisfy general education requirements may not be used to satisfy requirements in this area.

**The listing assumes that Algebra I and Algebra II have been completed at an accredited secondary institution with a grade of C- or better. Students lacking these college-preparatory courses will have to make up the deficiencies in their foundational course work.*
V. Revelation, Belief, and Action (18 hours)

Eighteen hours of religion including the following:

- Doctrinal Studies: RELT 331 or 332 or 333
- Adventist Heritage: RELH 360
- At least 6 hours of RELB coursework
- At least 9 upper-division hours

VI. Health and Fitness (8 hours)

HLED 166 Health Education 2
ESTH 476 Physical Education for Children 3
3 ESAC courses, including 1 aerobics course 1-1-1

VII. Practical and Applied Arts (4-7 hours)

EDUC 238 Computer Technology for Teachers 2
EDUC 238L Computer Technology for Teachers Lab 1
Select 1 additional course from Section VII: A, C, or D. 1-4

Total General Education Hours: 84-92

Master of Education Degree

The graduate program at Pacific Union College leads to a Master of Education (M.Ed.) degree. This degree meets the requirements for the SDA Professional Credential and may lead to a California Clear Credential if additional requirements are met. The program is designed for part-time enrollment during the summers and the degree is completed over a period of several years.

Admission to the Master of Education Degree Program

All potential students, including former Pacific Union College students, must apply for admission both to the college and to the master’s degree program.

The application will be considered once official postsecondary transcripts and other requested materials have been filed with the Education Department.

Admission is determined by the Education Department faculty on the basis of credentials held, recommendations, former academic performance, and background.

Requirements for Admission

1. A baccalaureate degree from an accredited college or university.
2. A state credential or SDA credential, or eligibility for these credentials.
3. Admission to Pacific Union College.
4. Submission of a graduate application to the Education Department that includes the following:
   a) application form
   b) two recommendations
   c) official transcripts
   d) interview with department chair and one other Education faculty member
   e) essay discussing interests and goals

5. A minimum GPA of 3.0 in each of the following areas:
   a) Undergraduate upper-division major
   b) Education courses
   c) Overall college work, or the last 96 quarter hours

6. Acceptable scores in the Graduate Record Examination (GRE) General Test.

7. A proposed program of studies appropriate to the student’s strengths, interests, and professional goals.

Notification of Admissions Action

Upon review of the application, the Education Department will notify the applicant of the action taken.

Cancellation of Acceptance

The college reserves the right to cancel the acceptance of any person for graduate study should further evidence indicate that he or she does not adequately meet requirements for admission to the master’s program.

Previous and Transfer Credit

The department chair must approve credit for any coursework taken prior to admission to the program.

A maximum of 12 quarter hours of approved transfer credits may be applied toward the degree.

Admission of Guest Applicants

A student that has been accepted for graduate study in another accredited institution of higher education and wishes to earn credit at Pacific Union College for transfer is not required to follow the regular admission procedures outlined above. For further information, see the section entitled “Admission as a Guest Student for Transfer Credit” in this catalog.

Committee on Studies

The Education Department faculty will work with each student to construct an acceptable Program of Studies and will monitor progress during the period of graduate study.

Program of Studies

The Program of Studies must provide for the following:

1. removal of any undergraduate deficiencies,
2. sequencing of course work so that all requirements are completed within the seven-year limit,
3. completion of all departmental and college requirements for the degree.
Master of Education, M.Ed.  
(Program offered during summers only)

This program is currently under revision to meet new California standards. The requirements listed below will be in effect through summer of 2010, but will be changed before summer 2011. Updated information may be obtained online or from the Credential Analyst in the Education Department.

A minimum of 45 hours (37 graduate-level hours)

➤ Pedagogy Requirements (30 hours):

EDUC 510  Leadership in Education 2  
EDUC 515  Educational and Psychological Evaluation 3  
EDUC 516  American Curriculum 3  
EDUC 517  Current Issues in Education 2  
EDUC 530  Brain Research and Learning 3  
EDUC 537/537L Advanced ESL Teaching Methods and Materials/ Field Experience (SB2042) 3-1  
EDUC 538/538L Computers in the Classroom/Lab 2-1  
EDUC 550  Advanced Study of Exceptional Children in the Classroom (SB2042) 3  
EDUC 566  Advanced Health Education 3  
(prerequisite: HLED 166- Health Education)

At least one of the following courses with laboratory: 4

EDUC 513/513L Advanced Instructional Strategies/Lab (3-1)  
EDUC 525/525L Teaching Children with Reading Difficulties/Lab (3-1)

➤ Action Research Project (7 hours)

EDUC 596  Methods in Research 2  
EDUC 597  Action Research Project 5

➤ Subject Matter Courses (8 hours)

At least 8 hours of graduate level electives or reserved graduate credit, chosen in consultation with a departmental advisor.

Note: Credit earned by correspondence, examination, student teaching or continuing education is not applicable for graduate degree course requirements.

Reserved Graduate Credit

Students who have completed 135 hours toward a baccalaureate degree and who will be eligible to apply for admission to the master’s program after graduation may request to reserve a maximum of 8 quarter hours of approved upper-division courses for graduate credit provided that they are not needed to fulfill requirements for the bachelor’s degree. Make arrangements with the Education Department and the Records Office.

Graduation Requirements

Masters candidates have the option of fulfilling requirements under the catalog of their first enrollment or any subsequent catalog during the time of continuous enrollment. The graduation requirements include the following:

1. Satisfactory completion of approved Program of Studies.
2. A minimum overall graduate GPA of 3.0 with no grade lower than B-.
3. Satisfactory completion of examinations and projects as determined by the student’s Committee on Studies.
4. Completion of requirements within seven calendar years beginning with the first enrollment in courses counting toward the master’s degree or date of acceptance into the program, whichever comes first. Students who take these courses at any time during the seven-year period are considered to have continuous enrollment status. A time extension requires approval from the Education Department.

Bachelor of Science in Early Childhood Education, B.S.E.C.E.

In harmony with its mission of excellence in Christian education, the Education Department offers a quality academic program accessible to an adult student population through non-traditional formats, times, and locations in the region surrounding the college. The department currently offers the B.S.E.C.E. program in Napa and at the Clearlake campus of Yuba College.

The Bachelor of Science in Early Childhood Education degree program builds on personal experience and previous college credit. The program is especially designed for working adult students. Classes meet one evening a week for four hours and are tailored for a mature, interactive learning style. The curriculum is a series of upper-division courses that lasts about 23 months.

A minimum of 192 quarter hours, including 60 upper-division hours, is required for obtaining the degree. Students enrolled in this program must maintain a cumulative GPA of 2.0 (C) or above.

Additional information about the Bachelor of Science in Early Childhood Education degree is available by contacting the Education Department’s Degree Completion Programs Office at (888) 311-4782 (toll free), (707) 965-6505, www.finishcollege.org, or by e-mail dcp@puc.edu.

This major and these courses are available only through the Education Department Degree Completion Program held off campus.
**Prerequisites to admission**
1. 60 transferable semester hours (90 quarter hours), including the required ECE foundation coursework
2. 1 year full-time ECE work experience or 2 years full-time work experience outside of the Early Childhood field

**Degree requirements**
In order to earn the B.S.E.C.E degree, students complete the following requirements:
1. Required ECE foundation coursework*
2. Core major requirements
3. Required cognate course*
4. Student teaching requirement*
5. General education program requirements*
6. Additional electives as necessary to earn a minimum of 192 quarter hours of college coursework*

**Required ECE foundation coursework**
8 semester hours (12 quarter hours) of transferable ECE coursework, including an approved course in Child Development

**Core major requirements**
60 hours *(Delivered in the B.S.E.C.E. program)*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 311</td>
<td>Speech and Language of Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 330</td>
<td>Literature for Children</td>
<td>4</td>
</tr>
<tr>
<td>ECE 340</td>
<td>Social, Emotional and Moral Development of Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 359</td>
<td>Exceptional Children in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>ECE 370</td>
<td>Math for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 380</td>
<td>Program Planning for Infants and Toddlers</td>
<td>4</td>
</tr>
<tr>
<td>ECE 381</td>
<td>Program Planning for Infants and Toddlers - Practicum</td>
<td>1</td>
</tr>
<tr>
<td>ECE 386</td>
<td>Approaches to Early Childhood Education</td>
<td>2</td>
</tr>
<tr>
<td>ECE 387</td>
<td>Cultural Diversity</td>
<td>3</td>
</tr>
<tr>
<td>ECE 388</td>
<td>Science for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 389</td>
<td>Management and Guidance of Children</td>
<td>4</td>
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<tr>
<td>ECE 425</td>
<td>Adult Supervision and Management</td>
<td>4</td>
</tr>
<tr>
<td>ECE 431</td>
<td>Administration and Supervision of Early Childhood Programs I</td>
<td>4</td>
</tr>
<tr>
<td>ECE 432</td>
<td>Administration and Supervision of Early Childhood Programs II</td>
<td>4</td>
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<tr>
<td>ECE 433</td>
<td>Administration and Supervision of Early Childhood Programs - Practicum</td>
<td>1</td>
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<tr>
<td>ECE 440</td>
<td>Emergent Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ECE 441</td>
<td>Emergent Literacy - Practicum</td>
<td>1</td>
</tr>
<tr>
<td>ECE 471</td>
<td>Early Childhood Senior Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

**RELB 305**  Biblical Perspectives  4  
**RELT 310**  Ethics and Personal Values  4

**Required cognate course**
An approved course in health education

**Student teaching requirement**
At least 2 semester hours (3 quarter hours) of student teaching in an approved program

**General Education Program for Degree Completion**
Since the majority of adult students in the degree completion program will be transferring nearly two thirds of their credits from other institutions, Pacific Union College has a modified general education program for these students. A total of 68 quarter hours of general education credit from seven different areas is required. 16 of these hours are met by major and cognate requirements, and the remaining 52 hours are to be distributed as described below.

All courses that are applied to the general education program requirements must be approved by Pacific Union College. Articulation agreements with local community colleges define acceptable courses in other institutions that will meet Pacific Union College’s general education requirements.

For a description of the intents and purposes of each general education requirement area, see the section entitled “The Academic Program” in this catalog.

**I. Foundations Of Learning** *(15 hours)*

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Rhetoric and College Writing (11):</td>
<td>Two-course college English sequence</td>
<td>4-4</td>
</tr>
<tr>
<td></td>
<td>One public speaking course</td>
<td>3</td>
</tr>
<tr>
<td>B. Reasoning from Data (4):</td>
<td>One introductory statistics course</td>
<td>4</td>
</tr>
</tbody>
</table>

**II. History and Social Sciences** *(11 hours)*

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. History (8):</td>
<td>Two history courses</td>
<td>4-4</td>
</tr>
<tr>
<td>B. Social Sciences (3):</td>
<td>This requirement is met by the core major requirements</td>
<td></td>
</tr>
</tbody>
</table>

**III. Arts and Humanities** *(6 hours)*

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Literature (3):</td>
<td>This requirement is met by the core major requirements</td>
<td></td>
</tr>
<tr>
<td>B-C. Visual Arts and Music: History/Appreciation (3):</td>
<td>One course in music or art history and/or appreciation</td>
<td>3</td>
</tr>
</tbody>
</table>

*These requirements are not delivered within the B.S.E.C.E. program.*


IV. The Natural World (4 hours)
A. Intermediate Algebra (0):
A full year of secondary school Algebra II (with grades of C- or higher) or an intermediate algebra course
This is a non-credit requirement
B. Science with Laboratory (4):
One laboratory course in natural science
May be in astronomy, biology, chemistry, geology, physics, or a comparable area

V. Revelation, Belief, and Action (8 hours)
A. Studies in Religion (8):
This requirement is met by the core major requirements

VI. Health and Fitness (2 hours)
A. Health (2):
This requirement is met by the required cognate course

VII. Practical and Applied Arts (2 hours)
A-D. Practical Arts, Information Management, Management of Personal Finance, Personal Skills (2):
One practical and applied arts course
Options for this area are listed in the section entitled “The Academic Program” in this catalog

General Education Electives (20 hours)
Students must complete 20 quarter hours of general education electives (in addition to the specific requirements described above) in order to earn a total of 68 hours of general education coursework. The 20 hours must be earned as described below:
• The electives must be distributed over at least four of the seven general education areas listed above and may not include more than ten quarter hours in any one area.
• The general education electives are to be chosen from the requirements for the Pacific Union College B.S./B.A. general education program. Options for each of the seven areas are listed see the section entitled “The Academic Program” in this catalog.

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Early Childhood Education

Lower-Division Courses:

ECED 181  2 F
Introduction to Early Childhood Education
A general overview of early childhood education. Includes basic child development, history of early childhood education, types of programs, qualifications and characteristics of successful teachers, career opportunities, teaching permit information, and current issues.

ECED 184  2 S
Health, Safety, and Nutrition
An holistic examination of health, safety, and nutrition and their effect on the well-being of children. How to prepare and maintain a safe and healthy environment and encourage good nutrition for young children. Helps meet State requirements for specified training in preventative health practices. Odd years.

ECED 185  3 W
Art, Music, and Movement for Young Children
Focus on art, music, and movement activities in promoting the overall development of children and learning across the curriculum. Experience with a variety of art materials, music genres, and movement activities.

ECED 189  2 W
Constructive Guidance and Classroom Management I
An introduction to guidance and discipline in the early childhood classroom. Explores the primary philosophical approaches to behavior management. Presents the methods of guidance leading to the development of intrinsic motivation for pro-social behavior and moral development in young children.

ECED 215  2 S
Observation and Evaluation of Early Childhood Programs
Evaluation and discussion of a variety of early childhood programs including Montessori, Reggio Emilia, Head Start and cooperative schools. Corequisite: ECED 216.

ECED 216  1 S
Observation and Evaluation of Early Childhood Programs — Practicum
Observation and analysis of specific off-campus early childhood programs. Observations are arranged by the instructor. Corequisite: ECED 215.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| ECED 220    | 4 W   | Curriculum Planning, Play and Environments  
Exploration of developmentally appropriate practice in the early childhood classroom, including play, planned and emergent curriculum, curriculum planning, and preparation of the environment. Prerequisites: ECED 181, 334, 335, fingerprint clearance. Corequisite: ECED 221. |
| ECED 221    | 1 W   | Curriculum Planning, Play and Environments — Practicum  
Observations and activities related to EDUC 220, weekly opportunity to interact with and teach children in the child care environment. Prerequisite: Fingerprint clearance. Corequisite: ECED 220. |
| ECED 230    | 4 W   | Child, Family, and Community  
Explores the value and necessity of collaboration between parents, teachers, and the community in support of children. Includes challenges facing contemporary families, the needs of families with diverse backgrounds, available community resources, political awareness, and child and family advocacy. Effective methods of communication with families and communities. Even years. |
| ECED 276    | 8 F, W, S | Student Teaching I  
Student teaching in an approved off-campus preschool. The student will teach all areas of the curriculum half-time for eight weeks and full-time for one week. Application and arrangements must be made at least one quarter before registering for the course. Students may need transportation to and from teaching assignments. Prerequisites: A minimum cumulative GPA of 2.25, ECED 181, 185, 189, 215, 216, 220, 221, 230, 251, 334, 335. Corequisite: ECED 277. Graded S/F. |
| ECED 277    | 1 F, W, S | Student Teaching Seminar  
Discussion of topics relevant to student teaching. Includes portfolio preparation. Corequisite: ECED 276. |
| Upper-Division Courses: |
| ECED 334    | 4 F   | Child Development  
(See PSYC 334.) |
| ECED 335    | 1 F   | Child Development Practicum  
Skills for observing and recording the cognitive, social, emotional, physical, and language development of children. Use of various methods for observation of children in preschools and elementary school. Corequisite: ECED 334. |
| ECED 361    | 4 F   | Administration and Supervision of Early Childhood Programs I  
Techniques and knowledge needed to develop and administer a quality early childhood center, including assessment of community need, licensing guidelines, board development, budget and financial planning, development of the center (equipping, staffing, enrolling children), evaluation, and development of parent and community support. Even years. |
| ECED 362    | 4 W   | Administration and Supervision of Early Childhood Programs II  
Study of the competencies required in the successful operation of a child development center. Includes marketing, recruitment, human resource management, facilities and risk management, professional development and leadership skills. Even years. |
| ECED 363    | 1 S   | Administration and Supervision of Early Childhood Programs—Practicum  
30 hours throughout the quarter assisting the director of an early childhood center in a variety of ways, including creating newsletters, billing, registration of children, public relations, checking for room ratios, fund raising events, and filing. Even years. |
| ECED 370    | 3 F   | Math for the Young Child  
An organized, sequential approach to creating math curriculum for young children. Methods of teaching math concepts such as classification, shapes, spatial sense, seriation, numbers, and measurements. Taught using naturalistic, informal, and structural types of learning. Stresses the integration of math with language arts, science, social studies, art, and music and movement. Even years. |
| ECED 371    | 3 S   | Science for the Young Child  
Methods of teaching science to young children. How to teach children to explore, classify, compare, contrast, and hypothesize in physical science, biology, and botany. Odd years. |
ECED 380  3 F
Program Planning for Infants and Toddlers
Programs for infants and toddlers to promote their optimum social, emotional, cognitive, and physical development. Includes observation, assessment, curriculum, continuity of care, special needs, and parent-teacher interaction. Odd years.

ECED 381  1 F
Program Planning for Infants and Toddlers–Practicum
Three hours per week observing, assessing, caring for, and teaching infants or toddlers in a center. Odd years.

ECED 482  3 F, W, S
Student Teaching II
Student teaching in an approved, off-campus early childhood classroom for three hours a day, three days a week for the entire quarter. The student will teach at least one child with special needs. Involves observing, assisting and teaching in the areas of math, science, emergent literacy, music, movement, and art. Students plan the curriculum for the quarter, collaborate with the supervising teacher, and individualize guidance strategies for the children, thus having opportunities to practice master teacher techniques. Prerequisites: A minimum cumulative GPA of 2.25 and upper-division GPA of 2.5, A.S. degree in ECE, ECED 370, 371. Corequisite: ECED 483. Qualifies for IP grading. Graded S/F.

ECED 483  1 F-W-S
Student Teaching Seminar II

ECED 489  2 F
Constructive Guidance and Classroom Management II
The primary philosophical approaches to guidance and classroom management as they apply to school-wide policies. Includes methods of guidance leading to the development of intrinsic motivation for pro-social behaviors such as cooperation, empathy, and altruism in young children. Students develop their own philosophy of guidance and management based on observations of children, discussion, and research. Prerequisite: ECED 189. Odd years.

Education

Lower-Division Courses:

EDUC 101  1 F, W, S
Introduction to Teaching
An overview of the teaching profession. Includes certification requirements, the history of education, teaching as a profession, and the characteristics of successful teachers. The program admission process begins in this class. Corequisite: EDUC 101L.

EDUC 101L  1 F, W, S
Classroom Observations
25-hour field experience that provides practical information about classroom teaching for the student who is entering the teaching profession. Involves extensive observation of teachers both in the classroom and on video. Must be completed before a student may be admitted to the credential program. Students who wish to apply credit for this course toward the requirements for a teaching credential must earn a grade of B- or better. This requirement may be waived on experience. Contact the credential analyst for more information. Corequisite: EDUC 101.

EDUC 238  2 F, S, Su
Computer Technology for Teachers
The use of computers in the elementary and secondary classroom. Development of skills in using technology to support teaching and learning. Distinguishes between technology as an “add-on” in the classroom and technology as an integral part of learning. Applies to area B of the Practical and Applied Arts general education requirement. Prerequisite: EDUC 101, 101L. Corequisite: EDUC 238L.

EDUC 238L  1 F, S, Su
Computer Technology for Teachers Laboratory
Prerequisite: EDUC 101, 101L. Corequisite: EDUC 238.

Upper-Division Courses:

EDUC 310  3 S
Speech and Language of Young Children
(See also SPPA 310.) Development of speech and language in children from birth to six years. Introduces differential diagnosis and treatment planning for children with delayed language development. Odd years.

EDUC 333  3 W, Su
Educational Psychology
Exploration of how children and adolescents learn and think in the classroom. Examines how characteristics such as intelligence, personality, cognitive and moral development, and diversity impact student learning. Includes the study of learning theories, motivation, cooperative learning, assessment, and managing a classroom. Odd summers.
Education

EDUC 335  2 F, Su
Ethical Dimensions of Teaching

EDUC 336  3 S
The Multicultural Classroom
   Preparation of candidates for the wide diversity of students they will encounter in the classroom. Includes an emphasis on developing methods for involving the family in the educational process. Addresses the legal basis for desegregation and multiculturalism in American Education. Emphasizes the knowledge and skills needed to help students be better informed and proactive in a multicultural society.

EDUC 337  4 S, Su
ELL Pedagogy
   (See ENGL 337.) Prerequisite: EDUC 101, 101L.

EDUC 350  3 W, Su
Exceptional Children in the Classroom
   Major categories of disabilities and giftedness and strategies to meet the needs of these children in the general classroom. Information about federal and state laws pertaining to disabilities and how to write and implement an IEP. Prerequisite: EDUC 101, 101L.

EDUC 480  3 W
Classroom Management
   An overview of classroom management models, including behaviorist options, with an emphasis on redemptive approaches. Identification of personal views toward classroom organization and structure and development of classroom management plan based on “best practice” strategies. The value of effective structure, developing procedures and rules, engaging curriculum, effective communication, and consistent follow-through. Prerequisite: EDUC 101, 101L.

Elementary Methods Courses:

EDUC 345  4 S
Teaching Math and Science in the Elementary School
   Prepares pre-service elementary teachers in science, health, and mathematics instruction through interrelated activities in classwork and fieldwork. Emphasis on California state content standards in science, health, and mathematics; planning and implementing effective lessons for each area. Prerequisites: Regular program admission, EDUC 353, 356, 490, 491, 493 (353L). Corequisites: EDUC 492, 493 (345L).

EDUC 353  4 W
Beginning Reading and Writing

EDUC 356  3 F
Intermediate Reading and Writing
   The nature of language acquisition and the principles related to intermediate reading/language arts instruction. Instructional strategies for developing ability to transmit meaning through talking and writing and to comprehend meaning through listening and reading. Emphasizes assessment and management techniques and teaching to diverse groups of students. Includes multigrade teaching and state standard aligned instruction. Prerequisites: Regular program admission. Corequisites: EDUC 490.

EDUC 390  2 F, Su
Teaching K-12 Bible
   Teaching objectives, materials, and strategies in Biblical education. Emphasizes the spiritual development of K-12 students and provides methods of teaching whereby Bible curriculum can be harmonized with that development. Explores and analyzes the Seventh-day Adventist Bible curriculum. Required for SDA elementary endorsement. Required for SDA secondary endorsement only if a Bible endorsement is desired. Prerequisite: Regular program admission. Corequisite: EDUC 390L. Available odd summers for employed teachers only; EDUC 390L is not offered or required as a corequisite during the summers.

EDUC 390L  1 F
Teaching K-12 Bible Practicum
   Designed to support EDUC 390 and place candidates in a Bible classroom within an SDA school setting. Includes observation of present practices in Bible instruction. Candidates will assist cooperating teachers as well as plan and implement a brief unit of study, based on the current class curriculum and the NAD Bible curriculum guides. Prerequisite: Regular program admission. Corequisite: EDUC 390.
EDUC 408  2 F

Social Studies and the Arts

Aspects of teaching history, social science, visual arts, and performing arts. Implementation of state adopted content standards in these subject areas. Observation of professionals in the field, paying particular attention to content and strategies of instruction, as well as techniques for teaching art as it relates to other subject areas and careers. Emphasizes case studies, integrated units, and cross-cultural activities. Prerequisite: Regular program admission.

EDUC 493  1-12 F-W-S

Student Teaching, Full-Time, Elementary

Elementary student teaching is divided into four components:

a) EDUC 493 (353L) - Student Teaching, Beginning Reading Experience (1):

25-hour field experience completed in a K-2 classroom. Involves observing, assisting, and actually teaching in the area of beginning reading and writing under the direction of an experienced primary grade teacher. Counts as 1 hour of Student Teaching and is supervised and evaluated. Prerequisite: Regular program admission, TB clearance, EDUC 356, 490. Corequisite: EDUC 353, 491. Graded S/F.

b) EDUC 493 (345L) - Student Teaching, Math Field Experience (1):

25-hour field experience completed in an upper-grade elementary school classroom. Involves observing, assisting, and actually teaching in the area of math under the direction of an experienced elementary grade teacher. Counts as 1 hour of Student Teaching and is supervised and evaluated. Prerequisite: Regular program admission, Department Review #1, EDUC 353, 491, 493 (353L). Corequisite: EDUC 345, 492. Graded S/F.

c) Pre-Session Student Teaching:

Ten-day experience at the beginning of a school year. Involves observing and assisting a teacher just prior to the beginning of school and into the first few days of a new school year. This 10-day full-time experience counts as part of student teaching. The credit for this experience is given when a student completes full-time student teaching. Prerequisite: Completion of reading or math field experience, Department Review #1, EDUC 345 or EDUC 353. Pre-Session Student Teaching should be completed in the summer prior to the year in which full-time student teaching takes place.

d) EDUC 482L - Student Teaching, Full-Time, Elementary (12):

Full-time student teaching occurs at the conclusion of the credential program courses. It lasts for the 11 weeks of the quarter and is a full-time, full day commitment. It is not possible for the student teacher to hold a day job during this time. By the end of the experience, the student will take complete responsibility for all classroom management, instructional planning, teaching, and student assessment. Candidates employed on a regular full-time teaching contract at a grade level covered by the desired credential may petition the department to complete in-service student teaching. Prerequisites: EDUC 337, 345, 350, 353, 356, 490, 491, 492, 493 (345L), 493 (353L), Department Review #1 and #2, Pre-Session Student Teaching, Passage of the California Teaching Performance Tasks Subject-Specific Pedagogy, Passage of CSET: Multiple Subjects, Designing Instruction, and Assessing Learning. Corequisite: EDUC 498. Qualifies for IP grading. Graded S/F.

Secondary Methods Courses:

EDUC 358  3 F

Literacy in the Content Areas

First in a series of three courses preparing pre-service teachers for the secondary classroom. Emphasis is placed on lesson design based on 1) the unique learning characteristics of adolescents, and 2) the reading and study skills needed in each content area. Effective teaching strategies for students with diverse levels of understanding and skill, including ELL students with limited language skills. Prerequisites: Regular program admission; junior class standing. Corequisite: EDUC 490.

EDUC 361  3 W

Middle School Teaching Strategies

Second in a series of three secondary methods courses. Special focus on the unique needs of middle school students. Creation of an environment and development of learning plans that accommodate developmental characteristics of young adolescents (ages 10-14). Exploration of project-based learning, cooperative learning, direct instruction, differentiated instruction, authentic assessment, and block scheduling. Prerequisites: regular program admission, EDUC 358, junior class standing, and completion of 50% of the major coursework. Corequisites: EDUC 494 (361L) and EDUC 491.

EDUC 362  3 S

Secondary Content Area Teaching Strategies

Final course in the secondary methods sequence; brings together all the secondary teaching elements that have been taught throughout the year. Focus on the high school environment and the knowledge and skills needed to plan and deliver instruction in specific content areas. Creation of assessment tools for the content area, development of effective learning units, and creation of course syllabi.
Students will make sample instructional presentations in class and conduct interviews with secondary teachers in their own content areas. Prerequisites: regular admission to the program, EDUC 358, EDUC 361, EDUC 494 (361L), EDUC 491, junior class standing, and completion of 50% of the major coursework. Corequisites: EDUC 494 (362L) and EDUC 492.

EDUC 390  2 F, Su
Teaching K-12 Bible
See description under “Elementary Methods Coursework.”

EDUC 390L  1 F
Teaching K-12 Bible Practicum
See description under “Elementary Methods Coursework.”

EDUC 494  1-12 F-W-S
Student Teaching, Full-Time, Secondary
Student teaching is divided into four components:

a) EDUC 494 (361L)- Student Teaching, Middle School Field Experience (1):
Involves 25 hours of observation and teaching in the specific content area of the credential in a middle school classroom (grades 6-8). Counts as 1 hour of Student Teaching and is supervised and evaluated. Prerequisites: Regular program admission, TB clearance, completion of 50% of the major coursework with GPA of 2.5 or above or passage of CSET. Corequisite: EDUC 361, 491. Graded S/F.

b) EDUC 494 (362L)- Student Teaching, Senior High School Field Experience (1):
Involves 25 hours of observation and teaching in the specific content area of the credential in a senior high school classroom (grades 9-12). Counts as 1 hour of Student Teaching and is supervised and evaluated. Prerequisites: TB clearance, EDUC 361, 494 (361L), completion of 50% of the major coursework or passage of CSET, Department Review #1. Corequisite: EDUC 362, 492. Graded S/F.

c) Pre-Session Student Teaching:
Ten-day experience at the beginning of a school year. Involves observing and assisting a teacher just prior to the beginning of school and into the first few days of a new school year. This 10-day full-time experience counts as part of student teaching. Credit is given when a student completes full-time student teaching. Prerequisite: EDUC 494 (361L), 494 (362), Department Review #1 and #2. Pre-Session Student Teaching should be completed in the summer prior to the year in which full-time student teaching takes place.

d) EDUC 494- Student Teaching, Full-Time, Middle or Senior High School (12):
Full-time student teaching occurs at the conclusion of the credential program courses. It lasts for the 11 weeks of the quarter and is a full-time, full day commitment. It is not possible for the student teacher to hold a day job during this time. By the end of the experience, the student will take complete responsibility for all classroom management, instructional planning, teaching, and student assessment. Candidates employed on a regular full-time teaching contract at a grade level covered by the desired credential may petition the department to complete in-service student teaching. Prerequisites: EDUC 337, 350, 358, 358L, 361, 362, 490, 491, 492, 494 (361L), 494 (362L), Department Review #1 and #2, Pre-Session Student Teaching, Passage of the California Teaching Performance Tasks Subject-Specific Pedagogy, Passage of the CSET: Content Area, Designing Instruction, and Assessing Learning. Corequisite: EDUC 498. Qualifies for IP grading. Graded S/F.

Student Teaching Seminars:

EDUC 490  1 F
Student Teaching Seminar: Subject Specific
Guides candidates toward the successful completion of the California Teaching Performance Assessment on Subject-Specific Pedagogy. Evaluates the candidate’s ability to understand how information about a class is used to prepare instruction for particular subjects and content areas and develops and adapts student assessment plans based on the content. Also provides support for candidates as they complete their student teaching. Prerequisites: Regular program admission. Corequisite: EDUC 356 or EDUC 358. Graded S/F.

EDUC 491  1 W
Student Teaching Seminar: Designing Instruction
Guides candidates toward the successful completion of the California Teaching Performance Assessment on Designing Instruction. Evaluates the ability to identify the links between students’ characteristics and learning needs. Also provides support for candidates as they complete their student teaching. Prerequisite: Regular program admission, EDUC 490. Corequisites: EDUC 353/493 (353L) or EDUC 361/494 (361L). Graded S/F.

EDUC 492  1 S
Student Teaching Seminar: Assessing Learning
Guides candidates toward the successful completion of the California Teaching Performance Assessment on Assessing Learning. Evaluates the ability to assess student learning. Also provides support for candidates as they complete their student teaching. Prerequisites: Regular program admission, EDUC 490, 491. Corequisite: EDUC 345/493 (345L) or EDUC 362/494 (362L). Graded S/F.
EDUC 498  1 F, W, S  
Student Teaching Seminar: Culminating Teaching Experience  
Guides candidates toward the successful completion of the California Teaching Performance Assessment Culminating Teaching Experience. Evaluates the ability of the candidate to integrate the three previous strands of the TPA: subject specific pedagogy, designing learning, and assessing learning. Also provides support for students as they complete their student teaching. Prerequisites: Regular program admission, EDUC 490, EDUC 491, EDUC 492. Corequisite: EDUC 493 (elementary) or EDUC 494 (secondary).

Summer Education Courses

Taught only during the summer. Most courses are taught on a 2-year alternating basis. Courses are open to individuals employed as full time teachers. Contact the Education Department for the list of course offerings for any specific summer.

EDUC 410  1-2 Su  
Soul Shapers: Level 1  
An in-depth study experience of Choice Theory and its application to the classroom and school setting. The writings of Scripture, Ellen White, and William Glasser provide the theoretical framework for class discussions and assignments. Experimental in nature, with learning coming out of the activities that are done during class. Meets the SDA Philosophy of Education requirement for the SDA teaching credential. Graded S/F.

EDUC 411  1-2 Su  
Soul Shapers: Level 2  
Builds on the theory and insight of the Level 1 course and focuses on conferencing skills in varied school and home scenarios. Students learn to conference using the principles of Choice Theory. Immediate feedback is given throughout the course as students practice what they have learned about lead-management techniques and fostering and maintaining positive relationships. Repeatable for credit. Graded S/F.

EDUC 420  1-2 Su  
Education Workshop  
Hands-on practical summer workshops for teachers seeking certification renewal credit. Offered under different subtitles on a rotating basis. Repeatable for credit under different subtitles. Graded S/F.

Past subtitles include the following:
- Cooperative Learning
- Kindergarten Workshop
- Pathways Reading
- Making & Using Portfolios
- Reading & Writing Workshop
- Robotics in the Classroom

EDUC 421  2 Su  
SDA Methods in Elementary Mathematics  
Meets the SDA Basic Elementary certification requirement for methods in mathematics. Open to practicing teachers holding a Conditional certificate; not open to students in the campus credential program. Eatn summers.

EDUC 422  3 Su  
Reading and Writing for Life  
Meets the SDA Basic Elementary certification requirement for methods in reading and language arts. Open to employees holding a SDA Conditional certificate; not open to students in the campus credential program. Odd summers.

EDUC 425  2 Su  
SDA Secondary Curriculum Methods  
Meets the SDA Basic Secondary certification requirement for secondary curriculum methods. Open to practicing teachers holding a Conditional certificate; not open to students in the campus credential program. Odd summers.

EDUC 426  2 Su  
SDA Secondary Reading Methods  
Meets the SDA Basic Secondary certification requirement for methods in secondary reading. Open to practicing teachers holding a Conditional certificate; not open to students in the campus credential program. Even summers.

EDUC 427  1 Su  
Assessment & Evaluation for Beginning Teachers  
Introductory overview of educational assessment & evaluation as used in the elementary and secondary classroom. Meets the SDA Basic certification requirement for educational assessment. Open to practicing teachers holding a Conditional certificate. Even summers.

EDUC 430  1-2 Su  
Kindergarten Administration  
Meets the SDA special endorsement requirements for Kindergarten teachers. Presents both SDA and state guidelines relating to student readiness and school entrance requirements. Focuses on leadership knowledge and skills needed for a successful Kindergarten program. Open to practicing teachers and students in the campus credential program. Graded S/F. Even summers.
**Education**

**EDUC 431**  
1-2 Su  
**Kindergarten Curriculum**  
Meets the SDA special endorsement for Kindergarten teachers. The NAD curriculum framework forms the basis of course content. Practical applications for Kindergarten classrooms are emphasized. Open to practicing teachers and students in the campus credential program. Graded S/F. Odd summers.

**EDUC 446**  
2 Su  
**SDA Methods in Elementary Social Studies**  
Meets the SDA Basic Elementary certification requirement for methods in Social Studies. Open to practicing teachers holding a Conditional certificate; not open to students in the campus credential program. Even summers.

**EDUC 447**  
2 Su  
**Real Science, Real Learning**  
Meets the SDA Basic Elementary certification requirement for methods in science & health. Open to practicing teachers holding a Conditional certificate; not open to students in the campus credential program. Odd summers.

**Graduate Courses:**  
*Prerequisite: Admission to the M.Ed. program, admission to the fifth-year program or department approval.*

**EDUC 510**  
2 Su  
**Leadership in Education**  
Students examine insights concerning themselves and their relationships with colleagues, stakeholders, and pupils that can make a real difference in their subsequent classroom attitudes and behavior. Even summers.

**EDUC 513**  
3 Su  
**Advanced Instructional Strategies**  
In-depth examination and use of progressive instructional strategies, including learner-centered strategies such as cooperative learning, critical thinking, project-based learning, and teaching to multiple intelligences. Corequisite: EDUC 513L. Qualifies for IP grading. Even summers.

**EDUC 513L**  
1 Su  
**Advanced Instructional Strategies Field Experience**  
A 30-hour field experience involving application of learning theory by teaching in K-12 or college classrooms using advanced instructional techniques. Corequisite: EDUC 513. Even summers.

**EDUC 515**  
3 Su  
**Educational Assessment and Evaluation**  
A multifaceted study emphasizing (a) the process of collecting information as an aid in understanding and making educational plans for pupils and (b) integrated processes for determining the nature and extent of pupil learning and development. Authentic assessment and commonly used teacher-made and standardized tests are studied. Odd summers.

**EDUC 517**  
2 Su  
**Current Issues in Education**  
Contemporary controversial issues in public and private education. Students become aware of possible alternatives in handling the issues, and to use their creativity to search for alternate solutions. Repeatable for credit. Odd summers.

**EDUC 525**  
3 Su  
**Teaching Children with Reading Difficulties**  
Diagnostic procedures and assessment instruments used to identify reading difficulties. Emphasis on instructional techniques used for remediation. Corequisite: EDUC 525L. Odd summers.

**EDUC 525L**  
1 Su  
**Teaching Children with Reading Difficulties Field Experience**  
A 30-hour field experience that involves assessing and diagnosing reading difficulties, writing assessment reports and recommendations, and developing instructional plans for children identified as needing reading intervention and/or remediation. Includes critical analysis and development of learner-centered language and literacy instructional techniques, with emphasis on the remediation of elementary pupils and/or middle school/high school students with reading difficulties. Corequisite: EDUC 525. Qualifies for IP grading. Odd summers.

**EDUC 530**  
3 Su  
**Brain Research and Learning**  
A critical examination of current investigations of cognitive aspects of learning. Odd summers.
EDUC 537  3 Su
Advanced ESL Methods and Materials
Theory and practice of second language teaching methods and materials, focusing specifically on the teaching and learning of literacy skills. Corequisite: EDUC 537L. Even summers.

EDUC 537L  1 Su
Advanced ESL Methods and Materials Field Experience
A teaching practicum that allows students to apply learned theory in a language classroom. Field teaching will be arranged according to students' interests and/or specific program needs. Corequisite: EDUC 537. Qualifies for IP grading. Even summers.

EDUC 538  2 Su
Computers in the Classroom
The uses of electronic media to communicate through collaborative tools, multimedia, web pages, and print media. Emphasis on how technology can be used to plan, locate, evaluate, select, and use information to solve problems and draw conclusions. Prerequisite: EDUC 238L or permission of the department technology instructor. Corequisite: EDUC 538L.

EDUC 538L  1 Su
Computers in the Classroom Laboratory
Cutting-edge technologies to enhance teaching and learning. Applications include Hyperstudio, Powerpoint, web-page design, videoconferencing, and desktop publishing. Corequisite: EDUC 538.

EDUC 550  3 Su
Advanced Study of Exceptional Children in the Classroom
Strategies for teaching students with learning disabilities in special and regular classrooms. Curriculum content and specific strategies and materials related to each academic area. Includes collection and use of formal and informal assessment information for designing the content of Individual Educational Programs (IEP) for students with disabilities in academic and behavioral areas. Prerequisite: EDUC 350. Odd summers.

EDUC 559  1-2 Su
Small Schools Curriculum
Meets the SDA requirements for a professional endorsement as a Small Schools Specialist. Focus is given to SDA curriculum guides, with a special focus on how to manage instruction in a multi-grade, multi-age setting. Open to practicing teachers holding at least a Conditional certificate; not open to students in the campus credential program. Graded S/F. Even summers.

EDUC 560  1-2 Su
Small Schools Administration
Meets the SDA requirements for a professional endorsement as a Small Schools Specialist. Focus is given to leadership skills, especially the organization knowledge and skills needed to manage a school program, while also teaching full time. Open to practicing teachers holding at least a Conditional certificate; not open to students in the campus credential program. Graded S/F. Odd summers.

EDUC 566  3 Su
Advanced Health Education
A study of the key health concerns of youth today and how a teacher creates an environment to prevent, change or cope with health problems. Focus on local, state, and federal laws concerning health issues, communicating to students and parents, and developing skills toward advocacy. Prerequisite: HLED 166 or equivalent. Even summers.

EDUC 595  1-3 Su
Independent Study
Individual study open to students with adequate preparation in the proposed area. Repeatable to a maximum of 3 credits.

EDUC 596  2 Su
Methods in Research
Principles of disciplined inquiry and an introduction to the methods of research including planning, using resources, reviewing literature, developing methodology, and communicating evidence verbally and visually.

EDUC 597  1-5 Su
Action Research Project
The culmination of the master's degree program, involving a practical application of theoretical concepts in an actual classroom situation. Research methods and literature review are presented. After receiving formal project approval, students implement the project and, upon completion, prepare a formal written report to be shared orally with the Education faculty and other graduate students during the summer quarter. Prerequisite or corequisite: EDUC 596. Qualifies for IP grading.
Clear Credential Courses:
Prerequisite: Admission to the Clear Credential Program.

EDUC 580A-580B .5-.5 Su
Clear Credential Orientation and Review, Part 1-Part 2
Consists of two one-day sessions for teachers who are converting their California Preliminary Credentials into California Clear Credentials. Each session is held immediately prior to the beginning of clear credential program coursework.  
**Part 1**
The first session is an overview of the Clear Credential Program requirements at PUC, including handbook, schedule of courses, procedures, forms, evaluations, assessment and evaluation; the California Standards for the Teaching Profession (CSTP); ePortfolio contents and instructions; self-assessment of CSTP competencies and development of the personal Professional Growth Plan; and instruction in the inquiry cycle and teacher action research.

**Part 2**
The second session includes a review of Year One fieldwork; presentation of the mid-program portfolio; self-assessment of CSTP competencies; and revision of the personal Professional Growth Plan. Prerequisites: EDUC 580A, EDUC 581/581L or EDUC 582/582L.

EDUC 581 1.5 Su
Clear Credential Standard 5: Pedagogy

EDUC 581L 2 Su
Clear Credential Standard 5: Fieldwork
Implementation of Standard 5: Pedagogy in the candidate’s classroom. Provides the setting where the participating teacher can successfully demonstrate understanding of the standard through regular collaboration with support providers, demonstration of CSTP knowledge and skills, use of approved academic content standards, application of the “Plan-Teach-Reflect-Apply” cycle, and continued development of the teacher’s Clear Credential portfolio. Prerequisite: EDUC 580A. Corequisite: EDUC 581. Even summers.

EDUC 582 1.5 Su
Clear Credential Standard 6: Universal Access
Presentation and discussion of the elements of California Clear Credential Standard 6: Universal Access. Includes designing and implementing equitable and inclusive classrooms for all students, effective use of resources including technology, teaching English Learners, and teaching Special Populations. Prerequisite: EDUC 580A. Corequisite: EDUC 582L. Even summers.

EDUC 582L 2 Su
Clear Credential Standard 6: Fieldwork
Implementation of Standard 6: Pedagogy in the candidate’s classroom. Provides the setting where the participating teacher can successfully demonstrate understanding of the standard through regular collaboration with support providers, demonstration of CSTP knowledge and skills, use of approved academic content standards, application of the “Plan-Teach-Reflect-Apply” cycle, and continued development of the teacher’s Clear Credential portfolio. Prerequisite: EDUC 580A. Corequisite: EDUC 582. Even summers.

EDUC 583 1 Su
Clear Credential Capstone
Development, organization, presentation, and submission of an ePortfolio to demonstrate ability to use and implement California Clear Credential Standards 5 & 6 and the California Standards for the Teaching Profession in one’s own classroom. Includes a final reflective paper on the entire Clear Credential Program experience and content. Professional presentation of the portfolio to the faculty, support providers, and cohort group faculty during the final summer; submission of the portfolio to the program electronically. Prerequisite: EDUC 580A, 580B, 581, 581L, 582, 582L.
Degree Completion Courses: Early Childhood Education

Available only in the Bachelor of Science in Early Childhood Education (B.S.E.C.E.) curriculum, an off-campus degree completion program.

Upper-Division Courses:

**ECE 311**

**Speech and Language of Children**

Development of speech and language in children from birth to age six. Introduces differential diagnosis and treatment planning for children with delayed language development.

**ECE 330**

**Literature for Children**

Literature for children from infancy through grade six. Emphasis on literary quality and a broad knowledge of the best that has been written for children.

**ECE 340**

**Social, Emotional and Moral Development of Young Children**

The social, emotional, and moral development of young children; classroom practices to promote positive development. Topics include attachment, emotional intelligence, temperaments, perspective-taking, altruism, self-regulation, cooperation, and the socio-moral atmosphere.

**ECE 359**

**Exceptional Children in the Classroom**

The major categories of disabilities and giftedness, and strategies for meeting the needs of these children in the general classroom. Students learn about federal and state laws pertaining to disabilities and how to write and implement an IEP.

**ECE 370**

**Math for the Young Child**

A sequential approach to creating a developmentally appropriate math curriculum. Methods of teaching math concepts such as classifying, shapes, spatial sense, seriation, numbers, and measurements are taught using naturalistic, informal, and structured types of learning. Integrates math with language arts, science, art, and music and movement.

**ECE 380**

**Program Planning for Infants and Toddlers**

Planning developmentally appropriate programs for infants and toddlers which will promote their optimum social, emotional, and cognitive development. Continuity of care, special needs, and parent-teacher interaction are also addressed. Corequisite: ECE 381.

**ECE 381**

**Program Planning for Infants and Toddlers- Practicum**

30 hours of observing, evaluating, caring for, and teaching infants or toddlers representing various age categories. Corequisite: ECE 380.

**ECE 386**

**Approaches to Early Childhood Education**

The major approaches to early childhood education including Montessori, High Scope, Waldorf, Reggio Emilia, Head Start, Constructivist, and Cooperative. Students gain experience in writing analysis papers on several approaches and responding to and evaluating class members' papers.

**ECE 387**

**Cultural Diversity**

The legal basis for desegregation and multiculturalism in American education. Provides the knowledge and skills needed to be proactive in a multicultural society. Prepares students for the wide diversity of pupils. Methods for involving the family in the educational process.

**ECE 388**

**Science for the Young Child**

Developmentally appropriate methods of teaching science. Students learn how to teach children to explore, classify, compare, contrast, and hypothesize in physical science, biology and botany.

**ECE 389**

**Management and Guidance of Children**

The primary philosophical approaches to guidance and classroom management; methods that promote moral development and pro-social behavior. Students develop their own philosophy of guidance and classroom management based on observations of children, discussion, and research.
Education

ECE 425  4  
**Adult Supervision and Management**  
The function and management of adults in child-care settings: values and goals, decision making, problem solving, and the management process as applied to the individual and the organization. Principles and guidelines for developing a good mentor-teaching program.

ECE 431  4  
**Administration and Supervision of Early Childhood Programs I**  
The techniques and knowledge needed to set up and administer a quality early childhood center, including assessment of community need, licensing guidelines, board selection, budget and financial planning, development of the center (equipping, staffing, enrolling children), evaluation, and promotion of parent and community support.

ECE 432  4  
**Administration and Supervision of Early Childhood Programs II**  
The key competencies required for marketing, recruitment, human resource management, facilities and risk management, professional development, and leadership skills.

ECE 433  1  
**Administration and Supervision of Early Childhood Programs –Practicum**  
30 hours of assisting the director of an early childhood center in a variety of ways including creating newsletters, billing, registration of children, public relations, checking for room ratios, and planning fund raising events.

ECE 440  3  
**Emergent Literacy and Literacy Strategies**  
The core components of a literacy program for preschool age children (3-5 years) including oral language development, phonemic awareness, print awareness, and alphabetic knowledge. Emphasis on understanding the research that supports the importance of each component, strategies for teaching, assessment tools to monitor student progress, and creating classroom environments that are rich in language and literacy learning opportunities, including actively integrating music, movement, and art in to the literacy curriculum. Students develop core lessons. Corequisite: ECE 441.

ECE 441  1  
**Emergent Literacy and Literacy Strategies–Practicum**  
Students teach a child, between the ages of three and five, who has been identified by the classroom teacher as needing additional help in literacy development. They produce strategies for teaching each component of literacy development, teach the child using these strategies, and use assessment tools to monitor the child’s progress. Corequisite: ECE 440.

ECE 471  2  
**Early Childhood Senior Seminar**  
A capstone course that includes a competency portfolio preparation and the discussion of topics relevant to the student teaching experience that is required before graduation. The portfolio includes the documentation needed to meet the 13 Early Childhood Education Performance Expectations.

Note: The following general education courses are taught by members of the Religion faculty.

RELB 305  4  
**Biblical Perspectives**  
Historical concepts and themes of the Bible that relate most directly to effectiveness in early childhood education practice and public life.

RELT 310  4  
**Ethics and Personal Values**  
Spiritual formation, ethics and world view, and their shaping influence on personal values, early childhood education, and public life.
Emergency Services

Faculty
James Robertson, director; Levi Gore
Departmental Office: 158 Fisher Hall; 965-7032

Degrees and Programs
Emergency Services, A.S. ................................................... 109

The EMERGENCY SERVICES program prepares students for the position of emergency medical technician (EMT) as well as other positions in related fields such as offices of emergency services and firefighting. Students who wish to continue their education upon completion of the program are academically prepared to enter paramedic school. Training includes vocational certifications in CPR, incident command, emergency vehicle operations, and emergency medical technician.

Students are encouraged to gain practical experience while in the program. Working as an EMT or emergency department technician provides valuable experience as well as income. Volunteer opportunities are available through the local fire department and the ambulance company. Both organizations are largely staffed by college students and provide extra-curricular training as well as a way to serve the community. Many volunteer firefighters and EMTs from Angwin have used their training and experience to transition into paid positions.

Major in Emergency Services, A.S.
A minimum of 48.5 hours

➤ Required Core Courses (21.5 hours):
EMER 101 Introduction to Emergency Services 3
EMER 104-105 Emergency Medical Technician 4-4
EMER 225 Public Health for EMS 3
EMER 235 Emergency Vehicle Operation 2
EMER 255 Emergency Scene Management 3
EMER 273 Emergency Medical Practicum 2
EMER 396 Emergency Services Seminar .5

➤ Required Cognate Courses (27 hours):
BIOL 101 Human Anatomy 5
BIOL 102 Human Physiology 5
BIOL 223 Medical Terminology 2
MGMT 261 Introduction to Management 3
MICR 134 General Microbiology 5
SPAN 105 Spanish for Health Care Professionals 3

At least one of the following courses:
SOCI 121 Introduction to Sociology (4)
SOCI 232 American Social Problems (4)

Recommended Cognate Course
NURS 212 Pharmacology (3)

Please Note:
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Updates are effective July 1, 2011.
Emergency Services

Lower-Division Courses:

EMER 101  3 F
Introduction to Emergency Services
The scope and practice of the EMS personnel at the different levels of certification/licensure. Topics include CPR, first aid, incident command, and leadership skills. Upon successful completion of the course, students will receive a California First Responder certificate.

EMER 104-105  4-4 W-S
Emergency Medical Technician
Emergency medical training necessary to provide pre-hospital basic life support to the sick and injured. Meets, in part, the requirements for California EMT certification. Must be 18 years old by course completion to be eligible for certification. Prerequisite: EMER 101 or CPR for the Healthcare Provider. EMER 104 or equivalent is a prerequisite for EMER 105.

EMER 225  3 W
Public Health for EMS
An overview of the American health system and public health education. Emphasis on the role of the pre-hospital medical provider in public health issues. Topics include disease prevention and treatment and the special concerns associated with the health of children and senior citizens; includes child and elder abuse. Prerequisite: EMER 105 or equivalent.

EMER 235  2 F
Emergency Vehicle Operations
The safe operation of emergency vehicles during all phases of use, including but not limited to emergency response. One lecture and one laboratory per week. Prerequisite: EMER 105 or equivalent and permission of the instructor.

EMER 255  3 S
Emergency Scene Management
Application of the nationally adopted incident command system to emergency scenes. Emphasizes proper use of resources, interfacing with allied agencies, and decision-making under stress. Prerequisite: EMER 105 or equivalent.

EMER 273  2 F, W, S
Emergency Medical Practicum
Application of skills from EMER 105 in a pre-hospital and a hospital setting. Prerequisite: Current EMT certification by the LEMSA. Qualifies for IP grading.

EMER 396  .5 S
Emergency Services Seminar
Single topics of current interest in the emergency medical field presented by guest lecturers.

Clinical Courses
Students must meet the following requirements prior to registration for clinical courses:
1. Current California EMT or National Registry of EMT certificate.
2. Documentation showing current certification in cardiopulmonary resuscitation for healthcare professionals. Certification must be either ACA BLS Healthcare Provider or Red Cross Professional Rescuer.
3. Health and safety documents on file with Student Health Services indicating required immunization and evidence of negative tuberculosis skin test within the last twelve months or appropriate radiologic documentation.
4. Successful completion of an acceptable criminal background check administered by a PUC contracted, independent agency. Results of the check are reviewed by the Program Director and maintained in a confidential location. Background checks that yield results potentially unacceptable to clinical agencies will be evaluated on a case-by-case basis. If a clinical agency does not accept a student on the basis of a background check and if the clinical requirements of the degree cannot be met, the student may not be allowed to continue in the Emergency Services Program.
Faculty
Cynthia Westerbeck, chair; Thorvald Aagaard, Janet Borisevich-Mezenou, Linda Gill, Georgina Hill, Sara Kakazu, Maria Rankin-Brown, Heather Reid
Departmental Office: Stauffer Hall; 965-7550

Degrees and Programs

English, B.A. ................................................................. 111
TESOL Certificate .......................................................... 112
Teaching Credential ....................................................... 112
Film and Theater Studies, A.S. ..................................... 113

English majors discover a great variety of literature, including traditional English and American texts as well as newly appreciated works by women and minority writers. They explore all the genres from many perspectives: recent critical approaches, history of ideas, classical studies, and Christianity and literature. They develop and refine their writing in both critical and creative writing courses.

English majors may select one of the five emphases: British and American Literature, Drama, English Education, Teaching English to Speakers of Other Languages, and Writing.

Major in English, B.A.
A minimum of 59 hours (41 upper-division hours)

⇒ Required Core Courses (41 hours):

ENGL 223 British Literature Survey 4
ENGL 224 Literary Theory 4
ENGL 335 Survey of Linguistics 4
(Corequisite: ENGL 134*) (1)
ENGL 346 Creative Writing (any subtitle) 4
ENGL 355 American Colonial and Romantic Periods 4
ENGL 490 Senior Seminar 1

At least one of the following courses:

ENGL 356 American Realism and Naturalism (4)
ENGL 357 American Modernism (4)

At least one of the following courses:

ENGL 464 English Medieval Literature (4)
ENGL 465 English Renaissance Literature (4)

At least two of the following courses:

ENGL 466 The Enlightenment in Britain (4)
ENGL 467 The Romantic Age in Britain (4)
ENGL 468 The Victorian Age in Britain (4)
ENGL 469 The Modern Age in Britain (4)
ENGL 470 Contemporary Literature in English (4)

At least one of the following courses:

ENGL 484 Literature of the Bible (4)
ENGL 485 The Classical World (4)

⇒ Emphases (choose one- see next page)

1. British & American Literature
2. Drama
3. English Education
4. Teaching English to Speakers of Other Languages
5. Writing

* This requirement may be met by completion of a course or satisfactory performance on a departmental examination.

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Updates are effective July 1, 2011.
1. British & American Literature Emphasis (18 hours)

ENGL 389  Junior Seminar  1
ENGL 474  Shakespeare  4
ENGL 492  Senior Project  2

At least 11 hours from the following:

Additional upper-division ENGL literature courses in British periods, American periods, genres, and themes; at least one genre or theme course is required.

2. Drama Emphasis (18 hours)

DRMA 141/341  Performance Credit (3 quarters)  1-1-1
DRMA 229  Acting I: Fundamentals  3
DRMA 239  Techniques of Stage Production  3
ENGL 211  Survey of Drama  4

At least one of the following courses:

ENGL 212  Shakespeare in Performance (2-3)
ENGL 474  Shakespeare (4)

At least one of the following courses:

DRMA 230  Acting II: Scene Studies (3)
DRMA 231  Voice and Speech (2)
DRMA 232  Movement (2)
DRMA 339  Specialized Training (2)
ENGL 210  Bay Area Theater (3)

3. English Education Emphasis (28-29 hours)

DRMA 229  Acting I: Fundamentals  3
ENGL 301  Great Books: Global Perspectives  4
ENGL 307  Composition Theory  3
ENGL 331  Literature for Adolescents  4
ENGL 336  Second Language Acquisition  4
ENGL 434  Advanced English Syntax  4
JOUR 141  Newswriting and Reporting  3

At least one of the following courses:

ENGL 212  Shakespeare in Performance (3)
ENGL 474  Shakespeare (4)

4. Teaching English to Speakers of Other Languages-TESOL- Emphasis (20 hours)

ENGL 320  Cultural and Psychological Learner Differences  2
ENGL 336  Second Language Acquisition  4
ENGL 337  ELL Pedagogy  4
ENGL 434  Advanced English Syntax  4
ENGL 443  ESL Curriculum Development and Classroom Management  4
ENGL 491  ESL Teaching Practicum  2

5. Writing Emphasis (18 hours)

ENGL 389  Junior Seminar  1
ENGL 492  Senior Project  2

At least 15 hours from the following:

ARTD 253  Publication Technology (3)
ENGL 346  Creative Writing (up to 15 credits)
ENGL 434  Advanced English Syntax (4)
ENGL 494  Writing Internship (3)*
JOUR 141  Newswriting and Reporting (3)
JOUR 244  Copy Editing (2)
JOUR 443  Investigative Reporting and Writing (3)
MDIA 140  Short Scriptwriting (2)
MDIA 246  Screenwriting I (4)
MDIA 247  Screenwriting II (4)
PREL 350  Promotional Writing for the Media (3)

Recommended for students wishing to go into publishing:

ARTD 110  Design: Tools, Materials and Techniques (2)
ARTD 150  Fundamentals of Graphic Design (3)

TESOL Certificate (24-25 hours)

ENGL 291  ESL Tutoring Practicum  1
ENGL 320  Cultural & Psych Learner Differences  2
ENGL 335  Survey of Linguistics  4
(Corequisite: ENGL 134**)  (1)
ENGL 336  Second Language Acquisition  4
ENGL 337  ELL Pedagogy  4
ENGL 443  ESL Curriculum Dev & Classroom Mgmt  4
ENGL 491  ESL Teaching Practicum  2

At least one of the following courses:

ANTH 124  Cultural Anthropology (4)
COMM 330  Intercultural Communication (3)
ENGL 434  Advanced English Syntax (4)

Teaching Credential

Students desiring to enter a program of studies leading to a California teaching credential in English should take the B.A. degree in English with the emphasis in English Education. Students will need to pass the English portion of the CSET exam one quarter prior to the full-time student teaching experience. Students are invited to discuss the program with their major advisor in the English Department.

Those who plan to teach on the secondary level should consult with the credential analyst in the Education Department.

* Most writing internships require JOUR 141 as a prerequisite.
* This requirement may be met by completion of a course or satisfactory performance on a departmental examination.
and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the section entitled “Education” in this catalog.

**Major in Film & Theater Studies, A.S.**

*A minimum of 44 hours*

*Required Core Courses (15 hours):*

- DRMA 229  Acting I: Fundamentals 3
- DRMA 239  Techniques of Stage Production 3
- ENGL 102  College English 4
- MDIA 131  Elements of Cinematic Storytelling 3
- MDIA 152  Intro to Filmmaking 2

*Emphases (Choose one):*

1. **Narrative/Writing Emphasis** (29 hours)

   *Required Emphasis Courses (13 hours):*
   
   - DRMA/MDIA 289  Thesis Project 3
   - ENGL 211  Survey of Drama 4
   - MDIA 140  Short Scriptwriting 2
   - MDIA 246  Screenwriting I 4

   *Required Emphasis Electives (16 hours):*
   
   - At least 10 hours from the following:
     
     - ARTH 260  Film History (3)
     - ENGL 210  Bay Area Theater (3)
     - ENGL 212  Shakespeare in Performance (2-3)
     - ENGL 346  Creative Writing (4)
     - ENGL 474  Shakespeare (4)
     - MDIA 247  Screenwriting II (4)

   - At least 6 hours from the following:
     
     - Additional coursework, selected from any of the 3 emphases.

2. **Performance Emphasis** (29 hours)

   *Required Emphasis Courses (13 hours):*

   - DRMA 141/341  Production Credit (3 quarters) 1-1-1
   - DRMA 230  Acting II: Scene Studies 3
   - DRMA 289  Thesis Project 3
   - ENGL 211  Survey of Drama 4

   *Required Emphasis Electives (16 hours):*

   - At least 10 hours from the following:
     
     - DRMA 141/341  Production Credit (1-3)
     - DRMA 231  Voice & Speech (2)
     - DRMA 232  Movement (2)
     - ENGL 210  Bay Area Theater (3)
     - ENGL 212  Shakespeare in Performance (2-3)
     - ENGL 474  Shakespeare (4)

   - At least 6 hours from the following:
     
     - Additional coursework, selected from any of the 3 emphases.

3. **Technical Emphasis** (29 hours)

   *Required Emphasis Courses (13 hours):*

   - MDIA 158  Intro to Television Production 2
   - MDIA 231  Sound Design I 2
   - MDIA 270  Cinematography I 3
   - MDIA 256  Editing 3
   - MDIA 289  Thesis Project 3

   *Required Emphasis Electives (16 hours):*

   - At least 10 hours from the following:
     
     - ARTP 150  Black & White Photography (3)
     - ARTP 250  Digital Photo I (3)
     - MDIA 232  Sound Design II (2)
     - MDIA 258  Motion Graphics (3)
     - MDIA 271  Cinematography II (3)
     - MDIA 350  Directing (3)
     - MDIA 355  Marketing and Distribution (3)

   - At least 6 hours from the following:
     
     - Additional coursework, selected from any of the 3 emphases.

**Minor in English**

*A minimum of 30 hours (20 upper-division hours)*

*Required Courses (12 hours):*

- ENGL 223  British Literature Survey 4
- ENGL 224  Literary Theory 4
- ENGL 355  American Colonial and Romantic Periods 4

*Required Electives (18 hours):*

   - At least 18 hours from the following:
     
     - Include at least 16 upper division hours.
     - ENGL literature courses (212, 356-57, 464-70, 474, 484-85)
     - ENGL genre courses (211, 311, 411)
     - ENGL theme courses (210, 352)
     - ENGL linguistics courses (335)

**Minor in Writing**

*A minimum of 30 hours (20 upper-division hours)*

*Required Courses (30 hours):*

Select at least 30 hours, including at least 20 upper-division hours, from the emphasis elective options listed for the Writing Emphasis for the B.A.
English

Drama

Lower-Division Courses:

**DRMA 141**  
Production Credit  
1 F, W, S  
Study and performance of a dramatic or technical role, under the supervision of an instructor. Enrollment only by permission of the instructor following an audition. Repeatable to a maximum of 4 credits.

**DRMA 229**  3 F, W  
Acting I: Fundamentals  
Development of stage presence through the study of improvisation, voice, movement, and acting. Introduction to points of view, characterization and interpretation of dramatic text. Includes public performance. Pre-requisite: DRMA 229.

**DRMA 230**  3 S  
Acting II: Scene Studies  
Development of point of view, characterization, stage presence, voice and movement through the study of a variety of dramatic texts. Includes public performance. Pre-requisite: DRMA 229.

**DRMA 231**  2 F  
Voice and Speech  
Development of the vocal techniques required for effective stage acting, including projection, articulation, accents, and pronunciation. Pre-requisite: DRMA 229. Odd years.

**DRMA 232**  2 F  
Movement  
Introduction to a variety of techniques of movement for the stage. Pre-requisite: DRMA 229. Even years.

**DRMA 239**  3 F  
Techniques of Stage Production  
Students will cultivate the director’s eye and vision through the exploration of various acting methods such as Viewpoints, Suzuki, and Montage Creation. Culminates in a final performance. Repeatable to a maximum of 6 credits.

**DRMA 289**  3  
Thesis Project  
Completion and presentation of an independent theater project. Enrollment in the course contingent upon prior approval of the project proposal. Qualifies for IP grading. Prerequisite: Permission of the instructor.

Upper-Division Courses:

**DRMA 339**  2  
Specialized Training  
Prepares students in the theory and skills needed to participate in theater productions using a variety of dramatic styles and genres. Repeatable for credit under different subtitles such as Acting for Singers, Acting Shakespeare, Improvisational Theater. May not be available every year. See each year’s class schedule for current offerings.

**ENGL 099**  4 F  
Developmental Reading and Writing  
Emphasis on reading for significant details, reading for the main idea, scanning, critical reading, rate flexibility, and vocabulary development. Required of students who do not meet minimum standards of admission for ENGL 100. Corequisite: ENGL 133**.

ENGL 100-102  4-4 F, W, S, Su  
College English  
Integration of composition and reading. ENGL 101 emphasizes critical reading

*  Exception: ENGL 301 is applicable to the B.A. in English with an emphasis in English Education.

**  This corequisite is required only for those students who demonstrate need for extra support in syntax, mechanics, and basic editing (based on placement testing and proficiency examinations).
of thematic units, examining expository essays, short stories, and poetry. Writing includes the personal and expository essay but culminates in the use of library source materials and standard documentation. Prerequisite: ENGL 100 with a minimum grade of C- or equivalent. Corequisite: ENGL 133**.

ENGL 102 continues the critical reading of thematic units, including study of short stories, drama, and poetry. Use of library source materials is expanded and refined in the production of a research paper. Prerequisite: ENGL 101 with a minimum grade of C- or equivalent. Corequisite: ENGL 133**.

**ENGL 133**  1 F, W, S
Practicum in Writing and Syntax
Individualized practice in syntax, mechanics, and basic editing. Required of students who demonstrate need for extra support in these areas based on placement testing and proficiency exams in ENGL 100, 101, and 102. Repeatable to a maximum of 3 credits.

**ENGL 301**  4 F, W, S
Great Books
Thematically organized works generally recognized as distinguished explorations and expressions of significant issues. Literature is selected from several genres, countries and time periods. Readings, lectures, discussions, reports and papers. Repeatable for credit under different subtitles. Current subtitles include:
- Class and Gender
- Global Perspectives
- Literature and the Arts
- Literature and the Environment
- Salvation Stories
- Travel Narratives
- Ventures in Science
Prerequisite: ENGL 102 or equivalent; enrollment limited to juniors and seniors.

LOWER-DIVISION COURSES:

**ENGL 134**  1 W
Review of English Syntax
The classification and application of English grammar. Covers the following sentence components: subjects, objects, verbs, adverbs, adjectives, prepositions, connectors, phrases, clauses, etc. Corequisite: ENGL 133**.

**ENGL 210**  3 W
Bay Area Theater
Exploration of dramatic literature and elements of production, acting and stage craft through the experience of attending a total of five live theater productions in the Bay area. Emphasis on appreciation of the art form, critical analysis, and the process of creating theater. Prerequisite: ENGL 102.

**ENGL 211**  4 W
Survey of Drama
A chronological survey of dramatic literature, from Greek theater to the 21st century. Provides historical context for the development of drama as a literary genre Prequisite: ENGL 102. Even years.

**ENGL 212**  2-3 Su
Shakespeare in Performance
An in-depth encounter, both in text and performance, with the four Shakespeare plays currently being presented at the Oregon Shakespeare Festival in Ashland, Oregon. Includes daily seminars, a backstage tour, and an interview with an actor. The three-credit option requires completion of an additional paper or research project. Qualifies for IP grading. Prerequisite: ENGL 102.

**ENGL 223**  4 F
British Literature Survey
British literature from the Anglo-Saxon period to the 21st century. Provides historical context for the development of major literary genres. Prerequisite: ENGL 102.

**ENGL 224**  4 W
Literary Theory
Major literary theories of the 20th century and their application to selected texts. Students begin developing a writing portfolio that is continued throughout the major and is presented during the Senior Seminar, ENGL 490. Prerequisite: ENGL 102.

**ENGL 291**  1 F, W, S, Su
ESL Tutoring Practicum
Methods in assisting English language learners one-on-one in listening, speaking, pronunciation, reading, vocabulary, grammar, writing and American customs. Prerequisite: ENGL 102.

UPPER-DIVISION COURSES:

(ENGL 101-102 or equivalent is prerequisite to all upper-division ENGL courses.)

**ENGL 307**  3 F
Composition Theory and Pedagogy
Contemporary theories of composition and the writing process: inventing, composing, revising, and editing. Also includes developing assignments, designing writing courses, and assessment of student writing. Even years.
The period courses in American literature (ENGL 355-357) explore a variety of genres and authors representing each literary “period” listed. Though the emphasis is on the reading of primary works, students also apply a variety of interpretive approaches to the literature.

**ENGL 355**  
**American Colonial and Romantic Periods**  
American authors from colonial times through the romantic era, emphasizing historical context.

**ENGL 356**  
**American Realism and Naturalism**  
Authors from American realists and naturalists. Even years.

**ENGL 357**  
**American Modernism**  
20th century American authors to 1950. Odd years.

**ENGL 389**  
**Junior Seminar**  
Techniques of literary research; choice of research topic for completion in ENGL 492 Senior Project.

**ENGL 411**  
**Poetics**  
Study of poetics and prosody through the reading of a wide range of poetry and theorists; explores poetry as a literary genre through the study of a variety of poetic forms and literary periods. Odd years.

**ENGL 434**  
**Advanced English Syntax**  
ENGL 443  4 W
ESL Curriculum Development and Classroom Management
   Assessing and adapting current English language teaching materials that meet specific learner needs. Includes techniques in successful English language classroom management. Recommended prerequisites: ENGL 336, 337. Even years.

The period courses in English literature (ENGL 464-470) explore a variety of genres and authors representing each literary “period” listed. Though the emphasis is on the reading of primary works, students also apply a variety of interpretive approaches to the literature.

ENGL 464  4 F
English Medieval Literature
   Texts from British Medieval literature. Even years.

ENGL 465  4 F
English Renaissance Literature
   Texts from British Renaissance literature. Odd years.

ENGL 466  4 W
The Enlightenment in Britain
   British writers from the Restoration and Neoclassic tradition. Odd years.

ENGL 467  4 S
The Romantic Age in Britain
   British writers of the first third of the 19th century. Odd years.

ENGL 468  4 F
The Victorian Age in Britain
   British writers from 1830 to 1880. Even years.

ENGL 469  4 W
The Modern Age in Britain
   British writers from 1880 to 1950 with focus on British Modernists. Even years.

ENGL 470  4 S
Contemporary Literature in English
   Literature in English since 1950. Even years.

ENGL 474  4 W
Shakespeare
   A selection of Shakespeare’s histories, romances, tragedies, comedies, and poetry in the context of his times. Even years.

ENGL 475  4 S
Literature of the Bible
   A study of the literary nature of the Bible. Odd years.

ENGL 484  4 S
The Classical World
   Ancient Greece and Rome studied through primary texts, including Greek and Roman epics, dramas, histories, and philosophical works. Even years.

ENGL 485  4 S
Senior Seminar
   Guides students in their preparation for applying to graduate school or entering the job market, including preparation for professional exams (GRE, CSET), job interviews, professional statements and cover letters, and writing samples. Requires completion of the senior portfolio and senior exit survey. Qualifies for IP grading.

ENGL 491  2 F, W, S
ESL Teaching Practicum
   Guided exposure to the ESL classroom through observation and supervised teaching. Prerequisites: ENGL 336 and 337.

ENGL 492  2 W
Senior Project
   Completion and presentation of the independent project begun in ENGL 389: Junior Seminar. Requires a literary paper of approximately 20 pages, or a creative project of comparable scope. Qualifies for IP grading.

ENGL 494  3 F, W, S
Writing Internship
   Supervised experience in writing on the job. A student may apply for an internship for one quarter in a department-approved workplace (examples: a college public relations office, a hospital department of communications or development, or other nonprofit organization or public relations firm). From this supervised experience in writing the student presents a portfolio containing a variety of finished documents. Qualifies for IP grading.

ENGL 495  1-3 F, W, S
Independent Study
   Repeatable to a maximum of 3 credits.

English as a Second Language

Service Course:
(Not applicable to a major or minor in this department)

ENSL 100  1-4 F, S
English for Special Purposes
   Practical language application for advanced ESL and other international students. Customized in response to student needs and interests in the following areas: professional pronunciation, advanced ESL composition, academic skills, American culture and institutions, and understanding the Christian culture. Repeatable for credit.
Faculty
Michael Hellie, chair; Charles Evans, Elaine Neudeck, Robert Paulson
Departmental Office: 60 Pacific Auditorium; 965-6344

Degrees and Programs
Physical Education with Teacher Education
   Emphasis, B.S. ......................................................... 117
Exercise Science, B.S. ................................................. 118
Teaching Credential .................................................... 118

The Exercise Science, Health, & Nutrition (ESHN) Department serves the Pacific Union College community by providing opportunities for career development in sports professions, for instruction, and for participation.

The department has the following objectives:
• to give thorough instruction in the requirements for participation and leadership in sports activities,
• to develop a knowledge and understanding of health and safety concepts,
• to offer a wide variety of suitable activities, in and out of the classroom, in an environment that supports Christian values,
• to encourage each individual to achieve a high level of total fitness and neuromuscular coordination supporting a wholesome lifestyle, and
• to encourage daily vigorous exercise for everyone in all stages of life.

The Physical Education degree with emphasis in Teacher Education is designed for students wishing to become sports teachers. The Exercise Science degree is designed for the student who either seeks to enter medical school or advance into athletic training. This program recommends the required cognate courses for a pre-professional program and has the required courses for entering a sport medicine graduate program in athletic training.

Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.

Major in Physical Education with Teacher Education Emphasis, B.S.
A minimum of 84 hours (44 upper-division hours)

> Required Core Courses (68 hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESAC 368</td>
<td>Water Safety Instructor</td>
<td>2</td>
</tr>
<tr>
<td>ESAC 370</td>
<td>Lifeguard Training</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 166</td>
<td>Historical Foundations of Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 170</td>
<td>Care and Prevention of Athletic Injuries</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 181</td>
<td>Basic Movement</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 183</td>
<td>Theory and Technique of Track and Field</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 260</td>
<td>Theory and Technique of Football</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 261</td>
<td>Theory and Technique of Volleyball</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 262</td>
<td>Theory and Technique of Basketball</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 263</td>
<td>Theory and Technique of Softball</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 264</td>
<td>Theory and Technique of Soccer</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 271-2-3</td>
<td>Theory and Technique of Officiating</td>
<td>2-2-1</td>
</tr>
<tr>
<td>ESTH 287</td>
<td>Theory and Technique of Individual Sports</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 365</td>
<td>Outdoor Experience</td>
<td>3</td>
</tr>
<tr>
<td>ESTH 371</td>
<td>Kinesiology</td>
<td>4</td>
</tr>
<tr>
<td>ESTH 372</td>
<td>Physiology of Exercise</td>
<td>4</td>
</tr>
<tr>
<td>ESTH 373</td>
<td>Corrective Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>ESTH 374</td>
<td>Motor Learning</td>
<td>4</td>
</tr>
<tr>
<td>ESTH 381</td>
<td>Theory and Technique of Racquet Sports</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 384</td>
<td>Theory and Technique of Rhythmic Activities</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 461</td>
<td>Coaching I</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 470</td>
<td>Management of Physical Education Programs</td>
<td>3</td>
</tr>
<tr>
<td>ESTH 471</td>
<td>Evaluation in Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>ESTH 476</td>
<td>Physical Education for Children</td>
<td>3</td>
</tr>
<tr>
<td>ESTH 483</td>
<td>Theory and Technique of Weight Training</td>
<td>2</td>
</tr>
<tr>
<td>ESTH 483</td>
<td>and Developmental Physical Education</td>
<td></td>
</tr>
<tr>
<td>ESTH 490</td>
<td>Ethics in Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>HLED 166</td>
<td>Health Education</td>
<td>2</td>
</tr>
</tbody>
</table>

> Required Cognate Courses (16 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 101</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 102</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
</tbody>
</table>
Major in Exercise Science, B.S.

A minimum of 63 hours (32 upper-division hours):

- Required Core Courses (55 hours):
  - BIOL 101 Human Anatomy 5
  - BIOL 102 Human Physiology 5
  - ESAC 370 Lifeguard Training 2
  - ESTH 166 Historical Foundations 2
  - ESTH 170 Care and Prevention of Athletic Injuries 2
  - ESTH 181 Basic Movements 2
  - ESTH 265 Theory and Technique of Aquatic Fitness 2
  - ESTH 287 Theory and Technique of Individual Sports 2
  - ESTH 371 Kinesiology 4
  - ESTH 372 Physiology of Exercise 4
  - ESTH 373 Corrective Physical Education 3
  - ESTH 374 Motor Learning 4
  - ESTH 378 Fitness Assessment and Exercise Prescription 3
  - ESTH 381 Theory and Technique of Racquet Sports 2
  - ESTH 471 Evaluation in Physical Education 3
  - ESTH 483 Theory and Technique of Weight Training 2
  - ESTH 490 Ethics in Physical Education 2
  - ESTH 492 Practicum in Sports Science 3
  - FDNT 235 Nutrition 3
  - HLED 166 Health Education 2

- Required Core Electives (6 hours):
  (To be chosen in consultation with the major advisor)
  - ESTH 183 Theory and Technique of Track and Field (2)
  - ESTH 260 Theory and Technique of Football (2)
  - ESTH 261 Theory and Technique of Volleyball (2)
  - ESTH 262 Theory and Technique of Basketball (2)
  - ESTH 263 Theory and Technique of Softball (2)
  - ESTH 264 Theory and Technique of Soccer (2)

Recommended Cognate Courses:
  (For students in a pre-professional program)
  - BIOL 111-112-113 Biological Foundations (15)
  - BIOL 320 Cellular and Molecular Biology (4)
  - CHEM 111-112-113 General Chemistry (15)
  - CHEM 371-372-373 Organic Chemistry (12)
  - CHEM 481-482 Biochemistry I-II (8)
  - PHYS 111-112-113 General Physics (12)

The B.S. degree curriculum (including all recommended cognates) meets or exceeds all undergraduate science requirements for pre-medical and pre-dental students applying to Loma Linda University and many other schools.

Teaching Credential

Students desiring to enter a program of studies leading to a California teaching credential in physical education should take the B.S. degree in Physical Education, Teacher Education Emphasis. Students will need to pass the physical education portion of the CSET exam one quarter prior to doing full-time student teaching. Students are invited to discuss the program with their major advisor in the Exercise Science, Health, & Nutrition Department.

Those who plan to teach on the secondary level should consult with the credential analyst in the Education Department and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the section entitled "Education" in this catalog.

Minor in Physical Education

A minimum of 30 hours (12 upper-division hours)

- Required Courses (10 hours):
  - ESTH 166 Historical Foundations of Physical Education 2
  - ESTH 170 Care and Prevention of Athletic Injuries 2
  - ESTH 470 Management of Physical Education Programs 3
  - ESTH 471 Evaluation in Physical Education 3

- Required Electives (20 hours):
  (To be chosen in consultation with the major advisor)
  - At least 10 hours from the following: 10
    - ESTH Theory and Technique courses
  - At least 10 hours from the following: 10
    - ESTH Any ESTH courses
Physical Education

Activity

Lower-Division Course:

ESAC 100
Adaptive Physical Education
Requires physician’s certification of need. Repeatable for credit.

Aerobics

All aerobics courses are repeatable for credit.

Lower-Division Courses:

ESAC 101A
Jogging

ESAC 103A
Physical Fitness

ESAC 105A
Fitness for Women

ESAC 107A
Swim and Stay Fit
Proficiency in swimming strokes required.

ESAC 109A
Hydro-Aerobics

Upper-Division Courses:

ESAC 304A
Cycling
Road bike required. (A limited number of bikes are available for student use- please make inquiries to the professor.)

ESAC 338A
Ultimate Frisbee

Aquatics

All aquatics courses are repeatable for credit.

Lower-Division Course:

ESAC 158
Elementary Swimming
Beginning level swimmers only.

Upper-Division Courses:

ESAC 368
Water Safety Instructor
Recommended prerequisite: Red Cross Level 5.

ESAC 370
Lifeguard Training
Recommended prerequisite: Red Cross Level 5.

Individual and Dual Sports

All individual and dual sports courses are repeatable for credit.

Lower-Division Courses:

ESAC 133
Mountain Biking

ESAC 171
Pickleball

ESAC 174
Elementary Badminton

ESAC 176
Elementary Weight Training

ESAC 178
Canoeing

ESAC 180
Elementary Golf
Additional fees apply. For current rates, inquire at the ESHN Department.

ESAC 192
Elementary Skiing/Snowboarding
Additional fees apply. For current rates, inquire at the ESHN Department.

ESAC 194
Elementary Tennis

ESAC 374
Intermediate Badminton

ESAC 376
Intermediate Weight Training

ESAC 380
Intermediate Golf

ESAC 392
Intermediate Skiing/Snowboarding
Additional fees apply. For current rates, inquire at the ESHN Department.

ESAC 394
Intermediate Tennis

Team Sports

All team sports courses are repeatable for credit.

Lower-Division Courses:

ESAC 120
Elementary Basketball

ESAC 123
Baseball-Men

ESAC 124
Flag Football
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESAC 128</td>
<td>1</td>
<td>Soccer</td>
<td>Fundamentals of body movement, posture, conditioning exercises, self-testing activities; selection, evaluation, and organization of social recreational activities. Odd years.</td>
</tr>
<tr>
<td>ESAC 130</td>
<td>1</td>
<td>Softball</td>
<td>Practice in and theory of softball. Development of fundamental skills of the game; analysis of skills, techniques, team strategy, rules and officiating procedures. Even years.</td>
</tr>
<tr>
<td>ESAC 132</td>
<td>1</td>
<td>Elementary Volleyball</td>
<td>Practice sessions and drills for developing fundamental skills and special abilities; study of rules and officiating techniques; consideration of practice scheduling and strategy. Odd years.</td>
</tr>
<tr>
<td>ESAC 333V</td>
<td>1</td>
<td>Advanced Volleyball-Women</td>
<td>Practice in and theory of flag football. Development of fundamental skills of the game; analysis of skills, techniques, team strategy, and rules. Even years.</td>
</tr>
<tr>
<td>ESAC 334V</td>
<td>1</td>
<td>Advanced Volleyball-Men</td>
<td>Practice in and theory of volleyball. Development of fundamental skills of the game; analysis of skills, techniques, team strategy, and rules. Even years.</td>
</tr>
<tr>
<td>ESAC 335V</td>
<td>1</td>
<td>Advanced Basketball-Women</td>
<td>Analysis and practice of skills and team play; interpretation of rules; strategy and techniques of teaching. Even years.</td>
</tr>
<tr>
<td>ESAC 336V</td>
<td>1</td>
<td>Advanced Basketball-Men</td>
<td>Analysis and practice of skills and team play; interpretation of rules; strategy and techniques of teaching. Even years.</td>
</tr>
<tr>
<td>ESTH 166</td>
<td>2 W</td>
<td>Historical Foundations of Physical Education</td>
<td>History of physical education, health and recreation. Effects of social expectations and world events on views of physical education and sports. An introduction to careers in these and related fields.</td>
</tr>
<tr>
<td>ESTH 170</td>
<td>2 W</td>
<td>Care and Prevention of Athletic Injuries</td>
<td>Practical application and theory of care and prevention of athletic injuries associated with coaching and teaching sport and game activities in a school setting. Topics include sprains, bleeding, fractures, exposure to heat and cold, seizures, heart attacks, accidental exposure to poisons and chemicals, and other injuries requiring immediate medical attention.</td>
</tr>
<tr>
<td>ESTH 181</td>
<td>2 F</td>
<td>Basic Movement</td>
<td>Historical Foundations of Physical Education</td>
</tr>
<tr>
<td>ESTH 183</td>
<td>2 S</td>
<td>Theory and Technique of Track and Field</td>
<td>Practice and theory of soccer. Development of fundamental skills of the game; analysis of skills, techniques, team strategy, and rules. Even years.</td>
</tr>
<tr>
<td>ESTH 260</td>
<td>2 F</td>
<td>Theory and Technique of Flag Football</td>
<td>Practice and theory of track and field. Practice sessions and drills for developing fundamental skills and special abilities; study of rules and officiating techniques; consideration of practice scheduling and strategy. Odd years.</td>
</tr>
<tr>
<td>ESTH 261</td>
<td>2 F</td>
<td>Theory and Technique of Flag Football</td>
<td>Practice and theory of flag football. Development of fundamental skills of the game; analysis of skills, techniques, team strategy, and rules. Even years.</td>
</tr>
<tr>
<td>ESTH 265</td>
<td>2 F</td>
<td>Theory and Technique of Aquatic Fitness</td>
<td>Practice and theory of basketball. Practice and theory of volleyball. Development of fundamental skills of the game; analysis of skills, techniques, team strategy, and rules. Even years.</td>
</tr>
<tr>
<td>ESTH 266</td>
<td>2 F</td>
<td>Theory and Technique of Aquatic Fitness</td>
<td>Practice and theory of basketball. Practice and theory of volleyball. Development of fundamental skills of the game; analysis of skills, techniques, team strategy, and rules. Even years.</td>
</tr>
</tbody>
</table>
Exercise Science, Health & Nutrition

ESTH 287 2 S
Theory and Technique of Individual Sports
Development of fundamental skills and strategies in various individual activities such as handball, golf, racquetball, and archery. Emphasis on teaching techniques, officiating, rules, and organization of materials for school programs. Additional fees apply. For current rates, inquire at the ESHN Department. Odd years.

Upper-Division Courses:

ESTH 365 3 S
Outdoor Experience
Theory and practice in camping, hiking, backpacking, and canoeing techniques. Ecological considerations, equipment and food selection, outdoor cooking, and orienteering. Additional fees apply. For current rates, inquire at the ESHN Department.

ESTH 371 4 F
Kinesiology
A study of joints and muscular structure and their relation to physical exercise. Three lectures and one laboratory per week. Prerequisites: BIOL 101, 102. Odd years.

ESTH 372 4 F
Physiology of Exercise
Physiological effects of muscular exercise, physical conditioning, and training. Significance of these effects for health and for performance in activity programs. Three lectures and one laboratory per week. Prerequisites: BIOL 101, 102. Even years.

ESTH 373 3 S
Corrective Physical Education
Common deviations of posture and feet; functional disturbances and crippling conditions found in school children. Survey of source material needed to plan and conduct individual, developmental, and special courses in physical education in schools. Prerequisite: ESTH 476. Odd years.

ESTH 374 4 W
Motor Learning
Physiological and psychological instructional considerations for learning, skill acquisition, and performance as applied to motor skills. Three lectures and one laboratory per week. Prerequisites: PSYC 121, BIOL 101, 102. Even years.

ESTH 378 3 W
Fitness Assessment and Exercise Prescription
Introduction to the theoretical and practical aspects of exercise assessment, exercise interpretations, and exercise prescription. Covers principles of exercise prescription with hands-on experiences using various clinical and field methods to evaluate cardiorespiratory fitness, muscular strength and endurance, flexibility and body composition. Prerequisite: ESTH 372. Odd years.

ESTH 381 2 F
Theory and Technique of Racquet Sports
Analysis of and practice in strokes and tactics; rules, history and skill progression for various levels of instruction. Odd years.

ESTH 384 2 W
Theory and Technique of Rhythmic Activities
Development of personal and teaching skills for theoretical and practical application of rhythms: the leadership of aerobic exercise, dramatic and creative play, folk rounds, and other activities. Development of skills for personal combative activities and techniques for teaching such skills. Odd years.

ESTH 461 2 W
Coaching I
Designed to develop skills for coaching athletic teams. Development of philosophies in harmony with Seventh-day Adventist principles concerning athletic events. Skills in team building and strategies. Practical experience included. Prerequisites: At least 3 of the following courses- ESTH 260, 261, 262, 263, 264. Even years.

ESTH 470 3 F
Management of Physical Education Programs
Relationship of physical education to modern education theory. The organization of physical education activities, organization and classification of pupils; emphasis on the arrangement and construction of equipment and planning of school programs suitable to denominational schools. Odd years.

ESTH 471 3 W
Evaluation in Physical Education
Scientific testing in physical education: analysis and study of tests, diagnosis of physical efficiency, and physiological reactions to exercise. Evaluation of programs and student achievement through measurement technique. Odd years.
ESTH 476   3 F
Physical Education for Children
Activity interests of children and appropriate materials for different age levels; selection of materials and methods of presentation. Consists of a combination of lectures and practice. Applies as one course for the Fitness general education requirement.

ESTH 483   2 S
Theory and Technique of Weight Training and Developmental Physical Education
Theory and technique of weight training, analysis of exercises for the atypical student and correction of postural deviations. Open to department majors and minors. Prerequisite: ESTH 371. Even years.

ESTH 490   2 W
Ethics in Physical Education
The power of religion in developing Christian professionals in health, physical education and recreation. Concepts of the way God, man and Spirit relate to one another; development of Christlike leadership qualities in both instructors and students. Even years.

ESTH 492   3 S
Practicum in Sports Science
Combines classroom work with practical hands-on experience to prepare students to continue their education in the fields of athletic training, personal training, sports physical therapy, or sports medicine. Skills developed in the program are taken from the following areas: anatomy and physiology, athletic injury care, prevention and rehabilitation, physical therapy, fitness programs for individuals and groups, health and wellness, nutrition, and strength training. Should be taken during the student’s last year at Pacific Union College before graduation.

ESTH 495   1-3 F, W, S, Su
Independent Study
Open by permission of the department chair to advanced students with adequate background and experience. Repeatable to a maximum of 3 credits.

HLED 169   2 W
Current Health Concerns
Explores the background and cause of common health problems of the adult as well as prevention and treatment. Designed to promote physical vitality and a sense of well-being.

Food and Nutrition

Lower-Division Course:

FDNT 235   3 F, W, S
Nutrition
Principles of nutrition, emphasizing nutritional requirements, dietary sources of nutrients, nutrient utilization, effects of nutrition on energy intake and weight control, fitness, disease prevention, and life cycle.

Health Education

Lower-Division Courses:

HLED 162   2 F, W, S
Fitness for Life
Introduces the philosophy of health, aimed at lasting nutritional and physical conditioning that promotes a high level of well-being. Emphasis on the prevention of heart disease, obesity, and stress. Laboratory evaluation in body composition, blood analysis, stress testing, and the treadmill.

HLED 166   2 F, W, S
Health Education
Encourages the development of self-awareness and promotes “wellness” as a life-long personal investment. Advocates protection and effective use of human and ecological resources and acquiring skills for individual responsibility. Emphasis on Seventh-day Adventist health principles. Treats substance abuse and nutrition as required for SDA and California teaching credentials.
Faculty
Amy Rebok Rosenthal, chair; Hilary Dickerson, Ileana Douglas, Paul McGraw

Departmental Office: 209 Irwin Hall; 965-6403

Degrees and Programs
History, B.A.................................................................123
Social Studies, B.S. .........................................................124

Students in the History & Social Studies Department explore the civilizations of Africa, Asia, Europe, North America, and South America. Using original and secondary written sources, films, and other documents, and through field trips and summer study programs outside the United States, departmental faculty work with their students in the study of geography, history, and political science.

Scholarship is encouraged and recognized by membership in Phi Alpha Theta, the history honors society, and through debates, lectures, and student and faculty presentations sponsored by Pacific Union College’s Alpha Zeta Theta Chapter.

Students have access to the Utt Memorial Library in the department’s seminar room and the adjacent Honors Program Common Room. Faculty-student suppers and discussion groups complete the collegial and friendly atmosphere, the hallmark of the department.

Prospective teachers should take a Social Studies major and consult with department teachers about non-departmental courses. Following completion of the Social Studies major each student seeking a California teaching certificate must take the California Subject Examination for Teachers (CSET).

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Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.

Major in History, B.A.
A minimum of 55 hours (31 upper-division hours):

► Required Core Courses (30 hours):
HIST 101-102 History of World Civilizations 4-4
HIST 134-135 History of the United States 4-4
HIST 180 History Methods I (3 quarters) 1-1-1
HIST 280 History Methods II 2
HIST 380 History Methods III 2
HIST 450 History Study Tour 4
HIST 480 Senior Thesis (3 quarters) 1-1-1

► Emphases (choose one):

1. American History Emphasis (25 hours)
HIST 411 Seminar in the History of the Americas 4
At least one of the following courses: 3
HIST 210 Introduction to African History (3)
HIST 220 Introduction to Ancient History (3)
HIST 230 Introduction to Asian History (3)
HIST 240 Introduction to Latin American History (3)
At least one of the following courses: 3-4
HIST 328 Medieval Europe (4)
HIST 329 Renaissance Europe (4)
HIST 331 Reason and Revolution (4)
HIST 332 Europe Since Napoleon (4)
HIST 351 History of Culture (3)*
At least three of the following courses: 11-12
HIST 351 History of Culture (3)**
HIST 355 Colonial America (4)
HIST 356 The New Nation: 1763-1820 (4)
HIST 357 Civil War and Reconstruction (4)
HIST 358 Recent America (4)

* Must be a European topic.
** Must be an American topic.
History & Social Studies

At least one of the following courses: 4
HIST 410 Seminar in African History (4)
HIST 412 Seminar in Asian History (4)
HIST 413 Seminar in European History (4)

2. European History Emphasis (25 hours)
HIST 413 Seminar in European History 4

At least one of the following courses: 3
HIST 210 Introduction to African History (3)
HIST 220 Introduction to Ancient History (3)
HIST 230 Introduction to Asian History (3)
HIST 240 Introduction to Latin American History (3)

At least three of the following courses: 11-12
HIST 328 Medieval Europe (4)
HIST 329 Renaissance Europe (4)
HIST 331 Reason and Revolution (4)
HIST 332 Europe Since Napoleon (4)
HIST 351 History of Culture (3)*

At least one of the following courses: 3-4
HIST 351 History of Culture (3)**
HIST 355 Colonial America (4)
HIST 356 The New Nation 1763-1820 (4)
HIST 357 Civil War and Reconstruction (4)
HIST 358 Recent America (4)

At least one of the following courses: 4
HIST 410 Seminar in African History (4)
HIST 411 Seminar in the History of the Americas (4)
HIST 412 Seminar in Asian History (4)

Major in Social Studies, B.S.
A minimum of 70 hours (30 upper-division hours):

> Required Core Courses (30 hours):
HIST 101-102 History of World Civilizations 4-4
HIST 134-135 History of the United States 4-4
HIST 180 History Methods I (3 quarters) 1-1-1
HIST 280 History Methods II 2
HIST 395 Social Studies Seminar 2
HIST 450 History Study Tour 4
HIST 480 Senior Thesis (3 quarters) 1-1-1

> Required Core Electives (40 hours):
Complete at least 40 hours of electives, including at least 21 upper-division hours, distributed as described:
At least 22 hours from the following 22
Additional HIST courses
Any three of the following options: 18
At least 6 hours from ECON courses
At least 6 hours from GEOG courses
At least 6 hours from PLSC courses
At least 6 hours from SOCI courses

Electives for those interested in social work, teaching, medicine, or law should be chosen in consultation with the major advisor.

Teaching Credential
Students desiring to enter a program of studies leading to a California teaching credential in social science should take the B.S. degree in Social Studies. Students will need to pass the social science portion of the CSET exam one quarter prior to doing full-time student teaching. Students are invited to discuss the program with their major advisor in the History & Social Studies Department.

Those who plan to teach on the secondary level should consult with the credential analyst in the Education Department and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the section entitled “Education” in this catalog.

Minor in History
A minimum of 31 hours (12 upper-division hours)

> Required Courses (19 hours):
HIST 101-102 History of World Civilizations 4-4
HIST 134-135 History of the United States 4-4
HIST 180 History Methods I 1-1-1
HIST 280 History Methods II 2

> Required Electives (9 hours):
At least 9 hours from the following: 12
Additional upper-division HIST courses

* Must be a European topic.
** Must be an American topic.
Economics

(See Business Administration and Economics for course descriptions.)

Geography

Lower-Division Courses:

GEOG 210  3 W
World Regional Geography
Regions of the world and their cultural, historical, climatic, and economic similarities or diversities. Emphasis on current developments. Even years.

GEOG 220  3 W
Geography of the Americas
Climate, natural resources, political, and economic geography of North and South America. Odd years.

History

Lower-Division Courses:

HIST 101-102  4-4 F, W, S
History of World Civilizations
Major characteristics and developments in world civilizations based on primary and secondary texts. Also integral: discussion of history’s place in the liberal arts and of the problems of the historical method. Prerequisite: ENGL 100.

HIST 134-135  4-4 F, W, S
History of the United States
The United States from colonial beginnings to the present time. The central theme is the growth of American democracy with its implications for government and society, racial and religious minorities and the emergence of the nation as a world power. Prerequisite: ENGL 100.

HIST 180  1 F, W, S
History Methods I
An introduction to the major, the department, its faculty and to the basic writing skills required for the survey courses in World Civilizations and U.S. History. Repeatable to a maximum of 3 credits.

HIST 210  3 F
Introduction to African History
Sub-Saharan Africa from the earliest societies to the modern era. Topics include the development of ancient African kingdoms and their customs, the spread and influence of Islam, the arrival of Europeans, colonialism and decolonization. Odd years.

HIST 220  3 F
Introduction to Ancient History
Ancient civilizations from their emergence to their collapse, with special attention to the development of government, philosophy and the arts. Even years.

HIST 230  3 W
Introduction to Asian History
Asian civilization from earliest times to the present. Primarily focuses on Japan and China with special attention to social, economic, political and intellectual developments. Odd years.

HIST 240  3 W
Introduction to Latin American History
Latin America from the earliest civilizations to the present. Emphasis on cultural, political, and economic trends. Even years.

HIST 280  2 W
History Methods II
Builds on the writing skills established during the freshman seminar series and introduces majors to the dominant historiographical schools in the field of history. Requires a major research paper based on primary and secondary sources. Prerequisite: HIST 180.

Upper-Division Courses:

HIST 320  3 F
Christian History: To 1054
(See also RELH 320.)
Development of the Christian Church from its pre-Christian origins to 1054, the year of the East-West schism. Emphasis on those social, political, intellectual, and religious pressures that contributed to the formation of Christian doctrines and the establishment of hierarchy and institutions. Detailed examination of significant work by major Christian figures.

HIST 321  3 W
Christian History: 1054 to 1600
(See also RELH 321.)
Developments in the Christian Church from the high Middle Ages to the Protestant Reformation. Emphasis on the major historical, theological and cultural forces that influenced the medieval church and gave rise to the Protestant Reformation. Examination of the work and writings of various Protestant reformers.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 322</td>
<td>3 S</td>
<td>Christian History: 1600 to the Present</td>
<td>(See also RELH 322.) Development of the Christian Church from the aftermath of the Protestant Reformation to the present day. Emphasis on the effects on the Church of major cultural movements, such as the Enlightenment, colonization and imperialism, modern warfare, and ecumenism. Detailed examination of significant works by Christians in response to “the modern world.”</td>
</tr>
<tr>
<td>HIST 328</td>
<td>4 S</td>
<td>Medieval Europe</td>
<td>The vital period from 300 to 1400, which saw the creation of Europe. The priorities and characteristics of the civilization which facilitated the emergence of a multifaceted medieval society that serves as the ancestor of the modern world. Prerequisites: HIST 101, 102, 280. Odd years.</td>
</tr>
<tr>
<td>HIST 329</td>
<td>4 S</td>
<td>Renaissance Europe</td>
<td>Europe from the 14th to 17th centuries, when experiments in art, literature, political theories and systems, and religion were prominent features of society. Prerequisites: HIST 101, 102, 280. Odd years.</td>
</tr>
<tr>
<td>HIST 331</td>
<td>4 W</td>
<td>Reason and Revolution</td>
<td>Europe from 1648 to 1815, with special attention to the effect of the Age of Reason on the modern mind, the growth of the bureaucratic state, and the impact of the era of revolution. Prerequisites: HIST 101, 102, 280. Even years.</td>
</tr>
<tr>
<td>HIST 332</td>
<td>4 F</td>
<td>Europe Since Napoleon</td>
<td>Europe since Napoleon: The political, social and religious trends during the 19th and 20th centuries. Prerequisites: HIST 101, 102, 280. Even years.</td>
</tr>
<tr>
<td>HIST 337</td>
<td>3 S</td>
<td>History of California</td>
<td>The geographic, economic, social, and historical factors which have contributed to the development of California. Even years.</td>
</tr>
<tr>
<td>HIST 335</td>
<td>4 W</td>
<td>Colonial America</td>
<td>The discovery, settlement, and growth of the European colonies in America, emphasizing those religious, political, and economic developments, particularly in the English colonies, that prepared the way for independence. Prerequisites: HIST 134, 135, 280. Even years.</td>
</tr>
<tr>
<td>HIST 337</td>
<td>3 S</td>
<td>History of California</td>
<td>The geographic, economic, social, and historical factors which have contributed to the development of California. Even years.</td>
</tr>
<tr>
<td>HIST 355</td>
<td>4 W</td>
<td>Adventist Heritage</td>
<td>An interdisciplinary exploration of theological and historical issues important to an understanding of the Advent Movement and the ministry of Ellen G. White. Meets the requirement in Prophetic Guidance and Denominational History for SDA teaching credentials.</td>
</tr>
<tr>
<td>HIST 356</td>
<td>4 W</td>
<td>Recent America</td>
<td>The rapid changes in American society, economy, and politics since World War II. Prerequisites: HIST 134, 135, 280. Odd years.</td>
</tr>
<tr>
<td>HIST 357</td>
<td>4 F</td>
<td>Civil War and Reconstruction</td>
<td>Slavery, the nature of the Union and the immediate and permanent effects of the Reconstruction on America. Prerequisites: HIST 134, 135, 280. Even years.</td>
</tr>
<tr>
<td>HIST 380</td>
<td>2 S</td>
<td>History Methods III</td>
<td>Refines writing and analytical skills developed in freshman and sophomore seminars. Introduces majors to the professionalization of history and history as a career. Includes conference paper presentations, admission to and preparation for graduate school, and guest lecturers from the field of history. Prerequisites: HIST 180, 280.</td>
</tr>
<tr>
<td>HIST 395</td>
<td>2 F</td>
<td>Social Studies Seminar</td>
<td>Focuses on the preparation of social studies majors for careers in education, law and history. Incorporates preparation for the California Subject Examination for Teachers in History.</td>
</tr>
</tbody>
</table>
History & Social Studies

HIST 410  4 F
Seminar in African History
Themes in African history. Requires a major research paper. Repeatable for credit under different topics. Prerequisites: HIST 210, 280. Even years.

HIST 411  4 S
Seminar in the History of the Americas
Themes in U.S. and Latin American history. Requires a major research paper. Repeatable for credit under different topics. Prerequisites: HIST 134, 135, 240, 280. Odd years.

HIST 412  4 W
Seminar in Asian History
Themes in Asian history. Requires a major research paper. Repeatable for credit under different topics. Prerequisites: HIST 230, 280. Even years.

HIST 413  4 W
Seminar in European History
Themes in European history. Requires a major research paper. Repeatable for credit under different topics. Prerequisites: HIST 101, 102, 280. Odd years.

HIST 450  4 Su
History Study Tour
Summer travel opportunity for majors. Topics vary. Prerequisites: HIST 101, 102, 134, 135 and appropriate introductory course. Repeatable for credit under different subtitles. Even summers.

HIST 480  1 F, W, S
Senior Thesis
First quarter serves as a preparation course for writing the senior thesis and requires the production of a thesis proposal. Second quarter incorporates the writing of the senior thesis. Third quarter consists of a formal thesis presentation to faculty and peers. Prerequisite: HIST 380. Repeatable to a maximum of 3 credits. Eligible for IP grading.

HIST 495  1-3 F, W, S
Independent Study
Individual research; open by permission of the department chair to advanced students with an adequate background. Repeatable to a maximum of 3 credits.

Political Science

Lower-Division Courses:

PLSC 124  3 F
Introduction to American Government
The development and functioning of the American machinery of government and a study of the political processes, both formal and informal, in which the citizen is involved.

PLSC 274  3 F
Introduction to Political Thought
An introduction to the perennial questions and major thinkers in this area of philosophy.

Upper-Division Courses:

PLSC 328  3 S
Critical World Issues
An important issue is selected by the instructor, discussed in class, and studied as a research topic. May include one or more of the following: the elements of national power, the dynamics of state conflict, national traits and policy patterns, the role of ideologies or moral considerations in the decision-making process, and the relationship between a society’s world view and the realities of policy-making. Repeatable for credit under different topics. Even years.

PLSC 340  3 S
History of Political Thought
Selected ancient, medieval, and modern political thinkers. Prerequisite: PLSC 274. Even years.

PLSC 485  3 F
Foreign Relations of the United States
Episodes selected from the history of American foreign relations to illustrate the development of U.S. foreign policy. Even years.

PLSC 495  1-3 F, W, S
Independent Study
Individual research; open only by permission of the department chair to advanced students with an adequate background. Repeatable to a maximum of 3 credits.

Sociology

(See Psychology & Social Work, Sociology area, for course descriptions.)
Faculty
Lloyd Best, chair; Roy Benton, Richard Rockwell, Steve Waters
Departmental Office: 238 Chan Shun Hall; 965-7269

Degrees and Programs
Mathematics, B.S......................................................... 129
Biomathematics, B.S...................................................... 130
Teaching Credential.......................................................... 130

The Mathematics Department provides courses for future mathematicians, teacher education, general education, and programs in other departments. A common goal of each course is that students will develop problem-solving skills based on mathematical reasoning and understanding, not merely rote memorization. Small class sizes promote communication and teamwork opportunities among students and faculty.

Students majoring in mathematics will have experience with mathematical modeling, abstraction, generalization, logical analysis, and mathematical technology. Students may select courses in order to focus on pure mathematics, applied mathematics, mathematics education, or actuarial certification. The major advisor will assist students with the selection of appropriate courses for each area of focus.

The biomathematics major is an attractive way to prepare for medical or dental school. The major provides excellent preparation for graduate study leading to a Master’s Degree in Public Health with emphasis in statistical analysis. A growing area of biological research uses sophisticated mathematics to study genetics, population fluctuations, and metabolic functions. This major provides entry to such graduate programs as Biomathematics, Biostatistics, Mathematical Biology, and Biometrics.

Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.

Major in Mathematics, B.S.
A minimum of 67 hours (30 upper-division hours)

- Required Core Courses (42 hours):
  MATH 131-132-133 Calculus I-II-III  4-4-4
  MATH 265 Elementary Linear Algebra  4
  MATH 269 Elementary Differential Equations  4
  MATH 275 Logic and Sets  4
  MATH 331 Probability Theory  3
  MATH 351 Introduction to Abstract Algebra I  3
  MATH 385 Mathematical Modeling  4
  MATH 390 Seminar  1
  MATH 421 Elementary Real Analysis I  3
  MATH 490 Senior Seminar  1

At least one of the following courses:
MATH 332 Mathematical Statistics (3)
MATH 352 Introduction to Abstract Algebra II (3)
MATH 422 Elementary Real Analysis II (3)

- Required Core Electives (18 hours):
  At least 18 hours of additional MATH courses, 18
  of which at least 12 hours must be upper-division.

- Required Cognate Courses (7-9 hours):
  CPTR 115 Intro. to Computer Programming  4

At least one of the following courses:
CHEM 451 Physical Chemistry (3)
CPTR 132 Data Structures and Algorithms I (4)
CPTR 347 Database Systems (4)
CPTR 437 Computer Graphics (3)
CPTR 455 Theory of Computation (3)
ENGR 211 Engineering Mechanics (3)
ENGR 216 Circuit Theory (4)
FIN 341 Finance (5)
INFS 470 Management Science (4)
PHYS 211 Physics with Calculus (4)
STAT 322 Statistical Methods (3)
All core and cognate courses should be chosen in consultation with the major advisor. In selecting courses, students are encouraged to consider the recommendations described below:

**Pure Mathematics**

A focus on pure mathematics can lead to careers in university teaching and research following graduate studies in mathematics and related areas, such as statistics, computer science, and physics.

The following courses are recommended for students interested in pure mathematics: MATH 267, MATH 332, MATH 352, MATH 422, MATH 425, and MATH 465.

**Applied Mathematics**

A focus on applied mathematics is a path to careers in medicine, government, business, and industry following graduate study in such areas as computational biology, operations research, and applied statistics.

The following courses are recommended for students interested in applied mathematics: MATH 332, MATH 355, MATH 375, STAT 322, INFS 470.

It is also recommended that students interested in applied mathematics earn at least a minor in an applied field such as Biology, Business Administration, Computer Science, Physics, or Psychology.

**Mathematics Education**

A focus on mathematics education is a major component in a program of studies leading to the California Teaching Credential in secondary school mathematics.

The following courses are recommended for students interested in mathematics education: MATH 341, MATH 354, MATH 355, and MATH 451.

**Actuarial Certification**

Actuarial certification can lead to careers in the insurance and investment industry, where actuaries use a broad knowledge of statistics, finance, and business.

The following courses are recommended for students interested in preparing for the national examinations for actuarial certification: MATH 267, MATH 332, MATH 375, STAT 322, and INFS 470.

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**Major in Biomathematics, B.S.**

A minimum of 86 hours (30 upper-division hours)

**> Required Core Courses (69 hours):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 111-112-113</td>
<td>Biological Foundations</td>
<td>5-5-5</td>
</tr>
<tr>
<td>BIOL 222</td>
<td>Introduction to Research Methods</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 111-112-113</td>
<td>General Chemistry</td>
<td>5-5-5</td>
</tr>
<tr>
<td>CPTR 115</td>
<td>Intro to Computer Programming</td>
<td>4</td>
</tr>
<tr>
<td>MATH 131-132-133</td>
<td>Calculus I-II-III</td>
<td>4-4-4</td>
</tr>
<tr>
<td>MATH 265</td>
<td>Elementary Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 269</td>
<td>Elementary Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 384</td>
<td>Biomathematics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 385</td>
<td>Mathematical Modeling</td>
<td>4</td>
</tr>
<tr>
<td>MATH 390</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MATH 490</td>
<td>Senior Seminar</td>
<td>1</td>
</tr>
<tr>
<td>STAT 322</td>
<td>Statistical Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

**> Required Core Electives (17 hours):**

At least 17 hours from the following courses: 17

(Include at least one MATH course and two BIOL courses)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 320</td>
<td>Cell and Molecular Biology          (4)</td>
</tr>
<tr>
<td>BIOL 328</td>
<td>Animal Behavior                     (4)</td>
</tr>
<tr>
<td>BIOL 331</td>
<td>Marine Science                      (4)</td>
</tr>
<tr>
<td>BIOL 348</td>
<td>Systems Physiology                  (5)</td>
</tr>
<tr>
<td>BIOL 354</td>
<td>Genetics                            (4)</td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Neurobiology                        (4)</td>
</tr>
<tr>
<td>BIOL 469</td>
<td>Immunology                          (4)</td>
</tr>
<tr>
<td>CHEM 371-372</td>
<td>Organic Chemistry I-II             (4-4)</td>
</tr>
<tr>
<td>MATH 331</td>
<td>Probability Theory                  (3)</td>
</tr>
<tr>
<td>MATH 332</td>
<td>Mathematical Statistics             (3)</td>
</tr>
<tr>
<td>MATH 351-352</td>
<td>Intro to Abstract Algebra I-II      (3-3)</td>
</tr>
<tr>
<td>MATH 355</td>
<td>Combinatorics                       (4)</td>
</tr>
<tr>
<td>MATH 375</td>
<td>Numerical Analysis                  (4)</td>
</tr>
<tr>
<td>MATH 421-422</td>
<td>Elementary Real Analysis I-II       (3-3)</td>
</tr>
<tr>
<td>MATH 425</td>
<td>Complex Analysis                    (4)</td>
</tr>
<tr>
<td>MATH 465</td>
<td>Linear Algebra                      (4)</td>
</tr>
</tbody>
</table>

**Recommended Cognate Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 373</td>
<td>Organic Chemistry III               (4)</td>
</tr>
<tr>
<td>CHEM 481</td>
<td>Biochemistry                        (4)</td>
</tr>
<tr>
<td>PHYS 111-112-113</td>
<td>General Physics (4-4-4)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>PHYS 211-212-213</td>
<td>Physics with Calculus (4-4-4)</td>
</tr>
</tbody>
</table>

Many of the core and elective courses for this major carry pre-requisites. All courses should be chosen and sequenced in consultation with the major advisor.
Teaching Credential

Students desiring to enter a program of studies leading to a California teaching credential in mathematics should take the B.S. degree in Mathematics and complete the recommended courses for the Mathematics Education focus. Students will need to pass the mathematics portion of the CSET exam one quarter prior to doing full-time student teaching. Students are invited to discuss the program with their major advisor in the Mathematics Department.

Those who plan to teach on the secondary level should consult with the credential analyst in the Education Department and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the section entitled “Education” in this catalog.

Minor in Mathematics

A minimum of 30 hours (6 upper-division hours)

- **Required Courses (16 hours):**
  - MATH 131-132-133 Calculus I-II-III 4-4-4
  - MATH 275 Logic and Sets 4

- **Required Electives (14 hours):**
  - At least 6 hours from the following: 6
    - Additional upper-division MATH or STAT courses
  - At least 8 hours from the following: 8
    - Additional MATH courses

The following elective courses are especially recommended for students interested in secondary-level teaching: MATH 265, MATH 341, MATH 342, and MATH 351.

The following elective courses are especially recommended for students interested in engineering or a physical science: MATH 265, MATH 267, and MATH 269.

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Mathematics

Service Courses:
(Not applicable to a major or minor in this department)

**MATH 019** 4 F, W

Introductory Algebra

Basic concepts and techniques of algebra for students without recent experience in algebra. Integers, algebraic expressions, first-degree equations and inequalities, simple rational expressions and proportions, integer exponents, scientific notation, polynomials, and graphing linear functions.

**MATH 096** 4 F, W, S

Intermediate Algebra

Factoring, linear and quadratic equations, functions, graphs, rational expressions, rational exponents and radicals, equations involving rational and radical expressions, complex numbers, and systems of equations. Prerequisite: MATH 019 or equivalent.

**MATH 106** 4 F, S

College Algebra

Begins with a quick review of intermediate algebra, including rational exponents and radicals, complex numbers, linear and quadratic equations, and inequalities. Also includes polynomial and rational functions, binomial theorem, composition and inverse of functions, exponentials and logarithms, systems of equations, arithmetic and geometric progressions. Other topics may include further study of polynomials and/or linear programming. Prerequisite: Algebra II in secondary school (C- or above) or MATH 096.

**MATH 113** 2 S

Trigonometry

A study of the six trigonometric functions and their relationships to one another, as well as the study of applications involving these six functions. Included are degree and radian measure, right triangle trigonometry, graphs of the trigonometric functions, inverse trigonometric functions, fundamental identities, addition identities, double-angle and half-angle identities, solutions of trigonometric equations, law of cosines, law of sines, and vector triangles. Prerequisite: MATH 106 or a strong background in algebra.
Mathematics

MATH 130  5 F
Precalculus
Functions and graphs emphasized as tools to prepare the student for calculus. Included are polynomial and rational functions, logarithmic and exponential functions, as well as a thorough treatment of the six trigonometric functions and their inverses. Prerequisite: MATH 106 or a strong background in algebra.

MATH 211-212  3-3 F-W
Foundations of School Mathematics I-II
The logic and structure underlying school mathematics. Concepts, procedures, problem-solving and applications at concrete, pictorial, and abstract levels.
MATH 211 includes problem-solving techniques, sets, logic and deductive reasoning, the arithmetic of whole numbers, fractions, decimals, integers, rational and real numbers, ratio and proportion, and percent. Prerequisite: Algebra II in secondary school (C- or above) or MATH 096.
MATH 212 includes geometry and measurement. Prerequisite: MATH 211.

Lower-Division Courses:
MATH 131-132-133  4-4-4 F-W-S
Calculus I-II-III
MATH 131: Introduction to the techniques of differentiation and integration. Includes the chain rule, fundamental theorem and maximizing/minimizing applications. Graphing calculators and mathematical software tools are used extensively. Prerequisite: MATH 106 and MATH 113, or MATH 130, or a strong background in algebra and trigonometry. Offered fall, winter.
MATH 132: Further skills in integration and its applications. Includes general substitutions, integration by parts, applications to geometry and physics, infinite series, and Taylor expansions. Prerequisite: MATH 131. Offered winter, spring.
MATH 133: Includes special curves, parametrizations, polar coordinates, solid analytic geometry, partial derivatives, and multiple integrals. Prerequisite: MATH 132. Offered spring.

MATH 265  4 F
Elementary Linear Algebra
Matrix algebra and determinants, applications to solving systems of linear equations, vector spaces, linear transformations, eigenvalues, and eigenvectors. Prerequisite: MATH 131.

MATH 267  4 S
Vector Calculus
Functions of more than one variable including the general chain rule, line and surface integrals, divergence, curl, gradient, and Stokes' theorem. Prerequisite: MATH 133.

MATH 269  4 W
Elementary Differential Equations
Ordinary differential equations balancing analytic techniques, qualitative methods, and basic modeling. Topics include eigenvalue methods for linear systems, Laplace transforms, phase plane, null-clines, equilibria, harmonic oscillator, and population models. Prerequisite: MATH 132. Recommended prerequisite: MATH 265.

MATH 275  4 S
Logic and Sets
A bridge to upper-division mathematics, developing the student’s ability to handle abstract concepts and careful proofs. Propositional and predicate logic, various types of proof, algebra of sets and functions, equivalence relations, and countable sets. Prerequisite: MATH 131.

Upper-Division Courses:
MATH 331  3 W
Probability Theory
Theory and applications of probability theory. Probability distributions and densities including multivariate, marginal, and conditional distributions. Expected value, Chebyshev’s and Bayes’ theorems. Moment-generating functions and product moments. Special discrete and continuous distributions and densities. Prerequisites: MATH 132, STAT 222. Odd years.

MATH 332  3 S
Mathematical Statistics
Theory and application of sampling distributions, transformation of variables, central limit theory, estimation, hypothesis testing, Bayesian inference, and decision theory. Prerequisite: MATH 331. Odd years.

MATH 341  4 S
Geometries
The development and history of Euclidean geometry, the axiomatic method and various axiom sets for Euclidean geometry, history of the parallel postulate and discovery of non-Euclidean geometry, neutral and hyperbolic geometry, philosophical implications. Prerequisite: MATH 275. Even years.

MATH 351-352  3-3 F-W
Introduction to Abstract Algebra I-II
MATH 351 is a basic introduction to groups, rings, integral domains, fields, and isomorphisms. Also included are mappings, equivalence relations, and modular arithmetic. MATH 352 is a continuation of MATH 351 that stresses applications. Topics studied include polynomials, elementary Galois theory, geometric constructions, algebraic coding, lattices, and Boolean algebras. Prerequisite: MATH 275. Odd years.
MATH 354   3 F
Number Theory
Topics include Diophantine equations, theorems and conjectures about prime numbers, congruences, the theorems of Euler and Fermat, perfect numbers, continued fractions, and Pythagorean triples. Prerequisite: MATH 275. Odd years.

MATH 355   4 F
Combinatorics
Permutations and combinations, occupancy models, generating functions, recurrence relations, principle of inclusion and exclusion, and pigeonhole principle. Graph Theory includes directed and undirected graphs, Euler and Hamiltonian paths, chromatic number, trees, matchings and coverings. Involves both theory and applications. Prerequisite: MATH 132. Recommended prerequisite: MATH 275. Even years.

MATH 375   4 W
Numerical Analysis
Theory and techniques for finding approximate solutions to mathematical problems, including error analysis, interpolation, approximation, fixed-point iteration, nonlinear equations, systems of equations, integration, and ordinary differential equations. Prerequisites: MATH 132, 265, and CPTR 115. Even years.

MATH 384   4 S
Biomathematics
An introduction to the applications of mathematical methods in the modeling of various biological phenomena. Connections are made between diverse biological examples linked by common mathematical themes. Exploration of a variety of discrete and continuous ordinary and partial differential equation models. Prerequisites: MATH 265, MATH 269. Even years.

MATH 385   4 S
Mathematical Modeling
Mathematical modeling of problems selected from a variety of applied areas, including industry, biology, business, and the social sciences. Both deterministic and stochastic models are considered, with an emphasis on practical problem-solving. Includes exploration of the computer as a problem-solving tool. Prerequisites: MATH 269 and CPTR 115. Odd years.

MATH 390   1 S
Seminar
Topics of current interest in mathematics and mathematics education, including applications of mathematics in other fields, introduced through lectures, reports, and periodicals. Discussion of professional mathematics organizations, conferences, and publications. Prerequisite: upper-division standing. Graded S/F.

MATH 421-422  3-3 F-W
Elementary Real Analysis I-II
The fundamental definitions and theorems underlying single-variable calculus and related topics. MATH 421 includes the completeness property, limits of sequences and functions, and continuity. MATH 422 is a continuation that covers derivatives, the Riemann integral, and infinite series. Prerequisites: MATH 132, 275. Even years.

MATH 425   4 S
Complex Analysis
The elements of the theory of analytic functions including Cauchy’s theorem, calculus of residues, conformality, and applications. Prerequisites: MATH 133, 275. Even years.

MATH 451   4 W
History of Mathematics
A survey of major developments in mathematics from antiquity to modern times. Involves historically relevant problem sets, videos, class discussions, and presentations by students and teacher. Prerequisite: MATH 131. Odd years.

MATH 465   4 S
Linear Algebra
A deeper study than given in MATH 265, including Jordan form, inner product spaces, quadratic forms, Hamilton-Cayley theorem, and normal operators. Prerequisites: MATH 265, 351. Odd years.

MATH 485  1-4 S
Special Topics in Mathematics
Study of a selected topic not covered elsewhere in the curriculum. Course content varies from year to year, reflecting current interest. Topics studied in recent years have been Differential Geometry, Set Theory and Cardinal Numbers, Formal Logic and Godel’s Theorem, Topology, Chaos and Fractals. Repeatable for credit. Further information is available at the departmental office.

MATH 490  1 S
Senior Seminar
Topics of current interest in mathematics and mathematics education, including applications of mathematics in other fields. Under supervision of departmental faculty, each student prepares and presents a paper on a topic of interest. Prerequisite: MATH 390.

MATH 495   1-3 F, W, S
Independent Study
Qualified students may, with the approval of the department chair, undertake a directed research problem suited to their background and experience. Repeatable to a maximum of 9 credits.
Statistics

Lower-Division Course:

**STAT 222**

*4 F, W, S*

**Introduction to Statistics**

Descriptive statistics, graphical methods, basic concepts of probability, binomial and normal probability distributions, central limit theorem, hypothesis testing involving means, confidence intervals, introduction to correlation and regression, and chi-square testing. Examples from a wide variety of disciplines, including business, the social sciences, and the life sciences, to prepare students with varying backgrounds and interests to become intelligent consumers and users of statistics. Prerequisites: Algebra II in secondary school (C- or above) or MATH 096, ENGL 101.

Upper-Division Course:

**STAT 322**

*3 W, S*

**Statistical Methods**

Linear and multiple regression and correlation, analysis of variance, time series analysis and forecasting, and non-parametric methods. Prerequisites: STAT 222, INFS 148 or equivalent.
Faculty
Sylvia Rasi Gregorutti, chair; Charo Caballero-Chambers
Departmental Office: 212 Irwin Hall; 965-6574
Chair’s Office: 965-6510

Degrees and Programs
Spanish, B.A. ................................................................. 135
Teaching Credential ....................................................... 136
Adventist Colleges Abroad ............................................... 136

The Modern Languages Department offers instruction in French, German, Italian, and Spanish. A major is available in Spanish, and minors are available in French, German, Italian, and Spanish.

Pacific Union College participates in the Adventist Colleges Abroad Program (ACA), which provides opportunity for students to study the language of their choice in a foreign country. Participating campuses are in Argentina, Austria, Brazil, France, Germany, Greece, Italy, Japan, Mexico, Spain, Thailand (Chinese) and Ukraine. Hebrew is taught at the Greek campus.

A student majoring in Spanish will be asked to spend from one to three quarters, as needed, in the Adventist Colleges Abroad Program in Spain or in Argentina and to take the courses prescribed by the major advisor. Summer programs are also available in Mexico and Spain.

Major in Spanish, B.A.
A minimum of 48 hours (30 upper-division hours)

All students majoring in Spanish must complete in residence at Angwin at least three upper-division Spanish courses (minimum of twelve hours).

Students with a background in the Spanish language will be placed in the program in accordance with their ability. Those who achieve advanced placement on a departmental proficiency examination may complete a Spanish major by taking 30 hours of upper-division Spanish and a minor in any field.

A student may choose from the following courses, all of which apply toward the major:

SPAN 132   Intensive Intermediate Spanish I  5
SPAN 133   Intensive Intermediate Spanish II  5

or

SPAN 151   Intermediate Spanish I  4
SPAN 152   Intermediate Spanish II  4
SPAN 153   Intermediate Spanish III  4

(Only one intermediate sequence may apply toward the major.)

SPAN 251   Spanish Conversation and Composition I  3
SPAN 252   Spanish Conversation and Composition II  3
SPAN 253   Spanish Conversation and Composition III  3
SPAN 367   Spanish and Latin American Culture and Civilization  4
SPAN 382   Applied Spanish Linguistics  4
SPAN 385   Business Spanish  4
SPAN 440   Spanish and Latin American Film  4
SPAN 441   Readings in Spanish Literature  4
SPAN 442   Readings in Latin American Literature  4
SPAN 495   Independent Study  1-6

Upper-division electives at ACA Campus*

At the Spanish-language ACA campuses (Argentina, Mexico, Spain), a student can choose from a variety of courses that apply to the Spanish major. Course descriptions are in the current Adventist Colleges Abroad Bulletin, available at the departmental offices or online at www.aca-noborders.org.
Modern Languages

Recommended Foreign Language Cognate Courses:
3-quarter sequence of beginning French, German, or Italian (12)
CHIN 111 Beginning Chinese (4)

Additional Recommended Cognate Courses:
ANTH 124 Cultural Anthropology (4)
ARTH 115-116 History of Western Art I-II (4-4)
COMM 330-430 Intercultural Communication I-II (3-2)
HIST 240 Introduction to Latin American History (3)
HIST 332 Europe Since Napoleon (4)
PLSC 485 Foreign Relations of the United States (3)

Teaching Credential
Students desiring to enter a program of studies leading to a California teaching credential in a language other than English with a concentration in Spanish should take the B.A. degree in Spanish. Students will need to pass the language other than English (Spanish concentration) portion of the CSET exam one quarter prior to the full-time student teaching experience. Students are invited to discuss the program with the chair of the Modern Languages Department.

Those who plan to teach on the secondary level should consult with the credential analyst in the Education Department and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the section entitled “Education” in this catalog.

Minors in French, German, Italian and Spanish
A minimum of 30 hours at the intermediate level or higher (15 upper-division hours)

A student desiring a minor in French, German or Italian usually spends one year studying abroad. Spanish minors usually require two quarters of study abroad.

Language Placement
Students who have had previous work in a given language and wish to take a beginning course in that language must obtain the consent of the department chair.

Students from a Spanish background taking Spanish will normally enroll in SPAN 251-252-253 Spanish Conversation and Composition I-II-III.

Those unsure of what course to enroll in should consult with the department chair or the instructor teaching the language the student plans to take. A useful reference is the Modern Languages Lower Division Course Placement chart found on the department web page and in the Academic Advising Handbook.

Adventist Colleges Abroad (ACA)
Pacific Union College is a member of Adventist Colleges Abroad (ACA), a consortium of colleges and universities operated by the Board of Higher Education of the North American Division of the Seventh-day Adventist Church. This consortium affords opportunity to qualified students for international study while completing the requirements of their programs at their home campus. The program allows students to immerse themselves in the culture and life of the host country and become conversant in the language; to mature socially, spiritually, and intellectually; and to develop sensitivity to cultural differences and a sense of responsibility for and mission to other peoples of the world. The following institutions are international affiliates of ACA offering academic year programs of study:

Argentina Universidad Adventista del Plata, Libertador San Martín
Spanish Language and Latin American Culture

Austria Seminar Schloss Bogenhofen, St. Peter am Hart
German Language and Culture

Brazil Instituto Adventista de Ensino, São Paulo
Portuguese Language and Culture

France Campus Adventiste du Salève, Collonges-sous-Salève
French Language and Culture

Germany Friedensau Adventist University, Friedensau bei Burg
German Language and Culture

Italy Istituto Avventista Villa Aurora, Florence
Italian Language and Culture

Spain Seminario Adventista Español, Sagunto
Spanish Language and Culture

In addition to academic-year programs, ACA offers six-week summer terms at the following international study centers:

Austria Seminar Schloss Bogenhofen, St. Peter am Hart:
German

Brazil Instituto Adventista de Ensino, São Paulo:
Portuguese

France Campus Adventiste du Salève, Collonges-sous-Salève:
French

Greece La Sierra University Study Center, Athens: Intermediate Biblical Greek, Beginning Biblical Hebrew

Italy Istituto Avventista Villa Aurora, Florence:
Italian

Japan Saniku Gakuin College, Isumi-gun:
Japanese

Mexico Universidad de Montemorelos, Montemorelos:
Spanish

Spain Colegio Adventista de Sagunto, Sagunto:
Spanish

Thailand Asia-Pacific International University, Saraburi:
Chinese

Ukraine Ukrainian College of Arts and Sciences, Kiev:
Russian
Applicants for international study need not be language majors or minors. Students majoring in various disciplines that allow for one or more elective years within the four-year curriculum may study in the year-abroad and summer session programs without losing credits or prolonging time before graduation by carefully planning the year(s) preceding and following their international study experience. Prerequisites for admission to ACA study abroad programs are as follows:

1. Admission as a regular student to Pacific Union College for the summer or academic year abroad.
2. Competence in the language of the host country for Argentina, France, and Spain (minimum: one year of college or two years of secondary study with a language GPA of 2.50). This level of language competence is prerequisite to one’s being considered for admission. Language competence is encouraged but not required of students enrolling in academic year programs in Austria, Brazil, France, Germany, or Italy, or of students in summer programs.
3. An overall college or university GPA of 2.0.
4. A good citizenship record that gives evidence of better-than-average maturity, adjustability, and congeniality.
5. Presentation of the application with all required information and signatures (academic and financial arrangements) to the Pacific Union College Admissions Office by April 1 (summer program and Spain academic year) or May 1 (all other academic year programs).
6. Attendance at an ACA orientation meeting at Pacific Union College.

College freshmen with competence in the language are not specifically excluded from ACA academic year programs, but the course of study is usually more beneficial to sophomores and juniors, especially those who plan to major or minor in the language. Although enrolled on an international campus, students are registered at Pacific Union College; are considered in residence at this college; and are eligible for all external grants, loans, scholarships, and financial aid offered to students in attendance at Pacific Union College. Credit earned abroad is recorded each term in the Pacific Union College Records Office.

The Adventist Colleges Abroad program offers a wide variety of language courses at intermediate and advanced levels concentrating on grammar, orthography, composition, phonetics, conversation, reading, pronunciation, literature, culture, civilization, and folklore as well as courses in art, education, geography, history, music, physical education, and religion.

Applicants must consult with their major professors, the Modern Language faculty, and the ACA coordinator before enrollment. Pacific Union College personnel advise students about courses to take abroad and determine how the credits will apply toward graduation requirements. Those who carefully plan their academic-year programs with Pacific Union College advisors may earn up to 54 quarter hours toward a baccalaureate degree. ACA courses may apply toward the major, minor, general education, and elective requirements; credit is awarded on the basis of course prefix.

ACA courses are in high demand; applications are processed in the order received. Applications are available at the Admissions Office and the Modern Languages Department. Deadline for summer applications and Spain academic year is April 1; for all other academic year programs, May 1.

For further information:
Adventist Colleges Abroad
12501 Old Columbia Pike
Silver Spring, MD 20904-6600
(301) 680-6444
FAX (301) 680-6463
E-mail: aca@nad.adventist.org
Website: www.aca-noborders.org
Modern Languages

Chinese

Service Course:
(Not applicable to a major or minor in this department)

CHIN 111  4 W
Beginning Chinese I
See course description under SPAN 111.

French

Service Courses:
(Not applicable to a major or minor in this department)

FREN 111-112-113  4-4-4 F-W-S
Beginning French I-II-III
See course description under SPAN 111-112-113. Must be taken in sequence.

German

Service Courses:
(Not applicable to a major or minor in this department)

GRMN 111-112-113  4-4-4 F-W-S
Beginning German I-II-III
See course description under SPAN 111-112-113. Must be taken in sequence.

Italian

Service Courses:
(Not applicable to a major or minor in this department)

ITAL 111-112-113  4-4-4 F-W-S
Beginning Italian I-II-III
See course description under SPAN 111-112-113. Must be taken in sequence.

Spanish

Service Courses:
(Not applicable to a major or minor in this department)

SPAN 105  3 W
Spanish for Health Care Professionals: Basic
Beginning-level conversational Spanish for health service professionals emphasizing pronunciation, vocabulary, and oral communication for medical settings.

SPAN 111-112-113  4-4-4 F-W-S
Beginning Spanish I-II-III
Designed to develop speaking, listening, reading, and writing skills in the language studied. Basic grammar and vocabulary presented through a proficiency-oriented approach emphasizing the practical use of the language.

All courses include an introduction to selected elements of the cultures in countries where the language is used. The first course in the sequence includes a special emphasis on the cultural component, as designated in the course title by L&C (Language & Culture).

These courses are not for students who have had two or more years of secondary school coursework in the language. Must be taken in sequence.

SPAN 131  5 F
Intensive Spanish Review
Intensive “bridge” for students who have completed a beginning course in Spanish but need review and practice before beginning the intermediate level. Includes laboratory practice. Prerequisite: One or two years of Spanish in secondary school.

Lower-division Courses:

SPAN 132-133  5-5 W-S
Intensive Intermediate Spanish I-II
Continuation of SPAN 131, providing intensive study of Intermediate Spanish (see course description under SPAN 151-152-153). Must be taken in sequence. Prerequisite: Passing grade in SPAN 131 or equivalent.

SPAN 151-152-153  4-4-4 F-W-S
Intermediate Spanish I-II-III
Designed to increase proficiency in speaking, listening, reading and writing the language studied. Focus on reinforcing control of basic grammar and on vocabulary expansion. Selected cultural features of countries where the language is used. Individualized laboratory practice. Must be taken in sequence. Prerequisite: Two years of secondary Spanish or SPAN 111-112-113 or its equivalent.

SPAN 251-252-253  3-3-3 F-W-S
Spanish Conversation and Composition I-II-III
Emphasis on oral and written expression in Spanish. For non-native students having completed more than two years of secondary-school Spanish or intermediate-level college Spanish; and for students whose native language is Spanish. Fulfills the intermediate-level general education language requirement for the B.A.

Upper-division Courses:
(Taught in Spanish)

SPAN 367  4 F
Spanish and Latin American Culture and Civilization
A study of Spanish and Latin-American culture and civilization with emphasis on contemporary life. Even years.
SPAN 382  4 F
Applied Spanish Linguistics
  Introduces principles of phonetics, phonology, morphology, and syntax. Special reference to foreign language teaching methodology and the particular problems of teaching Spanish. Odd years.

SPAN 385  4 W
Business Spanish
  Practice and vocabulary-building in Spanish as used in business, commerce, finance, and economics. Odd years.

SPAN 440  4 S
Spanish and Latin American Film
  Examination and discussion of Spanish and Latin American film in the various historical, political, and social contexts. Even years.

SPAN 441  4 W
Readings in Spanish Literature
  Readings in representative poets, novelists, and playwrights. Even years.

SPAN 442  4 S
Readings in Latin American Literature
  Readings in representative poets, novelists and playwrights. Odd years.

SPAN 495 1-3 F, W, S
Independent Study
  Thirty-six hours of reading per hour of credit. A weekly conference with the instructor. Enrollment limited to Spanish majors; admission by approval of the instructor. Repeatable once for credit.
Faculty
Rachelle Berthelsen Davis, chair; Bruce Rasmussen, Rosalie Rasmussen, Lynn Wheeler
Asher Raboy, Artist in Residence
Departmental Office: 102 Paulin Hall; 965-6201

Degrees and Programs:
Music, B.Mus. ................................................................. 140
Music, B.S. ................................................................. 142
Music, A.S. ................................................................. 142

The Music Department offers a two-year Associate of Science degree and two four-year curricula leading to Bachelor of Music and Bachelor of Science degrees. Emphasis in the Bachelor of Music degree may be in Music Education or in Performance.

Entrance Requirements
All music majors must take the Theory Placement Examination and the Functional Keyboard Facility Examination the first quarter in residence. Unsatisfactory performance mandates enrollment in MUSP 121 and/or MUTH 103 and/or MUTH 103L.

General Performance Requirements
Study in the major performance area is required each quarter of residence for Bachelor of Music majors. Performance emphasis majors must take an additional 6 hours of secondary performance credit. Secondary performance studies are usually permitted only after the student has reached upper-division status in the major performance area. Credit is based upon a half-hour lesson and four hours of practice per week for each credit hour earned.

A juried performance is expected each quarter for music majors when they are taking lessons in their major performance areas. A student preparing a required recital must perform the program for a faculty audition committee one month prior to the projected recital date. Specific year-by-year requirements in the various performance areas and details regarding jury evaluations are available at the Music Department Office and in the Music Department Student Handbook.

Required Recitals & Ensembles
Performance emphasis majors present a half-hour recital (MUSP 390) during the junior year and a one-hour recital (MUSP 490) in the senior year. Music education emphasis majors present a half-hour recital (MUSP 489) in the senior year. Bachelor of Science majors present a half-hour recital (MUSP 489) during the senior year or complete a special project (MUED 489) in an area of particular interest. The topic is chosen in consultation with the department chair and a teacher in the area of the project, with the approval of the music faculty. Associate of Science majors perform a minimum of 15 minutes in a recital during their last quarter of lessons.

All majors must periodically perform in general student recitals. For details, see the Music Department Student Handbook.

All four-year degree majors are required to register for ensemble credit each quarter in residence except while doing student teaching. Associate of Science majors are required to register for a minimum of six quarters of ensembles.

Concert Attendance
All four-year majors are required to attend a minimum of seven art music concerts each quarter in residence. Associate of Science majors are required to attend seven art music concerts during each of at least six quarters.

Certificate of Achievement
To encourage excellence in performance, the department may award the Certificate of Achievement to any outstanding music major who presents a recital or is soloist in a major performance of particularly high quality during each of the four years in residence. The student must apply to the music faculty for this award after giving the final recital.

Required Examinations
All music majors are required to take examinations prepared by departmental faculty during their first and last quarter in residence and the Major Field Achievement Test in music is required during the final quarter before graduation.
Bachelor of Music, B.Mus.

Minimum of 119 hours (56 upper-division hours)

- Required Core Courses (37 hours):
  - MUED 241 Basic Conducting 2
  - MUHL 245 World Music and Culture 3
  - MUHL 331 Music/Antiquity through Baroque 3
  - MUHL 332 Music/Classic & Romantic Eras 3
  - MUHL 333 Contemporary Music 3
  - MUTH 122-123 Theory I 3-3
  - MUTH 221-222-223 Theory II 3-3-3
  - MUTH 221L-222L-223L Theory II Laboratories 1-1-1
  - MUTH 224 Music Tech: Notation 1
  - MUTH 225 Music Tech: Editing & Synthesis 2

- Emphases (Choose one):
  - Music Education Emphasis (116-119 hours)
    - Required Core Courses (62 hours):
      - **Music Education**
        - MUED 338 Music for Children 2
        - MUED 338L Music for Children Laboratory 1
        - MUED 342 Instrumental Conducting 3
        - MUED 343 Choral Conducting 3
        - MUED 381-382-383 Music in Elem. & Sec. Schools 2-2-2
        - At least 10 hours from the following*:
          - MUED 370 Handbell Techniques & Methods (1)
          - MUED 371** Trumpet Techniques & Methods (1)
          - MUED 372** Trombone Techniques & Methods (1)
          - MUED 373 Horn/Tuba Techniques & Methods (1)
          - MUED 374** Flute Techniques & Methods (1)
          - MUED 375** Single-Reed Techniques & Methods (1)
          - MUED 376 Double-Reed Techniques & Methods (1)
          - MUED 377** Percussion Techniques & Methods (1)
          - MUED 378** Violin/Textbox Techniques & Methods (1)
          - MUED 379 Cello/Db1 Bass Techniques & Methods (1)
          - MUED 473-474 Piano Pedagogy (1-1)
          - MUED 475-476 Organ Pedagogy (1-1)
          - MUED 477** Voice Pedagogy (2)
          - MUED 478-479 String Pedagogy (1-1)

  - **Music Ensemble** 12
    - One large ensemble for each quarter in residence except the student-teaching quarter. Participation in both choral and instrumental ensembles for a minimum of three quarters each and in a small ensemble in the area of one’s specialty for a minimum of one quarter. For piano majors, three of the total hours must be in MUEN 359 Keyboard Ensemble. When MUEN 359 is taken, the large ensemble is not required.

- Music Performance
  - MUSP 163 and 363 Performance Studies: Major 12
    - (maximum 6 hours lower-division)
  - MUSP 489*** Senior Recital 1

- Music Theory
  - MUTH 331 Orchestration 3
  - MUTH 332 Counterpoint 3
  - MUTH 431 Form & Analysis 3
  - MUTH 432 Composition 1-1

- Required Professional Education Courses (54-57 hours):
  - See the section entitled “Education” in this catalog for further information about prerequisites and admission to the teacher education program.
    - EDUC 101 Introduction to Teaching 1
    - EDUC 101L Classroom Observation 1
    - EDUC 238 Computer Technology for Teachers 2
    - EDUC 238L Laboratory 1
    - EDUC 333 Educational Psychology 3
    - EDUC 335 Ethical Dimensions of Teaching/Learning 2
    - EDUC 336 The Multicultural Classroom 3
    - EDUC 337 ELL Pedagogy 4
    - EDUC 350 Exceptional Children in the Classroom 3
    - EDUC 358 Literacy in the Content Areas 3
    - EDUC 361 Middle School Teaching Strategies 3
    - EDUC 362 Secondary Area Teaching Strategies 3
    - EDUC 390/390L K-12 Bible & Practicum 0-3
      - (optional- for religion endorsement)
    - EDUC 480 Classroom Management 3
    - EDUC 490 Student Teaching Seminar: Subject Specific 1
    - EDUC 491 Student Teaching Seminar: Designing Instruction 1
    - EDUC 492 Student Teaching Seminar: Assessing Learning 1
    - EDUC 494 Middle School Field Experience 1
    - EDUC 494 Senior High Field Experience 1
    - EDUC 494 Full-Time Student Teaching 12
    - EDUC 498 Student Teaching Seminar: Culminating Teaching Experience 1
    - ENGL 335 Survey of Linguistics 4

* Piano majors must take MUED 473-474 and organ majors must take MUED 475-476.
** Require courses (unless they are in the major performance area).
**Recommendation for Directed Teaching**

Before acceptance into the Directed Teaching program, students must have passed the Keyboard Proficiency and Keyboard Harmony Examinations as prerequisites for recommendation by the music faculty. For details, see the *Music Department Student Handbook*.

**Teaching Credential**

Students desiring to enter a program of studies leading to a California teaching credential in music should take the B.Mus. degree with the emphasis in Music Education. Students will need to pass the music portion of the CSET exam one quarter prior to doing full-time student teaching. Students are invited to discuss the program with their major advisor in the Music Department.

Those who plan to teach on the secondary level should consult with the credential analyst in the Education Department and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the Education section of this catalog.

**Performance Emphasis** (82 hours)

**Music Education**

MUED 349 Directed Teaching: Music (in major area) 1-1

One of the following courses:

- MUED 342 Instrumental Conducting (3)
- MUED 343 Choral Conducting (3)

At least 4 hours from the following*:

- MUED 370 Handbell Techniques & Methods (1)
- MUED 371 Trumpet Techniques & Methods (1)
- MUED 372 Trombone Techniques & Methods (1)
- MUED 373 Horn/Tuba Techniques & Methods (1)
- MUED 374 Flute Techniques & Methods (1)
- MUED 375 Single-Reed Techniques & Methods (1)
- MUED 376 Double-Reed Techniques & Methods (1)
- MUED 377 Percussion Techniques & Methods (1)
- MUED 378 Violin/Viola Techniques & Methods (1)
- MUED 379 Cello/Double Bass Techniques & Methods (1)
- MUED 473-474 Piano Pedagogy (1-1)
- MUED 475-476 Organ Pedagogy (1-1)
- MUED 477 Voice Pedagogy (2)
- MUED 478-479 String Pedagogy (1-1)

* Piano majors must take MUED 473-474; organ majors must take MUED 475-476; voice majors must take MUED 477; string majors must take MUED 478-479; and all other majors must take 2 hours of MUED 495, studying the pedagogy and literature of their area of performance emphasis.

**Music Ensemble**

One large ensemble for each quarter in residence. 12

For piano majors, three of the twelve hours must be in MUEN 359, Keyboard Ensemble. When MUEN 359 is taken, the large ensemble is not required.

Chamber music in the major area 3

**Music Performance**

MUSP 164 and 364 Performance Studies: Major 36 (maximum 18 hours lower-division)

MUSP 386 Performance Studies: Secondary Area 6

MUSP 390 Junior Recital 1

MUSP 490 Senior Recital: Emphasis Major 1

**Music History and Literature**

A literature course in the area of the student’s major. Keyboard majors take MUHL 337; string majors take MUHL 339; all others take MUHL 495 studying the literature of their major instrument.

**Music Theory**

- MUTH 331 Orchestration 3
- MUTH 332 Counterpoint 3
- MUTH 431 Form & Analysis 3
- MUTH 432 Composition 1-1-1

> **General Education Requirements:**

The general-education requirements for the B.Mus. degree are the same as for the B.S. degree except as indicated below.

1. I.C (Statistics) is not required.
2. Only one course is required in II.B (Social Sciences).
3. Only one course is required from either III.B.1 (Visual Arts) or III.B.4 (Language & Culture).
4. III.B.2 (Music) is met by the major.
5. III.B.3 (Philosophy) is not required.
6. Only two courses are required from IV.B (Science) and IV.C (Applications of Scientific and Mathematical Reasoning). The courses must come from separate subsections and one course must include a laboratory.
7. Section VII (Practical and Applied Arts) is not required.
8. Section VIII (Foreign Language) is not required, except that voice emphasis majors require one year of French, German, or Italian.

Special GE considerations for music education emphasis majors:

1. Teacher candidates must pass a test or take a course in U.S. Constitution (satisfied by HIST 134-135 or HIST 356 or PLSC 124).
2. Teacher candidates must complete RELH 360 as well as 3 hours of Doctrinal Studies (RELT 331, 332 or 333).
3. Teacher candidates must take HLED 166.
**Major in Music, B.S.**

A minimum of 65 hours (21 upper-division hours)

- **Required Core Courses (60 hours):**
  - MUED 241 Basic Conducting 2
  - MUHL 245 World Music and Culture 3
  - MUHL 331 Music/Antiquity through Baroque 3
  - MUHL 332 Music/Classic & Romantic Eras 3
  - MUHL 333 Contemporary Music 3
  - MUTH 122-123 Theory I 3-3
  - MUTH 122L-123L Theory I Laboratories 1-1
  - MUTH 221-222-223 Theory II 3-3-3
  - MUTH 221L-222L-223L Theory II Laboratories 1-1-1
  - MUTH 224 Music Tech: Notation 1
  - MUTH 225 Music Tech: Editing & Synthesis 2
  - MUSP 163 and 363 Performance Studies: Major (maximum 6 hours lower-division) 7

One large ensemble for each quarter in residence 12

**At least one of the following courses:**
- MUED 489 Senior Project (1)
- MUSP 489 Senior Recital (1)

**At least 3 hours from the following:**
- MUED 331 Orchestration (3)
- MUTH 332 Counterpoint (3)
- MUTH 431 Form & Analysis (3)
- MUTH 432 Composition (1-3)

**Required Core Electives (5 hours):**

- At least 5 hours from the following:
  - Five additional hours selected in consultation with the advisor and approved by the music faculty to develop a solid background in the area of the student’s recital or project.

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**Major in Music, A.S.**

A minimum of 38 hours

- **Required Core Courses (29 hours):**
  - MUHL 105 Survey of Music 3
  - MUHL 245 World Music and Culture 3
  - MUTH 122-123 Theory I 3-3
  - MUTH 122L-123L Theory I Laboratories 1-1
  - MUSP 163 Performance Studies 6
  - MUSP 289 Associate Recital 1

- **Required Core Electives (9 hours):**
  - 9 hours of music electives, selected in consultation with the music advisor.

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**Music Education**

**Lower-Division Courses:**

**MUED 106  2 F**

**Issues in Church Music**

Analysis of issues in church music. Acquaints students with traditional and contemporary worship practices. Odd years.

**MUED 241  2 S**

**Basic Conducting**

Foundation for the development of skill in the art of conducting various ensembles.

**MUED 251-252-253  1-1-1 F-W-S**

**Singer’s Diction**

Correct pronunciation of text in other languages (Latin, English, German, Italian and French), based on the International Phonetic Alphabet (IPA). Builds good habits of tone, based on vowel placement and consonant articulation. Required of voice majors. Must be taken in sequence.

**Upper-Division Courses:**

**MUED 338  2 F**

**Music for Children**

Music for children from infancy through lower elementary school grades.

Surveys standard children’s music methods. Emphasizes development of child’s voice through solfege and authentic folk materials and covers teaching methods for singing, rhythmic activities and listening skills. Odd years.

**MUED 338L  1 F, W, S**

**Music for Children Laboratory**

Observation and practical experience with young children, using methods discussed in MUED 338. Highly recommended complement to MUED 338. May be taken any quarter. Prerequisite: MUED 338.
MUED 342  3 W
Instrumental Conducting
Practical work with instrumental groups. Stick technique, score reading and preparation, aural skills for conductors, and other related activities. Prerequisite: MUED 241. Even years.

MUED 343  3 W
Choral Conducting
Development of conducting gestures and rehearsal techniques for choral ensembles. Opportunities are provided to conduct secondary and college-level choral groups. Prerequisite: MUED 241. Odd years.

MUED 349  1 F, W, S
Directed Teaching: Music
Lessons taught by students in studio or classroom. Supervised and evaluated. Usually taken in conjunction with MUED 473 or 478 and continued winter and spring quarters. Repeatable to a maximum of 3 credits.

MUED 370  1 W
Handbell Techniques and Methods
Basic and advanced ringing techniques, handbell literature, group organization, solo and ensemble ringing, bell assignments, and bell maintenance. Even years.

MUED 371  1 F
Trumpet Techniques and Methods
Teaching and performing trumpet through the intermediate level. Performance techniques, pedagogical methods and materials, maintenance, and practical teaching experience. Odd years.

MUED 372  1 W
Trombone Techniques and Methods
Objectives similar to those of MUED 371. Odd years.

MUED 373  1 S
Horn/Tuba Techniques and Methods
Objectives similar to those of MUED 371. Odd years.

MUED 374  1 F
Flute Techniques and Methods
Objectives similar to those of MUED 371. Even years.

MUED 375  1 W
Single-Reed Techniques and Methods
Objectives similar to those of MUED 371. Even years.

MUED 376  1 S
Double-Reed Techniques and Methods
Objectives similar to those of MUED 371. Even years.

MUED 377  1 F
Percussion Techniques and Methods
Objectives similar to those of MUED 371. Emphasis on snare drum, timpani, and mallets. Solo and ensemble playing. Even years.

MUED 378  1 F
Violin/Viola Techniques and Methods
Ability to play and teach violin and viola at the beginning and intermediate levels. Elementary individual and class methods of instruction and basic maintenance. Odd years.

MUED 379  1 W
Cello/Double Bass Techniques and Methods
Objectives similar to those of MUED 378. Even years.

MUED 381  2 F
Music in Elementary and Secondary Schools I
Theories of and practice with musical development. Emphasizes the Kodály approach to teaching music in the elementary school. Deals with vocal development of children from the nonsinger to the junior-high chorister. Prerequisite: MUED 338. Even years.

MUED 382  2 W
Music in Elementary and Secondary Schools II
Music education philosophies and their practical applications for designing and implementing a secondary school choral curriculum. Topics include recruitment, auditions, repertoire selection, and classroom management. Prerequisites: MUED 241 and 338. Even years.

MUED 383  2 S
Music in Elementary and Secondary Schools III
Development and maintenance of instrumental programs in elementary, middle, and secondary schools. Objectives, evaluative techniques, motivation, administration, recruiting, scheduling, technology, repertoire, and current topics. Prerequisites: MUED 241 and 338. Even years.

MUED 470, 480  2, 2 Su
Music Workshops
During the summer session various workshops are offered in piano, choral music and strings.

MUED 473-474  1-1 F-W
Piano Pedagogy
Teaching piano, including materials and methods of instruction. Recommended corequisite: MUED 349. Odd years.
MUED 475-476  1-1 W-S  
Organ Pedagogy  
Teaching organ at beginning and intermediate levels. Survey of materials and methods of instruction. Odd years.

MUED 477  2 S  
Vocal Pedagogy  
Principles and methods of vocal instruction in Western cultures. Even years.

MUED 478-479  1-1 F, W  
String Pedagogy  
Teaching string instruments, including materials and methods of instruction. Recommended corequisite: MUED 349. Even years.

MUED 489  1 F, W, S  
Senior Project  
Special project for B.S. majors and, in lieu of MUSP 489, for B.Mus. education emphasis majors in unusual circumstances. By permission of the music faculty and in consultation with the advisor and the department chair.

MUED 495  1-3 F, W, S  
Independent Study  
Advanced independent project in music education. Requires approval of the department chair. Three hours maximum.

**Lower-Division Courses:**

MUEN 154  1 F, W, S  
I Cantori  
Mixed-voice chamber ensemble designed for voice majors and other serious vocal students. Considered a major touring ensemble; enjoys a full performance schedule. Core repertoire, both sacred and secular, performed with demanding performance standards. Auditions at the beginning of fall quarter, and membership required for the complete year. Corequisite: MUEN 161.

MUEN 155  1 F, W, S  
Symphonic Wind Ensemble  
Advanced instrumentalists rehearse and perform a wide variety of music in various settings. Tours and workshops on alternate-year basis. Members are selected by audition.

MUEN 156  1 F, W, S  
Orchestra  
Orchestral masterworks performed in quarterly concerts and other events. For advanced instrumentalists, both college students and community residents. Members are selected by audition.

MUEN 157  1 F, W, S  
String and Piano Chamber Music  
Experience with chamber music for piano with strings under the direction of a Music faculty member. Includes duos, trios, and larger groups.

MUEN 159  1 F, W, S  
Keyboard Ensemble  
Literature for keyboard duets, duos, and groups with instruments or voices and keyboard accompaniment. Three quarters required of all B.Mus. or A.S. Piano Pedagogy Module majors.

MUEN 160  1 F, W, S  
Big Band  
Emphasis on the rehearsal and performance of big band jazz. Development of reading and improvisation skills. Participation by audition/permission of instructor.

MUEN 161  1 F, W, S  
Chorale  
Large mixed chorus considered a minor touring ensemble. Repertoire includes music from a wide range of styles and periods, both sacred and secular. Membership is preferred for the complete year. Membership by audition.

MUEN 175  1 F, W, S  
Flute Quartet  
Normally limited to members of Symphonic Wind Ensemble. By audition.

MUEN 178  1 F, W, S  
Saxophone Quartet  
Normally limited to members of Symphonic Wind Ensemble. By audition.

MUEN 179  1 F, W, S  
Woodwind Quintet  
Normally limited to members of Symphonic Wind Ensemble. By audition.

MUEN 180  1 F, W, S  
Brass Quintet  
Normally limited to members of Symphonic Wind Ensemble. By audition.

MUEN 181  1 F, W, S  
Brass Ensemble  
Normally limited to members of Symphonic Wind Ensemble. By audition.

MUEN 182  1 F, W, S  
Trombone Choir  
By audition.

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**Music Ensembles**

The following satisfy the music major large-ensemble requirements: Chorale, I Cantori, Orchestra, Symphonic Wind Ensemble, and Keyboard Ensemble. Additional small ensembles are also offered. All music ensembles are repeatable for credit.

Upper-division credit for juniors and seniors is determined by the student’s proficiency and previous experience in college-level music.
MUEN 184  1 F, W, S
String Quartet
   Normally limited to members of the Orchestra. By audition.

MUEN 186  1 F, W, S
Beginning Handbell Choir
   Open to any student with music reading skills.

Upper-Division Courses:

MUEN 354  1 F, W, S
I Cantori
   (See description of MUEN 154.)
Corequisite: MUEN 361.

MUEN 355  1 F, W, S
Symphonic Wind Ensemble
   (See description of MUEN 155.)

MUEN 356  1 F, W, S
Orchestra
   (See description of MUEN 156.)

MUEN 357  1 F, W, S
String and Piano Chamber Music
   (See description of MUEN 157.)

MUEN 359  1 F, W, S
Keyboard Ensemble
   (See description of MUEN 159.)

MUEN 360  1 F, W, S
Big Band
   (See description of MUEN 160.)

MUEN 361  1 F, W, S
Chorale
   (See description of MUEN 161.)

MUEN 375  1 F, W, S
Flute Quartet
   (See description of MUEN 175.)

MUEN 378  1 F, W, S
Saxophone Quartet
   (See description of MUEN 178.)

MUEN 379  1 F, W, S
Woodwind Quintet
   (See description of MUEN 179.)

MUEN 380  1 F, W, S
Brass Quintet
   (See description of MUEN 180.)

MUEN 381  1 F, W, S
Brass Ensemble
   (See description of MUEN 181.)

MUEN 382  1 F, W, S
Trombone Choir
   (See description of MUEN 182.)

MUEN 384  1 F, W, S
String Quartet
   (See description of MUEN 184.)

MUEN 386  1 F, W, S
Advanced Handbell Choir
   Rings level three music and above. Available by audition to students with previous ringing experience. Performs both on and off campus.

MUHL 105  3 F, W, S
Survey of Music
   Music in western civilization, including music fundamentals and a brief history from antiquity to the present. Presented by recordings, visual aids, and lectures.

MUHL 206  2 W
Music in Christian Worship
   History and practice of the use of music in worship services. Emphasis on both liturgical and nonliturgical forms of worship. Odd years.

MUHL 245  3 W
Introduction to World Music and Culture
   Exploration of the importance of music in society around the world. Examines how people from a wide variety of cultures incorporate music into their lives. Emphasis is placed on non-Western and folk music.

Upper-Division Courses:

MUHL 331  3 F
Music from Antiquity Through the Baroque
   Music history through the Baroque Era. Development of forms and styles, cultural backgrounds and biographies, and analysis of basic musicological methods. Prerequisites: ENGL 101, the ability to read both bass and treble clefs, and a basic knowledge of music theory. Odd years.

MUHL 332  3 W
Music of the Classic & Romantic Eras

MUHL 333  3 S
Contemporary Music
   Music history from the Post-Romantics to the present. Includes some discussion of non-classical American music and its effect on the composition of classical music. See description and prerequisites for MUHL 331. Odd years.
**MUHL 337 2 W**  
**Keyboard Literature**  
The development of keyboard instruments; forms and literature pertaining to teaching and performance. Even years.

**MUHL 339 2 W**  
**String Literature**  
The development of string instruments; forms and literature pertaining to teaching and performance. Odd years.

**MUHL 495 1-3 F, W, S**  
**Independent Study**  
Advanced, independent project in music history. Requires approval of the department chair. Three hours maximum.

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**Music Performance**

**Lower-Division Courses:**

**MUSP 120-124 1 F, W, S**  
**Music Lessons: Class Instruction**  
Lessons for groups of four or more students in voice or instruments. Meets one clock hour per week. Not applicable toward the principle performance area of a music major. Repeatable for credit.

**MUSP 162 1-2 F, W, S**  
**Music Lessons: General**  
Elementary instruction in voice, harpsichord, organ, piano, guitar, and orchestra and band instruments. Not applicable toward the music major. Incurs an additional charge.* Repeatable for credit.

**MUSP 163 1-2 F, W, S**  
**Performance Studies: Major**  
Private lessons in voice, harpsichord, organ, piano, guitar, and orchestra and band instruments. Applicable to all majors except B.Mus. performance emphasis. One hour is usually taken each quarter. Repeatable for credit.

**MUSP 164 1-3 F, W, S**  
**Performance Studies: Emphasis Major**  
Private lessons in voice, harpsichord, organ, piano, guitar, orchestra and band instruments. Applicable to B.Mus. performance emphasis. Three hours are usually taken each quarter. Repeatable for credit.

**MUSP 289 1 F, W, S**  
**Associate Degree Recital**  
Required of associate degree students, the final quarter of lessons culminates in this recital. Minimum of 15 minutes.

**Upper-Division Courses:**

**MUSP 319 1-2 W**  
**Keyboard Harmony**  
For pianists and organists. Learning to transpose, modulate, and harmonize melodies; developing ability to improvise. Admission by permission of the instructor. Odd years.

**MUSP 320-324 1 F, W, S**  
**Music Lessons: Class Instruction**  
(See description of MUSP 120-124.)

**MUSP 362 1-2 F, W, S**  
**Music Lessons: General**  
(See description of MUSP 162.)

**MUSP 363 1-2 F, W, S**  
**Performance Studies: Major**  
(See description of MUSP 163.)

**MUSP 364 1-3 F, W, S**  
**Performance Studies: Emphasis Major**  
(See description of MUSP 164.)

**MUSP 386 1-2 F, W, S**  
**Performance Studies: Secondary Area**  
Private lessons for majors in secondary areas. Performance majors take 6 hours; music education majors, up to 6 hours by request. Available to students with upper-division status in the major performance area. Normally limited to one area and one hour credit per quarter. Selected in consultation with the major advisor. Repeatable for credit.

**MUSP 390 1 F, W, S**  
**Junior Recital**  
Required of performance emphasis majors in the junior year. Minimum of 30 minutes.

**MUSP 489 1 F, W, S**  
**Senior Recital**  
Required of music-education emphasis and B.S. music majors, the final quarter of lessons culminates in this recital. (See MUED 489 for exception.) Minimum of 30 minutes.

**MUSP 490 1 F, W, S**  
**Senior Recital: Emphasis Major**  
Required of performance emphasis majors, the final quarter of lessons culminating in this recital. Minimum of 60 minutes.

**MUSP 495 1-3 F, W, S**  
**Independent Study in Performance**  
Advanced, independent research project in solo and ensemble literature and pedagogy for the major instrument. Requires approval of department chair. Repeatable to a maximum of 3 credits.

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*For further information on the cost of private music lessons, see the section entitled “Financial Information” in this catalog.*
Music Theory

Lower-Division Courses:

**MUTH 103** 3 F  
Fundamentals of Music Theory  
Rudiments of music including notation, rhythm, melody, harmony, timbre, form, and texture. Usually taken at the same time as MUTH 103L. Required of majors who have not passed the Theory I entrance examination. Does not apply to a music major.

**MUTH 103L** 1 F  
Fundamentals of Music Theory Laboratory  
Exercises in aural and keyboard skills and sight singing. Meets two days a week. Usually taken in conjunction with MUTH 103. Required of majors who have not passed the Theory I entrance examination. Does not apply to a music major.

**MUTH 122-123** 3-3 W-S  
Theory I  
An integrated study of the parameters of music within a wide spectrum of cultures and historical periods. Exploration of the simpler forms and textures. Introduction to composition and arranging in vocal and instrumental applications. Must be taken in sequence.

**MUTH 221-222-223** 3-3-3 F-W-S  
Theory II  
Advanced study of musical parameters begun in Theory I. Movement toward more complex forms and textures. Must be taken in sequence. Prerequisites: MUTH 122-123.

**MUTH 221L-222L-223L** 1-1 W-S  
Theory II Laboratory  
Exercises in sight-singing, dictation, and keyboard skills. Meets two days a week. Usually taken in conjunction with MUTH 221-222-223.

**MUTH 224** 1 F  
Music Technology: Notation  
Fundamentals of music notation and desktop publishing using Finale. Presented through hands-on laboratory sessions. Part of the required sequence for Bachelor of Science in music and Bachelor of Music. Prerequisite: MUTH 122.

**MUTH 225** 2 W  
Music Technology: Editing & Synthesis  
Fundamentals of music recording, editing, and synthesis using industry standard software. Presented through lectures and hands-on laboratory sessions. Part of the required sequence for Bachelor of Science in music and Bachelor of Music. Prerequisite: MUTH 122.

Upper-Division Courses:

**MUTH 233** 3 W  
Counterpoint  
Basic contrapuntal principles as generally illustrated in music of various historical styles. Prerequisite: MUTH 123. Even years.

**MUTH 431** 3 S  
Form and Analysis  
Form and structure of music from plainchant to the present. Prerequisite: MUTH 123. Even years.

**MUTH 432** 1 F, W, S  
Composition  
Composing the smaller forms of music for a variety of vocal and instrumental combinations. Essentially private one on one sessions that will be unique for each student. Repeatable for credit. Prerequisite: MUTH 123.

**MUTH 495** 1-3 F, W, S  
Independent Study  
Advanced independent project in composition or theory. Requires approval of the department chair. Three hours maximum.
The faculty of the Nursing Department is committed to providing a broad, liberal and professional education to a diverse population of traditional and adult nursing students in multiple settings. This task is undertaken in a climate of Christian service, dedicated to the development of the whole person, and designed to serve the health needs of individuals, families, and the community at large. The curriculum and activities of the nursing program are planned in harmony with the mission of the college and of the Seventh-day Adventist Church, which it represents.

The department offers both Associate of Science (A.S.) and Bachelor of Science in Nursing (B.S.N.) degrees. The A.S. degree is available in a traditional format on the main campus in Angwin and in a non-traditional LVN to RN format at Travis Air Force Base in Fairfield. The B.S.N. degree is available as an RN to B.S.N. program in a non-traditional format on the main campus in Angwin. Both the LVN to RN and the RN to B.S.N. programs may be offered at other select sites; contact the department for more information.

Persons considering nursing are encouraged to include in their general education program courses in medical terminology, computer skills, and Spanish or the language of any Pacific Rim country.
**Major in Nursing, A.S.**

The Mission of the Associate of Science degree program in Nursing is to prepare students to provide competent nursing care for individuals of all ages by utilizing the nursing process, while functioning in the role of the associate degree nurse in the context of Christian faith and human service. This mission is fulfilled by providing quality nursing education guided by the Nursing Department’s philosophy.

→ Admission Requirements:

Admission requirements are those published in the General Catalog in effect during the year of the student’s admission to the nursing program. The Nursing Department reserves the right to admit or deny admission to individuals applying to the nursing program.

1. Admission is competitive and candidates are evaluated based on:
   a) Complete prerequisite courses with a grade of C or better in each course:
      i. A full year of Algebra II at the secondary level or completion of MATH 096.
      ii. A full year of Chemistry or Physics at the secondary level or completion of CHEM 101 or PHYS 105.
      iii. ENGL 101 College English (4).
      iv. BIOL 101 Human Anatomy (5) or BIOL 102 Human Physiology (5).
      v. NURS 110 Introduction to Nursing (2).
   b) College GPA calculated on cognate and GE courses required for the A.S. nursing degree. The minimum GPA for nursing admission is 2.7. Preference will be given to those with GPAs above 3.0 and to those who have completed at least 12 units of nursing cognate courses at Pacific Union College.
      i. Each course must be passed with a C or better.
      ii. Applicants will not be considered for admission if they have repeated more than two cognate or GE courses, or repeated any course more than once.
   
2. Applicants must submit an application for admission to the Nursing Department accompanied by the application fee of $30. The nursing application also serves as application to the college. Application and readmission packets are available from the Nursing Department and at the Pacific Union College website: www.puc.edu/nursing.*

The application process begins with submission of the application form; completion of prerequisite requirements and submission of each of the following completes the process:

a) Personal essay.

b) Official academic transcripts from each college previously attended.

c) Two acceptable professional/academic references. Recommendations written by relatives and those presented directly to the Nursing Department by the applicants themselves are not acceptable.

b) College GPA calculated on cognate and GE courses required for the A.S. nursing degree. The minimum GPA for nursing admission is 2.7. Preference will be given to those with GPAs above 3.0 and to those who have completed at least 12 units of nursing cognate courses at Pacific Union College.

   i. Report of a full physical examination within 12 months of admission that indicates acceptable health.
   ii. Evidence of immunity to measles (rubeola), mumps, rubella, and varicella, verified by titer or immunization.
   iii. Evidence of immunity to Hepatitis B, verified by titer or by documentation of immunization series in progress. Series should be started upon acceptance into the program if not previously initiated.

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* RN licensure may be denied for crimes, abusive behavior, or any illegal acts that are substantially related to the practice of nursing. Before applying to the nursing program, any applicant who has ever been convicted of a crime should ask for a copy of the Board of Registered Nursing Regulations Relating to Denial of Licensure, available at the Nursing Department or online at www.rn.ca.gov.
iv. Evidence of negative tuberculosis skin test following a two-step process, started upon acceptance into the program, or appropriate radiologic documentation.

Health and safety requirements may change without notice according to clinical facility requirements.

3. The Admissions Committee may request that the applicant participate in an admissions interview; applicants may also request an admissions interview.

After the applicant has met all readmission requirements, the application will be processed and the student notified in writing of the action taken. Readmission is on a space-available basis and is not guaranteed. Because of enrollment limitations in clinical sections, students may experience delays of one or more quarters before readmission to the program.

Students who fail a core nursing course may apply for readmission according to the “Readmission Procedure for Nursing”. Failure is defined as:

a) Receiving a grade below a C (2.0).

b) Withdrawing for failing performance.

The following additional requirements must be met for readmission:

1. Students must identify problem areas that resulted in their failure.
2. Students must show evidence for potential success by having corrected identified problem areas.
3. Students are limited to one clinical nursing course repeat in the program, including withdrawals for failing performance. Non-clinical nursing courses are NURS 212, 235, and 390.
4. Students are limited to one non-clinical nursing course repeat in the program, including withdrawals for failing performance. Non-clinical nursing courses are NURS 212, 235, and 390.

The Admissions Committee may request that an applicant participate in an admissions interview; applicants may also request an admissions interview. After the applicant has met all readmission requirements, the application will be processed and the student notified in writing of the action taken. Readmission is on a space-available basis and is not guaranteed. Because of enrollment limitations in clinical sections, students may experience delays of one or more quarters before readmission to the program.

Students who fail a core nursing course may apply for readmission according to the “Readmission Procedure for Nursing”. Failure is defined as:

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b) Withdrawing for failing performance.

The following additional requirements must be met for readmission:

1. Students must identify problem areas that resulted in their failure.
2. Students must show evidence for potential success by having corrected identified problem areas.
3. Students are limited to one clinical nursing course repeat in the program, including withdrawals for failing performance.
4. Students are limited to one non-clinical nursing course repeat in the program, including withdrawals for failing performance. Non-clinical nursing courses are NURS 212, 235, and 390.
> **Transfer, Challenge, and Waiver Options:**

Applicants wishing to transfer, challenge or waiver must meet the same admission or readmission requirements as generic students. Applicants may establish additional academic credit for acquired knowledge through challenge examinations or other methods of evaluation. Applicants meeting admission and degree requirements through transfer, challenge, or waiver have the same access as any other applicant for open space in clinical nursing courses.

Requests for admission by transfer from another nursing program are evaluated on an individual and space-available basis. Transfer courses must be equivalent to the courses in the Pacific Union College generic program. Eligible applicants must meet the same admission and continuation requirements as for the A.S. degree.

Applicants may have previous coursework, knowledge, and skills evaluated to validate their current level of knowledge. Knowledge validation in nursing is available to evaluate:

1. Applicants transferring from another program for educating registered nurses.
2. Applicants transferring from programs educating licensed vocational nurses.
3. Applicants having developed skills during previous employment, that are similar to those expected of students in required nursing courses.

The options available for LVNs or eligible applicants who have passed the GAP test to qualify to take the California licensure examination for registered nurses are as follows:

1. Advanced-Placement A.S. option (Angwin campus): Applicants are given credit for first-year nursing courses. Required nursing courses include NURS 221, 222, 254, 255, 256, 325, and 326. Applicants must meet the same admission and continuation requirements as for the A.S. degree with the following changes:
   a) Applicants must have had at least one year of acute, direct, patient care experience within the previous 5 years.
   b) Introduction to Nursing (NURS 110) is not required.

2. LVN to RN A.S. option: This program is offered at select off-campus sites. Intensive theory core weeks are conducted at regular intervals throughout each term for the nursing courses. Clinical hours are scheduled to allow working LVNs to meet their employment commitments. Required nursing courses are the same as previously described under the Advanced-Placement A.S. option. Applicants must meet the same admission and continuation requirements as for the A.S. degree with the following changes:
   a) Applicants must have had at least one year of acute, direct, patient care experience within the previous 5 years.
   b) Applicants must have completed a minimum of 16 college quarter units (10.6 semester units), including BIOL 101, 102 and MICR 134.
   c) Introduction to Nursing (NURS 110) is not required.
   d) Chemistry is not required.

3. 30-semester/45-quarter unit option: This option does not earn a degree in nursing from Pacific Union College. Required courses are MICR 134, BIOL 102, NURS 221, 222, 254, and 325 only. Applicants desiring this option are not subject to any evaluative processes for admission. An RN license obtained through this nondegree option is not recognized in all states and those electing this option may encounter difficulty articulating into B.S. nursing programs. Applicants are advised to carefully research the limitations of this option.

> **Transportation Policies:**

Students are expected to provide their own transportation to, during, and from off-campus clinical labs. State law requires proof of automobile liability insurance.

> **Course Evaluations:**

Each clinical nursing course is composed of both theory and clinical hours as reflected in the course description. Passing a clinical course and progressing to the next nursing course requires passing grades in both the theory and clinical components. If the clinical portion of a course is failed, a grade of F is recorded for the entire course. See the Clinical Evaluation Policy in the Nursing Department Student Handbook.

> **Requirements for Continuation in and Graduation from the Associate Degree Program in Nursing:**

1. Compliance with all policies and procedures in the Nursing Department Student Handbook.

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* Specific information and materials about transfer, challenge, waiver, and the 30-semester/45-quarter unit option are available in the Nursing Department and will be sent upon request.
2. A clear background check and drug screen are required of all students upon entry into the program and prior to participating in required clinical experiences. Students are responsible for all costs associated with criminal background check and drug screening (paid for through student fees). Both the criminal background check and the drug screen must be completed satisfactorily as determined by the Department of Nursing. Results are reviewed by the Department Chair. Results of the drug screening will not be disclosed by the Department to third parties except as may be necessary or appropriate to substantiate the Department’s actions or processes or as otherwise required by law (e.g., subpoena or public safety). Drug screens must be clear. Background check results that are potentially unacceptable to clinical agencies will be evaluated with the student and the clinical agency on a case-by-case basis. If an agency does not accept a student on the basis of background check or drug screen results, the program has no responsibility for arranging alternate clinical placements and the student will not be allowed to continue in the nursing program if clinical requirements of the courses cannot be met.

3. Current malpractice insurance, paid for by student fees.

4. Current certification in cardiopulmonary resuscitation for healthcare professionals through either AHA or Red Cross.

5. Acceptable physical and mental health, and demonstration of compliance with all health and safety requirements.*

6. A minimum grade of C (2.0) in the required nursing, cognate, and general education courses.

7. No more than one clinical nursing course repeat and one non-clinical nursing course repeat allowed. Non-clinical nursing courses are NURS 212, 235, and 390. A second failure in either a clinical or a non-clinical course results in the student being permanently dropped from the program.

8. Completion of all general education and cognate requirements before entering the second year of the A.S. curriculum. Exceptions must be petitioned to the Nursing Admissions Committee. This requirement does not apply to the LVN to RN program.

9. Completion of all standardized tests administered as part of nursing curriculum.

10. Satisfactory completion of the requirements for the A.S. Degree in Nursing as specified in the current General Catalog.

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Major in Nursing, A.S.

A minimum of 99 hours (115 hours including GE requirements)

> Required Core Courses (70 hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 121</td>
<td>Nursing I</td>
<td>6</td>
</tr>
<tr>
<td>NURS 124</td>
<td>Nursing II</td>
<td>6</td>
</tr>
<tr>
<td>NURS 125</td>
<td>Nursing III</td>
<td>6</td>
</tr>
<tr>
<td>NURS 212</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>NURS 221</td>
<td>Nursing IV</td>
<td>6</td>
</tr>
<tr>
<td>NURS 222</td>
<td>Nursing V</td>
<td>6</td>
</tr>
<tr>
<td>NURS 235</td>
<td>Health Assessment</td>
<td>4</td>
</tr>
<tr>
<td>NURS 254</td>
<td>Mental Health Nursing</td>
<td>6</td>
</tr>
<tr>
<td>NURS 255</td>
<td>Pediatric Nursing</td>
<td>5</td>
</tr>
<tr>
<td>NURS 256</td>
<td>Maternal-Newborn Nursing</td>
<td>6</td>
</tr>
<tr>
<td>NURS 325</td>
<td>Nursing VI</td>
<td>9</td>
</tr>
<tr>
<td>NURS 326</td>
<td>Management and Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 390</td>
<td>Pathophysiology</td>
<td>4</td>
</tr>
</tbody>
</table>

> Required Cognate Courses (29-30 hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 101</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 102</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>FDNT 235</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MICR 134</td>
<td>General Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 121</td>
<td>General Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 234</td>
<td>Human Development</td>
<td>4</td>
</tr>
</tbody>
</table>

At least one of the following courses: 3-4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 124</td>
<td>Cultural Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>NURS 376</td>
<td>Nursing Issues: Transcultural Care</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 121</td>
<td>Introduction to Sociology</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 214</td>
<td>The Family</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 232</td>
<td>American Social Problems</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 355</td>
<td>“Racial” and Ethnic Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

> General Education Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>College English</td>
<td>4</td>
</tr>
</tbody>
</table>

At least one of the following courses: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 105</td>
<td>Introduction to Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 226</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

At least 9 hours from the following: 9

Religion courses (Including at least 3 hours with prefix RELB)

Intermediate Algebra

A full year of Algebra II with semester grades of C or better at the secondary level or both of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 019</td>
<td>Introductory Algebra (or waiver test)</td>
<td></td>
</tr>
<tr>
<td>MATH 096</td>
<td>Intermediate Algebra (or waiver test)</td>
<td></td>
</tr>
</tbody>
</table>

Introductory Chemistry or Physics

A full year of Chemistry or Physics with semester grades of C or better at the secondary level or one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>Introductory Chemistry</td>
<td></td>
</tr>
<tr>
<td>PHYS 105</td>
<td>Introduction to Physics</td>
<td></td>
</tr>
</tbody>
</table>

* See Board of Registered Nursing Guidelines on substance abuse and mental illness, available in the Nursing Department.
Nursing

Service course:
(Not applicable to a major or minor in this department)

NURS 110 2 F, W, S
Introduction to Nursing

An overview of the profession of nursing, introducing participants to the philosophy and conceptual framework of the Nursing Department at Pacific Union College. Addresses the nature of nursing, historical and contemporary influences on nursing, guidelines for nursing practice, health practices and beliefs, and the scope of nursing within the healthcare system. Aims to provide participants with sufficient understanding of the nature and scope of nursing in order to better evaluate its fit with their goals and aptitudes. Required for applicants to the Associate of Science Degree in Nursing.

LOWER-DIVISION COURSES:

Note: In addition to the content described in each nursing course, the concepts of aging, communication, pharmacology, and therapeutic nutrition are integrated throughout the curriculum.

NURS 121 6 F, W, S
Nursing I

Introduces students to basic concepts related to the individual (comfort, elimination, infection, culture and diversity, spirituality) and the profession (clinical decision making, safety, teaching and learning, informatics, legal). Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in classroom, laboratory, and clinical settings.

Three theory units (30 clock hours) and three clinical units (90 clock hours).

Prerequisites: Admission to the Nursing Program, BIOL 101 or 102, CHEM 101 or PHYS 105, ENGL 101, MATH 096, NURS 110.
Corequisite: NURS 235.

NURS 124 6 F, W, S
Nursing II

Reinforces and expands on concepts previously learned and introduces students to concepts related to the individual (homeostasis, metabolism, mobility, tissue integrity, aging, end-of-life care). Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in classroom, laboratory, and clinical settings.

Three theory units (30 clock hours) and three clinical units (90 clock hours).

Prerequisites: NURS 121, 235.
Corequisite: NURS 124.

NURS 125 6 F, W, S
Nursing III

Reinforces and expands on concepts previously learned and introduces students to concepts related to the individual (oxygenation, cellular regulation I, perfusion I). Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in classroom, laboratory, and clinical settings.

Three theory units (30 clock hours) and three clinical units (90 clock hours).

Prerequisites: NURS 121, 235.
Corequisite: NURS 212.

NURS 212 3 F, W, S
Pharmacology

Introduces students to major classifications of pharmacotherapeutic agents administered to individuals receiving nursing care. An overview of the pharmacokinetics, indications, contra-indications, and drug interactions of commonly used medications provide a basis for safe and effective nursing care. Select concepts related to the individual and profession are addressed as they relate to pharmacology and the nursing role. Students achieve student learning outcomes by integrating new and prior knowledge in the classroom setting.

Three theory units (30 clock hours).
Prerequisites: NURS 221, 254.
Corequisite: NURS 236.

NURS 211 6 F, W S
Nursing IV

Reinforces and expands on concepts previously learned and introduces students to concepts related to the individual (immunity, inflammation, perfusion II). Students focus on managing care for patients with increasingly complex alterations in health and more fully integrating professional and interpersonal/healthcare concepts into nursing practice. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in classroom, laboratory, and clinical settings.

Three theory units (30 clock hours) and three clinical units (90 clock hours).
Prerequisites: NURS 125, 390.
Corequisite: NURS 254.

NURS 222 6 F, W, S
Nursing V

Reinforces and expands on concepts previously learned and introduces students to concepts related to the individual (cellular regulation II, sensory/neuro, critical care). Students focus on managing care for patients with complex alterations in health and fully integrating professional and interpersonal/healthcare concepts into nursing practice. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in classroom, laboratory, and clinical settings.

Three theory units (30 clock hours) and three clinical units (90 clock hours).
Prerequisites: NURS 221, 254.
Corequisite: NURS 256.
Students achieve three theory units (30 clock hours) and two clinical units (60 clock hours).

Prerequisites: Those listed for the appropriate corequisite course.

Corequisite: NURS 125, 221, or 222.

NURS 256 6 F, W, S
Maternal-Newborn Nursing

Reinforces and applies concepts previously learned to the perinatal setting and introduces students to concepts related to the individual (reproduction, neonatal transitions, sexuality) and to professional concepts unique to the setting of perinatal nursing. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in classroom, laboratory, and clinical settings.

Three theory units (30 clock hours) and three clinical units (90 clock hours).

Prerequisites: NURS 221, 254.

Corequisite: NURS 222.

NURS 271 1-2 F, W, S; 1-6 Su
Field Experience

A work-study course offered through the Nursing Department in cooperation with selected clinical agencies.

Students apply previously learned theory and clinical skills in assigned patient-care settings under direct supervision of selected RN preceptors. One quarter unit of academic credit requires 75 clinical hours. Repeatable to a maximum of 8 credits.

Prerequisite: NURS 125 and approval by Nursing Department faculty.

Upper-Division Courses:

NURS 325 9 F, W, S
Nursing VI

Reinforces and expands on concepts previously learned. Students focus on managing care for multiple patients and fully integrating professional concepts into nursing practice. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in classroom and clinical settings.

Three theory units (30 clock hours) and six clinical units (180 clock hours).

Prerequisites: All 100 and 200 level nursing courses.

Corequisite: NURS 326.

NURS 326 3 F, W, S
Management and Professional Practice

Reinforces and expands on concepts previously learned with emphasis on professional concepts essential to patient care management (advocacy, clinical decision making, collaboration, delegation, ethics, management and leadership, legal issues). Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in classroom settings.

Three theory units (30 clock hours).

Prerequisites: All 100 and 200 level nursing courses.

Corequisite: NURS 325.

NURS 390 4 F, W, S
Pathophysiology

Expands on concepts learned in the biophysical and psychosocial sciences and focuses on concepts related to the individual that are prevalent in the major conditions identified by the CDC and IOM as leading causes of morbidity and mortality (comfort, infection, homeostasis, metabolism, oxygenation, perfusion, immunity, inflammation, sensory/neuro). Concepts related to the profession (caring interventions, evidence based practice) are emphasized in relation to the nurses’ role in helping individuals move toward optimum health. Students achieve student learning outcomes by integrating new and prior knowledge in the classroom setting. Four theory units (40 clock hours).

Prerequisites: NURS 124, 212.

Corequisite: NURS 125.
Nursing

Bachelor of Science in Nursing, B.S.N.
(Second-Step Program in Nursing)

The mission of the Bachelor of Science in Nursing program is to prepare registered nurses for professional practice within a broad liberal education in a context of Christian faith and human service. This mission is fulfilled by providing quality nursing education guided by the Nursing Department’s philosophy.

This upper-division program for registered nurses leading to the Bachelor of Science in Nursing degree is designed to articulate with a two-year associate degree program. A registered nurse graduate of an Associate Degree program often will have completed most of the nursing prerequisites for the program. Prior nursing credit of associate degree or diploma program graduates will be evaluated and appropriate credit given.

A student enrolled in full-time study may sequence general education and nursing courses to complete degree requirements in three to six quarters. A flexible class schedule helps to accommodate the needs of those with limited access to nursing programs or who are unable to coordinate with traditional baccalaureate programs.

Admission Requirements:

Admission requirements are those published in the General Catalog in effect during the year of the student’s admission to the nursing program. The Nursing Department reserves the right to admit or deny admission to individuals applying for admission to the nursing program.

1. In addition to the requirements for admission to the college, the following criteria must be met:
   a) Junior academic standing.
   b) Completion of an associate degree, or equivalent, in nursing.
   c) Completion of the following:
      i. English 101 or equivalent
      ii. Introduction to Communication
      iii. Required cognates for the A.S. degree in Nursing
   d) Students accepted for full-time enrollment in the fall quarter will lack no more than 6-8 hours of required general education (GE) courses; for winter or spring quarters the applicant will lack no more than 12 hours of GE. For part-time enrollment the applicant will lack no more than 24 hours of GE. All applicants accepted into the BSN program must be able to demonstrate a feasible plan for completion of general education courses at a time consistent with completion of courses in the major.
   e) Successful completion of the NCLEX exam and receipt of the RN license is required in order to register for any practicum course and its corequisite courses if applicable. The practicum courses are NURS 432, NURS 462, and NURS 389 (under the practicum subtitle).

2. Applicants must submit an application for admission to the Nursing Department. Application packets are available from the Nursing Department and at the Pacific Union College website: www.puc.edu/nursing.

3. The Admissions Committee may request that the applicant participate in an admissions interview; applicants may also request an admissions interview.

After the applicant has completed all admissions requirements, the application will be processed according to department application deadlines and the student notified in writing of the action taken. See B.S.N. Nursing Application Packet for details.

National Specialty Certifications

Students transferring into the Bachelor of Science in Nursing program with previously earned national specialty certifications should apply to the chair of the Nursing Department for credit at the time of admission to the program. National specialty certifications includes those requiring a documented number of years/hours of work in the specialty and a standardized exam; see the Nursing Department for a list of recognized certifications.

Credit is granted subject to the approval of the chair of the Nursing Department in conjunction with the Records Office. Students with recognized certifications typically receive credit for NURS 389 Special Topics: Nursing Role Specialization Practicum (maximum of 5 quarter credits). In rare cases, a certification program may provide education that closely matches content provided in another upper-division nursing course at Pacific Union College. These situations will be considered for credit and course equivalencies on a case-by-case basis.

In order to receive credit, students must provide the Nursing Department with documentation providing evidence of the approved national certification. Grades issued in recognition of national specialty certification are recorded as “S” (Satisfactory).

Transportation Policies:

Students are expected to provide their own transportation to, during, and from off-campus clinical labs. Faculty will not provide transportation. Students are advised not to transport clients in their own vehicles under any circumstances. This policy protects both the client and the student. State law requires proof of automobile liability insurance.
Clinical Placement:
Clinical placement is evaluated and approved by the nursing faculty.

Requirements for registration for clinical courses:
2. Documentation showing current certification in cardiopulmonary resuscitation for healthcare professionals. Certification must be either AHA BLS Healthcare Provider or Red Cross Professional Rescuer.
3. Proof of current malpractice insurance.
4. Health and safety documents (see BSN Nursing Application Packet and Nursing Department Student Handbook for details on acceptable documentation):
   a) Report of a full physical examination within the past 12 months that indicates acceptable health.
   b) Evidence of immunity to measles (rubeola), mumps, rubella, and varicella- verified by titer or immunization.
   c) Evidence of negative tuberculosis skin test within the last twelve months or appropriate radiologic documentation.
   d) Hepatitis B immunization series is highly recommended.
5. A clear background check and drug screen are required of all students. Students not progressing directly from the PUC AS program into the BSN program (without a gap in enrollment) must complete the screening upon entry into the BSN and prior to participating in required clinical experiences. Students are responsible for all costs associated with criminal background check and drug screening. Results are evaluated and acted upon as described for the AS degree in Nursing.

Air Force ROTC
Air Force Reserve Officer Training Corps (Air Force ROTC) is available to Pacific Union College students through California State University, Sacramento. ROTC coursework is completed on the CSU Sacramento campus. Upon completion of ROTC requirements and coursework necessary for the degree objective (e.g., BSN in Nursing), cadets are commissioned as an officer in the US Air Force. Because of the firm scheduling requirements of the ROTC program, students should work closely with their academic advisor and the AF ROTC unit in planning their academic program. Air Force ROTC scholarships are available to qualified students. Contact the unit admissions officer in the Aerospace Studies Department at CSU Sacramento, telephone 916-278-7783, for information on the program.

Academic Requirements for Continuation in and Graduation from the Second-Step Program in Nursing:
1. The BSN cognate and general education requirements are outlined below. The general requirements for a baccalaureate degree are outlined in the section entitled “The Baccalaureate Degree Program” in this catalog.
2. Students who receive a grade lower than a C- in a nursing course must repeat the course. Students are limited to a total of two nursing-course repeats in the program, including withdrawals for failing performance, with no course repeated more than once.
Bachelor of Science in Nursing, B.S.N.

A minimum of 76 hours (45 upper-division hours) required for the major and cognates. All courses are to be selected in consultation with the nursing faculty advisor. Each practicum must be taken concurrently with the appropriate theory course.

> Required Core Courses (43-46 hours):
- NURS 390 Pathophysiology 4
- NURS 431 Community Health Nursing 4
- NURS 432 Community Health Nursing Practicum 3
- NURS 460 Health Education 4
- NURS 461 Health Care Management 4
- NURS 462 Health Care Mgmt/Educ Practicum 3
- NURS 485 Introduction to Nursing Research 4

At least one of the following courses:
- NURS 235 Health Assessment (4)
- NURS 335 Advanced Health Assessment (4)

At least one of the following courses:
- NURS “Special Topics” courses

At least three of the following courses:
- NURS “Nursing Issues” courses

> Required Cognate Courses (33-34 hours):
- BIOL 101 Human Anatomy 5
- BIOL 102 Human Physiology 5
- CHEM 101* Introductory Chemistry 4
- FDNT 235 Nutrition 3
- MICR 134 General Microbiology 5
- PSYC 121 General Psychology 4
- PSYC 234 Human Development 4

At least one of the following courses:
- ANTH 124 Cultural Anthropology (4)
- NURS 376 Nursing Issues: Transcultural Care (3)
- SOCI 232 American Social Problems (4)
- SOCI 355 “Racial” and Ethnic Relations (3)

General Education Requirements:
- ENGL 101-102 College English 4-4
- STAT 222 Introduction to Statistics 4
- At least one of the following courses:
  - COMM 105 Introduction to Communication (3)
  - COMM 226 Public Speaking (3)
- At least 8 hours from the following:
  - History courses
  - At least two courses from the following:
    - Arts and Humanities
- At least 18 hours from the following:
  - Religion courses, including at least 9 upper-division hours and 6 hours from RELB courses. This requirement may be prorated for transfer students.
  - RELB 341, RELT 345, and RELP 346 are offered in conjunction with nursing courses and are recommended.

Intermediate Algebra
A full year of Algebra II with semester grades of C or better at the secondary level or both of the following:
- MATH 019 Introductory Algebra (or waiver test) and MATH 096 Intermediate Algebra (or waiver test)

Electives:
Additional coursework as necessary to complete 192 hours total and 60 upper-division hours total to meet the baccalaureate degree requirements. Students may take additional Nursing Issues and Special Topics courses if upper-division hours are needed.

* Students who have already completed a non-credit CHEM 101 equivalency may substitute CHEM 102 (or any other higher level CHEM course) for this requirement.
Upper-Division Courses:

The sequence of course offerings may vary on satellite campuses.

**NURS 335  4 W**
**Advanced Health Assessment**
Reinforces and builds upon the concept of assessment focusing on further application and integration of skills of taking a full health history, collecting assessment data, and distinguishing normal from abnormal findings. Advanced assessment techniques are introduced and skills developed. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in classroom and laboratory settings.

Three theory units (30 clock hours) and one clinical unit (30 clock hours).

Prerequisite: BSN program admission.

**NURS 375  3 F**
**Nursing Issues: End of Life Care**
Reinforces individual concepts related to grief and loss, with a focus on grief response theories, and addresses common issues related terminal illness and death. Emphasis is on the professional concepts of advocacy, caring interventions, collaboration, and communication as relevant to end of life care. System concepts are applied as pertinent to the issues discussed. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in real and/or virtual classroom settings.

Three theory units (30 clock hours).
Prerequisite: BSN program admission.

**NURS 376  3 W**
**Nursing Issues: Transcultural Care**
Explores individual concepts related to culture and diversity and family. Emphasis is on the professional concepts of advocacy, caring interventions, collaboration, and communication as relevant to providing nursing care in an increasingly diverse world. System concepts are applied as pertinent to the issues discussed. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in real and/or virtual classroom settings.

Three theory units (30 clock hours).
Prerequisites: NURS 124, 212.

**NURS 384  3 - 4 S**
**Special Topics: Health Care Delivery Systems**
Explores professional concepts related to health care systems and health policy and the relationships among these systems and policies and the nation's health. Emphasis is on the professional concepts of accountability and advocacy within the health care system as relevant to select national health care issues. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in real and/or virtual classroom settings.

Three or four theory units (30 or 40 clock hours).
Prerequisite: BSN program admission.

**NURS 389  3 - 5 S**
**Special Topics: Various**
Exploration of special topics with implications for nurses in various professional roles. Repeatable for credit under different subtitles. Subtitles include Informatics, Complementary and Alternative Medicine, and Nursing Role Specialization Practicum. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in real and/or virtual classroom settings.

Three or four theory units (30-40 clock hours) for each subtitle, with the following exception: Specialization Practicum includes individualized practical experience in various settings for three to five clinical units (80 clock hours/unit).
Prerequisite: BSN program admission. Current California RN license required for practicum.

**NURS 390  4 W**
**Pathophysiology**
Expands on concepts learned in the biophysical and psychosocial sciences and focuses on concepts related to the individual that are prevalent in the major conditions identified by the CDC and IOM as leading causes of morbidity and mortality (comfort, infection, homeostasis, metabolism, oxygenation, perfusion, immunity, inflammation, sensory/neuro). Concepts related to the profession (assessment, caring interventions, evidence based practice) are emphasized in relation to the nurses' role in 'helping individuals move toward optimum health. Students achieve student learning outcomes by integrating new and prior knowledge in the classroom setting.

Four theory units (40 clock hours).
Prerequisites: NURS 124, 212.

**NURS 419  4 F**
**Nursing Issues: Professional**
Exploration of current nursing issues focusing on professional concepts relevant to the evolving role of nurses in a dynamic health care environment. Special emphasis on developing an expanded awareness of opportunities to participate as a change agent, demonstrating and advocating for best practices related to select health care system concepts (health policy, legal issues, quality improvement). Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in real and/or virtual classroom settings.

Four theory units. (4 clock hours).
Prerequisite: BSN program admission.
Nursing

NURS 420  4 F
Nursing Issues: Social
Exploration of current nursing issues that involve individual concepts (e.g., culture and diversity, family). Special emphasis on developing a better understanding of the sociocultural issues affecting the health of individuals, families, and communities, and the role of the nurse in facilitating wellness and supporting autonomy within various health care settings. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in real and/or virtual classroom settings.

Four theory units (40 clock hours).
Prerequisite: BSN program admission.

NURS 421  3 - 4 S
Nursing Issues: Various
Exploration of current nursing issues with implications for the nursing profession. Repeatable for credit under different subtitles, such as Global. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in real and/or virtual classroom settings.

Four theory units (4 clock hours).
Prerequisite: BSN program admission.

NURS 431  4 F
Community Health Nursing
Expands on professional nursing concepts applied to the community health care setting. Emphasis on promoting and maintaining health and preventing illness among individuals, families, and communities with a particular focus on issues identified by the CDC, IOM, and other organizations as health care priorities because of their potential to affect the Nation’s health. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in the classroom setting.

Four theory units (4 clock hours).
Prerequisite: BSN program admission
Corequisite: NURS 432

NURS 432  3 F
Community Health Nursing Practicum
Provides for the application of community health nursing concepts. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in community health care settings.

Three clinical units (90 clock hours).
Prerequisites: BSN program admission; current California RN license.
Corequisite: NURS 431.

NURS 460  4 W
Health Care Education
Expands on the professional concepts of teaching and learning and evidence based practice as a major strategy for health promotion and education. An overview of learning theories and educational strategies provides the basis for developing the role of nurse as educator. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in the classroom setting.

Four theory units (4 clock hours).
Prerequisite: BSN program admission.

NURS 461  4 S
Health-Care Management
Expands on professional concepts relevant to the role of nurse as manager. Includes an overview of theories of leadership and management and an emphasis on strategies to implement initiatives that improve safety and quality in various healthcare settings. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in the classroom setting.

Four theory units (4 clock hours).
Prerequisite: BSN program admission.

NURS 462  3 S
Health-Care Management and Education Practicum
Provides for the application of health care education and management concepts. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in various health care settings.

Three clinical units (90 clock hours).
Prerequisites: NURS 460 or 461; current California RN license.
Corequisite: NURS 460 or 461.

NURS 485  4 S
Introduction to Nursing Research
Introduces the concepts and process of research and its implications for nursing and reinforces and applies the professional nursing concept of evidence based practice. Emphasis on becoming a consumer of nursing research by developing basic skills for interpreting and using research to inform practice. Students achieve student learning outcomes by integrating knowledge, skills, and attitudes in the classroom setting.

Four theory units (40 clock hours).
Prerequisite: BSN program admission.
Recommended prerequisite: STAT 222.

NURS 495  1-3 F, W, S
Independent Study
Individual research; for advanced students with adequate background in appropriate nursing studies. Three units maximum.

One to three theory units (10-30 clock hours).
Prerequisites: Permission of chair or program coordinator.
Physics & Engineering

Faculty
Lloyd Best, chair; Vola Andrianarijaona, Bruce Ivey, James Robertson
Departmental Office: 238 Chan Shun Hall; 965-7269

Degrees and Programs
Physics, B.S................................................................. 159
Biophysics, B.S. ............................................................ 160
Natural Science, B.S. ....................................................... 160
Teaching Credential ..................................................... 160
Engineering ................................................................. 161

Physics is the search for the fundamental physical laws of nature. In particular, physics is the study of forces and motion of physical entities, seeking to find basic relations that synthesize these phenomena. The goal is to discover ways to control and predict natural occurrences and to understand and explain the physical universe. To achieve this goal involves observation and experimentation from which physical and mathematical models are developed that suggest concepts and theories. Although modern science limits itself to a naturalistic view of reality and to experimental ways of obtaining knowledge, this department takes the view that physical phenomena are consistent with the concept of an intelligent Designer and divine Creator.

Degrees offered include a four-year B.S. in Physics designed primarily to prepare students for graduate work or applied research; a four-year B.S. in Biophysics, which is popular for pre-medical and pre-dental preparation but is also suitable for secondary education; and a four-year B.S. in Natural Science with an emphasis in physics, which is primarily for those preparing for secondary teaching.

This department houses the first two years of the engineering program that is affiliated with the School of Engineering at Walla Walla University.

Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.

Major in Physics, B.S.
A minimum of 107 hours (37 upper-division hours)

- Required Core Courses (97 hours):
  - ASTR 115  Astronomy 5
  - CHEM 111-112-113  General Chemistry 5-5-5
  - CPTR 115  Intro. to Computer Programming 4
  - ENGR 216  Circuit Theory 4
  - MATH 131-132-133  Calculus I-II-III 4-4-4
  - MATH 265  Elementary Linear Algebra 4
  - MATH 267  Multivariable Calculus 4
  - MATH 269  Elementary Differential Equations 4
  - PHYS 211-212-213  Physics with Calculus I-II-III 4-4-4
  - PHYS 314  Elementary Modern Physics 4
  - PHYS 341-342  Classical Dynamics I-II 3-3
  - PHYS 361-362-363  Electromagnetic Theory I-II-III 3-3-3
  - PHYS 389L  Experimental Physics 1
  - PHYS 396  Seminar (4 quarters) .5-.5-.5-.5
  - PHYS 445  Thermal Physics 4
  - PHYS 461-462  Quantum Physics I-II 3-3
  - PHYS 489L  Advanced Experimental Physics 1

- Required Core Electives (10 hours)
  At least 4 hours from the following: 4
  Additional upper-division PHYS courses laboratory, project and/or independent research
  At least 6 hours from the following: 6
  Additional non-service PHYS courses
  CHEM 344  Nuclear Physics and Chemistry (3)

Recommended Proficiency:
Modern-language proficiency comparable to a one-year college course in French or German.

This course of study is adequate for the student who is preparing for graduate study in physics.
**Major in Biophysics, B.S.**

*A minimum of 107 hours (41 upper-division hours)*

- **Required Core Courses (97 hours)**
  - BIOL 111-112-113 Biological Foundations 5-5-5
  - BIOL 320 Cellular and Molecular Biology 4
  - BIOL 348 Systems Physiology 5
  - CHEM 111-112-113 General Chemistry 5-5-5
  - CHEM 371-372-373 Organic Chemistry 4-4-4
  - CHEM 481 Biochemistry I 4
  - ENGR 216 Circuit Theory 4
  - MATH 131-132-133 Calculus I-II-III 4-4-4
  - PHYS 314 Elementary Modern Physics 4
  - PHYS 321 Biophysics 3
  - PHYS 322 Medical Physics 3
  - PHYS 389L Experimental Physics 1
  - PHYS 396 Seminar (4 quarters) .5-.5-.5-.5
  - PHYS 489L Advanced Experimental Physics 1

  *One of the following options: 12-16*
  - PHYS 111-112-113 General Physics I-II-III (4-4-4)
  - PHYS 265 Applied Physics (4)

  or

- **Required Core Electives (10 hours)**

  *At least 10 hours from the following: 10 (Including at least 2 upper-division hours)*

  Additional non-service BIOL courses

  Additional non-service PHYS courses

  Additional CHEM courses chosen from the following:

  - CHEM 344 Nuclear Physics and Chemistry (3)
  - CHEM 450L Physical Chemistry Laboratory (1)
  - CHEM 451 Physical Chemistry: Thermodynamics (3)
  - CHEM 452 Physical Chemistry: Dynamics (3)

- **Recommended Courses:**
  - CPTR 115 Intro. to Computer Programming (4)
  - MICR 134 General Microbiology (5)
  - PHYS 265 Applied Physics (4)

  This program provides the additional emphasis in the physical sciences demanded for graduate study in biophysics, physiology, medicine, radiation biology and molecular biology, especially when a career in academic medicine or medical research is contemplated. This program is also recommended as a broad major for teaching at the secondary-school level.

---

**Major in Natural Science, B.S.**

**Physics Emphasis**

*A minimum of 100 hours (29 upper-division hours)*

This major provides appropriate preparation for teaching science at the secondary level. The core requirement of 65 quarter hours of course work corresponds to science subjects commonly taught in California public schools, and the emphasis treats the subject matter at a depth more than adequate for teaching the higher-level secondary science courses in physics. Emphases may also be obtained in biology or chemistry. For further information, see the sections entitled “Biology” and “Chemistry” in this catalog.

- ASTR 115 Astronomy 5
- ASTR 173 Meteorology 1
- BIOL 111-112-113 Biological Foundations 5-5-5
- BIOL 331 Marine Science 4
- BIOL 355 Issues on Origins 3
- CHEM 111-112-113 General Chemistry 5-5-5
- GEOL 233 Geology 4
- PHYS 390 History and Philosophy of Science 3

*At least one of the following courses: 3*

- ENVR 360 Conservation Biology (3)
- ENVR 361 Energy and Climate Change (3)
- ENVR 362 Pollution and Environmental Quality (3)

*One of the following sequences: 4-4-4*

- PHYS 111-112-113 General Physics I-II-III (4-4-4)*
- PHYS 211-212-213 Physics with Calculus I-II-III (4-4-4)

**Physics Emphasis (35 hours)**

- MATH 131-132-133 Calculus I-II-III 4-4-4
- PHYS 314 Elementary Modern Physics 4

*At least one of the following courses: 4*

- ENGR 216 Circuit Theory (4)
- PHYS 265 Applied Physics (4)

*At least 15 hours from the following: 15 (Including at least 12 upper-division hours)*

- Additional non-service PHYS courses
- CHEM 344 Nuclear Physics and Chemistry (3)

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**Teaching Credential**

Students desiring to enter a program of studies leading to a California teaching credential in science with a concentration in physics should take the either the B.S. degree in Biophysics or

*Students who select this option are required to complete PHYS 265 for the physics emphasis.*
the B.S. degree in Natural Science, Physics Emphasis. Students will need to pass the science (physics concentration) portion of the CSET exam one quarter prior to doing full-time student teaching. Students are invited to discuss the program with their major advisor in the Physics Department.

Those who plan to teach on the secondary level should consult with the credential analyst in the Education Department and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the Education section of this catalog.

**Minor in Physics**

A minimum of 30 hours (12 upper-division hours) chosen from physics, astronomy, and engineering courses (except ENGR 105).

**Engineering**

Engineering courses are offered for those who wish to begin studies in engineering that meet the requirements of the first two years of the engineering degree of Walla Walla University. Faculty of the WWU School of Engineering visit Pacific Union College regularly for guidance and counseling of students. The Bachelor of Science in Engineering degree, of which this program is a part, prepares the student to enter professional practice in civil, mechanical or electrical engineering. The following courses may be taken at Pacific Union College to satisfy the requirements of the affiliation plan:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111-112-113</td>
<td>General Chemistry</td>
<td>5-5-5</td>
</tr>
<tr>
<td>CPTR 115</td>
<td>Intro. to Computer Programming</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101-102</td>
<td>College English</td>
<td>4-4</td>
</tr>
<tr>
<td>ENGR 105</td>
<td>Introduction to Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 131</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 211-212-213</td>
<td>Engineering Mechanics I-II-III</td>
<td>3-3-3</td>
</tr>
<tr>
<td>ENGR 216</td>
<td>Circuit Theory</td>
<td>4</td>
</tr>
<tr>
<td>MATH 131-132-133</td>
<td>Calculus I-I-II-III</td>
<td>4-4-4</td>
</tr>
<tr>
<td>MATH 265</td>
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<td>Elementary Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 211-212-213</td>
<td>Physics with Calculus I-I-II-III</td>
<td>4-4-4</td>
</tr>
</tbody>
</table>

**Astronomy**

**Lower-Division Courses:**

**ASTR 115**  
Astronomy  
5 F, W  
An introduction for the general student to the basic elements of astronomy. Topics include models of the solar system, stars and their processes, clusters, galaxies, cosmology, and relevant physics topics such as light, spectroscopy, nuclear reactions, and relativity. Emphasizes the development of scientific ideas and models for the structure and contents of the universe and the effects of those ideas on western civilization. Laboratory activities emphasize personal observations of various astronomical objects, as weather permits. Four lectures and one evening laboratory per week. Prerequisite: MATH 096 or equivalent.

**ASTR 173**  
Meteorology  
1 F  
Helps explain various natural phenomena for a better understanding of the science of meteorology. Beginning with the basics of physics that control the atmosphere, the discussion extends to the causes of weather patterns, frost, snow, rain, sleet, tornadoes, and hurricanes.

**Upper-Division Course:**

**ASTR 495**  
Independent Study  
1-3 F, W, S  
With the approval of the department chair, qualified students may undertake the independent study of problems suited to their background and experience. Repeatable to a maximum of 3 credits.

**Engineering**

**Lower-Division Courses:**

**ENGR 105**  
Introduction to Engineering  
3 F  
A survey of engineering as a profession: the main divisions; the work, functions and personal characteristics of the engineer; application of the sciences in engineering; design tools used by engineers; computer methods, basic skills for engineering problem-solving. Two lectures and one laboratory per week.

**ENGR 131**  
Engineering Drawing  
3 W  
Principles of and practice in engineering drawing. Applications to technical problems of CAD drafting techniques, orthographic, and pictorial views. Two lectures and one laboratory per week.
Physics & Engineering

ENGR 211-212-213  3-3-3 F-W-S
Engineering Mechanics I-II-III
Statics and dynamics. Detailed analysis of equilibrium, kinetics and kinematics of particles and rigid bodies. Examples and problems relate to real engineering applications. Prerequisites: MATH 131-132. Corequisite: PHYS 211.

ENGR 216  4 S
Circuit Theory
Introductory circuit analysis for engineering and physics students. Circuit variables and parameters; Kirchoff’s laws and network solution; equivalent circuits, network theorems; natural and complete response; sinusoidal steady-state, phasors and impedance; frequency characteristics; power and power factor. Three lectures and one laboratory per week. Prerequisite: MATH 131-132. Corequisite: MATH 133

Physics

Service Courses:
(Not applicable to a major or minor in this department)

PHYS 105  5 S
Introduction to Physics
Emphasizes the ideas and concepts of conventional topics in physics with illustrations from everyday living. Assumes no previous physics course. (Students who need this course to meet a curricular requirement may also need to register for PHYS 106L.) Prerequisite: MATH 096 or equivalent.

PHYS 106L  1 S
Introduction to Physics Laboratory
A laboratory emphasizing physical measurements for those curricula requiring an introductory physics course with laboratory. One laboratory per week. Prerequisite or corequisite: PHYS 105.

PHYS 111-112-113  4-4-4 F-W-S
General Physics I-II-III
An introduction to the fundamental natural phenomena of the physical universe. Topics include Newtonian mechanics, waves, sound, heat, electricity and magnetism, optics, atomic and nuclear physics, special relativity, and elementary particles. Emphasis on fundamental principles and methods of physics. Suitable for preprofessional students and also acceptable as part of the general-education requirement in basic science. Three lectures and one laboratory per week. Prerequisites: MATH 131-132. Corequisite: PHYS 211.

PHYS 211-212-213  4-4-4 F-W-S
Physics with Calculus I-II-III
A calculus-based introduction to the study of the physical universe. Intended primarily for students majoring in the physical sciences, engineering, or mathematics, but also appropriate for other students with the necessary background in mathematics. Topics include Newtonian mechanics, waves, electricity and magnetism, optics, thermodynamics, and an introduction to modern physics. Three lectures and one laboratory per week. This sequence must be taken in order. Prerequisites: MATH 131-132-133.

PHYS 265  4 S
Applied Physics
Applications of fundamental physical principles such as thermodynamics, solid state physics, and modern optics to selected technological and/or practical uses. Topics include atomic transport processes in condensed phases, solid state physics in semiconductor, and modern optics. Three lectures and one laboratory per week. Prerequisite: PHYS 113 or 213. Odd years.

Upper-Division Courses:

PHYS 314  4 F
Elementary Modern Physics
A continuation of PHYS 211-212-213. Offers an overview of the fundamentals of relativity and quantum physics and selected topics such as atomic and molecular physics, statistical mechanics, solid state physics, nuclear physics, and elementary particles. Three lectures and one laboratory per week. Prerequisites: MATH 269, PHYS 213 or PHYS 265.

PHYS 321  3 W
Biophysics
For the upper-division physics student with adequate preparation in biology. Covers a variety of topics in which physical analysis and techniques are applied to study molecular and cellular phenomena. Prerequisites: BIOL 111-112-113, CHEM 113, PHYS 314. Even years.

PHYS 322  3 S
Medical Physics
A continuation of PHYS 321. Includes the physical principles of radiology, diagnostic imaging, and nuclear medicine. Prerequisite PHYS 321. Even years.
PHYS 341-342  3-3-F-W  
Classical Dynamics I-II  
Classical mechanics including Newtonian mechanics and Lagrangian dynamics, which are used to solve problems associated with central-force motion, rigid object dynamics, oscillations, and wave motion. The theoretical bases of problems are emphasized, together with the development of different problem-solving techniques. Prerequisites: MATH 265, 267, 269, PHYS 213. Even years.

PHYS 361-362-363  3-3-3-F-W-S  
Electromagnetic Theory I-II-III  
Topics include electrostatics, magnetostatics, electromagnetism, electromagnetic radiation, and relativistic electrodynamics. The concepts of field and potentials are emphasized. Prerequisites: MATH 265, 267, 269, PHYS 213. Odd years.

PHYS 389L  1 F, W, S  
Experimental Physics  
Provides experience with real science apparatus such as lasers, high field magnets, detectors, radioactive sources, and sophisticated electronics. Activities include experiments in mechanics, electromagnetism, optics, heat, and atomic and nuclear physics. One laboratory per week. Repeatable to a maximum of 5 credits. Prerequisites: ENGR 216. Corequisite: PHYS 314.

PHYS 390  3 S  
History and Philosophy of Science  
(See also PHIL 390)  
The historical roots of modern science, the nature of scientific knowledge, its development and methodology, the impact of science on culture (and vice versa), and the influence of philosophical and theological concepts on science. Prerequisites: PHYS 105 or CHEM 101; PHIL 101 or demonstrated preparedness for course. Even years.

PHYS 396  .5 F, W, S  
Seminar  
(See also BIOI 396, CHEM 396, CPTR 396, ENVR 396)  
Single topics of current interest in the natural sciences are presented by guest lecturers. To pass, a student must be on time and attend all five course sessions. Repeatable to a maximum of 3 credits. Graded S/F.

PHYS 445  4 S  
Thermal Physics  
A statistical description of a system of particles. Different ensembles and their associated partition functions are emphasized and applied to various thermal systems. Prerequisites: MATH 265, 267, 269; PHYS 314. Even years.

PHYS 461-462  3-3-W-S  
Quantum Physics I-II  
Quantum mechanics and atomic physics. Topics include wave packets, Schrödinger’s equation and its solutions, operator methods, angular momentum, matrix representation, spin, perturbation theory, the hydrogen atom, and radiation by atoms. Prerequisites: MATH 265, 267, 269; PHYS 314. Odd years.

PHYS 485  3 S  
Issues in Science and Religion  
(See also PHIL 485)  
The relationship and interaction between science and religion: epistemology, the methods, languages, scope and limitations of science and religion, problems of ethics and science. Two hours of credit may be applied toward the general-education requirement in religion. Prerequisites: PHYS 105, CHEM 101, or equivalent; PHIL 101 or demonstrated preparedness for course. Odd years.

PHYS 495  1-3 F, W, S  
Independent Study  
Properly qualified students majoring in physics may, with the approval of the department chair, undertake an independent study of a topic suited to their background and experience. Repeatable to a maximum of 3 credits.

PHYS 499  1-3 F, W, S  
Independent Research  
Properly qualified students majoring in physics may, with the approval of the department chair, undertake a directed research problem suited to their background and experience. Repeatable to a maximum of 9 credits.
Faculty
Monte Butler, chair; Bruce Bainum, Charlene Bainum, Fiona Bullock, Aubyn Fulton, Gregory Schneider
Departmental Office: 109 Davidian Hall; 965-6537

Degrees and Programs
Psychology, B.S. ................................................................. 165
Psychology, B.A. ................................................................. 166
Social Work, B.S.W.............................................................. 166

The department offers two majors: Psychology and Social Work. The goals of the department are as follows:
• To encourage purposeful living in the service of God and humanity by helping students understand and apply principles of human behavior in personal and professional relationships.
• To provide a general background for a wide range of careers that involve working with people, such as law, medicine, nursing, education, business, and the ministry.
• To prepare students at the baccalaureate level in the generalist framework for employment in the profession of social work.
• To prepare students for successful graduate study in psychology and social work.

Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.

Major in Psychology, B.S.
A minimum of 79 hours (55 upper-division hours)

Required Core Courses (57 hours):
PSYC 121 General Psychology 4
PSYC 122 Psychology Seminar* 3
PSYC 130 Introduction to the Psychology Major* 1
PSYC 322 Research Design 4
PSYC 323 Introduction to Experimental Psychology 4
PSYC 334 Child Development 3
PSYC 334L Child Development Laboratory 1
PSYC 344 Psychology of Personality 4
PSYC 364 Social Psychology 4
PSYC 394 Colloquium** 3
PSYC 436 Physiological Psychology 4
PSYC 444 History and Systems of Psychology 4
PSYC 445 Learning and Memory 4
PSYC 490 Issues in Religion, Ethics, and the Human Sciences 4
PSYC 499 Systematic Issues in Psychology 4

At least one of the following courses:
PSYC 390 Gender Issues (3)
SOCI 355 “Racial” and Ethnic Relations (3)

At least one of the following courses:
PSYC 435 Psychology of Religion (3)
SOCI 435 Sacred and Profane in Society (3)

Required Core Electives (11 hours):
At least 11 additional hours from the following:*** 11
PSYC 240 Health Psychology (4)
PSYC 260 Death and Dying (4)
PSYC 335 Adolescent Development (3)

* Must be taken before the junior year.
** Must be taken each quarter of the sophomore and junior years.
*** Transfer courses (generally limited to upper-division hours for current students) may be approved by the department.
Psychology & Social Work

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 358</td>
<td>Abnormal Psychology</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYC 360</td>
<td>Psychopharmacology</td>
<td>(3)</td>
</tr>
<tr>
<td>PSYC 368</td>
<td>Principles of Counseling</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYC 390</td>
<td>Gender Issues</td>
<td>(3)</td>
</tr>
<tr>
<td>PSYC 399</td>
<td>Research Seminar</td>
<td>(1-2)</td>
</tr>
<tr>
<td>PSYC 435</td>
<td>Psychology of Religion</td>
<td>(3)</td>
</tr>
<tr>
<td>PSYC 457</td>
<td>Psychological Testing</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYC 481</td>
<td>Field Work in Psychology</td>
<td>(1)</td>
</tr>
<tr>
<td>PSYC 491</td>
<td>Field Work in Psychology</td>
<td>(1-2)</td>
</tr>
</tbody>
</table>

> Required Cognate Courses (11 hours):
- ANTH 124 Cultural Anthropology 4
- SOCI 121 Introduction to Sociology 4
- STAT 322 Statistical Methods 3

Recommended Cognate Course:
Any college-level biology course with lab
*This recommendation is usually met by BIOL 102 (Human Physiology) or by any one of BIOL 111-112-113 (Biological Foundations).*

Major in Psychology, B.A.
*A minimum of 68 hours (52 upper-division hours)*

Core and cognate requirements are the same as those for the B.S. degree except the 11 hours of core electives are not required. B.A. students are required to complete the foreign language component of the general education package.

Bachelor of Social Work, B.S.W.
*A minimum of 112 hours (63 upper-division hours)*

The baccalaureate degree program in social work is fully accredited by the Council on Social Work Education. It is designed to prepare students at the baccalaureate level to enter the profession as generalist social work practitioners.

The Student Learning Outcomes (SLO’s) of the social work program support its mission and goals to train students as competent generalist social workers, ready for beginning professional practice in accord with the standards of the Council on Social Work Education. These SLO’s provide the standard by which the quality of education and professional competencies of students may be assessed.

Graduates of the social work program can:
1. Demonstrate recognition of the moral tensions, and appreciation of the common values, between the professions and the Christian faith.
2. Identify as a professional social worker and conduct oneself accordingly.
3. Apply social work ethical principles to guide professional practice.
4. Apply critical thinking to inform and communicate professional judgments.
5. Engage diversity and difference in practice.
6. Advance human rights and social and economic justice.
7. Engage in research-informed practice and practice-informed research.
8. Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.

Students interested in social work as a profession should make an advisement appointment with the Social Work Program Director. The *Social Work Student Handbook* contains detailed information on the admissions process.

1. Complete the program admissions packet, including admissions application and reference letters (one letter must be from a person who supervised the applicant a minimum of 30 hours in a social work or social service position).
2. Complete the personal admissions interview.

The Program Admissions Committee applies the following criteria in evaluating applications:
- Successful completion of required prerequisite courses
- Satisfactory course performance
- Effective oral-communication skills
- Effective written-communication skills
- Attitudes, behaviors, mental health, and ethics appropriate to the social work profession
- Minimum cumulative GPA of 2.25
- Minimum cumulative GPA of 2.5 within the Social Work core and cognate courses

The Admissions Committee notifies each candidate of the action taken on his or her application.

To remain in the program, students must continue to meet the same academic, ethical, mental health, and behavioral standards.
Any Social Work core or cognate course may be repeated for failing performance only once. A course is considered to be a repeat for failing performance if the student has attempted the course previously and the original attempt resulted in a grade below C- or a withdrawal due to failing performance.

The Social Work Student Handbook contains further information on criteria for admission to the program, continuance in it, and the appeal process.

**Required Core Courses (69 hours):**

- **PSYC 322** Research Design 4
- **SOCI 355** “Racial” and Ethnic Relations 3
- **SOWK 121** Introduction to Social Work 3
- **SOWK 232** American Social Problems 4
- **SOWK 275** History and Philosophy of Social Welfare Institutions 3
- **SOWK 340** Writing for Program Evaluation I 1
- **SOWK 341** Program Evaluation 2
- **SOWK 368** Principles of Counseling 4
- **SOWK 376** Human Behavior in the Social Environment I 3
- **SOWK 377** Human Behavior in the Social Environment II 3
- **SOWK 382** Practice Theory I 4
- **SOWK 383** Practice Theory II 4
- **SOWK 394** Colloquium* 3
- **SOWK 465** Practice Theory III 4
- **SOWK 468** Social Welfare Policy and Contemporary Social Issues 3
- **SOWK 476** Field Experience I 5
- **SOWK 477** Field Experience II 4
- **SOWK 478** Field Experience III 5
- **SOWK 486** Integrative Field Seminar I 1
- **SOWK 487** Integrative Field Seminar II 1
- **SOWK 488** Integrative Field Seminar III 1
- **SOWK 490** Issues in Religion, Ethics, and the Human Sciences 4

**Required Core Electives (8 hours):**

Electives must be selected in consultation with the Social Work advisor.

**Required Cognate Courses (35 hours):**

- **ECON 261** Principles of Economics-Macroeconomics 4
- **ENGL 105** College English 4
- **ENGL 102** College English 4
- **PLSC 124** Introduction to American Government 3
- **PSYC 121** General Psychology 4
- **STAT 222** Introduction to Statistics 4

*One of the following courses:*

- **BIOL 101** Human Anatomy (5)
- **BIOL 102** Human Physiology (5)

*One of the following courses:*

- **COMM 105** Intro to Communication (3)
- **COMM 226** Public Speaking (3)

*At least one of the following courses:*

- **PSYC 344** Psychology of Personality (4)
- **PSYC 358** Abnormal Psychology (4)

**General Education Requirements:**

The general education requirements for the B.S.W. are the same as for the B.S. degree except that the health requirement (VI-A) is fulfilled by the major.

**Recommended Courses:**

Students who intend to seek employment in California are strongly urged to include Spanish as a second language. See especially SPAN 105 Spanish for Health Care Professionals and SPAN 111-112-113 Beginning Spanish.

**Minor in Psychology**

* A minimum of 30 hours (12 upper-division hours)

**Required Courses (7 hours):**

- **PSYC 121** General Psychology 4
- **PSYC 122** Psychology Seminar 3

**Required Electives (23 hours):**

At least 23 hours from additional non-service PSYC courses, including at least 12 upper-division hours.

* Must be taken each quarter of the sophomore and junior years.
Psychology & Social Work

Anthropology

Lower-Division Course:

**ANTH 124**  
**Cultural Anthropology**

The nature and concept of culture, the learning and growth of culture, and the development of cultural patterns. Survey of economics, kinship, gender, political structures, languages, and religion in technologically simple and complex societies.

Psychology

Service Course:

*(Not applicable to a major or minor in this department)*

**PSYC 234**  
**Human Development**

Theory and research in developmental psychology, including an overview of the cognitive, emotional, physical, social, and moral development of the individual from conception to senescence. Prerequisite: PSYC 121.

Lower-Division Courses:

**PSYC 121**  
**General Psychology**

Survey of the field of psychology: social processes, biological psychology, learning, development, motivation, memory, personality, psychopathology, and therapies. Prerequisite: ENGL 100.

Upper-Division Courses:

**PSYC 322**  
**Research Design**

Methods of inquiry in the behavioral sciences from conception of idea to analysis of data. Includes the experiment, survey research, observational methods, and program evaluation. Three lectures and one laboratory per week. The laboratory introduces the student to the Statistical Package for the Social Sciences (SPSS). Prerequisites: PSYC 121, STAT 222.

**PSYC 323**  
**Introduction to Experimental Psychology**

Research design and procedures in psychological research. Requires a major research project laboratory. Two lectures, a 30 minute individual appointment with the instructor, and 4.5 hours of laboratory per week. Prerequisites: PSYC 121, 322.

**PSYC 334**  
**Child Development**

(See also ECED 334.)

Theory and research in developmental psychology; their application in understanding and relating to children. Focus on learning, perception, and identification and on the development of intelligence, motivation, language, play, personality, self-concept, moral principles, and sex roles. Emphasis on interaction between innate development and environmental influences. Covers infancy through adolescence. Note: psychology majors must also take PSYC 334L. Prerequisite: PSYC 121.

**PSYC 334L**  
**Child Development Laboratory**

Review and actual practice of research methods in the study of children from infancy through late adolescence. Prerequisite: PSYC 121.
<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Credits</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 335</td>
<td>Adolescent Development</td>
<td>3</td>
<td>W</td>
</tr>
<tr>
<td>PSYC 344</td>
<td>Psychology of Personality</td>
<td>4</td>
<td>F</td>
</tr>
<tr>
<td>PSYC 358</td>
<td>Abnormal Psychology</td>
<td>4</td>
<td>W</td>
</tr>
<tr>
<td>PSYC 360</td>
<td>Psychopharmacology</td>
<td>3</td>
<td>F</td>
</tr>
<tr>
<td>PSYC 364</td>
<td>Social Psychology</td>
<td>4</td>
<td>W</td>
</tr>
<tr>
<td>PSYC 368</td>
<td>Principles of Counseling</td>
<td>4</td>
<td>F</td>
</tr>
<tr>
<td>PSYC 370</td>
<td>Gender Issues</td>
<td>3</td>
<td>S</td>
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<tr>
<td>PSYC 394</td>
<td>Colloquium</td>
<td>.5</td>
<td>F, W, S</td>
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<tr>
<td>PSYC 399</td>
<td>Research Seminar</td>
<td>1-2</td>
<td>F-W</td>
</tr>
<tr>
<td>PSYC 435</td>
<td>Psychology of Religion</td>
<td>3</td>
<td>F</td>
</tr>
<tr>
<td>PSYC 436</td>
<td>Physiological Psychology</td>
<td>4</td>
<td>F</td>
</tr>
<tr>
<td>PSYC 444</td>
<td>History and Systems of Psychology</td>
<td>4</td>
<td>W</td>
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<tr>
<td>PSYC 445</td>
<td>Learning and Memory</td>
<td>4</td>
<td>S</td>
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**PSYC 335 Adolescent Development**
Theory and research in adolescent development. Focuses on the unique tasks and conflicts of adolescence, the role and function of adolescence in modern society, and the social and psychological problems and opportunities associated with adolescence. Prerequisite: PSYC 121.

**PSYC 368 Principles of Counseling**
A prepractice introduction to the work, ethical issues, and theories of counseling. Emphasis on establishing a beginning personal philosophy of counseling. Prerequisite: PSYC 121. Recommended prerequisite: PSYC 344 or 358.

**PSYC 390 Gender Issues**
Historical, biological, sociological, cultural, and psychological impacts on gender issues, both male and female. Significant emphasis on the effects on the individual, family, workplace, community, and society. Breaking stereotypes and barriers.

**PSYC 435 Psychology of Religion**
Religious experience, behavior, and development from the perspective of dynamic and research psychologies. Two hours may be applied toward the general-education requirement in religion. Prerequisite: PSYC 121. Odd years.

**PSYC 444 History and Systems of Psychology**
Greek and medieval background of psychology, the early modern period, the emergence of contemporary experimental work, and special fields of psychology; influential psychological systems. Prerequisite: PSYC 121.

**PSYC 445 Learning and Memory**
Comparison and integration of basic research in animal learning and human memory and cognition. Emphasis on the relative roles of mechanistic and mentalistic variables and on the plausibility of universal laws of learning. Three lectures and one laboratory per week. Prerequisite: PSYC 121.
Psychology & Social Work

PSYC 457  4 W
Psychological Testing
The purpose, contribution, and problems of psychological testing. Emphasis on understanding the psychometric and clinical characteristics of standardized tests. The major areas of testing, including ability, achievement, intelligence, interest, and personality. Three lectures and one laboratory per week. Prerequisite: PSYC 121. Recommended prerequisite: STAT 222.

PSYC 481  1 W
Field Work in Psychology Seminar
A weekly seminar focusing on ethical and professional issues in psychology; case presentations. Prerequisites: Completion of a Field Work Application by the last Friday before Thanksgiving Recess; completion of 60 hours of college credit; a grade of C- or higher in PSYC 122, 130, and one of the following: PSYC 344, 358, or 368 (concurrent registration is acceptable); and permission of the instructor. Corequisite: PSYC 491.

PSYC 490  4 S
Issues in Religion, Ethics, and the Human Sciences
Exploration of tensions in belief, conduct, and identity that arise from being both a Christian and a person changed through contact with the human sciences. Special attention to issues for Christians entering professions in psychology and social work. Prerequisite: PSYC 121. Open to senior majors in the Psychology & Social Work Department and to others by permission of the instructor.

PSYC 491  1-2 F, W, S
Field Work in Psychology
Placement in a local human service agency (for 3-6 clock hours per week). Prerequisite: Completion of PSYC 481 (concurrent registration is acceptable), and permission of the instructor. Repeatable to a maximum of 3 credits.

PSYC 495  1-3 F, W, S
Independent Study
Enrollment limited to department majors wishing to pursue independent investigations in psychology under the direction of the Psychology faculty. Repeatable to a maximum of 3 credits.

SOCI 355  3 S
“Racial” and Ethnic Relations
History of ethnic groups in the United States. Ethnic groups studied include African Americans, Jewish Americans, American Indians, Asian Americans, Latin Americans, and European Americans. The nature of prejudice and discrimination, especially as evidenced in contemporary American racial problems; possible solutions of group conflict.

SOCI 435  3 F
The Sacred and Profane in Society
Examination of the social-religious nature of humankind; description and use of concepts in the sociological study of religion; consideration of mainstream and marginal religious organizations and movements. Two hours may apply toward the general-education requirement in religion. Even years.

SOCI 495  1-3 F, W, S
Independent Study
Enrollment limited to advanced students wishing to do independent research under direction of the department faculty.

Sociology

Lower-Division Courses:

SOCI 121  4 S
Introduction to Sociology
The relationship of sociology to the total behavioral science field; orientation to the structure and functioning of society; development and social nature of personality; background and development of culture; basic social institutions.

SOCI 214  4 S
The Family
(See SOWK 214.)

SOCI 232  4 F
American Social Problems
(See SOWK 232.)
SOWK 126 2 F, W, S
Assertive Behavior
(See also PSYC 126.)
Emphasis on developing basic skills and confidence in clarifying one's desires or needs and communicating them to others in socially acceptable and effective ways. Learning through role playing, discussion, and setting personal goals.

SOWK 214 4 S
The Family
(See also SOCI 214.)
Exploration of the meaning and functions of family systems. The adjustments of premarrige, marriage, and family living viewed as a system, with focus on skills designed to establish and maintain the family institution.

SOWK 227 3 W
Conflict Resolution and Relationship Skills
(See also PSYC 227.)
Skill development in self-understanding and in relating effectively with others. Provides tools for effective communication and conflict resolution. Applicable to personal, work, and social relationships.

SOWK 232 4 F
American Social Problems
(See also SOCI 232.)
An introduction to major social problems in current American society. Causality, current dynamics, and projections on the future climate of social change related to crime, violence, population, environment, family issues, discrimination, social and economic justice, and health care.

SOWK 260 4 W
Death and Dying
(See also PSYC 260.)
Focuses on bio-psycho-social, cultural and spiritual factors related to death and dying. Includes a review of the physical aspects, agencies and institutions involved in the death process; legal issues; psychological theories of grief and mourning; and cultural, spiritual, and religious death rituals and beliefs. Also emphasizes support for professional crisis workers (e.g. police, firefighters, nurses, doctors, and ministers) and traumatic stress responses to disasters.

SOWK 275 3 W
History and Philosophy of Social Welfare Institutions
Exploration of changing value systems and philosophies and the attempts of society and social welfare institutions to meet human needs. Examination from both historical and current perspectives. Prerequisites: SOWK 121, PLSC 124 and HIST 101-102 or HIST 134-135.

Upper-Division Courses:

SOWK 340 1 F
Writing for Program Evaluation I
Introduction to program evaluation with an emphasis on the writing process. Corequisite: PSYC 322. Enrollment limited to junior B.S.W. majors, or those who have permission of the instructor.

SOWK 341 2 W
Program Evaluation
Emphasis on the process of carrying out a program evaluation project and the dissemination of findings. Prerequisites: SOWK 340 and PSYC 322.

SOWK 342 1 S
Writing for Program Evaluation II
Extensive re-writing of a student's program evaluation project in preparation for presentation to program staff and the broader practice community. Prerequisite: SOWK 341.

SOWK 368 4 F
Principles of Counseling
(See PSYC 368.)

SOWK 376 3 F
Human Behavior in the Social Environment I
The bio-psycho-social factors that influence behavior from infancy through young adulthood from the person-in-environment perspective. Focus on the assessment process in generalist practice, with special attention to cultural awareness and factors of human diversity. Emphasis on research relevant to social work practice. Prerequisites: SOWK 275, BIOL 101 or 102, PSYC 121.

SOWK 377 3 W
Human Behavior in the Social Environment II
The bio-psycho-social factors that influence behaviors of individuals from young adulthood through the elder years from the person-in-environment perspective. Focus on the assessment process in generalist practice, with special attention to cultural awareness and factors of human diversity. Emphasis on research relevant to social work practice. Prerequisite: SOWK 376.

SOWK 382 4 S
Practice Theory I
Emphasis on the generalist model of practice with focus on work with individuals. The micro level of intervention as it relates to client engagement, problem assessment, data collection, goals, strategies, action, and evaluation to help the client or client system resolve problems. Three lectures and one laboratory per week Prerequisites: SOWK 368, 376, 377. Enrollment limited to B.S.W. majors.
SOWK 383  4 F
Practice Theory II
Emphasis on the generalist model of practice with small groups and family systems. The mezzo level of intervention as it relates to group goals, structure, dynamics and processes. Focus on development of basic group work skills and techniques in working with groups of various composition and age. Three lectures and one laboratory per week. Prerequisites: SOWK 368, 376, 377. Enrollment limited to B.S.W. majors.

SOWK 390  3 S
Gender Issues
(See PSYC 390.)

SOWK 394  .5 F, W, S
Colloquium
(See PSYC 394.)

SOWK 465  4 W
Practice Theory III
Basic knowledge at the macro level necessary for functioning effectively in generalist social work roles. Focus on problem-solving methods for desired change within generalist practice; organizations and communities as they promote, restore, maintain, and enhance social functioning. Emphasis on community organization with diverse populations and on research techniques. Prerequisite: SOWK 382, 383. Enrollment limited to B.S.W. majors.

SOWK 468  3 S
Social Welfare Policy and Contemporary Social Issues
Focuses on policy analysis, critical thinking and current political issues at the state and federal levels as they impact diverse client populations. Explores the active role of the generalist social worker in this process. Prerequisite: SOWK 275, ECON 261.

SOWK 476  5 F
Field Experience I
A placement of 150 clock hours in an approved social service agency with emphasis on integration and active use of content from all areas of the curriculum. Prerequisite: SOWK 382. Corequisites: SOWK 383 and 486. Enrollment limited to senior B.S.W. majors with full acceptance into the Social Work Program. Qualifies for IP grading.

SOWK 477  4 W
Field Experience II
A placement of 120 clock hours in an approved social service agency with emphasis on integration and active use of content from all areas of the curriculum. Prerequisite: SOWK 476. Corequisites: SOWK 465 and 487. Enrollment limited to senior B.S.W. majors with full acceptance into the Social Work Program. Qualifies for IP grading.

SOWK 478  5 S
Field Experience III
A placement of 150 clock hours in an approved social service agency with emphasis on integration and active use of content from all areas of the curriculum. Prerequisite: SOWK 477. Corequisite: SOWK 488. Enrollment limited to senior B.S.W. majors with full acceptance into the Social Work Program. Qualifies for IP grading.

SOWK 486  1 F
Integrative Field Seminar I
A seminar to facilitate the transition from theory to practice. Corequisite: SOWK 476. Qualifies for IP grading.

SOWK 487  1 W
Integrative Field Seminar II
A seminar to facilitate a continued integration of theory and practice issues. Corequisite: SOWK 477. Qualifies for IP grading.

SOWK 488  1 S
Integrative Field Seminar III
A seminar designed to provide opportunity for practicum students to exchange learning from their field settings. Emphasis on continued integration of theory and practice issues, with particular emphasis on team consultation skills. Corequisite: SOWK 478. Qualifies for IP grading.

SOWK 490  4 S
Issues in Religion, Ethics, and the Human Sciences
(See PSYC 490.)

SOWK 495  1-3 F, W, S
Independent Study
Enrollment limited to advanced students wishing to do independent research on a specific topic of current social work interest and its implication for integrative practice.
Faculty
Leo Ranzolin, chair; Angel Hernandez, Young-Chun Kim, Jean Sheldon, Myron Widmer, Ross Winkle
Departmental Office: 16 Graf Hall; 965-6206

Degrees and Programs:
Theology, B.A.......................................................... 173
Religion, B.A ............................................................. 174
Teaching Credential .................................................. 175

Theology and Religion majors investigate the inspiring and life-changing truths of the Christian faith. Such exploration brings to life the Word of God in all its theological, historical, ethical, spiritual, and practical dimensions. The Religion Department offers two majors, Theology and Religion, and two minors, Religion and Biblical Languages.

The Theology major is recommended for those who want to enter Christian ministry, specifically pastoral ministry, youth ministry, lay ministry, chaplaincy, or the teaching of religion. This major fulfills all prerequisites for acceptance into the Master of divinity degree program at the Seventh-day Adventist Theological Seminary.

The Religion major is designed for those who want a solid background in religion but are planning careers in other fields, such as teaching, health professions, and law. Religion majors complete a set of core religion classes and do further in-depth study in a chosen subject by selecting one of three emphases: Biblical Studies, Health Professions, or Theology and Christian History.

The two minors, in Religion and Biblical Languages, provide a more formal framework for general students or education majors. Each minor incorporates the 18 hours of religion credit expected of every four-year graduate of the college.

Major in Theology, B.A.
A minimum of 98 hours (56 upper-division hours)

> Required Core Courses (98 hours):

Biblical Studies*
RELB 125 Books of Moses 3
RELB 130 Life and Teachings of Jesus 3
RELB 335 Greek Exegesis 3
RELB 445 Hebrew Exegesis 3

At least one of the following courses: 3
RELB 370 Studies in Daniel (3)
RELB 371 Studies in Revelation (3)

At least 6 hours from the following: 6
Additional non-service RELB courses

Historical Studies
RELH 235 Life and Ministry of Ellen White 3
RELH 360 Adventist Heritage 4
At least two of the following courses: 6
RELH 320 Christian History: To 1054 (3)
RELH 321 Christian History: 1054 to 1600 (3)
RELH 322 Christian History: 1600 to the Present (3)

Biblical Languages
RELL 125-126-127 Beginning Greek I-II-III 3-3-3
RELL 235-236 Intermediate Greek I-II 3-3
RELL 427-428 Biblical Hebrew I-II 3-3

Applied Theology
RELP 235 Sharing Your Faith 3
RELP 324-325 Ministry Colloquium I-II 4**

* To fulfill seminary entrance requirements for the Master of Divinity, students must take at least 9 hours of Old Testament RELB courses and at least 9 hours of New Testament RELB courses. RELB courses should be chosen accordingly.

** Repeats fall & winter (.5-.5) for four years.

Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.
**Religion**

**Major in Religion, B.A.**

This major is designed for those who want a broad background in religion but who plan careers in a variety of other professions, such as teaching, health professions, and law.

> **Required Core Courses (33 hours):**

- RELB 125  Books of Moses 3
- RELB 130  Life and Teachings of Jesus 3
- RELB 310  Prophets of Israel 3
- RELB 460  Paul and His Letters 3
- RELH 311  World Religions 3
- RELH 360  Adventist Heritage 4
- RELP 324  Ministry Colloquium (4 quarters) .5-.5-.5-.5
- RELT 235  Spiritual Formation 3
- RELT 331  Christian Theology: God and Humanity 3
- RELT 332  Christian Theology: Salvation and the Church 3

> **Emphases (choose one):**

1. **Biblical Studies Emphasis** (23 hours)

   At least 20 hours from the following: 20
   (Including at least 9 upper-division hours)
   - RELB 230  Psalms and Wisdom Literature (3)
   - RELB 250  Parables of Jesus (3)
   - RELB 260  Heroes and Villains (3)
   - RELB 265  Kings and Conquests (3)
   - RELB 270  Acts of the Apostles (3)
   - RELB 315  Biblical Ethics (3)
   - RELB 320  Women of the Bible (2)
   - RELB 328  Gospels (3)
   - RELB 342  Studies in Bible Interpretation (3)
   - RELB 370  Studies in Daniel (3)
   - RELB 371  Studies in Revelation (3)
   - RELH 340  Biblical Culture and Archaeology (3)
   - RELH 387  Story of the English Bible (3)

   At least 3 upper-division hours from the following: 3
   Additional non-service RELB, RELH, RELP, and RELT courses
Religion

2. Health Professions Emphasis (21-22 hours)
RELP 350  Studies in Christian Ministry: Jesus’ Ministry of Healing  3
RELT 350  Issues in Christian Faith: God and Human Suffering  3
RELT 440  Christian Bioethics  3
At least one of the following courses:  3
PHIL 485  Issues in Science and Religion (3)
RELT 329  American Denominations (3)
RELP 235  Sharing Your Faith (3)
RELT 216  Introduction to Christian Ethics (3)
RELT 320  Philosophy of Religion (3)
RELT 355  Christian Ethics in Society (3)
At least 6 hours from the following:  6
(Including at least 3 upper-division hours)
Additional non-service RELB, RELH, RELP, and RELT courses

Required Cognate Course:
At least one of the following courses:  3-4
EMER 225  Public Health (3)
FDNT 235  Nutrition (3) (does not fulfill G.E.)
PSYC 240  Health Psychology (4)
PSYC 260  Death and Dying (4)
PSYC 435  Psychology of Religion (3)
SOWK 214  The Family (4) (does not fulfill G.E.)
SPAN 105  Spanish for Health Care Professionals (3)

3. Theology and Christian History Emphasis (21 hours)
At least one of the following courses:  3
RELH 320  Christian History: To 1054 (3)
RELH 321  Christian History: 1054 to 1600 (3)
RELH 322  Christian History: 1600 to the Present (3)
At least 15 hours from the following:  15
Additional courses from RELH 320, 321, 322
RELH 235  Life and Ministry of Ellen White (3)
RELH 329  American Denominations (3)
RELH 340  Biblical Culture and Archaeology (3)
RELH 387  Story of the English Bible (3)
RELT 320  Philosophy of Religion (3)
RELT 335  Theology of the Sanctuary (3)
RELT 337  Last Day Events (3)
RELT 350  Issues in Christian Faith (3)
RELT 464  Seminar in Theology (3)
At least 3 hours from the following:  3
Additional non-service RELB, RELH, RELP, and RELT courses

Teaching Credential
Students planning to obtain a Seventh-day Adventist teaching credential in religion should consult with the credential analyst in the Education Department and should become acquainted with the specific requirements for admission to and successful completion of the Teacher Education Program as outlined in the Education section of this catalog.

Minor in Religion
A minimum of 30 hours (6 upper-division hours)

Required Courses (15-16 hours):
At least one of the following courses:  3
RELB 125  Books of Moses (3)
RELB 130  Life and Teachings of Jesus (3)
At least one of the following courses:  3
RELB 310  Prophets of Israel (3)
RELB 460  Paul and His Letters (3)
At least one of the following courses:  3
RELH 370  Studies in Daniel (3)
RELH 371  Studies in Revelation (3)
RELT 335  Theology of the Sanctuary (3)
At least one of the following courses:  3-4
RELH 235  Life and Ministry of Ellen White (3)
RELH 360  Adventist Heritage (4)
At least one of the following courses:  3
RELH 311  World Religions (3)
RELH 329  American Denominations (3)
RELT 216  Introduction to Christian Ethics (3)
RELT 320  Philosophy of Religion (3)

Required Electives (14-15 hours):
At least 14-15 hours from the following:  14-15
Additional non-service RELB, RELH, RELP, and RELT courses

Minor in Biblical Languages
A minimum of 30 hours (15 upper-division hours)

Required Courses (30 hours):
RELL 125-126-127  Beginning Greek I-II-III  3-3-3
RELL 235-236  Intermediate Greek I-II  3-3
RELL 427-428  Biblical Hebrew I-II  3-3
RELH 335  Greek Exegesis  3
RELH 445  Hebrew Exegesis  3
RELH 387  Story of the English Bible  3

This minor is not open to theology majors.
Religion

Philosophical Studies

Lower-Division Course:

PHIL 101  4 F, W, S
Introduction to Philosophy
Basic issues of philosophy, including methods and values, from the perspective of Western civilization.

Upper-Division Courses:

PHIL 390  3 F
History and Philosophy of Science
(See PHYS 390.)

PHIL 451  3 F
History of Western Thought
Survey of philosophy in Western civilization from the pre-Socratic era to the present. Prerequisite: PHIL 101.

PHIL 470  3 W
Seminar in Philosophy
An analysis and critique of selected primary sources of Western philosophers from Plato to the 20th century. Prerequisite: PHIL 101. Odd years.

PHIL 485  3 S
Issues in Science and Religion
(See PHYS 485.)

Biblical Studies

Service courses:
(Not applicable to a major or minor in this department)

RELB 100  2 F
Methods of Bible Study
Analysis of appropriate ways to approach the study of various types of written material found in the Bible.

RELB 114-115-116  2-2-2 F-W-S
Bible Themes I-II-III
Selected themes related to the problem of sin and the plan of redemption as presented in the Old and New Testaments. Open only to lower-division students with little exposure to Bible study. Admission by permission of the Department Chair.

RELB 125  3 F, W, S
Books of Moses
Literature, history, and theology of the first five books of the Old Testament.

RELB 130  3 F, W, S
Life and Teachings of Jesus
The life, work, and teachings of Jesus from selected portions of Matthew, Mark, Luke, and John.

RELB 230  3 W
Psalms and Wisdom Literature
Psalms, Proverbs, Song of Solomon, and other books of the Old Testament classified as “Writings.” Emphasis on major themes and representative passages.

RELB 250  3 F, W
Parables of Jesus
The history and interpretation of the parables of Jesus in the context of the New Testament and with reference to their contemporary relevance.

RELB 260  3 W
Heroes and Villains
Analysis of Biblical narratives about famous and infamous characters to discover key truths about God and life-giving principles for humans.

RELB 265  3 F
Kings and Conquests
An examination of selected chapters from the historical writings of the Old Testament: Joshua, Judges, Samuel, Kings, Chronicles, Ezra, Nehemiah, and Esther.

RELB 270  3 S
Acts of the Apostles
The development of the early church as depicted in Acts of the Apostles, with attention to background, purpose, theology, ethics, and relevance to present-day concerns.

Upper-Division Courses:

RELB 310  3 W
Prophets of Israel
The origin and nature of the prophetic movement followed by an examination of the message of the Old Testament prophetic books.

RELB 315  3 W
Biblical Ethics
Major moral teachings of the Old and New Testaments in relation to contemporary moral issues.

RELB 320  2 S
Women of the Bible
Women in the Bible, in the light of their cultures and times, with attention to theological themes and their relevance for today.

RELB 328  3 F
Gospels
The distinctive theological portraits presented by Matthew, Mark, Luke, and John in the depiction of the life, death, and resurrection of Jesus of Nazareth.
RELB 335  
Greek Exegesis  
Translation and exegesis of selected passages from the Greek New Testament, involving analysis of their historical background, literature, and theology. Prerequisites: REL 235 and 236.

RELB 341  
Jesus as Healer  
The role of Jesus as healer as seen in Matthew, Mark, Luke, and John. Enrollment limited to B.S.N. (nursing) students.

RELB 342  
Studies in Bible Interpretation  
Study of a book of the Old or New Testament, such as:  
- Genesis  
- Isaiah  
- 1 Corinthians  
- Acts  
- Romans  
- Ephesians  
- Hebrews  
Repeatable for credit under different subtitles.

RELB 370  
Studies in Daniel  
The book of Daniel, with focused study on its prophetic chapters.

RELB 371  
Studies in Revelation  
The book of Revelation, with focused study on its prophetic messages.

RELB 445  
Hebrew Exegesis  
Translation and exegesis of passages from the Hebrew Bible. This will involve analysis of the historical background, literature, and theology of selected Old Testament passages. Prerequisites: RELL 427 and 428.

RELB 460  
Paul and His Letters  
Analysis and interpretation of selected portions from the letters of Apostle Paul.

RELB 495  
Independent Study  
With the approval of the department chair, properly qualified students may undertake an investigation of a topic suited to their background and experience. Repeatable to a maximum of 9 credits.

**Historical Studies**

**Lower-Division Course:**

RELH 235  
Life and Ministry of Ellen White  
An introduction to the life and ministry of Ellen White, including an overview of her writings, the biblical teaching on the gift of prophecy, and contemporary issues relating to Ellen White.

**Upper-Division Courses:**

RELH 311  
World Religions  
An introduction to great traditions of world religions and to concepts for the study and comparison of these traditions. Emphasis on non-Judeo-Christian traditions. Includes an examination of these religions in relation to Christianity.

RELH 320  
Christian History: To 1054  
(See HIST 320)

RELH 321  
Christian History: 1054 to 1600  
(See HIST 321)

RELH 322  
Christian History: 1600 to Present  
(See HIST 322)

RELH 329  
American Denominations  
Historical and theological dimensions of American religious identity, with a view toward broadening the understanding of the context of Adventism.

RELH 340  
Biblical Culture and Archaeology  
The Bible in its religious, cultural, geographical, and political environment as illuminated by discoveries of archaeology.

RELH 360  
Adventist Heritage  
(See HIST 360)

RELH 387  
Story of the English Bible  
The history of the English Bible, including the production, canonization, transmission, and translation of the text as well as principles and methods for evaluating the text and modern English versions.

RELH 495  
Independent Study  
With the approval of the department chair, properly qualified students may undertake an investigation of a topic suited to their background and experience. Repeatable to a maximum of 9 credits.

**Biblical Languages**

No courses with the prefix REL may apply as electives to the religion minor.

**Lower-Division Courses:**

REL 125-126-127  
Beginning Greek I-II-III  
Basic grammar and translation of the Koine Greek of the New Testament, with attention to exegetical tools and methods. Must be taken in sequence.
**Religion**

**RELL 235-236  3-3 F-W**  
Intermediate Greek I-II  
Intermediate grammar, translation, and exegetical exercises in the Koine Greek of the New Testament. Must be taken in sequence. Prerequisites: RELL 125, 126 and 127

**Upper-Division Courses:**

**RELL 427-428  3-3 F-W**  
Biblical Hebrew I-II  
Basic grammar, vocabulary, and syntax of Biblical Hebrew, including selected readings from various portions of the Old Testament text. Must be taken in sequence.

**RELL 495  1-3 F, W, S**  
Independent Study  
With the approval of the department chair, properly qualified students may undertake an investigation of a topic suited to their background and experience. Repeatable to a maximum of 9 credits.

**Applied Theology**

**Lower-Division Courses:**

**RELP 210  3 S**  
Creative Worship  
Seeks to bring deep joy to one’s worship of God; uses a “hands-on” approach. Students experience a variety of worship expressions, study the biblical and historical foundations for worship, and work in teams to create innovative ways of leading people into meaningful adoration of God. The “hands-on” portion also helps students understand contemporary culture and its worship patterns.

**RELP 235  3 S**  
Sharing Your Faith  
The philosophy, principles, and methods of introducing God and the Gospel in a personal way. Students learn how to build genuine relationships with those of different faith backgrounds and to share the teachings of Scripture, including the distinctive teachings of Christianity and Adventism.

**Upper-Division Courses:**

**RELP 319  2 S**  
Church Missions in the Modern World  
A survey of contemporary mission theology and methodology, emphasizing personal motivation and preparation, comparative religions, cultural awareness, and interpersonal skills. Prerequisite to student missionary appointment. Enrollment limited to student missionary appointees; exceptions only by approval of the instructor.

**RELP 324-325 .5-.5 F-W**  
Ministry Colloquium I-II  
Lecture/discussion series for majors in theology and religion. RELP 324 focuses on topics of general interest for majors in theology and religion. RELP 325 includes an increased focus on ministry topics particularly relevant for theology majors. Repeatable for credit. Graded S/F.

**RELP 346  2-3 S**  
Spiritual Care for Patients  
Development of knowledge and skills for meeting spiritual needs that arise in patient care. Includes a survey of religious backgrounds to inform the caring ministry of the health-care professional. Enrollment limited to B.S.N. (nursing) students.

**RELP 350  3 S**  
Studies in Christian Ministry  
The origins, theological foundations, and past and current practices of selected topics in Christian ministry, such as:  
- Jesus’ Ministry of Healing  
- Youth Ministry  
- Worship  
- Public Evangelism  
- Preaching  
- Church Standards  
Repeatable for credit under different subtitles.

**RELP 381-382  3-3 F-W**  
Biblical Preaching I-II  
The art, discipline, and process of effective sermon preparation and delivery. Must be taken in sequence. Two hours lecture and one laboratory per week. Prerequisites: junior- or senior-year status; fulfillment of General Education requirement in oral communication. Even years.

**RELP 391-392-393  2-2-2 F-W-S**  
Extern Program I-II-III  
Field work in assigned churches and a weekly seminar. Enrollment limited to junior and senior theology majors who have been accepted into the Ministerial Studies Program. Must be taken in sequence.

**RELP 475-476  3-3 F-W**  
Pastoral Ministry I-II  
The theology, theory, and practice of pastoral ministry. Emphasis on understanding the biblical mandate and context for the local church and on learning how to lead effectively and build up the body of believers. Odd years.
### RELP 484  1-3 F, W, S
**Field Practicum**
Instruction and experience in specialized ministries: hospital chaplaincy, youth ministry, prison ministry, etc. Prerequisite: approval of the instructor. Repeatable for credit. Qualifies for IP grading. Graded S/F.

### RELP 495  1-3 F, W, S
**Independent Study**
With the approval of the department chair, properly qualified students may undertake an investigation of a topic suited to their background and experience. Repeatable to a maximum of 9 credits.

### Theological Studies

#### Lower-Division Courses:

**RELT 216  3 F**
**Introduction to Christian Ethics**
Moral decision-making involving the development and application of Christian principles to modern ethical issues.

**RELT 235  3 F**
**Spiritual Formation**
A theological and practical study of how to build and maintain a personal friendship with God, including the use of the classic disciplines used by Christians throughout the ages.

**RELT 240  3 S**
**Eco-theology**
Ecological theology, exploring the interrelationship of religion and nature in light of contemporary environmental concerns, from a Seventh-day Adventist perspective. Due to the interdisciplinary nature of the field, attention is given to various associated topics such as environmental ethics, philosophy, biblical and religious traditions, and social justice.

#### Upper-Division Courses:

**RELT 320  3 W**
**Philosophy of Religion**

**RELT 330  2 W**
**The Christian and the Media**
An Introduction to film from a Christian perspective. A number of films and contemporary television programs will be analyzed with a view of assessing their potential for shaping cultural and religious values. Ninety minutes lecture/discussion and ninety minutes viewing laboratory per week. Prerequisite: ENGL 102.

**RELT 331  3 F, W, S**
**Christian Theology: God and Humanity**
The nature and purpose of Christian doctrine; the doctrines of inspiration and revelation, God, humankind, sin, and the remedy for sin.

**RELT 332  3 F, W**
**Christian Theology: Salvation and the Church**
The doctrine of Christ—His nature and His work, the nature and purpose of the church, and the spiritual experience of its members.

**RELT 333  3 F, S**
**Seventh-day Adventist Theology**
The distinctive beliefs of the Adventist Church, including lifestyle and worship, the sanctuary, the law, Sabbath, death, the Second Coming, and heaven.

**RELT 335  3 W**
**Theology of the Sanctuary**
The plan of salvation as illustrated in the architecture, design, rituals, and theology of the tabernacle and various temples mentioned in Jewish history and literature and the Old and New Testaments.

**RELT 337  3 S**
**Last Day Events**
Final events of earth’s history culminating in the return of Jesus Christ, with emphasis on how to be ready for His coming.

**RELT 345  2-3 W**
**Christian Ethics in Patient Care**
The study and application of ethical theory and Christian principles to ethical dilemmas facing the professional nurse. Enrollment limited to B.S.N. (nursing) students.

**RELT 350  3 W**
**Issues in Christian Faith**
An in-depth study of a topic important to Christian faith. Consideration of the theological and spiritual dimensions of the topic. Subtitles include:
- *God and Human Suffering*
- *Women and the Church*
- *The Death and Resurrection of Christ*
Repeatable for credit under different subtitles.

**RELT 355  3 W**
**Christian Ethics in Society**
The moral implications of Christian faith for the organization or transformation of social institutions.
RELT 440  
Christian Bioethics
Contemporary ethical issues in the biomedical sciences from the perspective of Christian ethics. Topics include abortion, euthanasia, eugenics, reproductive technologies, and human experimentation.

RELT 464  
Seminar in Theology
Seminar for senior theology and religion majors. Others may be admitted with the consent of the instructor.

RELT 495  
Independent Study
With the approval of the chair, properly qualified students may undertake an investigation of a topic suited to their background and experience. Repeatable to a maximum of 9 credits.
Faculty
Milbert Mariano, chair; Alexander Carpenter, Amy Cronk, Cheryl Daley, Melissa Pratt, Cliff Rusch, Tom Turner, Rodney Vance
John Tagamolila, Artist in Residence
Departmental Office: 254 Fisher Hall; 965-6604

Degrees and Programs
Fine Art, B.S. .................................................. 181
Fine Art, B.A. .................................................. 182
Film and Television Production, B.S. ......................... 182
Graphic Design, B.S. ........................................ 183
Photography, B.S. ........................................... 184
Film and Theater Studies, A.S. .............................. 184
Graphic Design, A.S. ....................................... 185
Photography, A.S. .......................................... 185

In the Visual Arts Department, the student has the opportunity to study visual arts either as a vocation or as a means of increasing cultural awareness. The department is keenly interested in students who choose visual art as their occupation and who want to devote themselves to the period of intensive training necessary for their profession. It is also concerned with those whose interests may be vocational rather than professional, who recognize the cultural advantages to be obtained from the study of visual art, or who find in artistic experience a high degree of personal enjoyment and satisfaction.

Major in Fine Art, B.S.
A minimum of 80 hours (39 upper-division hours)

>Required Core Courses (80 hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARTD 124-125</td>
<td>Design and Composition I-II</td>
<td>3-3</td>
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<tr>
<td>ARTD 285</td>
<td>Color</td>
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</tr>
<tr>
<td>ARTD 460</td>
<td>Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 121-122</td>
<td>Drawing Fundamentals I-II</td>
<td>2-2</td>
</tr>
<tr>
<td>ARTF 210</td>
<td>Stained Glass</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 211</td>
<td>Three-Dimensional Design</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 212</td>
<td>Ceramics I</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 220</td>
<td>Acrylic Painting</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 221</td>
<td>Life Drawing I</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 226</td>
<td>Collage and Assemblage</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 310</td>
<td>Watercolor Painting</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 315</td>
<td>Encaustic Painting</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 320</td>
<td>Clay Sculpture</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 325</td>
<td>Printmaking–Silkscreen</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 326</td>
<td>Oil Painting</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 330</td>
<td>Printmaking–Woodcuts &amp; Etchings</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 332</td>
<td>Monotype</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 340-341</td>
<td>Ceramics II-III</td>
<td>2-2</td>
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<tr>
<td>ARTF 346</td>
<td>Stone Sculpture</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 394</td>
<td>Professional Practices in Art</td>
<td>1</td>
</tr>
<tr>
<td>ARTF 422</td>
<td>Life Drawing II</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 423</td>
<td>Portrait Drawing</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 447</td>
<td>Sculpture</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 461</td>
<td>Figure Painting</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 499</td>
<td>Thesis Project</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 107</td>
<td>America in Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 115-116</td>
<td>History of Western Art I-II</td>
<td>4-4</td>
</tr>
<tr>
<td>ARTH 370</td>
<td>Modern and Contemporary Art</td>
<td>4</td>
</tr>
<tr>
<td>ARTP 150</td>
<td>Black &amp; White Photography</td>
<td>3</td>
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At least one of the following courses:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTH 278</td>
<td>Women in Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 308</td>
<td>Asia in Art (3)</td>
<td></td>
</tr>
</tbody>
</table>
Visual Arts

Major in Fine Art, B.A.

A minimum of 57 hours (24 upper-division hours)

► Required Core Courses (57 hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARTD 124-125</td>
<td>Design and Composition I-II</td>
<td>3-3</td>
</tr>
<tr>
<td>ARTD 285</td>
<td>Color</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 121-122</td>
<td>Drawing Fundamentals I-II</td>
<td>2-2</td>
</tr>
<tr>
<td>ARTF 211</td>
<td>Three-Dimensional Design</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 212</td>
<td>Ceramics I</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 221</td>
<td>Life Drawing I</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 325</td>
<td>Printmaking–Silkscreen</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 330</td>
<td>Printmkg–Woodcuts &amp; Etchings</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 340</td>
<td>Ceramics II</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 394</td>
<td>Professional Practices in Art</td>
<td>1</td>
</tr>
<tr>
<td>ARTF 499</td>
<td>Thesis Project</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 115-116</td>
<td>History of Western Art I-II</td>
<td>4-4</td>
</tr>
<tr>
<td>ARTH 370</td>
<td>Modern and Contemporary Art</td>
<td>4</td>
</tr>
</tbody>
</table>

At least one of the following courses:

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARTH 107</td>
<td>America in Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 278</td>
<td>Women in Art</td>
<td>3</td>
</tr>
</tbody>
</table>

At least one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 210</td>
<td>Stained Glass</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 226</td>
<td>Collage and Assemblage</td>
<td>2</td>
</tr>
</tbody>
</table>

At least one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 320</td>
<td>Clay Sculpture</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 341</td>
<td>Ceramics III</td>
<td>2</td>
</tr>
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</table>

At least one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 332</td>
<td>Monotype</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 461</td>
<td>Figure Painting</td>
<td>2</td>
</tr>
</tbody>
</table>

At least one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 346</td>
<td>Stone Sculpture</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 447</td>
<td>Sculpture</td>
<td>2</td>
</tr>
</tbody>
</table>

At least one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 422</td>
<td>Life Drawing II</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 423</td>
<td>Portrait Drawing</td>
<td>2</td>
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</table>

At least two of the following courses:

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<tr>
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<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTF 220</td>
<td>Acrylic Painting</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 310</td>
<td>Watercolor Painting</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 315</td>
<td>Encaustic Painting</td>
<td>2</td>
</tr>
<tr>
<td>ARTF 326</td>
<td>Oil Painting</td>
<td>2</td>
</tr>
</tbody>
</table>

Major in Film and Television Production, B.S.

A minimum of 83 hours (44 upper-division hours)

► Required Core Courses (83 hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTD 124-125</td>
<td>Design and Composition I-II</td>
<td>3-3</td>
</tr>
<tr>
<td>ARTH 260</td>
<td>Film History</td>
<td>3</td>
</tr>
<tr>
<td>ARTP 150</td>
<td>Black &amp; White Photography</td>
<td>3</td>
</tr>
<tr>
<td>MDIA 131</td>
<td>Elements of Cinematic Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>MDIA 140</td>
<td>Short Scriptwriting</td>
<td>2</td>
</tr>
<tr>
<td>MDIA 152</td>
<td>Introduction to Filmmaking</td>
<td>2</td>
</tr>
<tr>
<td>MDIA 158</td>
<td>Introduction to Television Production</td>
<td>2</td>
</tr>
<tr>
<td>MDIA 231-232</td>
<td>Sound Design I-II</td>
<td>2-2</td>
</tr>
<tr>
<td>MDIA 246-247</td>
<td>Screenwriting I-II</td>
<td>4-4</td>
</tr>
<tr>
<td>MDIA 256</td>
<td>Editing</td>
<td>3</td>
</tr>
<tr>
<td>MDIA 265</td>
<td>Storyboarding &amp; Pre-Visualization</td>
<td>2</td>
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<tr>
<td>MDIA 270</td>
<td>Cinematography I-II</td>
<td>3-3</td>
</tr>
<tr>
<td>MDIA 341-342-343</td>
<td>Group Production I-II-III*</td>
<td>3-3-3</td>
</tr>
<tr>
<td>MDIA 350</td>
<td>Directing</td>
<td>3</td>
</tr>
<tr>
<td>MDIA 355</td>
<td>Marketing and Distribution</td>
<td>3</td>
</tr>
<tr>
<td>MDIA 380</td>
<td>Internship</td>
<td>3</td>
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At least one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MDIA 255</td>
<td>Animation</td>
<td>3</td>
</tr>
<tr>
<td>MDIA 258</td>
<td>Motion Graphics</td>
<td>3</td>
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At least one of the following courses:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>COMM 340</td>
<td>Visual Communication and Semiotics</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 434</td>
<td>Media Law and Ethics</td>
<td>3</td>
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Recommended Cognate Courses:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>JOUR 242</td>
<td>Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 160</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
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</table>

Recommended Field Experience:

It is recommended that all students majoring in Film and Television Production should have completed, by the close of the winter quarter of their senior year, 300 clock hours of professional work related to this emphasis and performed under approved supervision. The College will help place students in qualifying positions.

*The “Group Production” sequence must be taken twice– once during the junior year and once during the senior year.*
Required Core Courses (62-63 hours):

ARTD 110  Design: Tools, Materials and Techniques 2
ARTD 124-125  Design and Composition I-II 3-3
ARTD 130  Fundamentals of Graphic Design 3
ARTD 140  Typography I 3
ARTD 150  Digital Studio I 3
ARTD 262  Identity/Branding I 3
ARTD 268  Illustration I 3
ARTD 285  Color 2
ARTD 317  Interactive Design I 3
ARTD 362  Identity/Branding II 3
ARTD 364  Illustration II 3
ARTD 460  Portfolio Development 3
ARTD 468  Publication Design 2
ARTD 499  Thesis Project 3
ARTF 121-122  Drawing Fundamentals I-II 2-2
ARTF 394  Professional Practices in Art 1
ARTH 264  History of Graphic Design 2
ARTP 250  Digital Photo I 3
ARTP 252  Digital Photo Imaging 3

At least one of the following courses:
ENGL 224  Literary Theory (4)
ENGL 346  Creative Writing (4)

At least one of the following courses:
MKTG 351  Marketing (4)
MKTG 374  Advertising (3)

Emphases (Choose one):

1. Design Emphasis (33 hours)
ARTD 318  Interactive Design II 3
ARTD 361  Visual Identity Systems 3
ARTD 365  Packaging Design 3
ARTD 415  Environmental Design 3
ARTD 463  Typography II 3
ARTD 464  Digital Studio II 3
ARTD 465  Typography III 3
ARTF 211  Three-Dimensional Design 2
ARTF 325  Printmaking–Silkscreen 2
ARTH 370  Modern and Contemporary Art 4

At least one of the following courses:
ARTF 220  Acrylic Painting (2)
ARTF 310  Water Color Painting (2)

2. Illustration Emphasis (37 hours)
ARTD 365  Packaging Design 3
ARTD 463  Typography II 3
ARTD 464  Digital Studio II 3
ARTF 211  Three-Dimensional Design 2
ARTF 220  Acrylic Painting 2
ARTF 221  Life Drawing I 2
ARTF 226  Collage and Assemblage 3
ARTF 310  Water Color Painting 2
ARTF 325  Printmaking–Silkscreen 2
ARTF 326  Oil Painting 2
ARTF 330  Printmaking–Woodcuts and Etchings 2
ARTF 422  Life Drawing II 2
ARTF 423  Portrait Drawing 2
ARTF 461  Figure Painting 3

Recommended Course:
ARTP 251  Digital Photo II (3)

3. Web Emphasis (26 hours)
ARTD 318  Interactive Design II 3
ARTD 415  Environmental Design 3
ARTD 463  Typography II 3
ARTD 464  Digital Studio II 3
ARTH 370  Modern and Contemporary Art 4
ARTP 251  Digital Photo II 3
ARTP 352  Digital Darkroom 3

At least one of the following courses:
ARTF 220  Acrylic Painting (2)
ARTF 310  Water Color Painting (2)

Recommended Course:
ARTD 253  Publication Technology (3)

Recommended Cognate Courses (for all emphases):
COMM 340  Visual Communication and Semiotics (3)
JOUR 434  Media Law and Ethics (3)
MGMT 160  Small Business Management (3)
MKTG 360  Consumer Behavior (3)
### Major in Photography, B.S.

A minimum of 76 hours (40 upper-division hours)

**Required Core Courses (76 hours):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARTD 124-125</td>
<td>Design and Composition I-II</td>
<td>3-3</td>
</tr>
<tr>
<td>ARTD 130</td>
<td>Fundamentals of Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTD 285</td>
<td>Color</td>
<td>2</td>
</tr>
<tr>
<td>ARTD 317</td>
<td>Interactive Design I</td>
<td>3</td>
</tr>
<tr>
<td>ARTD 460</td>
<td>Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 394</td>
<td>Professional Practices in Art</td>
<td>1</td>
</tr>
<tr>
<td>ARTF 495</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 277</td>
<td>Social History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 370</td>
<td>Modern and Contemporary Art</td>
<td>4</td>
</tr>
<tr>
<td>ARTP 150</td>
<td>Black &amp; White Photography</td>
<td>3</td>
</tr>
<tr>
<td>ARTP 250-251</td>
<td>Digital Photo I-II</td>
<td>3-3</td>
</tr>
<tr>
<td>ARTP 252</td>
<td>Digital Photo Imaging</td>
<td>3</td>
</tr>
<tr>
<td>ARTP 350</td>
<td>Portrait Photography</td>
<td>3</td>
</tr>
<tr>
<td>ARTP 351</td>
<td>Product Photography</td>
<td>3</td>
</tr>
<tr>
<td>ARTP 352</td>
<td>Digital Darkroom</td>
<td>3</td>
</tr>
<tr>
<td>ARTP 430-431</td>
<td>Digital Story Telling I-II</td>
<td>2-2</td>
</tr>
<tr>
<td>ARTP 452-453</td>
<td>Fine Print I-II</td>
<td>3-3</td>
</tr>
<tr>
<td>ARTP 454</td>
<td>Advanced Portraiture</td>
<td>3</td>
</tr>
<tr>
<td>ARTP 455</td>
<td>Architectural Photography</td>
<td>3</td>
</tr>
<tr>
<td>ARTP 499</td>
<td>Thesis Project</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 242</td>
<td>Photojournalism</td>
<td>2</td>
</tr>
<tr>
<td>JOUR 434</td>
<td>Media Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 160</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Emphasis Electives (16 hours):**

At least 10 hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 260</td>
<td>Film History (3)</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Bay Area Theater (3)</td>
</tr>
<tr>
<td>ENGL 212</td>
<td>Shakespeare in Performance (2-3)</td>
</tr>
<tr>
<td>ENGL 346</td>
<td>Creative Writing (4)</td>
</tr>
<tr>
<td>ENGL 474</td>
<td>Shakespeare (4)</td>
</tr>
<tr>
<td>MDIA 247</td>
<td>Screenwriting II (4)</td>
</tr>
</tbody>
</table>

At least 6 hours from the following:

Additional coursework, selected from any of the 3 emphases.

### Major in Film & Theater Studies, A.S.

A minimum of 44 hours

**Required Core Courses (15 hours):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRMA 229</td>
<td>Acting I: Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>DRMA 239</td>
<td>Techniques of Stage Production</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>College English</td>
<td>4</td>
</tr>
<tr>
<td>MDIA 131</td>
<td>Elements of Cinematic Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>MDIA 152</td>
<td>Intro to Filmmaking</td>
<td>2</td>
</tr>
</tbody>
</table>

**Emphases (Choose one):**

#### 1. Narrative/Writing Emphasis (29 hours)

**Required Emphasis Courses (13 hours):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRMA/MDIA 289</td>
<td>Thesis Project</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Survey of Drama</td>
<td>4</td>
</tr>
<tr>
<td>MDIA 140</td>
<td>Short Scriptwriting</td>
<td>2</td>
</tr>
<tr>
<td>MDIA 246</td>
<td>Screenwriting I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Required Emphasis Electives (16 hours):**

At least 10 hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRMA 141/341</td>
<td>Production Credit (3 quarters)</td>
</tr>
<tr>
<td>DRMA 230</td>
<td>Acting II: Scene Studies</td>
</tr>
<tr>
<td>DRMA 289</td>
<td>Thesis Project</td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Survey of Drama</td>
</tr>
</tbody>
</table>

At least 6 hours from the following:

Additional coursework, selected from any of the 3 emphases.

#### 2. Performance Emphasis (29 hours)

**Required Emphasis Courses (13 hours):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRMA 141/341</td>
<td>Production Credit (1-3)</td>
<td>1-1-1</td>
</tr>
<tr>
<td>DRMA 231</td>
<td>Voice &amp; Speech (2)</td>
<td>3</td>
</tr>
<tr>
<td>DRMA 232</td>
<td>Movement (2)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Bay Area Theater (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 212</td>
<td>Shakespeare in Performance (2-3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 474</td>
<td>Shakespeare (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

At least 6 hours from the following:

Additional coursework, selected from any of the 3 emphases.

#### 3. Technical Emphasis (29 hours)

**Required Emphasis Courses (13 hours):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDIA 158</td>
<td>Intro to Television Production</td>
<td>2</td>
</tr>
<tr>
<td>MDIA 231</td>
<td>Sound Design I</td>
<td>2</td>
</tr>
<tr>
<td>MDIA 270</td>
<td>Cinematography I</td>
<td>3</td>
</tr>
<tr>
<td>MDIA 256</td>
<td>Editing</td>
<td>3</td>
</tr>
<tr>
<td>MDIA 289</td>
<td>Thesis Project</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Emphasis Electives (16 hours):**

At least 10 hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTP 150</td>
<td>Black &amp; White Photography (3)</td>
</tr>
<tr>
<td>ARTP 250</td>
<td>Digital Photo I</td>
</tr>
<tr>
<td>MDIA 232</td>
<td>Sound Design II</td>
</tr>
<tr>
<td>MDIA 258</td>
<td>Motion Graphics (3)</td>
</tr>
<tr>
<td>MDIA 271</td>
<td>Cinematography II</td>
</tr>
<tr>
<td>MDIA 350</td>
<td>Directing</td>
</tr>
<tr>
<td>MDIA 355</td>
<td>Marketing and Distribution (3)</td>
</tr>
</tbody>
</table>

At least 6 hours from the following:

Additional coursework, selected from any of the 3 emphases.
Major in Graphic Design, A.S.

A minimum of 49 hours

- Required Core Courses (49 hours):

  ARTD 110 Design: Tools, Techniques and Materials 2
  ARTD 124-125 Design and Composition I-II 3-3
  ARTD 130 Fundamentals of Graphic Design 3
  ARTD 140 Typography I 3
  ARTD 150 Digital Studio I 3
  ARTD 262 Identity/Branding I 3
  ARTD 268 Illustration I 3
  ARTD 299 Thesis Project 3
  ARTD 464 Digital Studio II 3
  ARTF 121-122 Drawing Fundamentals I-II 2-2
  ARTF 394 Professional Practices in Art 1
  ARTH 370 Modern and Contemporary Art 4
  ARTP 150 Black & White Photography 3
  ARTP 252 Digital Photo Imaging 3

  At least two of the following courses: 5-6
  ARTD 317 Interactive Design I (3)
  ARTD 361 Visual Identity Systems (3)
  ARTD 362 Identity/Branding II (3)
  ARTD 365 Packaging Design (3)
  ARTD 468 Publication Design (2)

- Recommended Cognate Courses:
  JOUR 434 Media Law and Ethics (3)
  MGMT 160 Small Business Management (3)
  MKTG 351 Marketing (3)
  MKTG 360, 374 Consumer Behavior, Advertising (3, 3)

Minor in Art

A minimum of 34 hours (10 upper-division hours)

- Required Courses (34 hours):

  ARTD 124-125 Design and Composition I-II 3-3
  ARTD 285 Color 2
  ARTF 121-122 Drawing Fundamentals I-II 2-2
  ARTF 211 Three-Dimensional Design 2
  ARTF 221 Life Drawing 2
  ARTH 370 Modern and Contemporary Art 4

  At least one of the following courses: 4
  ARTH 115 History of Western Art I (4)
  ARTH 116 History of Western Art II (4)

  At least two of the following courses: 4
  ARTF 210 Stained Glass (2)
  ARTF 212 Ceramics I (2)
  ARTF 226 Collage and Assemblage (2)
  ARTF 320 Clay Sculpture (2)

  At least two of the following courses: 4
  ARTF 220 Acrylic Painting (2)
  ARTF 310 Watercolor Painting (2)
  ARTF 315 Encaustic Painting (2)
  ARTF 326 Oil Painting (2)

  At least one of the following courses: 4
  ARTF 325 Printmaking-Silkscreen (2)
  ARTF 330 Printmaking-Woodcuts and Etchings (2)

Minor in Art History

A minimum of 32 hours (9 upper-division hours)

- Required Courses (32 hours):

  ARTD 124-125 Design and Composition I-II 3-3
  ARTD 285 Color 2
  ARTH 107 America in Art 3
  ARTH 264 History of Graphic Design 2
  ARTH 277 Social History of Photography 3
  ARTH 278 Women in Art 3
  ARTH 308 Asia in Art 3
  ARTH 370 Modern and Contemporary Art 4

  At least one of the following courses: 4
  ARTH 115 History of Western Art I (4)
  ARTH 116 History of Western Art II (4)

- Required Electives (2 hours):

  At least 2 hours from the following: 2
  Upper division ARTD, ARTF, or ARTP courses
The Rasmussen Art Gallery

The Rasmussen Art Gallery, located in the heart of the campus mall, offers students and community a stimulating and enriching cultural dimension in the visual arts. The gallery’s exhibitions provide exposure to contemporary work as well as to historically significant art.

Graphic Design

Lower-Division Courses:

ARTD 110  2 F
Design: Tools, Materials and Techniques
Provides the student with fundamental experience and knowledge in the use of the basic materials, tools and processes necessary for graphic designers. Emphasizes hand skills, with assignments covering construction, presentation, bookarts, and other basic techniques.

ARTD 124-125  3-3 F-W
Design and Composition I-II
The basic principles and elements of naturalistic and nonrepresentational design. Stresses creative use of line, color, shape, texture, and space.

ARTD 130  3 F
Fundamentals of Graphic Design
A basic overview of the design process from conceptualization and visualization to the preparation of advertising and collateral materials for print.

ARTD 140  3 W
Typography I: Foundations
Study of letter forms with emphasis on typesetting and preparation of copy for typesetting and design. Prerequisite: ARTD 130.

ARTD 150  3 S
Digital Studio I
Preprint production techniques for print applications. Emphasis on presentation and technical skills and problem solving. Recommended prerequisite: ARTD 130.

ARTD 253  3 W
Publication Technology
Uses the Macintosh computer as hardware platform and Adobe InDesign®. Emphasis is on page layout. Introduction to formatting long documents. Use of multiple master pages; building color pages. Two lectures and one laboratory per week.

ARTD 262  3 F
Identity/Branding I
Emphasizes conceptual problem-solving in the design of corporate identity and collateral materials. Prerequisites: ARTD 130, 140, 150. Recommended prerequisite: ARTD 268.

ARTD 268  3 W
Illustration I
To cultivate the process, resources, and skills needed to create fundamental illustrations in association with graphic design. Applied rendering and illustrations using Adobe Illustrator® to create illustrations and graphics for print and web media. Prerequisites: ARTF 121-122; Macintosh competency.

ARTD 285  2 S
Color
The study and hand-on exploration of color, including color perception, properties of color, interaction of colors, color harmony, and color associations. Develops the student’s ability to manipulate color for expressive and aesthetic purposes. Prerequisites: ARTD 124, 125

ARTD 299  3 F, W, S
Thesis Project
Individual project required of all associate-degree graphic design majors. Creation of a unified, accomplished body of work for exhibition in the Rasmussen Art Gallery or at another predetermined location on campus. Students completing more than one degree do a separate project for each degree earned. Qualifies for IP grading.

Upper-Division Courses:

ARTD 317  3 F
Interactive Design I
Designing World Wide Web personal home pages and Web sites for clients using the Web as a delivery platform. Goes beyond development of a properly functioning site to emphasize creation of visually attractive and coherent presentations. For general students and art majors. Prerequisite: CPTR 105 or computer competency (Mac). Recommended prerequisites: ARTD 124, 125, 261.

ARTD 318  3 W
Interactive Design II
Advanced exploration of the integration of components utilized in web and multimedia applications authoring. Students use industry standard software such as Dreamweaver®, Fireworks®, and Flash® for producing interactive projects for internet, CD-ROM, information kiosk, or DVD. Students practice interactive storytelling, navigation metaphors, technical constraints, and usability. Topics include basic animation techniques, transitions, user interactivity, basic scripting, and interactive development process. Prerequisite: ARTD 317.

ARTD 361  3 W
Visual Identity Systems
Advanced design and presentation as applied to art direction and collateral
materials. Prerequisites: ARTD 140, 150, 262. Odd years.

**ARTD 362**  
**Identity/Branding II**  
In-depth study of corporate identity and graphic standards programs. Includes identity design and usage in various print and collateral applications. Prerequisites: ARTD 140, 150, 262. Even years.

**ARTD 364**  
**Illustration II**  
Emphasis on rendering images for editorial and commercial assignments. Media include pen and ink and ink wash. Prerequisites: ARTF 221, ARTD 268.

**ARTD 365**  
**Packaging Design**  
The process of design and presentation as applied to packaging, the redesign of existing packaging and the creation of new product entries. Prerequisites: ARTD 140, 150, 262. Even years.

**ARTD 415**  
**Environmental Design**  
Advanced study of how to plan and design the integration of visual communication into the three-dimensional environment. Students explore how static and interactive typography, graphics and images can be applied as both pragmatic and poetic solutions in accord with interior and exterior architecture, museum/gallery displays, retail and corporate environments. Even years.

**ARTD 460**  
**Portfolio Development**  
Creation of a professional-quality portfolio tailored to a job search, gallery search or graduate school application. Specific attention given to refining and polishing the content, form, and packaging. Additional areas include developing a personal identity system and assembling a set of self-promotional materials. Prerequisite: ARTF 394.

**ARTD 463**  
**Typography II: Form and Communication**  
Type styles, character, arrangement, and usage in the design of printed materials. Practical experience in preparation of type for print production. Prerequisites: ARTD 140, 150, 262. Odd years.

**ARTD 464**  
**Digital Studio II**  
Explores the preparation of digital files and desktop design. For advanced graphic design majors who understand the basic elements of design, typography, and print and who have Macintosh competency. Prerequisites: ARTD 150, 262.

**ARTD 465**  
**Typography III: Expressive and Experimental**  
Advanced study of typography concentrating on the expressive use of letterforms and text, and the exploration of experimental and progressive application of type and letterforms. Prerequisite: ARTD 463. Even years.

**ARTD 468**  
**Publication Design**  
An in-depth study of publication layout and design techniques. For advanced graphic design majors who understand the basic elements of digital file preparation, layout and design. Prerequisites: ARTD 464. Even years.

**ARTD 499**  
**Thesis Project**  
Individual project required of all baccalaureate degree graphic design majors. Students create a unified, original, and professional body of work for exhibition either in the Rasmussen Art Gallery or another predetermined location on campus. Students completing more than one art degree do a separate thesis project for each degree earned. Qualifies for IP grading.

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**Fine Art**

**Lower-Division Courses:**

**ARTF 121-122**  
**Drawing Fundamentals I-II**  
Development of the student’s ability to communicate and express creative ideas using line, shape, value, and texture. One lecture and one laboratory per week.

**ARTF 210**  
**Stained-Glass Design**  
Materials and Techniques of stained-glass design, including copper foiling and leading techniques. One lecture and one laboratory per week.

**ARTF 211**  
**Three-Dimensional Design**  
The perceptual, spatial, and structural principles of well-ordered three-dimensional forms. Assignments introduce techniques of modeling and assemblage. One lecture and one laboratory per week.

**ARTF 212**  
**Ceramics I**  
Introduction to materials and techniques in creating hand-built and wheel-thrown ceramic forms. One lecture and one laboratory per week. Recommended prerequisite: ARTF 211.

**ARTF 220**  
**Acrylic Painting**  
Introduction to painting with acrylics. Exploration of color and brush techniques through a variety of subjects and styles. One lecture and one laboratory per week. Even years.
Visual Arts

**ARTF 221 Life Drawing I**
Improvement of visual skills and accurate portrayal of human surface anatomy. One lecture and one laboratory per week. Prerequisites: ARTF 121 or 122.

**ARTF 226 Collage and Assemblage**
The artistic use of papers, found objects, and other nontraditional media; historical examples and the creation of two- and three-dimensional projects. One lecture and one laboratory per week. Even years.

**Upper-Division Courses:**

**ARTF 310 Watercolor Painting**
Fundamentals of watercolor in landscape, still-life, and nonrepresentational painting. Includes work both in studio and on location. One lecture and one laboratory per week. Recommended prerequisites: ARTF 121, 122 or 220. Odd years.

**ARTF 314 Art for Children**
Provides an understanding of children's art and a knowledge of art materials and teaching techniques applicable to the child's levels of learning. Designed to provide in the life of the child the thrill of the visual and tactile uses of line, shape, value, color, and texture.

**ARTF 315 Encaustic Painting**
Materials and techniques of using pigmented wax as a painting medium on wood, canvas and other supports. Emphasis on exploring and inventing techniques, including layering and collage. One lecture and one laboratory per week. Recommended prerequisites: ARTF 121, 122 or 220. Odd years.

**ARTF 320 Clay Sculpture**
The design and techniques of creating sculptural forms in clay with additive and subtractive processes. Figurative and abstracted subject matter. One lecture and one laboratory per week. Recommended prerequisite: ARTF 211. Odd years.

**ARTF 325 Printmaking—Silkscreen**
The techniques of silkscreen printing including cut stencil and photostencil. One lecture and one laboratory per week. Prerequisite: ARTF 121 or 122.

**ARTF 326 Oil Painting**
Transparent and opaque oil painting techniques are studied in rendering still-lifes, landscapes, and abstractions. One lecture and one laboratory per week. Recommended prerequisite: ARTF 121, 122 or 220. Even years.

**ARTF 330 Printmaking—Woodcuts and Etchings**
An introduction to the creation of prints through the relief process of woodcuts and the intaglio process of etchings. One lecture and one laboratory per week. Prerequisite: ARTF 121 or 122. Even years.

**ARTF 332 Monotype**
Combines painting and printmaking techniques by painting images on metal and plexiglass plates, then transferring them to paper with a hand-operated printing press. One lecture and one laboratory per week. Prerequisite: one quarter of drawing, painting, or printmaking. Odd years.

**ARTF 340 Ceramics II**
Ceramics techniques and processes at the intermediate level. One lecture and one laboratory per week. Prerequisite: ARTF 212. Even years.

**ARTF 341 Ceramics III**
Advanced study in creating ceramic forms, formulating glazes, and alternative firing techniques. One lecture and one laboratory per week. Prerequisite: ARTF 340. Even years.

**ARTF 346 Stone Sculpture**
Creation of three-dimensional forms using subtractive methods in stone. One lecture and one laboratory per week. Recommended prerequisite: ARTF 211. Odd years.

**ARTF 394 Professional Practices in Art**
Focuses on issues that graduating art majors will face whether practicing in the field of art or applying to graduate programs. Each student compiles a portfolio of artworks. Features guest speakers.

**ARTF 422 Life Drawing II**
Advanced study in drawing the human figure. Emphasis on anatomy, expression, and development of a personal rendering style. One lecture and one laboratory per week. Prerequisite: ARTF 121 or 122. Odd years.

**ARTF 423 Portrait Drawing**
Advanced study in drawing a realistic rendering of the human head and features. One lecture and one laboratory per week. Prerequisites: ARTF 121 or 122. Even years.
ARTF 447
2 S
Sculpture
The materials and techniques of using various media to create sculptural forms, both representational and nonobjective. One lecture and one laboratory per week. Recommended prerequisite: ARTF 211. Even years.

ARTF 461
2 S
Figure Painting
Advanced study of color and composition with the human figure as subject matter. Emphasis on communicating expression and vitality. One lecture and one laboratory per week. Prerequisite: one quarter of painting or ARTF 221, 422 or 423. Even years.

ARTF 491
1-3 F, W, S
Cooperative Education in Art
An individualized contract agreement involving selected students, faculty, and employers to provide practical experience in art, art history, and graphic design in a professional setting. Approval of the department chair required in advance. Thirty clock hours of experience required for each hour of credit. Repeatable for credit.

ARTF 495
1-3 F, W, S
Independent Study
Available in any area where additional study is desired. Approval of department chair and major advisor is required. Repeatable to a maximum of 6 credits.

ARTF 499
3 F, W, S
Thesis Project
Individual project required of all baccalaureate degree fine art majors. Students create a unified, original, and professional body of work for exhibition either in the Rasmussen Art Gallery or at another predetermined location on campus. Students completing more than one art degree do a separate thesis project for each degree earned. Qualifies for IP grading.

History of Art

Lower-Division Courses:

ARTH 107
3 W
America in Art
A study of architecture, graphic art, painting, photography, and sculpture in the United States from the colonial period to the present. Odd years.

ARTH 115
4 F, S
History of Western Art I:
From Caves to Cathedrals
Examination of architecture, sculpture, painting and decorative arts in Europe from the period before written language to the end of the Middle Ages. Organized chronologically and geographically, the lectures explore art's relationship to different cultures' ideas of death, the divine, nature, and gender/ethnic identity.

ARTH 116
4 F, S
History of Western Art II:
Renaissance and Revolutions
Examination of painting, sculpture, architecture, photography, graphic and textile arts from the 15th century to the 21st century, primarily in Europe and the United States. Organized chronologically, the lectures will address themes of vision and representation, the canon, patronage, the artistic personality, and gender/ethnic identity.

ARTH 264
2 F
History of Graphic Design
The history of graphic design and visual communications from the development of ancient writing of the Sumerians progressing through 20th century advances in graphic design: major trends, developments, and influences. Students will be able to recognize, analyze, and understand important historical and world-wide cultural influences found in graphic design and visual communication. Odd years.

ARTH 277
3 F
Social History of Photography
Analysis of theories and techniques of major photographers in America and Europe from the inception of photography to the present.

ARTH 278
3 W
Women in Art
Female artists in the Western World from the Renaissance to the present, with particular focus on the 19th and 20th centuries. Even years.

Upper-Division Course:

ARTH 308
3 W
Asia in Art
An overview of art and architecture created in China, Japan, India, and Southeast Asia. Even years. Prerequisite: ARTH 115 or ARTH 116.
Visual Arts

ARTH 370 4 S
Modern and Contemporary Art
The Avant-garde in European and American art from Manet to the present. Includes architecture, graphic art, painting, performance, photography, and sculpture. Prerequisite: ARTH 116.

Photography

Lower-Division Courses:

ARTP 100 2 Su
Digital Art Photography
Digital imaging as a means of visualizing ideas in the context of visual communication design. Students learn the creative use of 2-D image manipulation and transformation of photographic and non-photographic imagery on the computer. Offered only at Albion. Repeatable for credit.

ARTP 150 3 F
Black & White Photography
The basic equipment, experimental manipulations, and photographic skills involved in producing black and white negatives, contact prints, and enlargements; the proper use of various films, papers, and chemicals. Ninety minutes lecture, four hours laboratory per week.

ARTP 250 3 W
Digital Photo I
An introduction to digital photography and digital camera operation. Covers lighting, composition, exposure, fundamentals of traditional photographic concepts, basic techniques in Adobe® Photoshop and Bridge. Ninety minutes lecture, four hours laboratory per week.

ARTP 251 3 S
Digital Photo II
Advanced digital photography and digital dark room production techniques using Adobe® Photoshop. Covers photographing and capturing images, blending, stitching, HDR, black & white conversions and work flow. Ninety minutes lecture, four hours laboratory per week. Prerequisite: ARTP 250.

ARTP 252 3 S
Digital Photo Imaging
Use of computer software tools and techniques to scan, alter and enhance photographs. Emphasis on artistic manipulation of digital images for graphic design and photographic applications. Prerequisites: (Mac competency), ARTP 150.

ARTP 259 3 F, W, S
Thesis Project
Individual project required of all associate-degree photography majors. Creation of a unified, accomplished body of work for exhibition in the Rasmussen Art Gallery or at another predetermined location on campus. Students completing more than one degree do a separate project for each degree earned. Qualifies for IP grading.

Upper-Division Courses:

ARTP 350 3 F
Portrait Photography
Development of fine art and commercial skills in black-and-white and color portraiture, including executive and group portraits, both in studio and outdoors. A 2¼ format camera is used. Ninety minutes lecture, four hours laboratory per week. Prerequisite: ARTP 251.

ARTP 351 3 W
Product Photography
Use of 2 1/4 and 4 x 5 format cameras with studio lighting for product still life, architectural, and industrial applications. Ninety minutes lecture, four hours laboratory per week. Prerequisite: ARTP 251.

ARTP 352 3 S
Digital Darkroom
Professionalism in color photography. Includes use of filters, business of photography and creating publishable photographs. Ninety minutes lecture and slide critique, four hours laboratory per week. Prerequisite: ARTP 251.

ARTP 430-431 2-2 W-S
Digital Storytelling I-II
Creation of an interdisciplinary collaborative project using techniques of rich media, including still photography, video recording, and sound and dialog. Collaboration between photography, drama, communication, and film and television. Must be taken in sequence. Prerequisite: ARTP 250, 251.

ARTP 452 3 F
The Fine Print I
Advanced photography printing using a large format camera. Refined printing using cold-light enlargers and archival treatments. Ninety minutes lecture, four hours laboratory per week. Even years.

ARTP 453 3 W
The Fine Print II
Second stage of refined printing with large format negatives. Ninety minutes lecture, four hours laboratory per week. Prerequisite: ARTP 452. Even years.

ARTP 454 3 W
Advanced Portraiture
An advanced approach to what comprises a portrait. Both medium and large format cameras are used. Ninety minutes
Visual Arts

lecture, four hours laboratory/field work per week. Prerequisite: ARTP 350. Odd years.

ARTP 455 3 W
Architectural Photography
Use of 2½ and 4 x 5 cameras to record interiors and exteriors of architectural subjects. Lighting techniques blend natural light and flash. Ninety minutes lecture, four hours laboratory/field work per week. Odd years.

ARTP 499 3 F, W, S
Thesis Project
Individual project required of all baccalaureate degree photography majors. Students create a unified, original, and professional body of work for exhibition either in the Rasmussen Art Gallery or at another predetermined location on campus. Students completing more than one art degree do a separate thesis project for each degree earned. Qualifies for IP grading.

Film and Television Production

Lower-Division Courses:

MDIA 131 3 W
Elements of Cinematic Storytelling
Introduction to the basic elements of cinema and related motion-picture technologies. Emphasis on developing skills of critical analysis and appreciation of the “language” of cinema; craft, genre, style, and technique. Historical overview of cinema classics and innovative visionaries of the medium. Introduction to roles and responsibilities involved in motion-picture technologies (e.g., scriptwriting, directing, cinematography, editing, lighting, sound direction, etc.). Lectures, discussion, and intensive viewing labs.

MDIA 140 2 S
Short Scriptwriting
Techniques and practice in writing the short media script. Fundamentals of short scripting, outline, structure, and brief theme development for PSA’s, short film and video features, broadcast and infomercials. Includes practical development of the students’ knowledge of screenwriting software programs. Student work will ideally be integrated into other media production courses requiring short scripts.

MDIA 152 2 S
Introduction to Filmmaking
An overview of the filmmaking process from concept to distribution with emphasis on how to make an independent film. Includes both the artistic and business principles of filmmaking. Intended for Film and Television majors and others interested in understanding how independent films are created. Students make their own short film projects during this class. Recommended prerequisite: CPTR 105 or Macintosh computer competency. One lecture and one laboratory per week. Prerequisite: MDIA 158.

MDIA 158 2 S
Introduction to Television Production
Survey of three types of media production from a Christian perspective: broadcast production, documentary production, and digital film production. Includes an overview of the positions that make up the production team, and the technologies that make the production happen. One lecture and one laboratory per week.

MDIA 231 2 F
Sound Design I
Introduction to audio recording theory and techniques for broadcast, film, and studio environments. Concepts such as multitrack mixing, voice-over recording, sound effects, editing, and wave-form processing are studied and practiced using current industry-standard audio equipment. Focus on learning industry-standard audio editing software. One lecture and one laboratory per week. Prerequisite: MDIA 158.

MDIA 232 2 S
Sound Design II
Focus on post-production sound. Includes audio dialogue replacement (ADR), sound effects recording (Foley), music mastering, pre-mix track preparation, final sound mixing and creation of a Dolby 5.1 surround mix using industry standard software and hardware. One lecture and one laboratory per week. Prerequisites: MDIA 131, 140, 152, 158, 231.

MDIA 246-247 4-4 W-S
Screenwriting I-II
Fundamentals of screenwriting: structure, character and scene development, conflict, locale, theme, script outline and story conception. Includes practical development of the student’s knowledge of screenwriting software programs. In MDIA 246, students produce one act of a full-length screenplay. In MDIA 247, students rewrite the first draft and move towards the creation of the final draft of a full-length screenplay (90 to 120 pages in length). Must be taken in sequence. Prerequisite: ENGL 102.

MDIA 255 2 W
Animation
Practical understanding of video animation, as used in contemporary films and video productions. Introduction to traditional animation, including history and original production techniques. Hands-on instruction using the latest software animation programs including Adobe After Effects, Flash, and Maya, with reference made to other programs.
Visual Arts

including 3D Studio Max and Lightwave 3D. One lecture and one laboratory per week. Prerequisites: ARTF 121, 122.

**MDIA 256 3 S**

**Editing**

Explores the history, theories, and techniques of film and television editing. Students learn to create meaning and emotion through the juxtaposition of moving images and the art of making the edit. Practical training includes learning to log, digitize, edit, and prepare footage for distribution using a nonlinear editing system (Apple Final Cut Pro®). Macintosh computer proficiency is required. Two lectures and one laboratory per week. Prerequisite: MDIA 158.

**MDIA 258 3 W**

**Motion Graphics**

Using the latest off-the-shelf software, students learn to create still and animated two-dimensional graphics for show opens, title sequences, image enhancements, and compositing. Emphasizes understanding the tools available. Software taught: Photoshop®, Illustrator®, After Effects®, Motion® Chyron Lyric®. Two lectures and one laboratory per week.

**MDIA 265 2 S**

**Storyboarding & PreVisualization**

Introduction to basic terminology, tools and media of storyboarding and pre-visualization. Development of thumbnails, storyboards, scripts, and other conceptual presentation processes. Considerations and concepts of narrative flow, pacing, and staging. Prerequisites: ARTF 121, 122, 221, MDIA 140.

**MDIA 270 3 S**

**Cinematography I**

Production outside the studio. Includes microphone selection and placement, working with available light, location management, expedition planning, and camera control. Job markets targeted include news gathering, documentary, mission adventure videos, and others. One lecture, one viewing session, and one laboratory per week.

**MDIA 271 3 W**

**Cinematography II**

Theory of and practice in using professional lighting equipment and natural lighting, along with camera exposure control, to achieve various moods and effects. One lecture, one viewing session, and one laboratory per week. Prerequisite: MDIA 158.

**MDIA 289 3**

**Thesis Project**

Completion and presentation of an independent film project. Proposals must be pitched to a department review panel for approval. Qualifies for IP grading.

**Upper-Division Courses:**

**MDIA 341-342-343 3-3-3 F-W-S**

**Group Production I-II-III**

A three-part series in which students work together as a collaborative team to create a film (narrative or documentary) or television project. The series is intended to allow students to apply their previously acquired skills as a team and prepare them for their thesis project. Two lectures and one laboratory per week. Must be taken in sequence. Prerequisites: MDIA 131, 140, 152.

Repeatable for credit under different topics. Topic options are the following:
- Documentary Production
- Film Production
- Television Production

**MDIA 350 3 W**

**Directing**

Directing of an independent film, documentary, or episodic television program. Director’s role in the filmmaking process, including preparing script for production, casting a project, working with actors during rehearsal, working with the crew on set, and understanding the director’s role as “auteur” or author of a film. Two lectures and one laboratory per week. Prerequisites: ARTH 260, MDIA 256, 270, 271.

**MDIA 355 3 S**

**Marketing and Distribution**

An exploration of film and television marketing and distribution with an emphasis on how to secure a distribution deal for an independent production. Alternative forms of distribution are examined including self-distribution, DVD creation, and online distribution. Students learn how to create their own DVDs using Apple DVD Studio Pro®. Two lectures and one laboratory per week. Macintosh computer proficiency is required.

**MDIA 380 3 F, W, S, Su**

**Internship**

Planned, coordinated, and supervised work experience in an industry allied with film or television production. A minimum of fifty hours of verified work experience required for each hour of credit. Repeatable to a maximum of 12 credits. For instructions and requirements, see department chair before registering. Qualifies for IP grading.

**MDIA 387-388-389 2-2-2 F, W, S**

**Thesis Project**

A film or television project produced and completed during the senior year that incorporates the creative, technical, and business skills learned throughout the major. The film, documentary, or television project will be presented at the Senior Film Festival held at the end of the year. Proposals must be pitched to a department review panel for approval at the beginning of the senior year.
Pacific Union College is incorporated under the laws of the State of California as a nonprofit religious institution. A portion of its income is derived from gifts and grants. These sources of funding help keep your cost at the lowest possible level consistent with adequate facilities and competent instruction. Because of uncertain economic conditions, the college must reserve the right to increase tuition rates, rents, and fees during the school year.

**Room Reservation Fee**
A $150 room reservation fee is required before a room assignment can be confirmed. The fee is refundable if a cancellation is received at least 21 days prior to the first day of classes. When an application to the college is withdrawn prior to the refund deadline, the room reservation fee is refunded in full upon written request to the appropriate residence hall dean. When residence hall occupancy is terminated, the fee is applied to the student account.

Current students in residence with a room reservation fee on file may designate a room preference before the end of the current school year. Specific room assignments for new students are made at the discretion of the residence hall dean with attention to class standing and the date the fee is received.

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**Financial Requirements for 2011-2012**

<table>
<thead>
<tr>
<th>Tuition — Quarter Fee Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>The tuition rates reflect a charge of $750 per quarter hour up to 11.5 hours. Tuition for 12 to 17.5 hours is $8,580. All hours over 17.5 are charged at $572 per hour.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Residual Testing ........... $40.00</td>
</tr>
<tr>
<td>Application Fee (first time only) ........... $30.00</td>
</tr>
<tr>
<td>Automobile Campus Registration Fee</td>
</tr>
<tr>
<td>Community students, car, per year ........... $33.00</td>
</tr>
<tr>
<td>Community students, additional car, per year .... $18.00</td>
</tr>
<tr>
<td>Community students, motorcycle, per year ........... $15.00</td>
</tr>
<tr>
<td>Residence-hall students, car, per year ........... $69.00</td>
</tr>
<tr>
<td>Residence-hall students with General Permit, car, per year ........... $54.00</td>
</tr>
<tr>
<td>Residence-hall students, motorcycle, per year ........... $25.00</td>
</tr>
<tr>
<td>Course Waiver Exam ........... $25.00 per exam</td>
</tr>
<tr>
<td>Credit by Exam ........... $25.00 per credit hour</td>
</tr>
<tr>
<td>Examination Fees (standardized)</td>
</tr>
<tr>
<td>Fees are charged to cover costs of such standardized tests as may be required by individual departments.</td>
</tr>
<tr>
<td>Film and Television Production Fees</td>
</tr>
<tr>
<td>(See Film and Television Production Fees Section)</td>
</tr>
<tr>
<td>Flight Training Fees</td>
</tr>
<tr>
<td>(See Flight Training Fees Section)</td>
</tr>
<tr>
<td>Laboratory and Class Fees</td>
</tr>
<tr>
<td>Fee varies with class. Breakage payment as circumstances may require.</td>
</tr>
<tr>
<td>Late Registration Fee ........... $25.00</td>
</tr>
<tr>
<td>(Payable in cash when you register; $35.00 if billed to your account)</td>
</tr>
<tr>
<td>Lost Residence-hall Key or Replacement ........... $50.00</td>
</tr>
<tr>
<td>Lost Student I.D. or Replacement ........... $12.00</td>
</tr>
<tr>
<td>Private Music Lesson Fee</td>
</tr>
<tr>
<td>(see Music Charges section)</td>
</tr>
<tr>
<td>Nursing Fees</td>
</tr>
<tr>
<td>(see Nursing Fees Section)</td>
</tr>
<tr>
<td>Senior Citizen (65 yrs. &amp; older) Rates</td>
</tr>
<tr>
<td>Non-Participation ........... N/C</td>
</tr>
<tr>
<td>Audit Credit ........... $75.00 per hour</td>
</tr>
<tr>
<td>Full Credit ........... $100.00 per hour</td>
</tr>
<tr>
<td>These special rates are available to senior citizens on an “empty-seat” basis. Regular degree students paying full tuition have priority.</td>
</tr>
<tr>
<td>Skiing Fees Inquire at Exercise Science and Nutrition Department</td>
</tr>
<tr>
<td>TEAS Assessment (Nursing) ........... $40.00</td>
</tr>
<tr>
<td>Technology Fee ........... $75.00 per quarter</td>
</tr>
<tr>
<td>Transcript of Credits ........... $25.00</td>
</tr>
</tbody>
</table>

For this one-time fee, billed at first enrollment, a student may request up to twenty-five transcripts without additional charge. Additional copies beyond the first twenty-five are $5.00 per copy.
Payment Information

Payment for the tuition, room, and board expenses is to be made by:

- September 15  Fall Quarter
- December 15  Winter Quarter
- March 15  Spring Quarter

You may pay in person, by mail, or online at https://webadvisor.puc.edu with your Lantern user name and password. Electronic checks, American Express, Discover Card, MasterCard, and Visa are accepted.

Financial Clearance

Students who have been admitted to the college may register for classes in advance. A financial restriction is placed on the student’s registration 30 days prior to the start of each quarter. During this period, students are required to obtain financial clearance from the Student Financial Services Office. Financial clearance is defined as completing a financial plan with the Student Financial Services Office and making the scheduled payment(s). A student who does not obtain financial clearance by 4:00 p.m. on the second day of classes for the current quarter will have their registration cancelled. For further information, see the section entitled “Academic Information and Policies” in this catalog.

Billing Procedure

As a student at Pacific Union College you have two accounts, your basic education account (covers tuition, room and board) and your miscellaneous account (covers other charges through the year, such as meal costs in excess of the minimum, private music lessons, course-overload charges, library fines, etc.).

You pay your basic education account charges on the basis of your payment plan with the school. Your miscellaneous account charges are to be paid each month upon receipt of the statement.

A late charge is assessed for any account that remains unpaid beyond 30 days.

Financing College

If you elect one of these plans, you should complete arrangements with your Pacific Union College financial counselor thirty days before the school term begins.

Tuition Guarantee Plan
Provisions of the Plan:
1. Under this plan, the tuition cost in effect at the time of the first payment agreement will remain in effect until graduation, provided you are enrolled full-time continuously (except summers). (Student missionaries and Taskforce workers may be granted a one-year leave of absence.) This discount is only available to students without need-based grants or loans.

Cash Discount
Provisions of the Plan:
1. Cash discounts will be applied as follows: 2% discount of the total advance payment for each quarter in residence.

Estimate of Expenses
The following amounts represent the estimated cost of full-time attendance during the fall, winter, and spring quarters of the 2011-2012 school year:

<table>
<thead>
<tr>
<th></th>
<th>One Year</th>
<th>Each Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition &amp; fees*</td>
<td>$25,740</td>
<td>$8,580</td>
</tr>
<tr>
<td>(12-17.5 hours)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology fee</td>
<td>225</td>
<td>75</td>
</tr>
<tr>
<td>Residence-hall Rent</td>
<td>4,260</td>
<td>1,420</td>
</tr>
<tr>
<td>Minimum Board</td>
<td>3,015</td>
<td>1,005</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$33,240</strong></td>
<td><strong>$11,080</strong></td>
</tr>
</tbody>
</table>

Books and school supplies are purchased on a cash basis at the College Bookstore.

* For students enrolled for six credit hours or more, tuition and fee charges include tuition, a student medical assistance plan, Student Association fees, and graduation fees.

2. Prior to or on September 15, you must pay total estimated costs (including room and board) for the year.

3. As a participant in this plan you are eligible only the first year of participation for a 2% cash discount on the total estimated costs.

4. Any money you earn from campus employment is paid directly to you. These earnings do not qualify as a reduction in the amount to be paid.

5. Costs in excess of the total estimated costs paid will be billed monthly. You must pay them on a monthly basis.

6. Should your actual costs be less than the estimated amount paid, the credit will be refunded after June 25.

This plan guarantees only the tuition rate, not any other charges, including but not limited to the room and board charges and any fees assessed after the beginning of the school year. If you elect this plan, you (or your parents or sponsor) must prepay each year the total estimated costs, which include room and board and other fees at the current rate.

Monthly Payment Plan
Provisions of the Plan:
1. After deduction of financial aid and scholarships from the total estimated costs, the remainder may be paid in nine equal payments beginning September 15th and on the 15th of each successive month through May.

2. The responsible party receives a
generally made available through grants, you may apply for financial aid, which is do so. If you have further financial need, the extent that you and they are able to application to meet your cost of attendance to state student aid programs is that you.

The basic premise of the federal and
discounts offered by the college for this discount, you also receive the ben-

For a family with two dependent stu-
dent per quarter is given; for a family with three or more, the discount is $250 per student per quarter.

For a family with three dependent stu-
dents/families who make the scheduled payments on a timely scheduled basis will not be charged the late fee.

Students are encouraged to complete the required forms for financial aid prior to the start of the quarter. Students who are granted provisional financial clearance will be given five (5) weeks after the start of the quarter to submit the required documents. If these documents are not received by the end of the five week period, then the student will be charged a late document fee of $150. Required documents are:

1. processed FAFSA,
2. Pacific Union College Financial Aid Application, and
3. any other documents required to process a financial aid award.

Family Discount Plan
Provisions of the Plan:
1. For a family with two dependent students attending the college at the same time, a discount of $200 per student per quarter is given; for a family with three or more, the discount is $250 per student per quarter.
2. If you are in a family qualifying for this discount, you also receive the benefits of any of the other payment and discount plans offered by the college for which you qualify.

Financial Aid Programs

The basic premise of the federal and state student aid programs is that you and your family have the primary obligation to meet your cost of attendance to the extent that you and they are able to do so. If you have further financial need, you may apply for financial aid, which is generally made available through grants, loans, and student employment.

The following definitions are given to clarify financial aid:

Cost of Attendance: Tuition, fees, room and board, books and supplies, personal expenses (laundry, clothing, etc.), and required travel.

Financial Aid: Financial resources available to meet financial needs, resources such as scholarships and grants, which are not repaid; loans, usually at favorable interest rates and with extended repayment periods; and part-time student employment.

Expected Family Contribution (EFC): The information reported on your FAFSA is used to calculate your EFC. The formula used to calculate your EFC is established by law and is used to measure your family’s financial strength on the basis of your family’s income and assets. The EFC is used to determine your eligibility for federal student aid and indicates how much money you and your family are expected to contribute toward your cost of attendance.

Financial Need: The difference between cost of attendance and the EFC.

Scholarships: Outright gifts awarded for achievement and leadership.

Grants: Outright gifts, based on financial need.

Loans: Financial assistance which must be repaid, usually with favorable interest rates and long-term repayment schedules.

Independent Student: For federal and state student aid program purposes, you are considered independent if you

1. are 24 years of age or older on or before December 31 of the award year,
2. are a veteran of the U.S. Armed Forces,
3. are an orphan or ward of the court,
4. have a legal dependent other than a spouse,
5. are a married student, or
6. are a graduate/professional student.

Free Application for Federal Student Aid (FAFSA): The application form used to determine your financial need. The FAFSA is available at www.fafsa.ed.gov.

Financial Aid Application (FAA): Pacific Union College’s supplemental form to apply for financial aid. This is available at the Student Financial Services Office, or at www.puc.edu.

Eligibility for Financial Aid
To receive aid from federal student aid programs, you must:

1. demonstrate financial need (except for certain loans),
2. have a high school diploma or equivalent,
3. be accepted to attend Pacific Union College,
4. be working toward a degree or certificate in an eligible program,
5. be a U.S. citizen or eligible noncitizen,
6. have a valid Social Security number (unless if you’re from the Republic of the Marshall Islands, the Federated States of Micronesia, or the Republic of Palau),
7. register with the Selective Service if required,
8. maintain satisfactory academic progress once in school,
9. certify that you are not in default on a federal student loan and do not owe money on a federal student grant, and
10. certify that you will use federal student aid only for educational purposes.

Satisfactory Academic Progress. To be eligible to receive federal, state, and/or institutional financial aid at Pacific Union College, you must maintain satisfactory academic progress, which is defined as follows:

Course Load. To be a full-time student, you must register for at least 12 hours and complete at least 10 hours per quarter. To complete a bachelor’s degree in
Financial Information

four years, you must complete an average of 16 hours per quarter. (Financial aid is available during the summer if you are taking at least 9 hours and will graduate at the end of summer quarter.)

GPA. You must earn a minimum quarter GPA of 2.0 and a cumulative GPA of 2.0 to qualify for financial aid. To be eligible for campus grant money, bachelors degree students must satisfactorily complete 39 hours in three consecutive quarters; two-year degree students must complete 36 hours in three consecutive quarters.

In calculating the GPA and evaluating progress toward completion of a degree:

“F” (Incomplete) and “IP” (in progress) carry no grade points and are not computed in the GPA.

“NR” (No grade reported) carries no grade points and is not computed in the GPA.

“W” (Withdrawal) is not computed in the GPA, nor is the course considered to be completed satisfactorily.

A course repeated at Pacific Union College to improve the GPA is counted only once toward the total credit hours required for graduation. Only the better grade is included in the GPA.

Time Frame for Progress Toward a Degree. If you receive financial aid, you should carefully adhere to the requirements of your major or other program to ensure completion on time. You must be in compliance with the tables above, which indicate the time for a first-year student to qualify for a degree. Financial aid for students in other classifications will be prorated.

Satisfactory Academic Progress Review. At the end of each quarter the Student Financial Services Office reviews the academic progress of each student. If while receiving financial aid you are found to be in violation of the hour and/or GPA requirements, your financial aid could be immediately suspended. At the end of the third quarter, campus financial aid may be suspended if the 39/36 hour requirement has not been met.

If your financial aid is suspended, before it can be reinstated you must make arrangements with the Student Financial Services Office and with the Records Office to take the appropriate course load to satisfy the 39/36 hour and GPA requirements.

For Four-year Degree

<table>
<thead>
<tr>
<th>By the end of</th>
<th>Credit to be completed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 quarters</td>
<td>39 hours</td>
</tr>
<tr>
<td>6 quarters</td>
<td>78 hours</td>
</tr>
<tr>
<td>9 quarters</td>
<td>117 hours</td>
</tr>
<tr>
<td>12 quarters</td>
<td>156 hours</td>
</tr>
<tr>
<td>15 quarters</td>
<td>all degree requirements</td>
</tr>
</tbody>
</table>

For Two-year Degree

<table>
<thead>
<tr>
<th>By the end of</th>
<th>Credit to be completed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 quarters</td>
<td>36 hours</td>
</tr>
<tr>
<td>6 quarters</td>
<td>72 hours</td>
</tr>
<tr>
<td>9 quarters</td>
<td>all degree requirements</td>
</tr>
<tr>
<td>12 quarters</td>
<td>all A.S. Nursing requirements</td>
</tr>
</tbody>
</table>

Part-Time Students. Financial aid may be available to part-time students as follows: three-quarter time (9-11.5 hours) and half-time (6-8.5 hours). You must declare less than full-time status to your financial counselor prior to the beginning of the quarter. Pacific Union College Campus Grant money is available to full-time students only. Additional information is available from your financial counselor.

Transfer Students. Transfer students are eligible for financial aid during their first quarter at Pacific Union College and are subject to the same satisfactory academic-progress policies as other Pacific Union College students. Credits earned prior to enrolling at Pacific Union College are not accepted when determining academic progress. Transfer credit may be accepted to make up a deficiency. Before registering as a transfer student, you must consult the Records Office to determine whether or not Pacific Union College will accept your transfer credits.

Appeal Procedures. The following appeal procedures are available if you are ever deemed not to be making satisfactory academic progress. If you are in this category, you may receive aid for the coming quarter upon approval of a written petition to the Financial Aid Committee at the Student Financial Services Office. This petition must

1. describe the reasons for not making satisfactory progress,
2. outline a program for correcting the problem, and
3. list an approved, attainable class schedule, signed by your academic advisor and a representative from the Teaching and Learning Center, for the following quarter.

Financial Aid Suspension. If you do not make satisfactory academic progress for the petitioned quarter, you will be placed on Financial Aid Suspension, a status that terminates financial aid. If your financial aid is suspended, you may appeal the suspension in writing to the Financial Aid Committee at the Student...
Financial Services Office.

The Financial Aid Committee will review the appeal and determine whether the suspension is justified. You will be advised of the decision in writing.

If the appeal is approved and aid is reinstated for 1 additional quarter, you must:

1. begin the quarter with a minimum of 12 hours, complete at least 10 hours, and attain a GPA for the quarter of at least 2.00 and sufficient to bring the cumulative GPA to at least 2.00.

If you do not meet the above requirements, financial aid will be suspended without recourse until you are able to demonstrate your ability to succeed with the appropriate course load and achieve the appropriate GPA.

Types of Aid

Financial aid consists of gift aid and self-help aid. Gift aid includes scholarships and grants, which require no repayment. Self-help includes loans, which must be repaid, and your employment earnings.

Gift Aid: Scholarships and Grants

From the Federal Government

Federal Pell Grant. The Pell Grant is a federally-funded grant program designed to help eligible undergraduates earn the first baccalaureate degree. The amount is based on your financial need and the number of hours for which you are enrolled.

FSEOG. The Federal Supplemental Educational Opportunity Grant program is a federal program for undergraduate students with exceptional financial need. An FSEOG award is automatically considered for students applying for financial aid through Pacific Union College.

BIA. Bureau of Indian Affairs grants help native American students meet their college costs. Applications for BIA grants and vocational assistance are available from the U.S. Bureau of Indian Affairs regional offices or from the Bureau’s Office of Indian Education, 2800 Cottage Way, Sacramento, CA 95825.

From the State Government

The California Student Aid Commission. All Pacific Union College students who are California residents are encouraged to apply to the California Student Aid Commission for state-funded grant assistance. Eligibility requirements and application procedures are posted at www.calgrants.org. An annual application is required for all grants. Applications are due by March 2 for the school term starting in September.

Cal Grants are based on a combination of demonstrated financial need and academic achievement as evidenced by your GPA. Scholarship award amounts are determined by the CSAC. Both the FAFSA and the GPA Verification Form must be submitted by March 2.

From the College

Honor Awards

Contact the Enrollment Services Office or the Student Financial Services Office for information about College-awarded scholarships and awards.

A Campus Grant is a limited grant available to help meet a student’s remaining financial need. Recipients must maintain satisfactory academic progress and carry a full course load; they may be required to live in College housing.

Self-Help: Loans

Most of the financial aid packages from the college’s Student Financial Services Office include an expectation that the applying student will take a loan under one of several loan programs. Your student loan helps defray current costs until you can better afford to pay for them. Campus Grant money is available to you only if you also have a Federal Direct Loan or Federal Perkins Loan.

Federal Direct Loan Program. The most common type of loan for undergraduates is the Direct Subsidized Student Loan, provided by the federal government. To be eligible, you must qualify to receive federal student aid.

The interest rate is variable. Repayment begins six months after you complete college or drop below half-time attendance. The servicer determines the repayment schedule. Interest rates and borrowing limits are posted at https://studentloans.gov. Loan origination fees are charged by Direct Loans.

If you have an undetermined financial need, you may apply for the Direct Unsubsidized Loan. The application process and loan amounts are the same as for the Direct Subsidized Loans. The difference between the two loan programs is that you are responsible for the interest accruing while in school if the loan is unsubsidized. You are not responsible for interest accruing for the subsidized loan.

Parent Loans for Undergraduate Students (PLUS). A PLUS loan is a federal loan available to parents who borrow on behalf of dependent students. Parents may borrow up to the full cost of education minus other financial aid. If a parent wishes the PLUS to be used for financial clearance, the completed PLUS application must be in the Student Financial Services Office to be certified prior to registration. If the PLUS is to be used to pay the entire cost of education, the Student Financial Services Office must have information about the PLUS loan.

Federal Perkins Loans. The Federal Perkins Loan program is funded mainly by the federal government but administered by the Student Financial Services Office.
The loans are repaid directly to Pacific Union College. No interest is charged while you remain in school as an undergraduate or continue education in a graduate or professional school. When you cease to be a student, there is a grace period before repayment begins.

The total repayment period is not to exceed ten years. Minimum payments of $40 are due on the first of each month during the repayment period and are delinquent if not received by the 15th, at which time the account becomes subject to a late fee. Regular collection procedures are employed, including accelerating the payment of the total loan and referrals to collection agencies when a loan account is in default.

**Collegiate Loans.** A collegiate loan is funded by a program established by Pacific Union College. Loan amounts are limited to available funds allocated by the college for this program. The terms, interest rate, and payback requirements mirror the Federal Perkins Loan program.

### Financial Information

<table>
<thead>
<tr>
<th>Hrs./Wk.</th>
<th>Rate/Hr.</th>
<th>Income/Yr.</th>
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<tbody>
<tr>
<td>10</td>
<td>$8.00</td>
<td>$2,400</td>
</tr>
<tr>
<td>15</td>
<td>$8.00</td>
<td>$3,600</td>
</tr>
<tr>
<td>20</td>
<td>$8.00</td>
<td>$4,800</td>
</tr>
</tbody>
</table>

The college cannot guarantee how much you will earn.

Campus employment is arranged through the Student Employment Office in Financial Services. If you seek work on campus, you must file an application with the Student Employment Office and be registered for at least eight hours of course work (except during the summer).

Electronic time clocks are used for recording hours worked. Student workers are paid by electronic funds transfer every two weeks. Department directors employing students determine wage rates within ranges established by College management. Hourly rates are in compliance with state and federal laws.

You may assign a portion of your wages to your account by completing a form available at the Student Financial Services Office. You may also request that tithe and/or church expense offerings be deducted from your earnings.

**Federal Work-Study Program.** If you qualify, a portion of your wages may be subsidized through the Federal Work-Study Program. Federal Work-Study is designed to broaden the range of meaningful employment. In order for you to be employed on the Federal Work-Study Program, you must have applied for financial aid and must be receiving financial aid (i.e., a Federal Pell grant, a Federal Perkins Loan, a Federal SEOG, etc.) awarded by the Student Financial Services Office, and must have an unmet financial need. (If you are employed in the Religion Department, you are not eligible to participate in the Work-Study Program.)

The type of financial aid offered to you depends upon the amount of financial need and the resources available. After family resources and outside resources (Cal Grants, Rotary Scholarships, etc.) are taken into consideration, a financial award is built in the following order:

1. Federal Pell Grant
2. Federal Supplemental Educational Opportunity Grant
3. Cal Grant/Pacific Union College Scholarships/Tuition Assistance, etc.
4. Loan (Federal Direct Loan or Federal Perkins Loan)
5. Pacific Union College Campus Grant

If your award letter from the Student Financial Services Office includes a Pacific Union College Campus Grant, you must take a loan in order to qualify for the grant.

**Please note:** It may be impossible for the college to fill your complete financial need. Also, it may be impossible for all of your Pacific Union College scholarship awards to fit into your FAFSA need figure.

### Special Programs

Special programs are designed to help qualified students finance their costs of attendance. It is your responsibility to investigate and, if you qualify, to pursue these financial sources.

**Veterans’ Benefits.** The Cal-Vet Educational Assistance Program may pay fees and a monthly stipend to students who qualify. For more information on these programs or on G.I. benefits, veteran’s loans, or veteran’s employment, contact the Department of Veterans Affairs or the veterans certifying official at Pacific Union College.

**State Aid to the Physically Handicapped.** Through its Bureau of Vocational Rehabilitation, the State of California provides financial assistance to students who have physical disabilities. This assistance may include an additional amount to help cover living costs. Students who may be entitled to this assistance should apply to the State Bureau of Vocational Rehabilitation.
How to Apply for Financial Aid

1. Complete and submit the FAFSA. The FAFSA is necessary for determining your EFC and applying for federal student aid. Select Pacific Union College as one of the colleges to receive your Student Aid Report (SAR) using the college’s Federal School Code 00125800. Upon receipt, review your copy of the SAR for accuracy.

2. To apply for a Cal Grant, legal residents of California must complete and submit the GPA Verification Form and the FAFSA by March 2. Obtain a Certificate of Mailing for each form to prove that you met the March 2 deadline. (Students currently receiving a Cal Grant do not need to file the GPA Verification Form.)

3. Complete a Pacific Union College Financial Aid Application (FAA) and return it to the Student Financial Services Office, if requested.

4. Send signed copies of Federal income-tax returns and W-2s to the Student Financial Services Office, if requested.

5. Apply for admission to the college.

March 2 is the filing deadline for the FAFSA and GPA Verification Forms. April 15 is the priority processing deadline for receipt of the items listed above by the Student Financial Services Office, Pacific Union College, One Angwin Avenue, Angwin, California 94508-9707. Aid awards for applications received after these dates will be based on funds available, but may not cover the determined need.

Delivery of Financial Aid

Cal Grant A, B and C tuition awards are placed as credit on student accounts each quarter.

Financial aid is posted directly to student accounts. Grant aid is handled entirely by the college and is posted directly to individual accounts.

Students receiving Federal Perkins Loans will have an advance posted each quarter. Direct and PLUS Loans are processed via electronic funds transfer directly to the student account.

Placing all monies on the student account provides an audit trail. Should any question arise regarding the account or the disposition of aid, the student account statements readily provide the necessary information.

If your aid exceeds the college charges, it is possible to arrange with the Student Financial Services Office for a cash withdrawal from the account at the end of the quarter.

Each quarter the same procedure is followed. Ordinarily, financial aid is credited at the beginning of each quarter. However, if you should have unforeseen financial problems with documented increased financial need, supplemental aid may be given.

A financial aid award packet will be sent to you if you have

1. completed financial aid applications (FAFSA, FAA) on file at the Student Financial Services Office;
2. been accepted for admission by the college;
3. sent requested supplemental financial documentation; and
4. responded to any further requests by the Student Financial Services Office.

The financial aid award packet contains your financial check sheet, an award letter indicating your financial aid and scholarships, appropriate loan documents and a payment agreement.

The payment agreement and award letter must be signed and returned to the Student Financial Services Office. This acceptance serves as authorization to prepare the federal student aid you will receive.

If you are interested in applying for financial aid, or if you receive financial aid, you should be aware of the following:

1. You are encouraged to discuss any financial problems with your financial aid counselor. Staff members want to help you achieve your academic goals.
2. Financial aid is not intended to help with financial obligations incurred prior to coming to the college. Thus, if you have car payments or substantial credit card or loan debt, it would be best to liquidate such obligations before applying for aid and coming to school.
3. You are encouraged to discuss academic problems with your academic advisors at an early date, or to seek special help from the Counseling Center and/or the Teaching and Learning Center.
4. Students receiving financial aid are responsible for doing as well as possible in their classes. If you find it necessary to change or reduce your course load, you must consult with your financial counselor regarding how the change in your course load affects your financial aid.
5. If you must withdraw from the college, first contact the Student Financial Services Office for a determination of refunds to be made to the aid funds and for information regarding disposition of any loans you may have.
6. You are responsible, as long as there is an unpaid balance, to keep the Student Financial Services Office informed of your address and to make the minimum monthly payments.
7. If you have Perkins or Collegiate loans and transfer to another school, or return to Pacific Union College after being out for more than six months, you may request the Student Financial Services Office to defer your loan payments until you are not attending school again. A similar deferment is possible on Direct Federal Student Loans, but you must contact the servicer for the proper paperwork.
8. Completion of a two-year associ-
Refund Policy

Tuition Refunds for a reduction in course load are made after you withdraw from a course through Lantern. When dropping all courses, you must complete a Notice of Withdrawal from School form. This form is available at the Records Office.

The amount of tuition refund to students who withdraw from any or all courses during a quarter is determined from the date the completed withdrawal form is filed with the Records Office.

The refund schedule is as follows:

1. First through fifteenth school day of the quarter - 100% refund;
2. Sixteenth school day of the quarter - 59% refund;
3. 3% less for each school day thereafter;
4. After the 29th school day - no tuition refund.

Residence Hall Room Refund

When a room is occupied less than one quarter, a charge is made for the actual number of days (60 days per quarter) on a pro-rata basis as follows:

1. First through seventh calendar days - 100% refund
2. Eighth calendar day - 86.67% refund;
3. Ninth through 60th calendar days - 1.67% reduction per day;
4. After the 60th calendar day - no refund.

Financial Aid Refunds

Since tuition, room, and board refunds are a reduction in your costs, a corresponding reduction must be made in financial aid that you may have received. Your account will be charged for the reduction in financial aid.

To be certain that all charges and credits have been entered on your account, the college reserves the right to withhold settlement of any balance due to you until the end of the next billing cycle (30 days after you leave campus).

G.I. Bill

Students qualifying for the G.I. Bill should make this fact known to the veterans certifying official in the Records Office at the time of application to the college. The certifying official will supply the necessary forms and advise you of the procedures you must complete in order to receive the benefits to which you are entitled. The Department of Veterans Affairs (VA) determines eligibility for the G.I. Bill.

By prior arrangement with the VA, veterans may have an advance payment check available on registration day. Monthly payments are made by the VA directly to the student, with the following exception: the school receives payments for tuition and fees directly from the VA for students receiving benefits under the Post-9/11 G.I. Bill. These payments will be placed directly on the student accounts.

Students are required to follow the regular payment plan as listed for other students. For further information, see the section entitled “Veterans” in this catalog.

International Students

International students are required to pay all costs for the upcoming quarter in advance. A deposit of $1,000 is required before an I-20 is issued. This deposit will be held until the student ceases to attend Pacific Union College. The $1,000 deposit can be applied to the student's final quarter at Pacific Union College. An additional $150 fee is required from international students who plan to live in one of the residence halls. (See “Room Reservation Fee.”)

International students on student visas do not qualify for loans and grants as detailed in the financial section. Campus employment, however, may be available. International students are expected to meet required payments for miscellaneous charges at registration and throughout the quarter just as other students do.

To determine the parents’ or sponsor’s ability to meet the educational costs without the need for financial aid, the applicant must also submit for review a bank statement showing a balance of $41,150 US dollars drawn on an international bank. Further information is available from the Student Financial Services Office.

Insurance for International Students

Because the cost of medical care in the United States is high in comparison to costs in other countries, all international students must have and maintain major medical insurance coverage while attending Pacific Union College. This insurance must have minimum coverage of at least $150,000. The insurance may not discriminate on the basis of sex or age. The policy must be written in English.

Pacific Union College has a major medical insurance plan available for international students. At the time of registration students must purchase the medical insurance available through the college or provide a copy of the schedule...
of benefits of their own medical insurance policy, meeting or exceeding the minimum requirements specified by the college.

Automobile insurance is required in the United States to cover liability for damages in the event of an accident. Severe penalties are imposed on the owner and driver of an uninsured vehicle should an accident occur. The international student advisor at Pacific Union College can provide information about purchasing automobile insurance.

Adventist Colleges Abroad (ACA)

Students considering enrollment in the ACA program should consult with their financial advisor at the Student Financial Services Office. Most scholarship and loan programs are available to students in the ACA program, especially those based on fund sources other than Pacific Union College. Financial aid, scholarships, or loans funded by Pacific Union College are not available to students in the ACA program. Educational scholarship assistance for denominational employees’ dependents is available for all ACA programs.

Dining Commons

The Dining Commons is operated on the cafeteria plan. If you live in one of the college residence halls, you are expected to take your meals in the Dining Commons. The quarterly minimum charge for board is $1,005.

If you are a commuting student, or if you are enrolled in less than a half-time study load, you may pay cash or use your regular ID card when using the Dining Commons. (You may be asked to pay a deposit before your ID card is activated for use in the Dining Commons.) All meal charges must be paid by the end of the next billing cycle.

Residence Halls

Pacific Union College affirms the values to be gained from being primarily a residential college. Most students live in one of the seven gender-exclusive residence halls. Four women’s residence halls can accommodate approximately seven hundred students; three men’s halls, approximately six hundred.

By accepting admission, if you are an unmarried student aged 22 or younger you agree to live in a residence hall unless you apply for and are granted an exception (see “Student Housing”).

To apply for a room in a residence hall, complete and submit a Residence Hall Information Card along with a $150 room reservation fee. Room assignments for new students are made on the basis of class standing, the date the fee is received, and the discretion of the residence hall dean. If you change your mind and do not enroll at Pacific Union College, your full room reservation fee will be refunded, provided you notify your residence hall dean of your decision at least 21 days prior to the first day of classes.

The standard room rate is $1,420 per quarter for double occupancy in each residence hall. When a student can be accommodated only through overcrowding, there will be a 25% reduction in the rental rate for each student in the room. If you choose to room alone, provided space is available, you will be charged an additional $710 per quarter.

When a room is occupied less than one quarter, a charge is made for the actual number of days on a pro-rata basis. (See “Refund Policy”.)

When you move out of the residence hall, the room will be inspected for reasonable cleanliness and normal wear. If necessary, charges for extra cleanup or repairs will be made at this time against your student account.

You will be issued a key upon occupancy of a residence hall room and will be expected to return it when you move out. Should the key be lost or not returned upon departure, a $50 lost-key charge will be placed on your account.

Charges made to your long-distance telephone number cannot be billed on your monthly statement. (For further information, see the section entitled “Telephone Information” in this catalog.)

The College is not liable for loss of your personal belongings or damage to them. If you want insurance coverage for personal possessions, you should arrange for it with your personal insurance carrier.

Student Family Housing

Housing for married students and single parents is available on campus in two areas: Court Place and Brookside Park. To qualify for residence in these areas, applicants must be taking a regular course load and complete a minimum of 12 hours of class work with a GPA of 2.0 or above each quarter.

The Court Place apartments include fourteen one- and three-bedroom duplex units with a one-car carport space adjacent. Brookside Park includes forty-one to three-bedroom apartments with carport. All apartments are furnished with stove, oven, refrigerator, window coverings and carpet.

Assignments are made on a first-come, first-served basis, established by a $10 nonrefundable deposit. Information about housing for married students or single parents is available from the Student Services Office, Pacific Union College, One Angwin Avenue, Angwin, CA 94508-9707.

The College is not liable for loss of your personal belongings or damage to them. If you want insurance coverage for personal possessions, you should arrange it with your personal insurance carrier.
Student Medical Assistance Plan
Pacific Union College does not provide a primary health insurance plan for students. It is your responsibility to have a primary plan in place when you enroll. Health Services can provide information regarding primary plans you may wish to contact.

In the event of an accident, it is your responsibility to contact the Health Services Department. Accidents must be reported to the department unless the injury is an emergency needing immediate care from an emergency room. In this case, notification is needed as soon as the patient is treated and stable for the college to consider being a payer of outside services. All outside services without the prior authorization from health services staff will be the financial responsibility of the individual. (Please refer to our exclusion list on our website located at www.puc.edu/healthservices)

The college’s student medical assistance plan is not a student insurance plan. A portion of the college’s tuition income is allotted to the Health Services Department and, with prior approval, these funds can be accessed as an adjunct to your primary insurance plan. This is done in an effort to offset the costs of primary insurance plans which often cover only a portion of medical expenses. College funds are accessed only after you or your parent’s primary insurance plan has been billed.

Late Charge on Unpaid Accounts
If you have any account that remains unpaid beyond 30 days after the close of the quarter in which you left the college, a late charge will be assessed.

Billing/Collections
When you leave Pacific Union College your loans and any unpaid tuition balance are transferred from the Student Financial Services Office to the Student Loans and Accounts Office for billing and tracking of repayment. Pacific Union College contracts with a third-party provider for this billing. They are not a collection agency but accounts are automatically placed in collections at 180 days of delinquency.

Late Registration Fee
A late-registration fee of $25 is assessed for failure to complete registration on time. This fee is paid at the Records Office in cash before you are considered fully registered. An additional $10 is charged if you do not pay at the Records Office.

Film and Television Production Fees
There are fees associated with classes in the Film and Television Production program due to the specialized equipment and supplies needed for the program. Fee charges are generated when you register for a Film and Television Production course that has a fee associated with it. For current fee information, contact the Visual Arts Department.

Flight Training Fees
After you register for flight training, the amount needed to pay for ten hours of instruction per credit hour is applied to your flight account at the Parrett Field Flight Center. Expenses for the flight simulator, the airplane and the instructor may be charged to that account. When the tuition credit has been used, additional funds must be applied to the account to maintain a positive balance until the course curriculum has been completed. You may inquire at the Flight Center for cost estimates for your course. Aviation majors may expect to pay approximately $6,000 per year, in addition to tuition, for simulator time and airplane rental fees. (Rates may be adjusted during the school year if there is a significant change in the cost of fuel, insurance, etc.)

Because of reduced tuition for summer courses, one-half tuition credit is applied to the flight account for instruction during the summer session.

Music Charges
Private music lessons are offered on either a credit or no-credit basis. On a credit basis, all students except music majors and minors are charged the normal tuition charge as well as a private music lesson fee of $200 per credit hour.

Fee waiver. The private music lesson fee will not be charged to those majors and minors who are enrolled in Theory I (MUTH 121-122-123) or who have already taken these courses and are continuing to enroll in courses normally expected of majors and minors.

This fee waiver normally applies only to the required number of hours of those lessons necessary to fulfill the degree requirements.

Private Music Lesson Fees Per Quarter
With credit:
Each credit hour of lessons: $200 (tuition additional)
Without credit:
Each half-hour series of lessons: $300

Each credit hour is based upon a minimum of nine one-half-hour private music lessons per quarter. Lessons missed because of a student’s irregular attendance may not be made up.

If a student withdraws within the first two weeks of the quarter, the refund is prorated; after that no refunds are made.

Students enrolling as members of music organizations or ensembles register on a credit or audit basis. A limited number of ensemble scholarships are available.
through the Music Department for students who incur overload tuition charges as a result of enrolling in one of these courses.

**Nursing Fees**

Nursing fee charges are generated when you register for a course that has a fee associated with it. Repeating a course also generates the fee. Fees cover items such as skills lab equipment costs, background checks, malpractice insurance, graduation nursing pin, and the initial testing and evaluation for the national tests given across the program. For current fee information, contact the Nursing Department.

**Skiing Class Fees**

Skiing class fees are generated when you register for the course. For current rates, inquire at the Exercise Science Department. Recently the charges have been in the $200-250 range.

**Auditing**

Lecture-type courses that are audited are charged at the half-tuition rate. Independent study, ensembles, and participation-type courses may be audited, but full tuition is charged.

**Graduation in Absentia**

It is expected that all graduates will participate in the commencement services unless the Records Office is notified in writing that the student plans to graduate in absentia. Written application for exemption should be made no later than one week prior to commencement. A fee of $25 is assessed to any graduate who is absent from graduation without having given prior notice.

**Technology Fee**

Students enrolled for one or more credits on the Angwin campus pay a $75 per-quarter technology fee.

**Final Examinations**

It is expected that all students take final examinations when scheduled, but students may petition the academic dean for exceptions. Exceptions are granted for documented emergency situations or arduous examination schedules (as defined by the academic dean). Any exceptions granted for other reasons will incur a charge of $100 per rescheduled final examination.

**Transcripts and Diplomas**

Each student at first enrollment is billed a one-time transcript fee of $25. For this payment the student may request up to twenty-five transcripts without additional charge. Additional copies beyond the first twenty-five are $5 per copy.

Each graduate is provided with one diploma free of charge. Replacement diplomas are $25 per diploma.

Any costs incurred for rush mailing of documents are added. Inquire at the Records Office for current rates.

**Checks**

Checks for a student’s account should be made payable to Pacific Union College. Checks intended for a student’s personal use should be made payable to the student and not to Pacific Union College. Returned checks are subject to a $15 charge plus statutory penalties if action to collect becomes necessary.

**Cash Withdrawals**

Students are expected not to request cash withdrawals from their accounts. Exceptions are ordinarily considered only in emergency situations or when a credit balance exists.

**Banking and Security of Personal Possessions**

You are advised not to keep money in your residence hall room. The College does not assume any responsibility for the loss of money or other personal belongings left in rooms or elsewhere on campus. Provision is made for students to deposit money for safe keeping at the Financial Services Office. The College does not provide banking services, and no interest accrues. (A charge of $2 is made for reissuing lost passbooks.)

You may use bank debit cards to get cash at the College Market. The Silverado Credit Union is conveniently located in the Angwin Plaza; students are invited to take advantage of its wide variety of financial services. An ATM is located at the SCU.

Purchases made with a personal check require a driver’s license or a DMV ID card. VISA, MasterCard, American Express, and the Discover group may also be used for Bookstore purchases. Students may charge Bookstore purchases to their College accounts.
Vehicle Registration

Students with vehicles to be parked on campus property are required to register each vehicle with the Public Safety Department. When registering a vehicle, information from the following documents is required: current DMV registration with state of residence, driver’s license, and proof of current insurance. A parking permit will be provided upon completion of the registration process; this permit is unique to the registered vehicle and must be displayed properly at all times. A vehicle registration fee of $69 is assessed on all student cars (prorated to $54 for residence-hall students who receive a general permit and to $33 for community students); a vehicle registration fee of $25 is assessed on all student motorcycles (prorated to $15 for community students).

Pacific Union College assumes no liability or responsibility for any personal property while on college property. Parking on the campus is at your own risk. Pacific Union College reserves the right to close any area on campus as needed. Parking privileges may be revoked for excessive violations of California or Campus Vehicle Codes. Pacific Union College reserves the right to search a person’s vehicle with reasonable cause. Vehicle registration information may be disseminated to appropriate college personnel or law enforcement authorities as necessary without notice.
Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.

**Ex Officio**

Pacific Union College Presidents

At Healdsburg
Sidney Brownsberger 1882-1886*
William C. Grainger 1886-1894*
Frank W. Howe 1894-1897*
Roderick S. Owen 1897-1899*
Marion E. Cady 1899-1903*
Elton D. Sharpe 1903-1904*
Warren E. Howell 1904-1906*
Lucas A. Reed 1906-1908*

At Angwin
C. Walter Irwin 1909-1921*
William E. Nelson 1921-1934*
Walter I. Smith 1934-1943*
Henry J. Klooster 1943-1945*
Percy W. Christian 1945-1950*
John E. Weaver 1950-1954*
Henry L. Sonnenberg 1954-1955*
Ray W. Fowler 1955-1963*
Floyd O. Rittenhouse 1963-1972*
John W. Cassell, Jr. 1972-1983
D. Malcolm Maxwell 1983-2001*
Richard C. Osborn 2001-2009
Heather J. Knight 2009-

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President, Pacific Union Conference

Shirley Chang, Ph.D., Vice Chair
Retired Professor,
San Jose State University

Heather J. Knight, Ph.D., Secretary**
President, Pacific Union College

Theodore Benson, Ed.D.**
Treasurer, Pacific Union Conference

Ratamio Cano, B.A.**
President,
Central California Conference

Donald E. Feltman, B.S.
Managing Member,
Great Falls Heritage Partners LLC

Eleanor Ferguson-Marshalleck, Ph.D.
Associate Dean, College of Health and Human Services, CSU Los Angeles

Harry “Chip” Gabriel, M.B.A.
President, Generations LLC

Esther J. Chambi Herold, J.D.
Attorney

Clyde Holland, M.B.A.
Chairman & CEO, Holland Partners

Kristine R. Johnson, M.A.
Speech Pathologist

Leanor Boulin Johnson, Ph.D.
Professor, Arizona State University

David H. Kim, M.D., F.H.M.
Regional Medical Director,
Team Health West

Dwayne O. Leslie, J.D.
CEO, Phase V Pharmaceuticals

Terry Newmyer, M.B.A.
CEO & President, St. Helena Hospital

Bradford C. Newton, D.Min.**
Executive Secretary,
Pacific Union Conference

James E. Pedersen, M.Div.**
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Retired Special Agent,
State of California

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Chief Deputy Director,
California Housing Finance Agency

Arnold Truejillo, M.Div.**
Vice President,
Pacific Union Conference

Larry Unterseher, M.Div.**
President, Nevada-Utah Conference

Berit von Pohle, Ed.S.
Director of Education,
Pacific Union Conference

Ralph S. Watts III, M.Div.**
President, Hawaii Conference

*Deceased

**Ex Officio
College Personnel

College Administration
Heather J. Knight, Ph.D. President
Pacific Union College

Gynna Bumanglag, B.S.W. Candidate Administrative Secretary
Rosemary L. Collins, M.A. Associate Director, Student Persistence
Janet S. Ivey, M.A. Administrative Assistant
Serhii Kalynovs’kyi, M.S. Director, Institutional Research
Jennifer J. Wareham Best, M.A. Director, Student Persistence

Academic Administration
Nancy Hoyt Lecourt, Ph.D. Vice President for Academic Administration and Academic Dean

Jonathan S. Bradley, B.A. Assistant Registrar
Carlyn Ferrari, M.A. Academic Probation Mentor
Tanya J. Healy, B.A. Executive Assistant
Georgina Hill, Ph.D. Director, Honors Program
Nancy R. Jacobo, M.P.H. Coordinator, Disabilities Support Services
Maria G. Lopez, B.S. Director, Academic Computing
Kathleen S. Mattison, B.A. Assistant Registrar
Edwin L. Moore, M.A. Associate Academic Dean
Cherith D. Mundy, M.S.Ed. Assistant to the Associate Academic Dean
Leticia Russell, M.A. Coordinator, Freshman Academic Success Program
Jennifer J. Wareham Best, M.A. Director, Teaching and Learning Center
Marlo J. Waters, M.S. Registrar
Valerie Yingling, B.A. Tutoring Coordinator

Financial Administration
Dave C. Lawrence, Ed.D., M.B.A. Vice President for Financial Administration and Chief Financial Officer

Christopher S. Ames, B.B.A. Assistant Controller
Gayln L. Bowers, M.B.A. Director, Human Resources
Douglas E. Ermshar, B.S. Controller
Rebecca J. Evans, B.S. Student Financial Services Counselor
Geraldine C. Glantz, B.A. Collections and Program Analyst
Joy L. Hirdler, B.B.A. Director, Budgets and Fiscal Services
Jessica K. Kegley, B.A. Student Financial Services Counselor
Hildet C. Madrid Student Financial Services Counselor
C. Jay Miller, M.B.A. New Student Financial Services Counselor /Recruiter
Debbie S. Stewart, B.S. Executive Assistant
Laurie L. Wheeler, M.B.A. Director, Student Financial Services

Student Services
Lisa Bissell Paulson, Ed.D. Vice President for Student Services and Dean of Students

James I. Boyd, Jr., B.S. Dean of Men
R. Laffitt Cortes, M.Div. Campus Chaplain
Gena Cowen, B.A. Assistant Dean of Women
Hernan Granados, M.Div. Assistant Dean of Men
Laura Gore, M.S.W. Career Counselor
Jonny Halversen, B.S. Assistant Dean of Men
Kristi R. Horn, M.S. Assistant Dean of Women
Michael Jefferson, M.A. Director, Counseling Center
Robert Kurtz, M.Div. Assistant Dean of Men
Susan Ranzolin, B.S.N. Program Coordinator
Annette L. Riebe, M.A. Associate Dean of Women
Sandra Sargent, R.N. Director, Health Services
Karen G. Tempchin Assistant Dean of Men
Sean Westenrider, B.S. Director, Public Safety
Douglas S. Wilson Associate Dean of Students and Dean of Women, Residence Life

Public Relations and Enrollment Services
Julie Z. Lee, B.A. Vice President for Marketing and Enrollment Services

Susanne Ermshar, B.S. Coordinator
Nicholas Hubbard, B.S. Webmaster
C. Jay Miller, M.B.A. New Student Financial Services Counselor /Recruiter
Brandon Monty, B.B.A. Enrollment Counselor
Dana Negro, B.S. Data Entry Specialist
Kay Parks, A.S. Executive Assistant
Craig E. Philpott, B.S.M. Director, Admissions
Clifford M. Rusch, M.F.A. Associate Director, Public Relations and Art Director
Haley Wesley, B.F.A. Designer
Cambria Wheeler, B.A. Enrollment Counselor
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Gilbert Abella, M.A., M.S.L.S.  Electronic Resources and Reference Librarian
Junior Artigas, B.S.  Director, Media Services
Patrick Benner, M.L.I.S.  Computer Systems and Reference Librarian
Joel H. Lutes, M.L.S.  Electronic Resources and Reference Librarian
Linda E. Maberly, M.L.I.S.  Cataloger and Collection Development Librarian

Auxiliary Enterprises and Services
Willie E. Cook, B.A.  Manager, Albion Field Station
Ada M. Funes, B.S.  Director, Discoveryland Children’s Center, Angwin
Arthur B. Goulard, B.A.  Director, Landscape
Miguel A. Irula  Director, Custodial Service
Mark W. Pacini, A.S.  Housing Coordinator
Kaye L. Varney, B.S.  Director, Flight Center
Robert B. Wilson  Director, Copy Center and Mail Services
Julie A. Yamada, B.S., B.A.  Director, Discoveryland Children’s Center, St. Helena
Allan L. Zehm, B.S.  Director, Land Management

Howell Mountain Enterprises
A Wholly Owned Subsidiary of Pacific Union College
John I. Collins, Ed.D.  President
Michael S. Cline  Manager, Market
Douglas E. Ermshar, B.S.  Treasurer
Rob J. Payne, B.S.  Manager, Hardware
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Claudia Cortes, M.S.W., San Francisco State University, 1998.

Meg Easter-Dawson, M.S.W., Indiana University, 1997.

James Featherstone, L.C.S.W., M.S., Columbia University, 1974.

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Blanch Hilman, M.S.W., Columbia University, 1987.

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College Personnel

Church Partners in Ministerial Training
Calistoga SDA Church
Elmshaven SDA Church
Middletown SDA Church
Napa Community SDA Church
Napa Spanish SDA Church
Napa Valley Korean SDA Church
Pacific Union College SDA Church
Rohnert Park Korean SDA Church
St. Helena SDA Church
St. Helena Spanish SDA Church
Santa Rosa SDA Church
Yountville Signs Memorial SDA Church

Affiliated Agencies for Nursing Clinical Instruction
Children’s Hospital Central California
David Grant Medical Center
Kaiser Permanente, Santa Rosa
Kaiser Permanente, Vallejo
Loma Linda University Medical Center
Marin County Health & Human Services
Napa County Health & Human Services
North Bay Health Care
Queen of the Valley Hospital
San Bernardino County
Santa Rosa Memorial Hospital
Shriners Hospitals for Children
Solano County Health & Social Services
Sonoma County Health Dept.
Sonoma Valley Hospital
St. Helena Hospital
St. Helena Hospital Center for Behavioral Health
St. Helena Hospital, Clearlake
Sutter-Solano Medical Center
UC Davis Medical Center
Ukiah Valley Medical Center

School Partnerships in Supervised Instruction
Calistoga Joint Unified School District
City of Santa Rosa School District
Fairfield-Suisun Unified School District
Fortuna Unified School District
Foothills Adventist Elementary School
Healdsburg School District
Howell Mountain School District
Konocti Unified School District
Middletown Unified School District
Napa Valley Unified School District
Pacific Union College Elementary School
Pacific Union College Preparatory School
Pope Valley Unified School District
St. Helena Unified School District
Vallejo Unified School District
Windsor Unified School District

Field Supervisors in Education
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Donna Altes, B.A., University of Los Angeles, 1967.
Nancy Cross, B.A., California State University, Northridge, 1968.
Betty McCune, Ed.D., University of Southern California, 1983.
Richard Perkins, B.S., Chico State University, 1967.
John Sidorski, B.S., Humboldt State University, 1968.
Rowena Turner, B.A., Western Baptist Bible College, 1961;
Teaching Credential, California State College, Hayward, 1964.
Paulin Center for the Creative Arts


Charles V. Bell, Ph.D., P.E., Oboe. B.S.E.E., Mississippi State University, 1956; M.S.E.E., Stanford University, 1957; Ph.D., Stanford University, 1960. (1984)


John Milholland, Brass. (1997)


Integrity is expected of every student in all academic work. The guiding principle of academic integrity is that the work one presents as one’s own is one’s own.

Students shall not violate the Code of Academic Integrity and shall avoid situations likely to compromise academic integrity. Students shall observe the provisions of the Code of Academic Integrity whether or not faculty members establish special rules of integrity for particular courses. Failure of faculty to prevent academic dishonesty does not excuse students from compliance with the Code.

Those who engage in academic dishonesty diminish the quality and value of their education and bring discredit to the academic community.

**Categories of Academic Dishonesty**

Academic dishonesty includes, but is not limited to, the following:

1. **Cheating**—Using, or attempting to use, unauthorized materials in any academic exercise; or having someone else do one’s own academic work. Examples of cheating include looking at another student’s paper during a test, bringing notes to a test, obtaining a copy of a test prior to the test date, and presenting homework prepared by someone else.

2. **Fabrication**—Inventing or falsifying information. Examples of fabrication include “dry-labbing” (inventing data for an experiment not done or not done correctly), making references to sources not actually used in a research paper, forging signatures on academic forms, forging letters of recommendation, and falsifying credentials in an application.

3. **Facilitating Academic Dishonesty**—Helping someone else to commit an act of academic dishonesty. This includes giving someone a paper or homework to copy from and allowing another to cheat from one’s test paper.

4. **Plagiarism**—Using the words or ideas of another writer without attribution, so that they appear as if they were one’s own. Plagiarism includes copying someone else’s work word for word, rewriting someone else’s work with only minor word changes, and paraphrasing or summarizing work without acknowledging the source.

5. **Multiple Submissions**—Presenting work done in previous courses as if it were new and original work. Although professors are sometimes willing for a student to use previous work as the basis for new work, they expect the student to do new work for the current course. A student who wants to submit a piece of academic work in more than one course should seek the approval of the instructors.

6. **Abuse of Academic Materials**—Harming, appropriating, or disabling academic resources so that others cannot use them. This includes removing tables and illustrations from books and journals to use in a paper, stealing books or articles, and damaging computer files intended for the use of others.

7. **Misrepresentation**—Lying about or misrepresenting one’s work, academic records, or credentials. Examples include claiming ownership of another’s work, several students submitting copies of the same computer document and taking credit for group work to which a student did not contribute significantly or fulfill his or her obligations.

8. **Electronic Dishonesty**—Inappropriately using network access in a way that affects a class or other students’ academic work. Examples of electronic dishonesty include using someone else’s authorized computer account to send and receive messages, breaking into someone else’s files, gaining access to restricted files, disabling others’ access to network systems or files, obtaining a computer account under false pretenses, and knowingly spreading a computer virus. These general definitions may be supplemented or modified by additional policies stated in course syllabi.

**Procedures for Addressing Academic Dishonesty**

1. When an instructor believes that a student has acted dishonestly, a conversation on the incident in question occurs between the instructor and the student. The instructor should notify the department chair of the incident and the conversation about it.

2. If the instructor is not satisfied with the student’s explanation, the instructor documents the incident in writing. The documentation includes definition of disciplinary action. A copy is filed in the Academic Dean’s office. These files are available to the Pre-professional Recommendations Committee, to any instructor who is asked for a recommendation, and to the program admissions committees for Nursing, Ministerial Studies, and Social Work.

3. If a second incident occurs in any class, the Academic Dean may give the student an F in the class where the second incident occurred. A third incident may result in suspension from the college for one quarter. A fourth incident may call for permanent dismissal.

4. Students who wish to appeal the decision of the Academic Dean may appeal to the Academic Standards and General Education Committee. Students should submit a written appeal and may appear before the committee if they choose.

5. The decision of the committee is final. However, if any student believes that the final decision is unjust, he or she may follow the grievance procedure outlined in the Student Handbook.

6. Students are entitled to add a written rebuttal to their personal files in the Academic Dean’s Office.
Appendix B: Student Rights Under FERPA

**Student Rights under FERPA**

In maintaining student records, Pacific Union College complies with the Family Educational Rights and Privacy Act of 1974 (FERPA). This act affords students certain rights with respect to their education records.

FERPA rights extend to any student who has attended Pacific Union College. Your FERPA rights begin on the first day that you attend class at the college and expire upon your death. These rights include:

1. **The right to inspect and review your education records.**

   If you wish to review your education record, you should submit to the Registrar a completed “Request to Inspect and Review Education Records” form, available at the Records Office. Requests will be processed within forty-five days from the date the request is filed. The Registrar will make arrangements for access and will notify you of the time and place where the records may be inspected.

2. **The right to request an amendment of your education records that you believe to be inaccurate, misleading, or otherwise in violation of your privacy rights under FERPA.**

   If you wish to request an amendment to your record, you should submit to the Registrar a completed “Request to Amend Education Records” form, available at the Records Office. If Pacific Union College decides not to amend the record as requested, you will be notified of the decision in writing and will be given a right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to you when you are notified of the right to a hearing.

3. **The right to suppress the disclosure of directory information, provided that the request is submitted while you are an enrolled student.**

   If you wish to exercise this right, you should submit to the Registrar a completed “Request to Suppress Directory Information” form, available at the Records Office.

   At Pacific Union College directory information consists of the following: 1. Name; 2. Address (local and home); 3. E-mail address; 4. Telephone number (local, home, and cellular); 5. Date of birth; 6. Photograph; 7. Most recent educational institution attended; 8. Participation in officially recognized activities and sports; 9. Weight and height of members of athletic teams; 10. Academic program of study; 11. Dates of attendance; 12. Enrollment status (full-time, part-time, etc); 13. Class standing (freshman, sophomore, etc); 14. Expected date of graduation; 15. Degrees conferred and date of conferral; and 16. Academic honors and awards received (dean’s list, cum laude, etc).

4. **The right to provide written consent before Pacific Union College discloses information from your education records, except to the extent that FERPA authorizes disclosure without consent.**

   Pacific Union College discloses directory or public information without your prior written consent, unless if you exercise your right to refuse disclosure as described above.

   Pacific Union College discloses information from your education records without your prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is: 1. A person employed by Pacific Union College as an administrator, faculty, or staff member; 2. A student employed by Pacific Union College to assist an administrator, faculty, or staff member in fulfillment of his/her professional duties; 3. A person employed by, or under contract to, Pacific Union College to perform a special task, such as an attorney or an auditor; 4. A person or organization acting as an official agent of Pacific Union College and performing a business function or service on behalf of Pacific Union College; 5. A member of a Pacific Union College committee (may include student members); or 6. A person serving on the Pacific Union College Board of Trustees. A school official has a legitimate educational interest if the official needs to review your education record in order to: 1. Perform appropriate tasks that are specified in his/her position description or by a contract agreement; 2. Perform a task related to your education; 3. Perform a task related to your discipline; or 4. Provide a service or benefit relating to you as a student such as health care, counseling, job placement, or financial aid.

   Upon request, Pacific Union College may disclose information from your education records to officials of another school in which you seek or intend to enroll.

   Upon request, Pacific Union College may disclose information from your education records to your parents if you are a dependent student as defined by the IRS code, provided that proper documentation is on file at the college to establish dependency.

   Pacific Union College may disclose information from your education records under additional FERPA provisions authorizing disclosure without consent. A full description of all authorized exceptions for disclosure may be obtained from the Registrar.

4. **The right to file a complaint with the U.S. Department of Education concerning alleged failures by Pacific Union College to comply with the requirements of FERPA.**

   The Family Policy Compliance Office administers FERPA and any complaints may be filed at the following address:

   Family Policy Compliance Office- U.S. Dept of Education
   400 Maryland Avenue, SW- Washington, D.C. 20202-5901
Please Note:
Highlighting indicates substantive updates for the 2011-2012 academic year. Pagination may differ from the 2010-2012 printed copy.

Updates are effective July 1, 2011.

Business Admin. & Economics Dept. 59
A.S. Degree 63
B.A. Degree 62
B.B.A. Degree 60
B.S. Degree 63
B.S.M. Degree 64
Courses 67

Reserved for Post-Degree 37
for Student Missionary/Task Force 38, 44
Transfer 37
Cum Laude 40

D
DANTES (DSST) Examinations 38
“Dead Week” 38
See Pre-Examination Week
Dean’s List 33
Degree Completion Program 4
Early Childhood Education 89, 95
Management 59, 64
Degrees 4, 21
Candidacy 22, 40
Conferral 22, 40
Multiple 22
Diplomas 40
Directed Group Study 41
Directed Study 41
Directory 224
Disabilities, Accommodation 14
Disciplinary Action 15
Dismissal 15, 33, 217
See also Academic: Dismissal

Drama B.A. Degree 112
Drama Courses 114

E
Early Childhood Education 89
A.S. Degree 90
B.S. Degree 90
B.S.E.C.E. Degree 95
Courses 97, 107
Economics Courses 68
Education Department 89
B.S. Degree 93
Courses 99
Credentials 90
Early Childhood Program 89
See Early Childhood Education
M.Ed. Degree 94
Electronics Courses 50
Emergency Services Program 109
A.S. Degree 109
Courses 110
Emeriti 207
Index

Employment, Student .................................. 32, 198
Engineering (Affiliated Program) .................. 161
Engineering Courses .................................. 161
English Department .................................. 111
B.A. Degree .............................................. 111
Courses .................................................. 114
Placement .................................................. 24
English Proficiency Examinations ................. 19
Environmental Studies B.S. Degree ............... 52
Environmental Studies Courses ..................... 57
Equal Opportunity Commitment .................... 2
European History B.A. Degree ....................... 124
Even Year Courses ...................................... 41
Examinations ............................................. 38
ACT or SAT .............................................. 18, 24
CHSPE or GED .......................................... 18
Credit by .................................................... 38, 39
English Proficiency ..................................... 19
Final ......................................................... 35, 203
Placement ................................................. 24
Services ..................................................... 15
Waiver ...................................................... 39
Exercise Sci., Health, & Nutrition Dept. ......... 117
B.S. Degree ............................................... 118
Courses ..................................................... 119
Expenses, Estimate of ................................... 194

F
Faculty Directory ........................................ 209
Family Rights and Privacy Act ... See FERPA
Federal Financial Aid ..................................... 197
Fees .......................................................... 193, 202
FERPA ........................................................ 16, 218
Film and Theater Studies A.S. Deg... 113, 184
Film and TV Production B.S. Degree ............ 183
Film and TV Production Courses ................. 191
Final Examinations ...................................... 35, 203
Finance B.B.A. Degree ................................. 60
Finance Courses ......................................... 68
Financial Aid .............................................. 195
Application ............................................... 199
Federal ....................................................... 197
Programs & Eligibility .................................. 195
Refunds ...................................................... 200
State .......................................................... 197, 198
Suspension of .............................................. 196
Financial Information ................................... 193
Fine Art B.A. Degree .................................... 182
Fine Art B.S. Degree .................................... 181
Fine Art Courses ........................................ 187
Food Services ............................................ 13, 201
French Courses .......................................... 138
Full-Time Status ......................................... 32, 200

G
GED ........................................................... 18
General Education ....................................... 24
Purpose of ............................................... 11, 25
Requirements, A.S. ..................................... 25
Requirements, B.A. ..................................... 25
Requirements, B.B.A. .................................. 62
Requirements, B.Mus. .................................. 141
Requirements, B.S. ..................................... 25
Requirements, B.S.E.C.Ed. ......................... 96
Requirements, B.S.M. ................................ 65
Requirements, B.S.N. .................................. 158
Requirements, B.S.W. ................................ 167
General Science Courses ............................. 38
General Studies Courses .............................. 44
Geography Courses ...................................... 125
Geology Courses ......................................... 57
German Courses ......................................... 138
GI Bill .......................................................... See Veterans
Grade Changes .......................................... 34
Grade Point Average (GPA) ....................... 23, 34, 196
Grading System .......................................... 34
Graduate Courses ....................................... 41, 104
Graduate Program (M.Ed.) ......................... 21, 94
Graduation ................................................. 22
in Absentia ............................................... 40, 203
Application and Contract ............................. 22
Commencement Ceremony ............................ See Commencement
Recognition and Honors ................................ 40
Requirements: Associate Degree .................. 22
Requirements: Baccalaureate Degree ............ 23
Requirements: Masters Degree ...................... 95
Grants ......................................................... 197
Graphic Design A.S. Degree ....................... 185
Graphic Design B.S. Degree ......................... 182
Graphic Design Courses ............................... 186
Grievance Policies & Procedures ..................... 16
Guest Students ........................................... 19

H
Handbook, Student ...................................... 15, 16, 17
Handicapped Students ................................. 14, 198
Health Education Courses ............................ 122
Health Insurance ... See Insurance, Health
Health Services .......................................... 14, 18
High School Students .................................. 19
History of the College .................................. 9
History & Social Studies Department ............. 123
B.A. Degree ............................................. 123
B.S. Degree ............................................. 124
Courses ..................................................... 125
Home School ............................................ 18, 24
Honors Courses ......................................... 44
Honors Program ......................................... 30, 40
Housing, Student ........................................ 13, 201

I
IB Examinations .......................................... 38
ID Cards ..................................................... 203
IELTS Score .............................................. 19
IGETC .......................................................... 24
Illustration B.S. Degree ................................ 183
Incomplete Work ........................................ 34, 196
Independent Student Status ......................... 195
Independent Study ...................................... 38
Information Systems B.B.A. Degree ............. 61
Information Systems Courses ....................... 69
In-Progress Work ....................................... 34, 196
Insurance, Automobile ............................... 204
Insurance, Health ........................................ 18, 200, 202
Intercultural Communication B.A. Deg... 80
International Business B.A. Degree .......... 61
International Students ................................. 17, 19, 200
Italian Courses ......................................... 138

J
Journalism B.S. Degree ................................ 80
Journalism Courses ..................................... 83

L
Laboratories .............................................. 41
Late Charge on Unpaid Accounts ................. 202
Late Work .................................................. 34
Learning Differences, Accommodation ....... 14
Lecture Series ............................................ 15
Liberal Studies B.S. Degree ......................... 93
Library Services .......................................... 14
Life Learning, Credit by ............................... 39
Literature B.A. Degree ................................ 112
Load, Course ............................................. 32, 195
Loans ......................................................... 197

M
Magna Cum Laude ....................................... 40
Major ....................................................... 11, 22, 23
Management B.B.A. Degree ....................... 61
Management B.S.M. Degree ....................... 64
Management Courses ................................. 70, 72
Map .......................................................... 223
Marketing B.B.A. Degree ......................... 62
Marketing Courses ....................................... 71
Master of Education (M.Ed.) ....................... 23, 94
Mathematics Department ............................ 129
B.S. Degree ............................................... 129
Courses ..................................................... 131
Placement .................................................. 24
Microbiology Courses ................................. 58
Military Service, Credit for ......................... 37
Minor ........................................................ 4, 23
Mission of the College ................................ 11
Modern Languages Department ................... 135
ACA Program ............................................ 136
B.A. Degree ............................................. 135
Courses ..................................................... 138
### Index

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>136</td>
<td>Placement</td>
</tr>
<tr>
<td>139</td>
<td>Music Department</td>
</tr>
<tr>
<td>142</td>
<td>A.S. Degree</td>
</tr>
<tr>
<td>140</td>
<td>B.Mus. Degree</td>
</tr>
<tr>
<td>142</td>
<td>B.S. Degree</td>
</tr>
<tr>
<td>153</td>
<td>Concerts</td>
</tr>
<tr>
<td>136</td>
<td>Courses</td>
</tr>
<tr>
<td>149</td>
<td>Nursing Department</td>
</tr>
<tr>
<td>156</td>
<td>A.S. Degree</td>
</tr>
<tr>
<td>158</td>
<td>B.S.N. Degree</td>
</tr>
<tr>
<td>159</td>
<td>Courses</td>
</tr>
<tr>
<td>160</td>
<td>Graduation Recognition</td>
</tr>
<tr>
<td>165</td>
<td>Program Admissions</td>
</tr>
<tr>
<td>156</td>
<td>Nutrition Courses</td>
</tr>
<tr>
<td>41</td>
<td>Odd Year Courses</td>
</tr>
<tr>
<td>71</td>
<td>Office Administration Courses</td>
</tr>
<tr>
<td>31</td>
<td>Unaccredited Institutions</td>
</tr>
<tr>
<td>139</td>
<td>Enrollment</td>
</tr>
<tr>
<td>32</td>
<td>Overload</td>
</tr>
<tr>
<td>193</td>
<td>Ownership of Written Work</td>
</tr>
<tr>
<td>165</td>
<td>Preprofessional Curricula</td>
</tr>
<tr>
<td>166</td>
<td>Prerequisites</td>
</tr>
<tr>
<td>151</td>
<td>President</td>
</tr>
<tr>
<td>167</td>
<td>Privacy of Records</td>
</tr>
<tr>
<td>151</td>
<td>Probation</td>
</tr>
<tr>
<td>168</td>
<td>Psychology &amp; Social Work Department</td>
</tr>
<tr>
<td>166</td>
<td>B.A. Degree</td>
</tr>
<tr>
<td>165</td>
<td>B.S. Degree</td>
</tr>
<tr>
<td>168</td>
<td>Courses</td>
</tr>
<tr>
<td>19</td>
<td>PTE Score</td>
</tr>
<tr>
<td>80</td>
<td>Public Relations B.S. Degree</td>
</tr>
<tr>
<td>84</td>
<td>Public Relations Courses</td>
</tr>
<tr>
<td>32, 41</td>
<td>Quarter System</td>
</tr>
<tr>
<td>193</td>
<td>Rates and Fees</td>
</tr>
<tr>
<td>196</td>
<td>Reapplication</td>
</tr>
<tr>
<td>196</td>
<td>Records</td>
</tr>
<tr>
<td>196</td>
<td>Recreational Facilities</td>
</tr>
<tr>
<td>174</td>
<td>B.A. Degree</td>
</tr>
<tr>
<td>176</td>
<td>Courses</td>
</tr>
<tr>
<td>165</td>
<td>Religious Life</td>
</tr>
<tr>
<td>41</td>
<td>Remedial Courses</td>
</tr>
<tr>
<td>41</td>
<td>Repeating Courses</td>
</tr>
<tr>
<td>196</td>
<td>Residence Halls</td>
</tr>
<tr>
<td>201</td>
<td>Residence Requirements</td>
</tr>
<tr>
<td>23</td>
<td>Rosario Beach Marine Station</td>
</tr>
<tr>
<td>34</td>
<td>SAT Examinations</td>
</tr>
<tr>
<td>39</td>
<td>ACT or SAT</td>
</tr>
<tr>
<td>24</td>
<td>Satisfactory Academic Progress</td>
</tr>
<tr>
<td>34</td>
<td>Satisfactory/Fail Grading</td>
</tr>
<tr>
<td>197</td>
<td>Scholarships</td>
</tr>
<tr>
<td>23</td>
<td>Senior Assessment Seminar</td>
</tr>
<tr>
<td>44</td>
<td>Social Studies B.S. Degree</td>
</tr>
<tr>
<td>124</td>
<td>Social Work B.S.W. Degree</td>
</tr>
<tr>
<td>166</td>
<td>Social Work Courses</td>
</tr>
<tr>
<td>170</td>
<td>Sociology Courses</td>
</tr>
<tr>
<td>135</td>
<td>Spanish B.A. Degree</td>
</tr>
<tr>
<td>138</td>
<td>Spanish Courses</td>
</tr>
<tr>
<td>82</td>
<td>Speech Pathology (Affiliated Program)</td>
</tr>
<tr>
<td>84</td>
<td>Speech Pathology Courses</td>
</tr>
<tr>
<td>84</td>
<td>Statistics Courses</td>
</tr>
<tr>
<td>16</td>
<td>Student Association</td>
</tr>
<tr>
<td>16</td>
<td>Student Conduct and Handbook</td>
</tr>
<tr>
<td>13</td>
<td>Student Housing</td>
</tr>
<tr>
<td>20</td>
<td>Student Learning Outcomes</td>
</tr>
<tr>
<td>13</td>
<td>Student Life and Services</td>
</tr>
<tr>
<td>44</td>
<td>Student Seminar Sequence</td>
</tr>
<tr>
<td>112</td>
<td>Study Abroad</td>
</tr>
<tr>
<td>14</td>
<td>Summa Cum Laude</td>
</tr>
<tr>
<td>40</td>
<td>Suspension</td>
</tr>
<tr>
<td>196</td>
<td>Telephone Information</td>
</tr>
<tr>
<td>112</td>
<td>TESOL B.A. Degree</td>
</tr>
<tr>
<td>21</td>
<td>TESOL Certificate</td>
</tr>
<tr>
<td>173</td>
<td>Theology B.A. Degree</td>
</tr>
<tr>
<td>179</td>
<td>Theology Courses</td>
</tr>
<tr>
<td>196</td>
<td>TOEFL Score</td>
</tr>
<tr>
<td>193</td>
<td>Tuition</td>
</tr>
<tr>
<td>194</td>
<td>Unaccredited Institutions</td>
</tr>
<tr>
<td>33</td>
<td>Undecided Major</td>
</tr>
<tr>
<td>202</td>
<td>Unpaid Accounts</td>
</tr>
<tr>
<td>41</td>
<td>Upper-Division Courses</td>
</tr>
<tr>
<td>204</td>
<td>Vehicle Registration and Insurance</td>
</tr>
<tr>
<td>14</td>
<td>Veterans</td>
</tr>
<tr>
<td>35</td>
<td>Benefits</td>
</tr>
<tr>
<td>35</td>
<td>Standards of Progress</td>
</tr>
<tr>
<td>35</td>
<td>Visual Arts Department</td>
</tr>
<tr>
<td>185</td>
<td>A.S. Degree</td>
</tr>
<tr>
<td>182</td>
<td>B.A. Degree</td>
</tr>
<tr>
<td>181</td>
<td>B.S. Degree</td>
</tr>
<tr>
<td>186</td>
<td>Courses</td>
</tr>
<tr>
<td>15</td>
<td>Gallery</td>
</tr>
<tr>
<td>39</td>
<td>Waiver Examinations</td>
</tr>
<tr>
<td>39</td>
<td>Web Design B.S. Degree</td>
</tr>
<tr>
<td>183</td>
<td>Withdrawal from Courses</td>
</tr>
<tr>
<td>196</td>
<td>Withdrawal from the College</td>
</tr>
<tr>
<td>198</td>
<td>Work-Study Program</td>
</tr>
<tr>
<td>15</td>
<td>Worship Attendance</td>
</tr>
<tr>
<td>112</td>
<td>Writing B.A. Degree</td>
</tr>
</tbody>
</table>

---

N: Natural Science B.S. Degree
   New Student Orientation
   Nondegree Students
   Not Reported, Grade
   Numbering of Courses

O: Odd Year Courses
   Office Administration Courses
   Orientation
   Overload
   Ownership of Written Work

P: Part-Time Status
   Pass/Fail
   Payment, Late
   Payment of Accounts
   Personnel
   Philosophical Studies Courses
   Photography Courses
   Physical Education B.S.
   Physical Education Courses
   Physics & Engineering Department
   Affiliated Program (Engineering)
   B.S. Degree
   Courses
   Placement
   English
   Mathematics
   Modern Languages

Plagiarism
   Policies, Academic
   Policies, Financial
   Political Science Courses
   Possessions, Personal
   Pre-Examination Week
   Prefixes, Course

---

See Course Numbers and Prefixes
Preprofessional Curricula

T: Teaching and Learning Center
   Teaching Credentials
   Telephone Information
   TESOL B.A. Degree
   TESOL Certificate
   Theology B.A. Degree
   Theology Courses

U: Unaccredited Institutions
   Undecided Major
   Unpaid Accounts
   Upper-Division Courses

V: Vehicle Registration and Insurance
   Veterans
   Benefits
   Standards of Progress
   Visual Arts Department
   A.S. Degree
   B.A. Degree
   B.S. Degree
   Courses

W: Waiver Examinations
   Web Design B.S. Degree
   Withdrawal from Courses
   Withdrawal from the College
   Work-Study Program
   Worship Attendance
   Writing B.A. Degree

---

221
Numerical Legend
1. Angwin Plaza:
   Ace Hardware
   Angwin Teen Center
   College Bookstore
   Market
   Washette
2. Post Office
3. Career and Counseling Center
4. Dental Building
5. Credit Union
6. Tennis Courts
7. Athletic Field:
   Hardball and Softball Fields
   Sand Volleyball Courts
8. Brookside Park:
   Student Family Housing
9. Service Station:
   College Chevron
10. Athletic Track & Field
11. Press Building:
    Copy Center
    Estate Planning
    Mail Services
12. Custodial:
    Lost and Found
13. Heating Plant
14. Church and Sanctuary
15. Alumni Park
16. Fisher Hall:
    Visual Arts
17. Sabbath School Rooms
18. Church Complex:
    Campus Chapel
    Campus Ministries
    Church Office
    Fireside Room
    Scales Chapel
19. Paulin Hall:
    Music
20. Pacific Auditorium:
    Fitness Center
    Gymnasium
    Exercise Science, Health, & Nutrition
    Weight Room
21. Swimming Pool
22. Public Safety
23. Chan Shun Hall:
   Academic Administration
   Academic Advising
   Chemistry
   Computer Science
   Mathematics
   Physics
   President’s Office
24. Davidian Hall:
    Nursing
    Psychology & Social Work
25. Teaching and Learning Center
26. Dining Commons:
    Cafeteria
    Campus Center
    Student Association Offices
27. Rasmussen Art Gallery

28. Library:
   E.G. White/SDA Study Center
   Information Technology Systems and Services
   Media Services
   Pitcairn Islands Study Center
29. Preparatory School
30. Elementary School
31. Advancement / Alumni
32. Financial Services:
    Accounting Services
    Financial Administration
    Human Resources
    Student Financial Services
33. West Hall:
    Education
    Health Services
34. West Hall Annex
35. Stauffer Hall:
    Alice Holst Theater
    English
36. Amphitheater
37. Storage Area
38. Newton Hall:
    Men’s Residence
39. Grainger Hall:
    Men’s Residence
40. Clark Hall:
    Biology
    Wilmer Hansen Collection
41. Irwin Hall:
    Business Administration
    Communication
    History
    Modern Languages
42. Amb Hall
43. Graf Oval
44. Graf Hall:
    Academic Records
    Admissions
    Enrollment Services
    KNDL Radio
    Public Relations
    Religion
    Student Services
    Visitor Center
    Women’s Residence
45. Dauphinee Chapel
46. Andre Hall:
    Women’s Residence
47. Winning Hall:
    Women’s Residence
48. Discoveryland Preschool
49. Land Management
50. Recycling Center
51. Plant Services
52. Mobile Manor
53. Landscape
54. Court Place Apartments:
    Student Family Housing
55. Nichol Hall:
    Men’s Residence
56. McReynolds Hall:
    Women’s Residence
57. Virgil O. Parrett Field:
    Flight Center
58. Young Observatory
59. Commencement Grove
60. Prayer Chapel
61. Cogeneration Plant

Alphabetical Legend
23. Academic Administration
24. Academic Advising
44. Academic Records
32. Accounting Services
1. Ace Hardware
44. Admissions
31. Advancement / Alumni
35. Alice Holst Theater
15. Alumni Park
42. Amb Hall
36. Amphitheater
46. Andre Hall
1. Angwin Plaza
1. Angwin Teen Center
10. Athletic Track & Field
40. Biology
8. Brookside Park
41. Business Administration
26. Cafeteria
26. Campus Center
18. Campus Chaplain
18. Campus Ministries
3. Career & Counseling Center
23. Chan Shun Hall
23. Chemistry
18. Church Complex
18. Church Office
14. Church & Sanctuary
40. Clark Hall
61. Cogeneration Plant
1. College Bookstore
9. College Chevron
59. Commencement Grove
41. Communication
23. Computer Science
11. Copy Center
54. Court Place Apartments
5. Credit Union
12. Custodial
45. Dauphinee Chapel
24. Davidian Hall
4. Dental Building
26. Dining Commons
48. Discoveryland Preschool
28. E.G. White/SDA Study Center
33. Education
30. Elementary School
35. English
44. Enrollment Services
11. Estate Planning
20. Exercise Science, Health, and Nutrition
32. Financial Administration
32. Financial Services
18. Fireside Room
16. Fisher Hall
20. Fitness Center
57. Flight Center
43. Graf Oval
44. Graf Hall
39. Grainger Hall
20. Gymnasium
7. Hardball and Softball Fields
33. Health Service
13. Heating Plant
41. History
32. Human Resources
28. Information Technology Systems & Services
41. Irwin Hall
44. KNDL Radio
49. Land Management
53. Landscape
28. Library
12. Lost and Found
11. Mail Services
1. Market
23. Mathematics
56. McReynolds Hall
28. Media Services
52. Mobile Manor
41. Modern Languages
19. Music
38. Newton Hall
55. Nichol Hall
24. Nursing
20. Pacific Auditorium
19. Paulin Hall
23. Physics
28. Pitcairn Island Study Center
51. Plant Services
2. Post Office
60. Prayer Chapel
29. Preparatory School
23. President’s Office
11. Press Building
24. Psychology & Social Work
44. Public Relations
22. Public Safety
27. Rasmussen Art Gallery
50. Recycling Center
44. Religion
17. Sabbath School Rooms
7. Sand Volleyball Courts
18. Scales Chapel
9. Service Station
35. Stauffer Hall
26. Student Association Offices
32. Student Financial Services
44. Student Services
21. Swimming Pool
25. Teaching and Learning Center
6. Tennis Courts
44. Visitors’ Center
1. Washette
20. Weight Room
33. West Hall
34. West Hall Annex
40. Wilmer Hansen Collection
47. Winning Hall
57. Virgil O. Parrett Field
16. Visual Arts
58. Young Observatory
Contact Information

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Registrar ........................................................ 965-6673
Fax............................................................. 965-6432
Transcripts ...................................................... 965-6553

**Residence Hall Living**
Dean of Women ............................................... 965-6315
Andre Hall ...................................................... 965-7481
Graf Hall ........................................................ 965-6520
McReynolds Hall .............................................. 965-6149
Winning Hall ................................................... 965-6313
Dean of Men .................................................... 965-7203
Grainger Hall ................................................... 965-6491
Newton Hall .................................................... 965-6487
Nichol Hall ..................................................... 965-6101

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Fax............................................................. 965-7689