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### **Mission:**

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. (more)

### **Official Catalog**

The online catalog is the official document relative to academic program offerings and charges. Any print-outs of pages taken from the on-line version are, by definition, unofficial.

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## **Introduction to the University**

Point Loma Nazarene University (PLNU) is a liberal arts institution affiliated with the Church of the Nazarene. Accredited by the WSCUC Senior College and University Commission, Point Loma offers degree programs at the baccalaureate and graduate levels. The university's main campus is located on the Point Loma peninsula between the San Diego Bay and the shores of the Pacific Ocean with additional campus locations in San Diego, Mission Valley, and Bakersfield. PLNU currently enrolls nearly 4,200 students.

## **Heritage**

In 1895, Phineas F. Bresee, a minister in the Methodist Episcopal Church, and J. P. Widney, a Methodist layperson and former president of the University of Southern California, founded the Church of the Nazarene in Los Angeles, California. Their primary purpose was to bring the good news of the Gospel of Jesus Christ to the poor and underprivileged. In 1902, Dr. Bresee founded Pacific Bible College, at the urging of several laypersons. Its purpose was to train ministerial and lay leaders for the new denomination.

Through the generosity of Mr. and Mrs. Jackson Deets, Pacific Bible College was able to purchase the Hugus Ranch in northeast Pasadena. With the subsequent move to the new Pasadena campus in 1910, the institution became Nazarene University and enlarged the scope of the curriculum to include a typical program in the liberal arts. In 1924, it was reorganized as Pasadena College (PC), the undergraduate honor society known as Sigma Phi Mu was organized, and a system of student government was instituted.

Pasadena College received initial accreditation from the Northwest Association of Secondary and Higher Schools in 1943, and from the Western College Association in 1949. In 1951, PC received state accreditation of its education program, and the Board of Trustees approved the addition of graduate education in 1965. Faced with a growing enrollment and the need for expansion, the college moved to San Diego's historic Point Loma peninsula in the summer of 1973. Today, as Point Loma Nazarene University, the institution offers numerous majors in various academic degrees, is approaching an enrollment of 4,200 at all of its teaching locations with a faculty and staff of 662, and enjoys an ocean-front campus in San Diego and strategically located branch campuses throughout southern California.

## **Church and University**

Point Loma Nazarene University maintains its regional and international affiliation with the Church of the Nazarene through its theological and mission commitments. It is owned and governed by its Board of Trustees who oversee the affairs of the university as a self-selecting and self-perpetuating body.

The Church of the Nazarene is an international protestant denomination in the Wesleyan-holiness tradition with an evangelical Christian mission emphasizing salvation and holy living. The relationship of the university with the

denomination is characterized by a mutual commitment to the doctrine and mission of the church and to its ministry and service in a global context.

## **The University Community**

**The Students.** The university welcomes qualified students who desire higher education in a context of vital Christianity. The role of Point Loma in higher education is fulfilled by helping students realize their mental, physical, social, moral, and spiritual ideals. The university's belief is that a personal commitment to Jesus Christ is the basis for achieving self-worth and understanding, the motivation for building a just social order, and the means for relating to God through worship and service.

**The Faculty.** The Point Loma faculty is composed of Christian teachers/scholars who are dedicated to teaching and other scholarly activity in an environment "where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith." Individuals serving as faculty are committed to lifelong learning and teaching. They strive to exemplify excellence in their profession and model a personal understanding of the interconnectedness of faith, learning, and living.

**The Staff.** The university community also includes qualified persons who provide vital support services to academic and co-curricular enterprises. Often directly involved in the lives of students and faculty, dedicated staff work diligently to provide services that make a quality difference at Point Loma.

**The Alumni.** Graduates and former students of Point Loma Nazarene University are an equally important -though extended-part of the university community. They embody the mission and goals of the university and seek to make a difference all over the world. Alumni participate in the life of Point Loma as well through giving opportunities and frequent memorable events on campus.

## **University Mission**

### **Vision**

Discovering vocation, expanding horizons, deepening faith, and transforming communities.

### **Mission Statement**

#### **To Teach ~ To Shape ~ To Send**

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where truth is pursued, grace is foundational, and holiness is a way of life.

### **Mission Context**

The university, established in 1902 by the Church of the Nazarene, offers quality liberal arts and professional programs on its campus in San Diego and select graduate and professional programs throughout the denomination's Southwest Educational Region.

### **Core Values**

- **Excellence in teaching and learning** - Teaching and learning constitute the central and defining activities of Point Loma Nazarene University. Faculty believe that effective teaching includes maintaining a vital relationship with one's discipline, establishing a positive connection to students, and building bridges among the students as a community of learning with the academic material.
- **An intentionally Christian community** - PLNU wants students to be participants in a community of learning who intentionally think and behave as Christians in all of their endeavors. Through many curricular and co-curricular activities, PLNU builds a community where women and men are challenged to explore ways to align their hearts and minds to that of Christ.
- **Faithfulness to our Nazarene heritage and a Wesleyan theological tradition** - While working cooperatively with the whole church of Jesus Christ, the university is committed to maintaining and celebrating our denominational ties with the Church of the Nazarene and embracing the distinctives of that tradition.
- **The development of students as whole persons** - A complete education prepares women and men to live full lives that integrate the pursuit of knowledge with beliefs, values, and actions. Holistic learning prepares students to make a positive difference in the world.
- **A global perspective and experience** - PLNU students should be equipped to become "world citizens." The university provides academic coursework, international study, field research, and ministry experiences that aid students in becoming conversant with the complexities of life in the global community.
- **Ethnic and cultural diversity** - PLNU recruits women and men from a variety of cultural, ethnic, and socio-economic backgrounds as students, faculty, and staff. A willingness to hear and learn from many diverse voices is foundational to a Christian liberal arts education and prepares students to become truly educated people, equipped to live in a diverse society and world. The university therefore actively pursues ideas, practices, and relationships that honor diversity and encourages engagement with others different from one's self in order to grow in community with and be reconciled to one another.
- **The stewardship of resources** - PLNU considers itself to be caretaker of all that has been entrusted to the university (people, facilities, money, and knowledge), using resources in a way that reflects the purposes of God and protects the goodness of God's creation.
- **Service as an expression of faith** - The university community understands itself to be stewards, not owners, of time, talent, and selves. Part of the call to Christians is to serve the world, working to better the condition of humankind both locally and globally.

## Institutional Learning Outcomes (ILO)

Institutional Learning Outcomes (ILO's) at Point Loma Nazarene University are the broad, over-arching outcomes aligned with university mission and core values that inform program outcomes in the university's academic, co-curricular, and support units. These ILO's capture the breadth of the PLNU experience and community and help define its uniqueness. For students beginning their educational experience, the ILO's determine those focal points that mark their journey, and for graduate and adult students continuing their academic careers, the ILO's define both the starting point and the direction of their ongoing journey. For the PLNU staff and faculty, the outcomes explicitly articulate the institution's expectations. They guide the community in discussions around questions of faith, profession, social justice, personal relationships, service, giftedness, political and community engagement, and life choices.

The university and the student work cooperatively to achieve ILO's, so that students will be prepared to live faithfully as engaged, growing Christians who seek to model the character of God in their lives. These students will also possess curiosity for life-long learning; the ability to think critically about global challenges; the ability to identify, create and weigh alternative viewpoints and opinions; and the ability to imagine and enact characteristically Christian ways of addressing these challenges. To assist students in achieving these ILO's, the university offers students a safe environment to challenge the status quo, to engage intentionally in discussions that test the foundation of their views, to build a respect for the stewardship of creation, to show compassion toward those in need, and to respect the diversity of opinions within and outside the Christian faith community.

"As a community of faithful learners, Point Loma Nazarene University's purpose for learning is to engender greater and deeper love for God and all that God has created, exploring the world in the confidence of God's grace. As a university seeking faithfulness to the Wesleyan tradition, we do not see learning and faith as two separate and distinct spheres that need to be forced together. Rather, we engage in the learning process as a people striving to live faithfully toward Jesus Christ, who calls us to this love of God and neighbor. We pursue such faithful learning, living and loving in the community. We pursue the vocation of learning together in the very presence of the God of the universe, freeing us to ask hard questions about our beliefs, ourselves and our world." (*A Wesleyan Approach to Faithful Academic Life*, PLNU, from 2009 edition).

As a learner-centered expression of our mission statement, the ILO's describe how members of the Point Loma Nazarene University community will demonstrate learning, growing and serving.

### **Context #1: Learning, Informed by our Faith in Christ**

ILO #1: Students will acquire knowledge of human cultures and the physical and natural world while developing skills and habits that foster life-long learning.

### **Context #2: Growing, in a Christ-Centered Faith Community**

ILO #2: Students will develop a deeper and more informed understanding of self and others as they negotiate complex environments.

### **Context #3: Serving, in a Context of Christian Faith**

ILO #3: Students will serve locally and/or globally in vocational and social settings.

## **The University Seal**

The university seal is used on all official documents. It consists of a shield picturing the symbols of VENIA (Grace), VERITAS (Truth) and SANCTITAS (Holiness), themes that-in keeping with the heritage of Point Loma Nazarene University-have been identified with the Wesleyan-holiness tradition.

## **Point Loma Campus and Facilities**

### **Advantages of Location**

Point Loma Nazarene University enjoys many advantages from its location in beautiful, culturally rich Southern California. San Diego itself is an area of unequaled climate and spectacular scenery. Neighboring institutions affording advantages in library, culture, and nature study resources include the University of California-San Diego, San Diego State University, San Diego Symphony Orchestra, San Diego Opera Company, Scripps Institute of Oceanography, Palomar Observatory, and many others.

The university enjoys a quiet, natural setting overlooking the Pacific Ocean only ten minutes from the center of metropolitan San Diego. With Los Angeles two and one-half hours driving time to the north, Mexico 30 minutes to the south, the ocean immediately to the west, and San Diego Bay and the Laguna Mountains to the east, the Point Loma peninsula is a most desirable location.

The economy of the greater San Diego area is also advantageous in affording opportunities for part-time employment for students who desire work to help support themselves.

## **The Point**

The campus, located on San Diego's picturesque Point Loma peninsula, is a 93-acre plot first established as an educational site by the Theosophical Society of America and has been occupied since by Balboa University, California Western College, and United States International University. The early occupants of this site erected a number of wooden buildings, some of which have been renovated and are still in use as designated historical sites. Since 1995, many new classroom, office, and residence halls have been added to the historic buildings to provide a unique campus setting. Recently added facilities include an expanded athletic complex, the Fermanian School of Business and Business Center, the Cooper Music Center with its 400-seat Crill Performance Hall, Ryan Library & Learning Center, Colt Hall, Nicholson Commons, Draper Hall, Smee Hall - School of Theology and Christian Ministry, Bond Academic Center, Sator Hall, Latter Hall, and the Prescott Prayer Chapel. Buildings of historical interest include the Greek Amphitheatre, first of its type to be built in the United States; Mieras Hall, built in 1901 by the Spalding family; and Cabrillo Hall, originally the home of Madame Katherine Tingley, leader of the Theosophical Society.

## Special Collections

The San Diego campus of Point Loma Nazarene University is not only a garden spot overlooking the San Diego Bay to the east and the Pacific Ocean to the west. It also is home to several collections and works of public art.

Paintings from the Spiros John Karras Collection of California Plein Air paintings, housed primarily in Cooper Music Center, are prominently displayed for public viewing. The Fischer Collection (a rare and unique set of matched, hand-made string instruments for use by faculty and student string quartets) is housed in Cooper Music Center and may be viewed and heard in public recitals.

Ryan Library has two collections of note: special collections of the writings of Arminius and John Wesley and the William C. and Frances Vaughters collection of pre-Columbian artifacts. In addition to these collections, the campus is home to various works of art. As a former center for the Theosophical Society, original buildings feature interior woodworking by Reginald Machel. Ryan Library houses sculptures of the artist Scott Stearman and an original Norman Rockwell painting created for use as a Saturday Evening Post cover.

Two monumental works of sculpture grace the campus in Point Loma: *The Calling*, by Scott Stearman, and *Centenary Passage*, by Peter Mitten. The first was presented to the university by the Women's Auxiliary to portray Jesus' calling of the disciple Peter as a symbol of the "divine calling to all, the assurance of Christ's constant companionship, and the invitation to become fishers of men." The second is a 10-foot work of granite and bronze created by local artist and former Point Loma Nazarene University faculty member in the Department of Art and Design. It was commissioned to commemorate the university's centennial during the 2001-2002 academic year.

## Ryan Library

Ryan Library supports student learning in an environment that combines the traditional values of the liberal arts university with the digital infrastructure of the 21st century. Library faculty and staff are dedicated to serving the information needs of the PLNU community. In classroom settings and one-on-one consultations, librarians teach students how to formulate meaningful questions, create effective research strategies, and evaluate the quality and relevance of various information sources. The work of the library faculty and staff fosters the pursuit of knowledge, excellence in teaching and learning, and respect for inquiry and diverse points of view. The library is home to a variety of comfortable learning spaces: rooms for group work and projects, clusters of soft seating, areas for quiet study, and more. In addition, Ryan Library is home to approximately 130,000 physical items, including books, periodicals, media materials, and specialized collections, as well as more than 190,000 e-books. The library also subscribes to numerous online research databases, many of which provide full-text access. For items not held by the library, InterLibrary Loan services provide access to resources located throughout the region and the world. Online access to library resources and services is available through the Ryan Library webpage at [www.pointloma.edu/library](http://www.pointloma.edu/library).

## Department of Public Safety

The Department of Public Safety strives to maintain a safe environment for the university community. To achieve this, the department functions twenty-four hours a day, seven days a week. The university emergency telephone number is 619-849-2525.

**Vehicle Regulations.** Parking and driving on the campus is a privilege. The owner/driver is referred to the Student Handbook and University Vehicle Code for complete regulations.

**Vehicle Registration.** All vehicles operated by students must be registered. Freshman residential students are not permitted to bring vehicles to the university.

## **Information Technology Resources**

### **Academic Computer Center (Ryan Learning Center) Computer Labs**

At the Point Loma campus, undergraduate students will find a robust network with more than 250 computers in the Ryan Learning Center computer labs and in a number of school and department computer labs. These computers provide students, faculty, and staff with resources for education, research, and communication. The labs make available over 100 applications ranging from word processing to sophisticated statistical, art, programming, and discipline-specific applications. The Windows computer lab environment can also be accessed from your own computer through [view.pointloma.edu](http://view.pointloma.edu).

### **Software**

Students have the opportunity to purchase third party software at a discounted rate through <https://pointloma.onthehub.com>.

### **Internet Services (Email and Web)**

Students can conduct research and communication using the campus wireless network as well as the computer labs, library, and residence hall rooms. Students are given a PLNU login account which provides access to a Google "G-Suite" account (which includes email and Google Drive access), as well as login privileges to University websites, PLNU computer labs, and the campus wireless network. Students are also able to go online to register for classes, check grades, and view their class schedule and other student information in Workday Student. Workday Student may be accessed at <http://workday.pointloma.edu> or with the Workday app on a mobile device. In addition to telephone and written correspondence, email is a recognized means of official university-to-student communication. Students are expected to read their university email on a regular basis.

Undergraduate students have access either on-campus or remotely to a variety of technology resources:

- Workday Student - <http://workday.pointloma.edu>
- Email - <http://gmail.pointloma.edu>
- Learning management system - <http://canvas.pointloma.edu>
- Library research materials - <https://www.pointloma.edu/library>
- Virtual lab environment - <https://view.pointloma.edu>
- ITS self-service knowledge base - <https://help.pointloma.edu>

### **Residential Computing**

PLNU has extensive wireless coverage across our campuses including the residence halls. While there is limited access to the wired network, wireless is the preferred connection type. There is twenty-four-hours-a-day, seven-days-a-week

access to the network from the convenience of the student's rooms for email, research, web browsing, etc. It is highly recommended that students bring a computer, preferably a laptop or tablet, to campus as these offer the most flexibility. During New Student Orientation (NSO), students receive information and assistance connecting to the PLNU network as well as their accounts.

## **Help Center**

The Help Center is available for students who have technology questions related to accessing PLNU provided resources (i.e. troubleshooting connectivity and account access issues). Students may also visit the Help Center, located on the third floor of Ryan Learning Center. Assistance for PLNU-related technology is available by phone and email:

- 619-849-2222
- [help@pointloma.edu](mailto:help@pointloma.edu)

## **Centers and Institutes**

The university sponsors several centers and institutes that are directly linked to the academic enterprise and extend the institutional mission in practical ways that assist both students and the broader community.

### **The Center for International Development**

The Center for International Development exists to apply life-affirming business principles to the complex challenges of global poverty. The center places a particular focus on areas of economic and social development. The center is committed to equipping, training, and sending Christian leaders to serve international communities that are suffering and to support the work of the church. The center supports the vision of the university and the Fermanian School of Business by preparing students for professional service with international humanitarian and missions agencies. The center grew out of an exploratory visit to Armenia by PLNU faculty and George Fermanian to identify ways the university could proactively prepare students to address the humanitarian and economic challenges and opportunities of globalization.

### **The Center for Justice and Reconciliation**

The Center for Justice and Reconciliation (CJR) leverages research, advocacy, and innovation, dedicated to justice and reconciliation, to transform our community through social change. Our work is informed by community leaders, made rigorous by its connection to academics, and prioritizes practical application to help students engage in the world through the lens of their faith.

Throughout the academic year, students have opportunities to connect around the issues of human trafficking, poverty, immigration, economic justice and other social issues. Through on-campus events, community activities, internships, and co-curricular learning, the CJR connects community issues with campus learning. The CJR manages the Beauty for Ashes Scholarship for survivors of human trafficking, the kNOW MORE Human Trafficking Prevention Curriculum and the Human Trafficking Research and Data Roundtable (HT-RADAR), as well as partnering with other on and off-campus partners to examine poverty, race, and immigration.

### **The Center for Pastoral Leadership**

The Center for Pastoral Leadership exists to enhance the educational mission of the university through its work with ministerial students, pastors, and the Church. The center is an educational and service resource designed to strengthen the relationship of the university and the sponsoring denomination, the Church of the Nazarene as well as other constituent churches, and to promote effectiveness in pastoral ministry.

Activities of the center include mentoring of pre-ministerial students, continuing education for pastors, and other aspects of church/university relations including, especially, pastoral support.

## **The Center for Teaching and Learning**

Established in 2000, PLNU's Center for Teaching and Learning (CTL) exists to provide leadership, encouragement, advocacy, and resources to enhance teaching, learning, and scholarship for all faculty, including full-time, part-time, and adjunct faculty. The Center is committed to cultivating a culture at PLNU that values and facilitates ongoing professional development and growth. CTL supports faculty as they design coursework, improve classroom techniques, contemplate and adapt new techniques and technologies into their classrooms, and assess the effectiveness of their teaching methods.

The Center supports professors in a wide variety of ways as they further their scholarship and seek effective strategies to engage students in learning. CTL houses a substantial library, offering books on loan on a wide range of topics relevant to teaching, learning, scholarship, writing and research. CTL also runs workshops on pertinent topics, brings in outside experts to share new ideas and strategies and develops learning communities amongst faculty that can facilitate lasting change across our campus.

The CTL office and reading room is located in the Deans' Center on the west side of Bond Academic Center and is open during normal business hours as a resource for all faculty.

## **The Early Childhood Learning Center**

The Early Childhood Learning Center is designed as an interactive laboratory school. The mission of the Early Childhood Learning Center is to provide a high quality educational experience for university students from observations, demonstration teaching, and individualized experiences with young children. Although the Early Childhood Learning Center functions as a laboratory school in the Department of Sociology, Social Work, and Family Sciences, it is open to all academic disciplines of the university in a variety of ways. The center is an open environment where teachers, children, students, and parents interact, play, work, and learn together. The programs of the center are designed to teach the whole child socially, emotionally, cognitively, physically, creatively, spiritually, and to give guidance to the university student in modeling the practice of alternative philosophies of early childhood education.

## **The Fermanian Business and Economic Institute**

The Fermanian Business and Economic Institute is a strategic unit of PLNU that specializes in a variety of consulting services dedicated to discovering insights that effect change for organizations around the globe. Our skilled team of consultants, economists, and researchers provide clients and partners with individualized, actionable results that support strategic decision-making. Consulting services include economic analysis and forecasting, economic impact studies, business plans, customer and consumer trends, market research, feasibility studies, expert opinion, and many other contemporary needs of the business and economic community, public and private, for-profit and nonprofit. The FBEI holds membership in a variety of prominent business organizations including the San Diego Military Advisory Council, National Association for Business Economics, and others.

Our current and former clients include the California State Treasurer, San Diego Military Advisory Council (SDMAC), the California Attorney General, Building Industry Association (BIA) San Diego, San Diego Metropolitan Transit System, San Diego Housing Commission, City of Coronado, The Salvation Army, National Association for Business Economics (NABE), Chain Link Fence Manufacturers Institute (CLFMI), Sempra Generation, San Diego Zoo Global, and many other public and private firms and organizations.

## **The Health Promotion Center (School of Nursing)**

The School of Nursing's Health Promotion Center (HPC) provides needed health care services, referrals and advocacy for individuals and families in the San Diego community in order to promote optimal health. The program is located at the Mid-City Church of the Nazarene. This free clinic is staffed by nursing faculty and students each week for those adults in the community with little or no access to health care. Using a service learner model, the HPC offers health assessments including screening labs. It also offers TB skin tests, Flu shots, blood pressure and diabetes screening, individual health teaching, and health education classes.

## **The Margaret Stevenson Center for Women's Studies**

The Center for Women's Studies was created as a result of the university's historic affirmation of the value and dignity of women. The Women's Studies minor is a sequence of interdisciplinary courses of interest to both women and men that examine important gender issues. Cross-campus engagement offers the opportunity for dialogue about a transformational Christian praxis in these areas. In addition to the academic minor, the center regularly hosts events, including film forums, panel discussions, and speakers from on and off the campus, which offers students and faculty opportunity to engage in a rich dialogue on gender issues and Christianity.

## **The Wesleyan Center**

Point Loma Nazarene University's Wesleyan Center seeks to inspire a new generation of Wesleyan scholars who will influence the broader church and society. The Center promotes a deep understanding of Wesleyan theology and practices and their application to higher education, the church, and society. The Center's mission rests on the conviction that Wesleyan beliefs and practices may be fruitfully embodied in every academic discipline.

## **Accreditation, Affiliations and State Authorization**

Point Loma Nazarene University is numbered among those institutions of higher education that meet or exceed the rigorous standards of accrediting associations and commissions. Point Loma Nazarene University is accredited by the WASC Senior College and University Commission (WSCUC), for which it periodically completes a self-study that addresses recognized standards and principles of excellence.

**WSCUC may be contacted at 985 Atlantic Avenue, Suite 100, Alameda, CA 94501, or by telephone at (510) 748-9001.**

In addition, Point Loma Nazarene University has gained professional and program accreditation from the following agencies:

*Academy of Nutrition and Dietetics*

*Accreditation Council for Business Schools and Programs\**

*Accreditation Council for Education in Nutrition and Dietetics (formerly CADE)*

*California Board of Registered Nursing*

*California Commission on Teacher Credentialing*

*Commission on Accreditation of Athletic Training Education*

*Commission on Collegiate Nursing Education*

*Council for the Accreditation of Educator Preparation (formerly NCATE)*

*Council on Social Work Education*

*National Association of Schools of Music*

\*Fermanian School of Business programs only.

Point Loma Nazarene University and individual faculty members hold membership in the following organizations:

*Academy of American Poets*

*Academy of International Business*

*Academy of Management*  
*Academy of Marketing Sciences*  
*Academy of Nutrition and Dietetics*  
*Accord Network*  
*Accreditation Council for Business Schools and Programs*  
*African Studies Association*  
*Alpha Psi Omega, Theatre Honor Fraternity*  
*American Academy of Religion*  
*American Anthropological Association*  
*American Association for Higher Education*  
*American Association for the Advancement of Science*  
*American Association of Christian Counselors*  
*American Association of Colleges for Teacher Education*  
*American Association of Colleges of Nursing*  
*American Association of Critical Care Nurses*  
*American Association of Family and Consumer Sciences*  
*American Association of Health, Physical Education, Recreation and Dance*  
*American Association of Immunologists*  
*American Association of Presidents of Independent Colleges and Universities*  
*American Association of Teachers of Spanish and Portuguese*  
*American Chemical Society*  
*American Choral Directors Association*  
*American College Health Association*  
*American College of Healthcare Executives*  
*American College of Nurse-Midwives*  
*American College of Sports Medicine*  
*American College Personnel Association*  
*American Conference of Academic Deans*  
*American Council on Education*  
*American Counseling Association*  
*American Economic Association*  
*American Educational Research Association*  
*American Historical Association*  
*American Institute of Certified Public Accountants*  
*American Institute of Graphic Artists*  
*American Library Association*  
*American Marketing Association*  
*American Mathematical Society*  
*American Physical Society*  
*American Political Science Association*  
*American Psychiatric Nursing Association*  
*American Psychological Association*  
*American School Counselors' Association*  
*American Scientific Affiliation*  
*American Sociological Association*  
*American Studies Association*  
*Asian American Journalism Association*  
*Associated Writing Programs*  
*Association for Asian Studies*  
*Association for Christians in Student Development*  
*Association for Christians in the Mathematical Sciences*  
*Association for Institutional Research*  
*Association for Psychological Science*  
*Association for Supervision and Curriculum Development*

*Association for Women in Mathematics*  
*Association for Women's Health, Obstetric, and Neonatal Nurses*  
*Association of American Colleges and Universities*  
*Association of California Nurse Leaders*  
*Association of California School Administrators*  
*Association of Christian Economists*  
*Association of Christian Librarians*  
*Association of Christian Schools International*  
*Association of Christian Schools International Administrators*  
*Association of College and Research Libraries*  
*Association of Computing Machinery*  
*Association of Governing Boards of Universities and Colleges*  
*Association of Independent California Colleges and Universities*  
*Association of the United States Army*  
*British Society for the History of Mathematics*  
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*Charles Wesley Society*  
*Children's Literature Association*  
*Christian Association for Psychological Studies*  
*Christian Business Faculty Association*  
*Christian Holiness Partnership*  
*Christian Library Consortium*  
*Christians for Biblical Equality*  
*Christians in the Visual Arts*  
*College and University Personnel Association*  
*College Music Society*  
*Collegiate Media Advisors*  
*Committee on the Status of Women in the Economics Profession*  
*Conference on Christianity and Literature*  
*Conference on Faith and History*  
*Consortium for Computing Sciences in Colleges*  
*Council for Christian Colleges and Universities*  
*Council for Higher Education*  
*Council for the Advancement and Support of Education*  
*Council for Undergraduate Research*

*Council of Administrators of Family and Consumer Sciences*  
*Council of Independent Colleges*  
*Credential Counselors and Analysts of California*  
*Direct Marketing Association*  
*Evangelical and Ecumenical Women's Caucus*  
*Family and Consumer Sciences Education Association*  
*Golden State Athletic Conference*  
*Institute of Electrical and Electronics Engineers*  
*Institute of Management Accountants*  
*International Association for Jazz Education*  
*International Network for Social Network Analysis*  
*International Reading Association*  
*International Shakespeare Society*  
*International Writing Centers Association*  
*Investigative Reporters and Editors*  
*Learning Disabilities Association*  
*Marian Association of Helpers*  
*Mathematical Association of America*  
*Midwest Modern Languages Association*  
*Modern Language Association*  
*Music Educators National Conference*  
*Music Teachers National Association*  
*NAFSA: Association of International Educators*  
*National Association for Business Economics*  
*National Association for Education of Young Children*  
*National Association for Research in Science Teaching*  
*National Association of Biology Teachers*  
*National Association of Branch Campus Administrators*  
*National Association of Church Musicians*  
*National Association of Christians in Special Education*  
*National Association of Christian Social Workers*  
*National Association of Clinical Nurse Specialists*  
*National Association of Evangelicals*  
*National Association of Foreign Student Advisors*  
*National Association of Independent Colleges and Universities*  
*National Association of Intercollegiate Athletics*  
*National Association of Rehabilitation Nurses*  
*National Association of Schools of Music*  
*National Association of Social Workers*  
*National Association of Student Personnel Administrators*  
*National Athletic Trainer's Association*  
*National Career Development Association*  
*National Coalition Against Domestic Violence*  
*National Council of Teachers of English*  
*National Organization of Scholars*  
*National Parliamentary Debate*  
*National Register of Health Care Providers in Psychology*  
*National Science Teachers Association*  
*National Society of Hispanic MBA's*  
*National Strength and Conditioning Association*  
*National Women's Studies Association*  
*Nazarene Association of Colleges for Teacher Education*  
*North American Association of Christians in Social Work*  
*North American Christian Foreign Language Association*

*Nurses Serves Organization*  
*Nursing Christian Fellowship (Intervarsity)*  
*Pacific Sociological Association*  
*Pediatric Hematology Oncology Nurses*  
*Phi Beta Kappa*  
*Phi Delta Lambda, Alpha Chapter of the Nazarene Honor Society*  
*Phi Kappa Delta*  
*Phi Kappa Phi*  
*Phi Upsilon Omicron, National Honor Society of Family and Consumer Sciences*  
*Psi Chi, The International Honor Society in Psychology*  
*Religion News Writers Association*  
*Renaissance Society of America*  
*Rocky Mountain Psychological Association*  
*San Diego/Imperial County Libraries Disaster Response Network*  
*San Diego Press Club*  
*San Diego Sports Commission*  
*Shakespeare Society of America*  
*Sigma Theta Tau, International Honor Society for Nursing (Zeta Mu Chapter)*  
*Sigma Xi*  
*Société des Professeurs français et francophones d'Amerique*  
*Society for Applied Anthropology*  
*Society for Christian Ethics*  
*Society for Cinema and Media Studies*  
*Society for Human Resource Management*  
*Society for Industrial and Applied Mathematics*  
*Society for the Study of Early Modern Women*  
*Society for the Study of Psychology and Wesleyan Theology*  
*Society for the Study of Reproduction*  
*Society of Biblical Literature*  
*Society of Professional Journalists*  
*Southern California Instruction Librarians*  
*Statewide California Electronic Library Consortium*  
*TASH: Equity, Opportunity, and Inclusion for People with Disabilities*  
*The Association of Departments of English*  
*The Association of Independent Liberal Arts Colleges for Teacher Education*  
*The California Chicano News Media Association*  
*The College Board*  
*The Conference on Christianity and Literature*  
*The National Institute for Computer Assisted Reporting*  
*Victorian Interdisciplinary Studies Association of the Western United States*  
*Wesleyan Philosophical Society*  
*Wesleyan Theological Society*  
*Western Association of Graduate Schools*  
*Western Decision Sciences Institute*  
*Western Psychological Association*

## **State Authorization**

State authorization is a formal determination by a state that Point Loma Nazarene University (PLNU) is approved to conduct activities regulated by that state or U.S. Territory. PLNU is not required to obtain state authorization in every state or U.S. Territory, and the University has opted at this time not to seek authorization in some states and U.S. Territories. In certain states, PLNU is unable to offer distance education courses or internship/field experience

opportunities. Additionally, PLNU meets the criteria for an exemption from state authorization in certain states. A current list of authorizations and exemptions is available on the institutional website.

## **State and Federal Policies**

### **Notice of Non-Discrimination**

In accordance with Title VI of the Civil Rights Act of 1964, Point Loma Nazarene University does not discriminate on the basis of race, color, age, or national origin. Furthermore, as required by Title IX of the 1972 Education Amendments, Point Loma Nazarene University does not discriminate on the basis of gender in its educational programs, activities, or employment policies. Point Loma Nazarene University also provides equal opportunity for qualified persons with handicaps in compliance with the requirements of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The Director of the Academic Support Office provides advice and support to students with disabilities. Inquiries and appeals regarding compliance with these federal requirements may be directed to the Vice President for Student Development, Nicholson Commons, Office 303, (619) 849-2313.

### **Reservation of Rights**

Point Loma Nazarene University reserves the right to make changes in the academic catalogs regarding personnel listings, tuition and fees, majors and minors, course offerings, course sequencing, and other provisions and requirements relative to academic programs, within the student's term of attendance.

### **Education Records (FERPA) and Directory Information**

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student's education records within 45 days after the day Point Loma Nazarene University ("PLNU") receives a request for access. A student should submit to the Office of Records, a written request that identifies the record(s) the student wishes to inspect. The school official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the requested records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.

A student who wishes to ask PLNU to amend a record should write the Office of Records, clearly identify the part of the record the student wants changed, and specify why it should be changed.

If PLNU decides not to amend the record as requested, PLNU will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to provide written consent before PLNU discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent.

Under FERPA, PLNU may disclose education records without a student's prior written consent to school officials with legitimate educational interests. A school official includes persons employed by PLNU in an administrative, supervisory, academic, research, or support staff position (including security personnel and health staff); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of PLNU who performs an institutional

service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent, or a student volunteering to assist another school official in performing his or her tasks. A school official typically has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for PLNU.

Upon request, PLNU also discloses education records without consent to officials of another school in which a student seeks or intends to enroll. PLNU will make a reasonable attempt to notify a student of these disclosures, unless the request or disclosure is initiated by the student.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by PLNU to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Student Privacy Policy Office  
U.S. Department of Education  
400 Maryland Avenue  
SW Washington, DC 20202

FERPA also permits PLNU to disclose directory information without student consent. Accordingly, PLNU may, but is not required to, release directory information. PLNU has defined directory information as name, address (including electronic mail), telephone number, date and place of birth, major field of study, dates of attendance, enrollment status, degrees, honors and awards received, participation in officially recognized activities and sports, weight and height of members of athletic teams, degree candidacy, and the most recent previous educational agency or institution attended. This information may be provided, upon review by the Director of Records, as public information to individuals who demonstrate a valid need for the information.

Except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information, and disclosures to the student, FERPA requires PLNU to record such disclosures. Eligible students have a right to inspect and review the record of disclosures.

In addition to the above, FERPA permits postsecondary institutions to disclose PII from the education records without obtaining prior written consent of the student in the following circumstances:

- To officials of another school where the student seeks or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student's enrollment or transfer, subject to specific requirements.
- To authorized representatives of the U. S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local educational authorities. Such disclosures may be made in connection with an audit or evaluation of federal or California supported education programs, or for the enforcement of, or compliance with, federal legal requirements that relate to those programs.
- In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid.
- To organizations conducting studies for, or on behalf of, PLNU in order to: (a) develop, validate, or administer predictive tests; (b) administer student aid programs; or (c) improve instruction.
- To accrediting organizations to carry out their accrediting functions.
- To comply with a judicial order or lawfully issued subpoena.
- To appropriate officials in connection with a health or safety emergency, subject to all FERPA requirements.
- To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to FERPA's requirements. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding.
- To the general public, the final results of a disciplinary proceeding, subject to FERPA's requirements, if PLNU determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and

the student has committed a violation of PLNU's rules or policies with respect to the allegation made against him or her.

- To parents of a student regarding the student's violation of any federal, state, or local law, or of any rule or policy of the school, governing the use or possession of alcohol or a controlled substance if PLNU determines the student committed a disciplinary violation and the student is under the age of 21.

Periodically, PLNU conducts formal and informal photo and video shoots (around the campus and at off-campus events and activities) for use in university publications, social media, promotional videos/commercials, and the PLNU Web site. Students who require that no identifiable image be used by the university must notify Marketing and Creative Services in writing prior to the second Monday of each semester. Students should email their request to [photo-optout@pointloma.edu](mailto:photo-optout@pointloma.edu) and include their full name and student ID number. In addition, PLNU may submit information about students' participation in school activities to media outlets. Students who require that their names be excluded from such stories must notify Marketing and Creative Services in writing prior to the second Monday of each semester.

Questions relative to FERPA policies should be referred to the Office of the Vice Provost for Academic Administration.

## **Student Consumer Complaint Process**

The U.S. Department of Education has amended the Higher Education Act (HEA) authorizing the "Program Integrity Rule." This amendment provides, among other things, regulations associated with the federal student financial aid program that require colleges or universities authorized to offer postsecondary education in one or more states to ensure access to a complaint process 34 CFR 668.43(b) that will permit student consumers to address the following:

1. Alleged violations of State consumer protection laws that include but are not limited to fraud and false advertising;
2. Alleged violations of State laws or rules relating to the licensure of postsecondary institutions; and
3. Complaints relating to the quality of education or other State or accreditation requirements.

To access a copy of PLNU's student complaint process, [click here](#).

An individual may contact the Department of Consumer Affairs of the Bureau for Private Postsecondary Education for review of a complaint. The Bureau may be contacted at 2535 Capitol Oaks Drive, Suite 400, Sacramento, CA , 95833, at their website: <http://www.bppe.ca.gov/enforcement/complaint>, via email at [bppe@dca.ca.gov](mailto:bppe@dca.ca.gov), or by phone or fax at (916) 431-6959 PH, (916) 263-1897 FAX.

## **Religious Expression**

Founded in 1902, Point Loma Nazarene University (PLNU) is a Christian university committed to the liberal arts and professional preparation. A combination of challenging academics, deep spirituality, and service-centered action prepares students for living purpose-filled lives and integrating knowledge with beliefs, values, and actions.

Being of Wesleyan heritage, and affiliated with the Church of the Nazarene, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life. We also strive to provide a learning and living environment that promotes safety, transparency, personal integrity, civility, mutual respect, and freedom from unlawful discrimination.

This integration of faith and learning is recognized by the United States and California Constitutions and many state and federal laws. For example, exemptions in Title IX(1) and the California Equity in Higher Education Act(2) recognize the right of religious educational institutions such as PLNU to incorporate religious beliefs into all aspects of

university life and maintain faith-based standards of behavior to which all community members voluntarily agree to follow. A full statement of PLNU's mission and community expectations for faculty, staff and students can be found at:

Student Standards of Conduct: Undergraduate Students

Residential Life Policy

Why PLNU

1. 20 U.S.C. Section 1681(a)(3).
2. Cal. Ed. Code Section 66271.

## **Veterans Benefits and Transition Act of 2018**

In compliance with the Veterans Benefits and Transition Act of 2018, Point Loma Nazarene University permits \*covered individuals to attend or participate in the course of education during the period beginning on the date in which the individual provides to PLNU a certificate of eligibility (COE) for entitlement to educational assistance under chapter 31 or 33 and ending on the earlier of the following dates:

1. The date on which the US Department of Veteran Affairs (DVA) provides payment for a course of education to PLNU.
2. The date that is 90 days after the date on which the educational institution certifies for tuition and fees following receipt of the COE from the student.

PLNU will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other PLNU facilities, or require that a covered individual borrow additional funds, or any covered individual because of the individual's inability to meet his or her financial obligations to PLNU due to the delayed disbursement funding from the DVA under chapter 31 or 33.

\*A covered individual is any individual who is entitled to educational assistance under chapter 31, Veteran Readiness and Employment, or chapter 33, Post 9/11 GI Bill benefits.

To qualify for this provision, students are required to:

1. Submit a Certificate of Eligibility (CH33) or VRE Authorization (CH31) to PLNU within 30 days of the start of the term.
2. Provide a written request to use CH33 entitlement, or have a VRE Authorization on file for CH31 for each term student is requesting to use benefits.
3. Submit a signed PLNU VA Student Agreement form, one time, upon first requesting benefits.

If there is a difference in the amount of the student's financial obligation to PLNU and the amount that the student is eligible to receive from the DVA, the student may incur an additional fee or may be required to make an additional payment to make up the difference.

For more information, please see PLNU's Veterans officer.

## **Admissions**

### **Admission Requirements and Procedures**

As a Christian institution providing higher education in the liberal arts and selected professional areas, Point Loma Nazarene University offers admission to qualified applicants of moral character, personal maturity, and intellectual ability. Preference is given to those who share the ideals and objectives of the university, and whose self-directive capabilities might enable them to profit in an optimal way from its total program of learning and developmental experiences. The Enrollment Management Committee of the faculty has ultimate responsibility for admission and readmission to the university. The university maintains a policy of non-discrimination in the admission of students.

All necessary forms in the process of application may be obtained from the Admissions Office. In preparation for initial entrance or readmission, applicants are encouraged to file the appropriate forms early in the process. Admission to the university does not in itself assure the student of housing, financial aid, or other necessary arrangements. It is the responsibility of the applicant to make such arrangements with the appropriate office. February 15 is the priority deadline for admission to the university for the fall semester.

## **Admission to Freshman Standing**

Students may apply as early as the fall semester of their senior year in high school or one year prior to transfer from another college or university. First-year applicants may apply for early action or regular admission. Early action is an option reserved for students who have made Point Loma Nazarene University one of their top-choice institutions providing notification by December 20. The deadline for early action is November 15 and requires receipt of all admission materials, including transcripts and test scores. Applicants for the February 15 regular admission priority deadline and those deferred from Early Action may receive notification between mid-March and the first week of April. Students seeking admission to the university following their secondary education must file the following with the Admissions Office:

- a formal application for admission;
- two recommendations;
- official SAT and/or ACT score reports;
- an official high school transcript or its equivalent; and
- a formal interview (strongly encouraged but not required).

The university expects applicants for admission to follow a typical preparatory course of study during their high school years. This should include the following program:

- English and literature - 4 years
- One foreign language - 2 years
- History and social sciences - 3 years
- Mathematics (through Algebra II) - 3 years
- Natural science (2 with laboratory) - 3 years

Note: Students who plan to major in mathematics or any of the sciences should include at least three years of mathematics and laboratory courses in physical or biological sciences in their high school programs.

Students who are admitted with any deficiencies in the above preparatory pattern may be required to make up such deficiencies either by taking certain courses or by demonstrating a minimum level of proficiency through acceptable scores on standardized achievement tests.

Freshmen entering Point Loma from accredited high schools have an aggregate weighted GPA of above 3.800 and an average score of 1240 on the SAT, or 26 on the ACT.

## **Provisional Admission**

Up to five percent of the entering first year class may be "admitted with provisions" due to a deficiency in one or more of the minimum requirements for admission in good standing. Most of these students are required to complete the Learning Enrichment for Academic Progress (LEAP) program during the initial enrollment year. For those few not required to complete the LEAP program, provisional admission requires a maximum fall semester course load of 13 units, course monitoring by the office of the Vice Provost for Academic Administration, and may mean placement in particular courses to ensure readiness for the students' chosen major curriculum. Regular academic standing can be achieved by earning a 2.5 minimum GPA following the first enrolled term, or in some cases by passing the math placement exam prior to matriculation.

## Admission of Transfer Students

Students seeking admission from accredited colleges and universities must file the following with the Admissions Office:

- a formal application for admission;
- two recommendations;
- official SAT and/or ACT score reports and an official high school transcript (for students with less than 36 completed semester units at application);
- official transcripts of all college/university coursework; and
- a formal interview (recommended).

Students from accredited colleges and universities may be considered for admission provided a GPA of 2.000 has been maintained in all previous course work. Transfer applicants who have met all priority deadlines will receive notification between early February and mid-April. The university has developed articulation agreements with a number of community colleges. Transcripts submitted from non-accredited institutions are evaluated on an individual basis. Transcripts from universities outside the United States must be evaluated for the student by an independent evaluation service approved by Point Loma. Transfer students who do not have all official transcripts on file with the Admissions Office before initial registration may be admitted but will not be allowed to register for the following semester until all transcripts are on file. Issues related to proper placement are addressed below under "Advanced Placement."

Students from community colleges may transfer in a maximum of 70 applicable units toward the baccalaureate degree at Point Loma. All courses taken at a community college transfer as lower-division units only.

## Admission of International Students

Point Loma Nazarene University welcomes students from all over the world. Students for whom English is not the native language must demonstrate English language proficiency by taking the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS). Minimum scores to be considered are an 80 iBT on TOEFL, or 6.5 on IELTS. This requirement can be waived by submitting SAT or ACT scores. International students seeking admission to the university must file the following documents with the Admissions Office:

- a formal application for admission;
- two recommendation letters;
- official evaluated transcripts (high school or university) ;
- SAT/ACT scores if the student's native language is English or official TOEFL or IELTS scores (for non-native speakers);
- an affidavit of support; and
- a formal interview (strongly recommended).

Students seeking to receive credit at the university from an institution outside the United States are required to have their foreign transcript evaluated by a service that is accredited by the National Association of Credential Evaluation Services (NACES). A detailed or course-by-course report is required. Official foreign transcripts are submitted to the service of choice and the evaluations subsequently submitted directly to the Office of Records. For further information, students may contact the Director of International Student Services/International Admissions Counselor.

## Readmission to the University

Students who leave the university must apply for readmission through the Office of Admissions, meeting general admissions deadlines and making deposits as required. Students whose continuous enrollment is not interrupted by more than one semester may remain under their declared applicable Catalog. Those who are readmitted after two or more consecutive semesters of non-attendance return under the Catalog in effect at the time of readmission.

## **Special Features**

### **Entrance and Placement Examinations**

All domestic, first-time freshmen applicants for admission to the university are required to take either the ACT or the SAT. These tests are administered at high schools and university test centers throughout the United States. The scores earned are used for placement in certain courses. The Point Loma Nazarene University SAT testing code is 4605; the ACT code is 0370. Entering students who have not taken the entrance examination are required to meet this requirement after arrival.

### **New Student Orientation (NSO)**

An important component of the First-Year Experience at Point Loma Nazarene University is a program known as New Student Orientation (NSO). An intensive orientation to all aspects of student life at the university, NSO welcomes students and families to the main campus for a three-day series of events that focus on issues such as academic life, residential life, adjustment to the challenges of a university education, financing one's education, and enjoyable social events. The NSO experience is the culmination of mailings and website offerings prepared and administered by a cross-section of the university community, including staff, faculty, and student leaders. NSO is offered both in August and in January.

### **Course Challenge Programs**

Students may use a variety of vehicles for meeting graduation requirements other than in the traditional classroom. These include the Advanced Placement (AP) program sponsored by the College Entrance Examination Board, approved on-line courses, the College Level Examination Program (CLEP), and the International Baccalaureate (IB) program. (See also Transfer Credit.)

### **Advanced Placement Program (AP)**

Entering students who have satisfactory scores on AP examinations may receive credit in applicable areas of the curriculum. A score of four or five receives six units of credit where appropriate.

First-time freshman students who enter with advanced standing by a variety of means open to them are required, nevertheless, to fulfill the normal freshman experiences, even when the number of transcribed units exceeds the technical category of freshman. These include PSY 1001, WRI 1010 (or its equivalent), and BIB 1001-BIB 1002, unless met by substitutions approved by the Vice Provost for Academic Administration.

### **College Level Examination Program (CLEP)**

Students may earn up to 32 semester units of credit by demonstrating proficiency in Subject Examinations related to graduation requirements. Credit is awarded as recommended by the College Board, with some restrictions to certain majors and general education. Credits are awarded only after the student has earned twelve units in residence with a minimum GPA of 2.000.

### **International Baccalaureate (IB)**

Point Loma recognizes the International Baccalaureate (IB) program and awards advanced standing for Higher Level courses completed with a score of five or above. Official IB transcripts must be sent to the Office of Records for

consideration. Credits awarded through the IB program are accepted as university credits and are not subject to the transcribing fee. For complete information, students should contact the Office of Records.

## Financing a PLNU Education

### Tuition and Fees

This Catalog section contains information on costs and how to take advantage of payment options and financial assistance through the Student Financial Services (SFS) Office. Students and parents are urged to read the following pages with care. Students are responsible for being aware of, and complying with, the information in this section.

- Approximate Annual Costs (New and Readmitted Students)
- General Fees
- Miscellaneous Financial Regulations
- Music Fees
- Payment Information
- Refund Policies
- Residence Fees
- Special Fees
- Summer Degree Processing Fee (Refundable)
- Tuition
- Tuition Refund Insurance

### Tuition

TUITION BLOCK (12-17 semester units)	\$18,800/semester
Less than 12 units (per unit)	\$1,570
Units in excess of 17 units (per unit)	\$1,250
Nursing Program Fee (SO, JR, SR)	(2019-2020 and 2020-2021 cohorts) \$3,000/semester  (Pre-2019-2020 cohorts) \$2,400/semester
2021 SUMMER SESSION TUITION	<i>Available in early Spring 2021. Please refer to the Summer School website.</i>

### General Fees

<i>General fee (per semester)</i>	\$350
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This fee assists in covering the cost of student activities, student services (e.g., multicultural, military, international, medical and mental health), and university technology. (Undergraduate students taking less than 12 units in a semester are charged \$29.17 per unit.)

<i>University Deposit (non-refundable after May 1st)</i>	\$425
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### Tuition Refund Insurance

PLNU offers Tuition Refund Insurance that reimburses families for tuition costs in the event that a student is unable to complete a semester due to accident or sickness. For more information regarding this plan, please go to <https://gradguard.com/tuition-insurance>. There is no provision for tuition refund insurance for students who enter during the summer. The last day to purchase tuition refund insurance is the day before fall and spring session classes begin. The fee for 2020-2021 is \$125 per semester for \$10,000 coverage.

## Audit Tuition

Students auditing courses are not assessed additional tuition unless the student is registered for greater than 17 units or less than 12 units (including audit units). Students enrolled in greater than 17 units or less than 12 units will be assessed audit tuition equal to half of the regular tuition rate for those registered audit units.

## Special Fees

Application Fee - Undergraduate	\$50
Degree Processing Fee	\$120
Independent Study Fee (per unit)	\$250
Laboratory and Course Fees	\$20 - 300
Late Payment Fee: 5% of remaining balance, minimum fee	\$25
Special Examination Fee	varies
Student Athlete Fee	\$175/semester
Student Teaching Fee - GRAD (per unit)	\$75
Writing Tutorial Lab Fee	\$150

For more information regarding specific course and lab fees, please click [here](#).

## Summer Degree Processing Fee (Refundable Prior to October 1)

Application for Summer Graduation	\$500
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## Music Fees

Students enrolled in private music lessons are charged the following fees in addition to tuition charges. Students receive 14 lessons per semester.

<b>Private Lessons:</b>	
One half-hour lesson per week (one unit)	\$440

One hour lesson per week (two units)	\$880
<b>Practice Rooms</b>	
Students enrolled in private or class lessons (vocal or instrumental) are charged for the use of a practice room in Cooper Music Center.	
<b>Practice Room Per Semester:</b>	
One half-hour a day	\$25
One hour a day	\$50

## Residence Fees

Room and Board (per semester)

<b>Room Costs:</b>	<b>Per Semester:</b>	<b>Per Year:</b>
Room only (including Colony)	\$3,100	\$6,200
Dorm Fund (Residence Hall Activities and Laundry Machines)	\$37	\$74
<b>Dining Options (Board):</b>		
Unlimited Meals + \$50 Dining Dollars	\$2,615	\$5,230
15 Meals/Week + \$50 Dining Dollars	\$2,350	\$4,700
180 Meals/Semester + \$200 Dining Dollars + 10 Guest Meals/Semester	\$2,350	\$4,700
120 Meals/Semester + \$200 Dining Dollars + 10 Guest Meals/Semester	\$2,020	\$4,040
Add-on Block - 10 or 20 Meals/Semester (only for 120 or 180 block plans)	10 meals - \$92.50 20 meals - \$170	

Students desiring to live in residential housing pay a deposit in order to reserve a room, which is part of the \$425 University Deposit. The housing deposit may be refunded (after a 30-day waiting period) to students who withdraw after the eighth week of the semester, provided all accounts have been paid in full. There is also a \$37 charge per semester residence hall fund.

All unmarried students living in residential housing who are under 23 years of age are required to board at the Nicholson Commons Dining Room under one of the meal plans listed above. Students who do not formally choose a meal plan are charged for the 15 meals/week + \$50 Dining Dollars plan. Students are permitted to change meal plans during the first two weeks of the semester only. Freshman students are required to be on either the 15 meals/week plan or the Unlimited Access plan for their first year at PLNU. The Nicholson Dining Room is closed during the interim period between the fall and spring semesters and during Spring Break.

## Approximate Annual Costs (First-Year Freshman or Transfer Student Estimated Cost)

2020-2021 Costs:	Per Semester:	Per Year:
Tuition (12-17 units)*	\$18,800	\$37,600
General Fee	\$350	\$700
Room**	\$3,100	\$6,200
Dorm Fund***	\$37	\$74
Board (Dining Plan)****	\$2,350	\$4,700
Total	\$24,600	\$49,200

\*These figures do not include the cost of books, supplies, special fees, transportation, or personal expenses.

\*\*Based on a shared room.

\*\*\*Pays for Residence Hall Activities and Laundry Machines.

\*\*\*\*Based on a mid-priced meal plan.

## Payment Information

Tuition, room, board, and fees are due and payable by the deadlines shown below. For the convenience of students and parents wishing to pay expenses in installments, a monthly payment plan is offered. (See option 2 below.)

A billing notification will be sent by email to students prior to the payment deadline each semester. The notification also serves as the official notice that students should view billing information in Workday. All transactional information is viewable in Workday under Financials. Payment options and deadlines are:

### Option 1: Full payment of the Net Balance (total charges minus financial aid excluding Federal Work-Study awards) by the following dates:

Fall 2020 semester - August 3, 2020

Winter Intersession 2021 - January 8, 2021

Spring 2021 semester - February 15, 2021

Please Note: PLNU does not accept credit card payments toward tuition, fees and room/board. Payments can be made electronically through a valid checking or savings account.

### Option 2: The Net Balance in monthly payments

For one or both semesters using PLNU's Tuition Installment Plan (TIP) option. This interest-free alternative to lump-sum payments allows families to establish a budget for each semester and to make payments in monthly installments. Automatic payment from a valid checking or savings account is required. For more information contact the Student Financial Services Office at (619) 849-2538 or [sfs@pointloma.edu](mailto:sfs@pointloma.edu).

### **Option 3: The Net Balance with a Federal PLUS loan**

The Federal PLUS loan is a low-interest federal loan for parents. Parents who wish to apply do not have to demonstrate financial need but must meet certain credit criteria. Federal PLUS loans are repayable over a ten-year period. To apply for a Federal PLUS loan, parents should complete an on-line loan application at <https://studentaid.gov>.

### **Option 4: The Net Balance with a private education loan**

A private education loan is based on the borrower's credit, and the interest rates vary. Borrowers almost always require a credit-worthy cosigner. Apply for a private education loan at <https://choice.fastproducts.org/FastChoice/home/126200/>.

### **Option 5: Combination Plan**

A combination of options 2, 3, and 4 allows families to budget as much as possible from current income and savings, using the Tuition Installment Plan option, then borrow any remaining balance using a loan.

All charges must be paid each semester according to the established deadlines. Failure to make timely payment or to make other arrangements acceptable to the Student Financial Services Office will result in students being assessed a late fee (of 5% of the remaining student account balance) and may include de-enrollment. Students are not permitted to register for future semesters if they have a past-due balance.

## **Refund Policies**

### **Tuition**

Refunds are computed during regular semesters at the following percentages upon filing a properly executed change of schedule or withdrawal with the Office of Records.

<i>Semester-length courses (16 weeks)</i>	
First Two Weeks of Semester	100%
Third Week	75%
Fourth Week	50%
Fifth through Eighth Week	25%
<i>Quad-length courses (8 weeks)</i>	
First Week of Semester	100%

Second Week	50%
Third and Fourth Week	25%
<i>Intersession and Summer sessions (5 weeks)</i>	
First Week of Semester	100%
Second Week of Semester	50%
Third Week of Semester	25%

Students are not entitled to any tuition refund after the end of the business day on Friday of the eighth week of a regular semester-long course (4 weeks for a quad course, 3 weeks for intersessions). Specific refund dates are published in Lomalink (the university's student newsletter). Students receiving federal financial aid who withdraw during the first ten weeks (60%) of the semester lose eligibility for all or part of their loans and grants, in accordance with federal regulations. For additional information, students should contact the Student Financial Services Office.

If you are planning on withdrawing or taking a leave of absence (LOA)\* from the University during a term you must contact the Office of Records (Records) to begin the process. Records will determine your official date of withdrawal and notify Student Financial Services (SFS). Using that date, SFS will determine how much financial aid you have earned and how much we have to return. For Federal Financial Aid (Federal Pell Grant, Federal SEOG, Federal Subsidized, Unsubsidized, and Parent PLUS loans), SFS will run the Return of Title IV Funds (R2T4) process. This refund calculation is required by the Department of Education (ED) when a student withdraws from school to determine the amount of Federal aid that must be returned. For institutional aid, State aid, and private loans\*\*, the amount of aid returned is based on the institutional refund policy stated above. For instance, if you withdraw during the 25% refund period, we will keep 75% of aid awarded and return 25%.

If you withdraw after a term, you will have earned all of your aid since you completed the term. Aid for subsequent term(s) would be canceled.

If you borrowed a Federal loan, you must complete loan exit counseling at <https://studentaid.gov>.

*\*LOAs for Financial Aid purposes are considered a withdrawal from PLNU.*

*\*\*Major Private loan lenders have expressed, on a case-by-case basis that 100% of the private loan disbursement can be kept to pay off a remaining balance or the SFS office can issue the credit of a private loan disbursement to the student.*

## **Fees**

All Fees are fully refundable during the first four weeks of each regular semester (fall and spring) and during the first two weeks of each summer session and are not refundable after these dates.

## **Residence Hall Fees**

Refundable according to the tuition refund schedule except for the first two weeks of the semester (ending on the Sunday before the third week of classes) during which there is a charge of \$28 per night. The housing deposit may be refunded (after a 30-day waiting period) to students who withdraw after the eighth week of the semester, provided all accounts have been paid in full.

## **Meals**

Prorated as of the date the withdrawal is received in the Office of Records.

## **Miscellaneous Financial Policies**

Students are responsible for handling all financial matters related to their attendance at the university. FERPA, the federal "Privacy Act," prohibits sending billing and financial aid information to parents or guardians of students 18 years of age or older without written permission of the student.

Students are charged for the full semester for all courses or private lessons for which they are registered, unless a "Change of Schedule" form is secured from the Office of Records, completed with proper signatures, and filed with the Office of Records. Any refunds or adjustments of student accounts arising from changes in class schedules are made as of the date on which the change of schedule form is filed at the Office of Records. Changes in arrangements for meals are made when requests or arrangements are completed at the Student Financial Services Office (this is true regardless of the date on which the student may have ceased attending classes or taking private lessons, or may have changed plans for meals).

At the time a student leaves the university, all accounts must be paid in full. The housing deposit and refunds, if any, will be applied to any charges due. Any unpaid balance will accrue interest at 10 percent per annum. In addition, Point Loma Nazarene University may report unpaid accounts to a national credit bureau. The student is responsible for paying all collection costs, including attorney fees and court costs as adjudged reasonable, in the event a suit must be instituted.

*Note: Diplomas may not be released nor will a student be permitted to participate in a commencement ceremony, until all accounts are paid.*

Operational costs are sometimes affected by factors over which the university has no control. Therefore, the charges and financial aid policies quoted in the Catalog are subject to change without notice.

## **Earned Grades Policy**

In addition to completing a course's academic requirements, PLNU's Earned Grades Policy requires that a student's account be substantially paid in full to receive final course grades in a given term. Please review the complete Earned Grades Policy [here](#).

## **Financial Aid**

### **Financial Aid at Point Loma**

The financial assistance program at Point Loma Nazarene University includes federal grants and loans, state grants, PLNU institutional aid, and external aid, including scholarships and grants awarded by corporations, civic organizations, and churches. Financial assistance is intended to assist students who otherwise would be unable to attend the university.

The university recognizes that the primary responsibility for paying expenses rests with the student (and spouse, if married) and parents who are expected to contribute in proportion to their resources. Any financial assistance awarded by the university is intended to help bridge the gap between the student's expected family contribution and the cost of attending PLNU.

Financial assistance is usually awarded to students based on need. The student's financial need and eligibility for various programs and the family's ability to pay are determined best by analyzing the information submitted on the Free

Application for Federal Student Aid (FAFSA). Various federal and state regulations, institutional policies, and funding-level limitations may affect the types and amounts of financial assistance that a student may receive from year to year. Additionally, changes in information and circumstances may cause financial assistance awards to be reduced, increased, or eliminated subsequent to the initial determination of these awards.

**If the student's financial aid awards include need-based aid, then outside scholarships and all forms of PLNU institutional aid are treated as need-based also, and in certain cases may be reduced or canceled to prevent funding in excess of financial need.**

## **Applying for Aid at PLNU**

To receive any type of federal, state, or need-based institutional aid at PLNU, the student is required to complete the FAFSA (or renewal FAFSA) each academic year of enrollment prior to the March 2 priority deadline. Students who complete the FAFSA by March 2 will receive priority consideration for the full range of financial aid programs available at PLNU. Students may submit a FAFSA throughout the academic year. Students who complete a FAFSA after the priority filing date are considered for institutional need-based awards only if there are remaining funds available.

## **Financial Need**

Financial Need is defined as the difference between the student's Cost of Attendance (COA) for the academic year and the "Expected Family Contribution" (EFC) as determined by completion of the FAFSA.

Cost of Attendance is the sum of tuition, fees, room and board, books and supplies, transportation, and miscellaneous costs. Expected Family Contribution is a statistical figure calculated using the financial information provided on the FAFSA by the student and parent that represents the ability of the student's family to contribute to the cost of the student's education.

## **Appeals for Special Circumstances**

Federal regulations provide the SFS Office with discretionary authority to make case-by-case adjustments to student/parent FAFSA data in cases of special circumstances. Examples of special circumstances may include:

- Significant reductions to income (loss of job, reduction of work hours, etc.)
- Unusually high medical or dental expenses (uninsured amounts only)
- A parent attending college
- Dependency status appeals

If a student believes there are special circumstances that should be reviewed, the student should contact the SFS Office to see if an appeal is necessary. If after contacting the SFS Office and the appeal is feasible, the student must complete and submit an Appeal for Special Circumstances form, or the appropriate form for the appeal (available at the SFS Office or online at [www.pointloma.edu/SFSforms](http://www.pointloma.edu/SFSforms)). After initial review of the appeal, additional documentation may be required.

## **Federal Aid Programs (Requires completion of a 2020-2021 FAFSA)**

### **Federal Pell Grant**

The Pell Grant is awarded to students with a qualifying Expected Family Contribution (EFC) as determined by the FAFSA. Pell Grant is aid which does not have to be repaid. It can be used to help pay university charges (tuition and

fees, on-campus room and board) or living expenses. The maximum award for the 2020-2021 Academic Year (AY) is \$6,345.

PLNU uses the Disbursement Date as the Pell Grant Recalculation Date (PRD). Changes of enrollment status after the PRD (i.e. increasing units from half-time to full-time) will not result in a change to Pell Grant eligibility.

### **Federal Children of Fallen Heroes (CFH) Scholarship**

The CFH Scholarship is awarded to an otherwise Pell-eligible student whose parent or guardian died as a result of active service in the line of duty as a Public Safety Officer. Such a student may receive the maximum Pell Grant and increased amounts of other federal student aid if the student was less than 24 years old when the parent or guardian died, or was enrolled at an institution of higher education at the time of the parent or guardian's death.

### **Federal Iraq & Afghanistan Service Grant (IASG)**

The IASG is awarded to an otherwise Pell-eligible student whose parent or guardian died as a result of U.S. military service in Iraq or Afghanistan after September 11, 2001. Such a student may receive increased amounts of federal student aid if the student was less than 24 years old when the parent or guardian died, or was enrolled at an institution of higher education at the time of the parent or guardian's death.

### **Federal Supplemental Educational Opportunity Grant (SEOG)**

The SEOG is "campus-based" federal aid which is awarded to Pell Grant recipients who have a qualifying Expected Family Contribution (EFC). Since SEOG funding is extremely limited, not all students who qualify receive an award. At PLNU the maximum SEOG Grant for the 2020-2021 Academic Year (AY) is \$1,500; however, final award decisions are subject to the final campus-based fund allocation awarded to PLNU. Students who have an EFC of \$0 will be considered as a priority group for funding.

### **Federal Work-Study**

The Federal Work-Study (FWS) program is awarded to eligible students but it is only guaranteed if the student acquires on-campus employment. Students eligible for Federal Work-Study awards are not guaranteed employment. If awarded Federal Work-Study, the student should contact the Student Employment Office to secure employment at (619) 849-2633 or online at [www.pointloma.edu/work](http://www.pointloma.edu/work). FWS is disbursed in the form of bi-weekly paychecks from the cashier's office in Draper Hall or by direct deposit.

## **Federal Loan Programs**

### **Federal Direct Student Loans**

The Federal Direct loan is a low-interest student loan borrowed directly from the U.S. government designed to help students pay for college. Depending on eligibility, the student may be awarded a subsidized (for a student who demonstrates "need" as determined by the FAFSA) and/or unsubsidized (no "need" required) Direct Loan. The U.S. Department of Education pays the interest on a Direct Subsidized Loan while a student is in school at least half-time, for the first six months after a student leaves school (referred to as the grace period\*), and during a period of deferment (a postponement of loan payments). Unsubsidized means that the student is responsible for paying all the interest that accrues on the loan amount from disbursement until the loan is repaid in full. Direct Loan interest rates and origination fees are published by the Department of Education. Direct Loan interest rates become effective on July 1<sup>st</sup> of each year. Direct Loan origination fees become effective on October 1<sup>st</sup> of each year. Understanding the importance of repaying any federal student loan taken while in school is critical. Sample loan repayment schedules are available for students at <https://studentaid.gov>.

Yearly amounts:

Freshmen (0-24 units) \$5,500 (up to \$3,500 of which may be Subsidized)

Sophomore (25-56 units) \$6,500 (up to \$4,500 of which may be Subsidized)

Junior and Senior (57+ units) \$7,500 (up to \$5,500 of which may be Subsidized)

If the student is independent or the parent has been denied a Federal Parent PLUS Loan, the student may be eligible for an additional Unsubsidized loan (Freshman and Sophomore, \$4,000; Juniors and Seniors, \$5,000).

#### *Federal Direct Subsidized and Unsubsidized Loan Repayment*

Repayment begins six months after the student graduates, withdraws, or drops below half-time status (i.e. less than six units).

Before Subsidized or Unsubsidized Direct Loan funds are released, online Entrance Counseling is required of all first time borrowers. This is a mandatory federal requirement to advise student borrowers of their rights and responsibilities in receiving a student loan. Loan amounts are generally released in two disbursements, regardless of enrollment period. Exceptions may be made for students enrolled in one semester. Students may accept all or a portion of their Federal Direct Loan eligibility. Loan origination fees will be charged in accordance with federal regulation from any federal student loan funds disbursed. The Entrance Counseling and completion of the Master Promissory Note (MPN) may be completed online at <https://studentaid.gov>.

When a student graduates, withdraws from the university, takes an approved leave of absence, or drops below half-time status, Exit Counseling is required. This is a mandatory federal requirement for all students who have received a Direct Student Loan. Exit Counseling may be completed online at <https://studentaid.gov>. PLNU offers optional in-person loan Exit Counseling to graduating seniors. Additional information may be obtained from the Student Financial Services Office.

#### *Federal Direct Parent Loan for Undergraduate Students (PLUS)*

The Direct Parent PLUS Loan is a credit-based loan available to parents of dependent undergraduate students who file a 2020-2021 FAFSA. The PLUS Loan annual borrowing limit is equal to the student's cost of education minus any other financial aid awarded. Direct Parent PLUS Loan interest rates and origination fees are published by the Department of Education. The Direct Parent PLUS Loan interest rates become effective on July 1<sup>st</sup> of each year. The Direct Parent PLUS Loan origination fees become effective on October 1<sup>st</sup> of each year. Repayment begins 60 days after the loan is fully disbursed or borrowers may request a deferment or forbearance of repayment until their student leaves the university. The application and Master Promissory Note must be completed online at <https://studentaid.gov>.

Normally, PLUS Loan funds are released in two equal disbursements: one for fall semester and one for spring semester. If the parent wishes to have the entire loan disbursed in a single semester, the parent must specify this on the online PLUS loan application. Loan origination fees will be charged in accordance with federal regulation from any Federal Parent PLUS Loan funds disbursed to the student account.

#### *Federal Nursing Student Loan*

The Nursing Loan is a low-interest federal loan for students enrolled in the PLNU Nursing program who demonstrate exceptional financial need. The interest rate is fixed at 5.00% for the life of the loan and begins accruing nine months after graduation, withdrawal, or dropping to less than half-time status (i.e., less than six units). Repayment also begins at that time. Students have up to ten years to repay the loan. Students awarded a Nursing Loan must complete Entrance Counseling and sign a Promissory Note each year before funds can be credited to their student account. Because of limited funding, there is no guarantee that a student will continue to receive Nursing Loan funding in subsequent years.

Pre-Nursing program students are not eligible for a Federal Nursing student loan. Students must complete a 2020-2021 FAFSA to determine eligibility.

## **Need-Based State Aid Programs**

For details about any California state fund programs, students may visit the California Student Aid Commission (CSAC) website at [www.csac.ca.gov](http://www.csac.ca.gov).

### *Cal Grant*

*Cal Grant funding is limited to four academic years. In order to graduate in four years at Point Loma Nazarene University, you must complete at least 16 units or more per semester. Please work with your academic advisor to ensure you will graduate in four years.*

Cal Grant is a program of the California Student Aid Commission (CSAC). Students may receive a Cal Grant for a maximum of four academic years (eight semesters) of undergraduate study. In addition, teacher credential students who received Cal Grant as undergraduates may be eligible for a two-semester extension of their benefits. Award amounts are determined annually by the passing of a final State of California budget; all Cal Grant awards listed on an award letter are to be considered "estimated" until the final budget is passed into law by the California legislature.

CSAC notifies new Cal Grant recipients whether they have been awarded an Entitlement or Competitive Cal Grant. Before a Cal Grant award can be added to a student's Financial Aid Award Letter, the SFS Office must review the data provided by the student and parents on the FAFSA to make sure that the student is financially eligible.

**Cal Grant A** is for students from low to middle income families. It is restricted to paying tuition and mandatory fee charges only. The award amount of the Cal Grant is determined upon approval of a final State of California budget.

**Cal Grant B** is for students with exceptionally high need (based on the FAFSA). During the first year of the award, Cal Grant B pays an Access Grant. PLNU credits these funds directly to the student's account to help pay down semester charges. However, the student has the option of receiving Access Grant funds as a check each semester by submitting a written request to the Student Financial Services office before the end of each semester Add Period. After that date, the semester Access Grant is credited to the student's account and may not be available for refund. During the second and subsequent years, Cal Grant B includes a tuition and fee-paying component in addition to Access. The award amount of the Cal Grant and Access Grant is determined upon approval of a final State of California budget.

### *Application Process for New Cal Grants*

Students must have submitted a 2020-2021 FAFSA (<https://studentaid.gov>) by March 2, 2020, and a verified grade-point average (GPA) to the California Student Aid Commission (CSAC) by the same date. High school seniors must request that their high school provide this information to CSAC electronically. Current PLNU students who are California residents and who have completed 24 or more college units will have their GPA electronically submitted to CSAC.

### *Renewal Cal Grants*

All Cal Grant recipients must meet income and asset ceiling and family size limits established annually by the California Student Aid Commission (CSAC) and meet Satisfactory Academic Progress (SAP) in order to have their Cal Grant renewed for the 2020-2021 Academic Year. Students may renew a Cal Grant award for up to four academic years (eight semesters). Submission of a verified GPA is not required to renew a Cal Grant. Students who received a Cal Grant at another institution must file a FAFSA and complete Form G-10 (Grant Record Change Form for Students) or contact CSAC at 1-888-224-7268.

For details about renewal requirements for the 2020-2021 Cal Grant, students may visit the California Student Aid Commission (CSAC) website at [www.csac.ca.gov](http://www.csac.ca.gov).

#### *Cal Grant and The California Dream Act*

The California Dream Act of 2011 allows students without lawful immigration status but who meet certain requirements to apply for and receive state financial aid at California private colleges. The award amount of the Dream Act Cal Grant is determined upon approval of a final State of California budget.

For details about applying for a Cal Grant under the Dream Act, visit the California Student Aid Commission (CSAC) website at <https://dream.csac.ca.gov>.

### **Additional State Grants**

#### *Law Enforcement Personnel Dependent's Grant*

The Law Enforcement Personnel Dependents Grant (LEPD) is a need-based educational grant awarded to dependents and spouses of California Peace Officers (Highway Patrol, Marshal, Sheriff, and Police Officer), employees of the Department of Corrections and California Youth Authority, and both full-time and permanent firefighters who have been killed or totally disabled in the performance of duty. Applications are accepted throughout the academic year.

#### *Chafee Grant*

The California Chafee Grant program gives money to current or former foster youth to use for career and technical training, or college courses. The grant does not have to be repaid and is intended to help the student pay living expenses. The Chafee Grant, also known as the Chafee Educational and Training Voucher (ETV) Program, is a federally funded program and is subject to the availability of federal funds each year. To qualify, students must be a current or former foster youth and not have reached their 22nd birthday as of July 1 of the award year. The court must have established their dependency when they were between the ages of 16 and 18. The California Department of Social Services will verify their foster youth eligibility status.

### **The FAFSA Verification Process**

Any student who files a FAFSA may be selected for a process called "verification", either by the Department of Education or by the University. Verification is the process of confirming that the data reported on the FAFSA is accurate. PLNU has partnered with Inceptia's "Verification Gateway" as an approved third party servicer who assists PLNU in collecting all documents required to complete the process for any student selected by the Department of Education for verification. Students who may be selected for institutional verification will be contacted by PLNU's Student Financial Services (SFS) Office directly.

Students may decline the request for verification documents, however in doing so, they become ineligible for any federal or state financial aid and for some forms of need-based institutional financial aid. It is recommended that all students complete the verification process as early as possible to avoid late notification of the loss of eligibility of financial aid.

### **PLNU Institutional Aid**

All forms of PLNU institutional aid are limited by semester charges and enrollment status. Award amounts are divided equally between fall and spring semesters, and generally cannot be used for summer session coursework. All forms of PLNU institutional aid, including merit-based awards, may be limited by the student's financial need. This means that

in certain cases, institutional aid may need to be reduced or canceled if the student is receiving either federal or state need-based aid.

## **Enrollment Status Requirements**

All forms of institutional aid require full-time enrollment (12 units or more per semester) through the end of the Refund Period—the first eight weeks of the semester. Institutional aid is canceled for any student dropping below 12 units before that time. Graduating seniors may receive a prorated amount of institutional aid if enrolled less than full-time during their final academic year. Students with exceptional circumstances may be eligible to receive a prorated amount of institutional aid on an appeal basis only for a maximum of one semester. A written request must be submitted to and approved by SFS.

## **Institutional Merit Awards**

### **Academic Scholarships**

For first-time freshmen who begin attending PLNU during the 2020-2021 Academic Year, academic awards are awarded for an initial two-year period and, subject to maintaining renewal criteria, can be received for a maximum of eight (8) semesters. Continuous full-time enrollment is required (12 units or more per semester) to retain an academic scholarship. Renewal eligibility is based on the student's cumulative GPA (not rounded) calculated at the end of the fall or third semester of the second year of the award and each subsequent year. Any student not meeting the renewal criteria at that time will be given until the end of the spring or fourth semester to meet the qualifying cumulative GPA. **Once lost, an academic scholarship cannot be regained.**

Eligibility for an academic scholarship beyond eight (8) semesters may be considered on a case-by-case appeal basis but is limited to a maximum of ten (10) semesters of continuous enrollment at PLNU.

To be eligible for selection, first-time freshmen must:

- be offered admission to PLNU
- submit an official seven-semester high school transcript to PLNU by the deadline date
- meet all GPA, test score, and need requirements

#### *Bresee Need-Based Merit Award*

The Bresee scholarship is awarded to first-time freshmen who have demonstrated unmet need based on completion of the FAFSA for the 2020-2021 Academic Year as follows:

- They have a weighted high school cumulative GPA of  $\geq 3.500$  (not rounded) **AND** SAT of  $\geq 1300$  or ACT  $\geq 28$
- OR**
- They have a weighted high school cumulative GPA of  $\geq 3.800$  (not rounded) **AND** SAT of  $\geq 1030$  or ACT of  $\geq 20$

The Bresee Scholarship is renewable with a cumulative GPA of  $\geq 3.200$  (not rounded), calculated at the end of the fall semester of the second year. Unmet need will be determined for renewal based on the FAFSA filed in the student's sophomore year for junior year eligibility and junior year for senior year eligibility. The student's cumulative GPA and financial need will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. This award is given for a maximum of eight (8) semesters.

#### *Provost Scholarship*

The Provost's Scholarship is awarded to first-time freshmen for the 2020-2021 Academic Year as follows:

- They have a weighted high school cumulative GPA of  $\geq 3.675$  (not rounded) **AND** SAT of  $\geq 1200$  or ACT  $\geq 25$   
**OR**
- They have a weighted high school cumulative GPA of  $\geq 3.700$  (not rounded) **AND** SAT of  $\geq 1180$  or ACT of  $\geq 24$

#### *Trustee Scholarship*

The Trustee's Scholarship is awarded to first-time freshmen for the 2020-2021 Academic Year as follows:

- They have a weighted high school cumulative GPA of  $\geq 3.775$  (not rounded) **AND** SAT of  $\geq 1300$  or ACT  $\geq 28$   
**OR**
- They have a weighted high school cumulative GPA of  $\geq 3.800$  (not rounded) **AND** SAT of  $\geq 1280$  or ACT of  $\geq 27$

#### *President Scholarship*

The President's Scholarship is awarded to first-time freshmen for the 2020-2021 Academic Year as follows:

- They have a weighted high school cumulative GPA of  $\geq 3.975$  (not rounded) **AND** SAT of  $\geq 1430$  or ACT  $\geq 32$   
**OR**
- They have a weighted high school cumulative GPA of  $\geq 4.000$  (not rounded) **AND** SAT of  $\geq 1400$  or ACT of  $\geq 31$

The Provost, Trustee, and President's academic scholarships are renewable with a cumulative GPA of  $\geq 3.400$  (not rounded), calculated at the end of the fall semester of the second year. The student's cumulative GPA will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. Each award is given for a maximum of eight (8) semesters.

## **Competitive Academic Scholarships**

#### *Full Honors Scholarship*

One Full Honors Scholarship will be awarded by the Admissions office to a first-time freshman for the 2020-2021 Academic Year. This award covers tuition expenses for the year. This scholarship is initially awarded for two years and is then renewable annually with a  $\geq 3.40$  cumulative GPA (not rounded) at PLNU. The student's cumulative GPA will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. This award is given for a maximum of eight (8) semesters.

#### *Science Honors Scholarships*

Prospective students invited to attend Point Loma Nazarene University's Science Honors Weekend event may be awarded a Science Honors Scholarship by faculty from the Science, Math, or Computer Science disciplines. Awarding of a Science Honors Scholarship is in addition to the offer of any PLNU Academic Scholarship. This scholarship is initially awarded for two years and is then renewable annually with a  $> 3.40$  cumulative GPA (not rounded) at PLNU. The student's cumulative GPA will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. This award is given for a maximum of eight (8) semesters.

## Merit Scholarship Criteria for Incoming Transfer Students:

A Transfer Merit Scholarship is available to new transfer students with 16 or more credit hours; eligibility criteria vary depending on the student's cumulative GPA and the number of college units completed, as shown below:

*Transfer Merit 1 Scholarship \$6,000*

Transfer GPA of  $\geq 3.300$ -3.590

*Transfer Merit 2 Scholarship \$8,000*

Transfer GPA of  $\geq 3.600$

The Transfer Merit 1 Scholarship is renewable with a cumulative GPA of  $\geq 3.200$  (not rounded) calculated at the end of three full PLNU semesters. The Transfer Merit 2 Scholarship is renewable with a cumulative GPA of  $\geq 3.400$  (not rounded) calculated at the end of three full PLNU semesters. The student's cumulative GPA will be reevaluated at the end of each subsequent fall semester for renewal during the next academic year. It is awarded for a maximum of eight (8) semesters.

Transfer students with less than 32 units will be evaluated on a case-by-case basis for academic scholarship eligibility.

## Second Chance Merit Scholarship

Students who did not qualify for any academic award at the time they were admitted to PLNU may be considered for this award after completing at least three consecutive full-time semesters at PLNU, and attaining a cumulative resident GPA of  $\geq 3.700$  (not rounded and excluding study abroad, summer school, and transfer units). If eligible, this scholarship will be awarded for the following academic year. Applications for this award are available from the Student Financial Services office. Due to limited funding, all students who are eligible may not be awarded. A priority application deadline of March 2<sup>nd</sup> will be used to determine eligibility in the event of limited funding. Institutional need grants awarded to Second Chance Merit Scholarship recipients will be awarded according to the catalog policies in place for their cohort.

## Tuition Discounts

*Pastor and Missionary Child Discount*

The Pastor's or Missionary Child Discount for the 2020-2021 Academic Year provides a percentage discount on tuition charges for the **dependent** children of Nazarene and non-Nazarene pastors.

For the **dependent child** of a pastor or missionary to qualify, each of the following statements must be true:

- The pastor must be a full-time - \*career senior pastor or in a full-time career member of the pastoral staff during the 2020-2021 Academic Year.
- The student is under the age of 24 during the academic year in which the discount is awarded.
- The student is not married.
- The student does not have children.
- The student is not a veteran of the U.S. Armed Forces.
- The student will be working on a B.A. or B.S. degree during the 2020-2021 Academic Year. (This award is given for a maximum of 8 semesters.)

\* **"Career"** is defined as someone whose full-time paid vocation is a licensed or ordained pastoral ministry position. NOTE: To be considered career ministry, the parent in ministry's current primary source of income must come from their involvement in full-time pastoral (pulpit) ministry. Proof of valid denominational ordination or licensing for the parent named will be required for all first time Pastor Child Discount applicants but is not a guarantee of eligibility. Verification of housing or parsonage allowance may be required. Due to limited resources, eligibility is not extended to non-profit, para-church, or church administrative or support staff, or independent children of pastors.

Students wanting to apply for either the Pastor's or Missionary Child Discount may obtain an application form from the Student Financial Services office or the PLNU website. Tuition discounts are not automatically renewable and continued qualifying employment may be verified.

## **Institutional Grants**

### *Church Scholarship, Nazarene Grant-in-Aid and District Grants*

The Nazarene Matching Grant program is for Nazarene students from the Southwest Educational Region of the Church of the Nazarene (#9), which is comprised of the following districts: Anaheim, Arizona, Central California, Hawaii, Los Angeles, New Mexico, Northern California, Sacramento, Southern California, Southwest Latin America, Southwest Native American, and Western Latin America.

The program consists of three awards: the Church Scholarship, the Nazarene Grant-in-Aid, and a District Grant. In order to receive these three awards, the student's home Nazarene church must send PLNU a Church Scholarship check (up to \$250 per year). PLNU matches this with the Nazarene Grant-in-Aid (up to \$250 per year) and also applies the appropriate District Grant. (District Grant award amounts may vary by district and are determined by the Board of Trustees during the annual budgeting process.) A student whose home Nazarene church does not participate in the matching grant program may still be able to receive District Grant funds if the church's pastor sends a written request to the Student Financial Services Office on church letterhead.

For students living on-campus, these three awards can be used to help pay tuition and mandatory fees or on-campus room and board charges. For students living off-campus, the awards are restricted to tuition and fees. Neither the Church Scholarship nor the Nazarene Grant-in-Aid can be refunded to the student. However, for off-campus students whose total financial aid exceeds semester charges, the student may use District Grant funds to purchase a commuter meal plan.

Students may receive the Church Scholarship, Nazarene Grant-in-Aid, and District Grant during the fall and spring semesters only, for up to ten regular semesters. Full-time enrollment (12 units or more per semester) is required through the end of the refund period.

It is the student's responsibility to contact the church and request that it send the Church Scholarship check to PLNU. If the church does not send the money within one week of priority registration, the Church Scholarship, Nazarene Grant-in-Aid, and District Grant will be removed from the student's financial aid awards.

The student should contact the church as early as possible during the academic year to find out if there are any special eligibility requirements (i.e., a minimum period of church attendance, church involvement, etc.) or if it requires submission of an application form.

## **Need-Based Institutional Aid**

### *Point Loma Forward Grant*

The Point Loma Forward Grant is awarded to students with financial need and who meet all eligibility requirements. To be considered, students must have filed a FAFSA for the academic year in which they are awarded. Students will be awarded a Federal Direct Subsidized Loan and Federal Work Study before being awarded a Point Loma

Forward Grant for the 2020-2021 Academic Year. Renewal of institutional need grants for returning students is dependent upon continued eligibility under the awarding criteria for that cohort and the availability of funds.

#### *Point Loma Community Grant*

The Point Loma Community Grant is awarded to students who demonstrate unmet need after all other forms of need-based financial aid have been awarded and who are not the recipient of a PLNU academic scholarship. To be considered, students must have filed a 2020-2021 FAFSA. Renewal of a Point Loma Community Grant requires continued eligibility under the awarding criteria for that cohort and is subject to availability of funds.

#### *Point Loma Legacy Grant*

The Point Loma Legacy Grant may be awarded to students who have at least one parent who attended or graduated from Point Loma Nazarene College/University, who were not awarded in excess of the maximum allowable forms of institutional aid, and who demonstrated remaining unmet need, and is subject to the availability of funds. To be considered, students must have filed a 2020-2021 FAFSA. Renewal of a Point Loma Legacy Grant requires continued documented unmet need as verified by completion of a FAFSA, and is subject to availability of funds.

## **Performance Awards**

#### *Athletic Scholarship*

For students who live on-campus, athletic scholarships can only be used to help pay tuition, mandatory and other fees, and on-campus room and board. A completed Athletic Scholarship Agreement (ASA) must be submitted to the Student Financial Services Office and the student-athlete given athletic clearance before athletic scholarship funds will be disbursed to the student account. Student-Athletes who receive any form of PLNU athletically-related scholarship are not eligible for an institutional need-based grant. All NCAA Division II rules and requirements must be followed in order to be eligible for and to retain an athletic scholarship and to participate on an athletic team. The student should contact the Intercollegiate Athletic Department at (619) 849-2265 or go to <http://www.plnusealions.com>.

#### *Forensics Scholarships*

Students will contact the Department of Communication Studies Assistant at (619) 849-2391 ([www.pointloma.edu/communication](http://www.pointloma.edu/communication)).

#### *Music Scholarships*

Students will contact the department assistant in the Department of Music at (619) 849-2445 ([www.pointloma.edu/music](http://www.pointloma.edu/music)).

#### *Theatre Scholarships*

Students will contact the department chair in the Department of Communication Studies at (619) 849-2248 ([www.pointloma.edu/communication](http://www.pointloma.edu/communication)).

## **Elected or Appointed Office Institutional Aid**

#### *ASB and Resident Assistantships (RA)*

Both Associated Student Body (ASB) Leadership and RA Awards are treated as need-based if the student's financial aid awards include any form of federal or state need-based aid. This means that an ASB or RA award may have to be reduced or in rare cases, canceled to prevent the student from being funded in excess of financial need.

An alternative to having all or a portion of an RA award reduced or canceled to avoid over-awarding may be for the student to receive the excess award through student payroll. Under this option, the student will receive the amount of the excess as payroll which then must be reported to the IRS.

**RA awards are based on the equivalent of the maximum meal plan with the exception of RA's assigned to Flex housing who are awarded the equivalent meal plan for Flex residents.**

ASB Scholarships are awarded each semester with a portion paid as a stipend directly to the student and a portion awarded as a form of financial aid. ASB Stipends are subject to a Board of Review process and the final amount is contingent upon a student's successful completion of the duties associated with their leadership role. If a student does not perform satisfactorily, they may experience a reduction in the amount of the award. Students may be given the option of having the entire semester amount paid as a form of scholarship but should consult with the Student Financial Services Office before making a request.

The contact person for ASB awards is the Director of Community Life. The contact person for resident assistantships is the Dean of Students.

## **Departmental/School and Endowment Awards**

Each year, various academic departments and schools award a limited number of scholarships to selected students. Students should contact their academic department or school for applications and deadlines. Generally, students in their freshman year are not eligible for these awards.

A listing of endowed scholarships for the 2020-2021 Academic Year can be found on the PLNU website. Continuing students who are interested in applying for these scholarships should contact the appropriate academic department or the Student Financial Services Office for application information.

## **Financial Aid from Outside Agencies**

Various organizations, such as businesses, community groups, churches, administer scholarships based on merit, athletics, community service, organizational affiliation, academic performance, or educational objective. Some of these awards require financial need. It is the student's responsibility to research outside scholarship opportunities. Once awarded, it is the student's responsibility for contacting the outside agency sponsoring the scholarship award and requesting that it send the scholarship check to PLNU. Outside scholarship awards are always divided evenly over both the fall and spring semesters, unless the scholarship donor specifically states otherwise. Even if the scholarship donor sends the funds directly to the student, the award must still be treated as a resource, which means that other aid in the student's financial aid may need to be reduced or canceled to prevent the student from being funded in excess of campus charges, financial need, or cost of attendance. **Students must notify Student Financial Services of any outside scholarship awarded to them during an academic year.**

## **ROTC and Vocational Rehabilitation**

Both Reserve Officers Training Corps (ROTC) and Vocational Rehabilitation (Voc Rehab) help students to pay tuition and fee charges. Award amounts must be verified by the organization providing the financial assistance. Vocational Rehabilitation is treated as need-based aid and can limit a student's eligibility for merit and other need-based financial aid programs.

## **Veterans Administration (VA) Benefits**

Veterans Administration (VA) benefits are awarded to veterans of the Armed Services and dependents who qualify. These funds may count against the student's eligibility for other institutional need-based financial aid programs. VA Benefits are certified by the university and may be paid directly to the student or credited to their student account.

### *The Yellow Ribbon Program*

The Yellow Ribbon GI Education Enhancement Program (Yellow Ribbon Program) is a provision of the Post-9/11 Veterans Educational Assistance Act of 2008. This program allows institutions of higher learning (degree granting institutions) in the United States to voluntarily enter into an agreement with VA to fund tuition expenses that exceed the highest public in-state undergraduate tuition rate. Point Loma Nazarene University will match up to \$10,000 of remaining tuition charged after the primary Chapter 33 tuition benefit has been certified and verified by the VA. Amounts and number of awards are dependent on available funds for each academic year and are not guaranteed to applicants until the final budget is approved by the Board of Directors. Award decisions will be made in writing to the eligible students. Students awarded a Yellow Ribbon Program Grant may not be eligible for institutional need-based aid.

Only individuals entitled to the maximum benefit rate (based on service requirements) may receive this funding. Therefore, a student may be eligible if:

- They served an aggregate period of active duty after September 10, 2001, of at least 36 months.
- They were honorably discharged from active duty for a service-connected disability and they served 30 continuous days after September 10, 2001.
- They are a dependent eligible for Transfer of Entitlement under the Post-9/11 GI Bill passed on a veteran's service under the eligibility criteria listed above.
- They are accepted for admission at PLNU for the 2020-2021 Academic Year, they are an applied student or they are in good academic standing as a returning student; applied and returning students must be registered as a full-time student at the time the award is disbursed.

PLNU Yellow Ribbon Grants will be awarded after submitting:

- A valid Yellow Ribbon Certificate of Eligibility from the Veteran's Administration certifying eligibility for the Yellow Ribbon Program ([www.gibill.va.gov](http://www.gibill.va.gov)).
- Returning Students: Documentation confirming status as a student in good academic standing for the current academic year is required.

## **Other Resources**

If a student receives any form of non-PLNU financial assistance, such as outside scholarships or veterans benefits, the SFS Office may have to reduce previously awarded financial aid so that funding does not exceed the cost of attendance, institutional charges, or financial need as determined by completion of the FAFSA. Whenever possible, the SFS Office will reduce Federal Work-Study and loan amounts before adjusting grant or scholarship assistance.

## **Tuition Remission**

PLNU employees and their dependents may be eligible for tuition remission and should contact the Office of Human Resources at (619) 849-2200 or go online at [www.pointloma.edu/HumanResources](http://www.pointloma.edu/HumanResources) for more information.

Students taking graduate-level courses must complete an Application for Tuition Remission Form each academic year enrolled. Tuition discounts are not automatically renewable for dependent students. The employment status for the PLNU employee will be verified with Human Resources each subsequent year of enrollment prior to renewal of the dependent student's tuition remission benefits.

If a dependent student of a PLNU employee earns a PLNU academic scholarship, the amount of tuition remission must be reduced by the amount of the academic award. If the student has remaining unmet need as determined by the FAFSA, they may be awarded up to a maximum of \$4,000 of their earned academic scholarship to apply for the cost of attendance, including on-campus room and board.

In addition, a limited number of students whose parents are employed at Council of Christian Colleges and Universities (CCCU) institutions may be eligible for tuition remission benefits. These students must apply through the PLNU Admissions Office to determine their eligibility for this benefit.

NOTE: Although tuition remission is a benefit, it is a resource and may limit the student's eligibility for federal, state, and institutional aid.

Tuition remission benefits (including CCCU) may never be applied to study abroad charges.

## **Limits of Financial Aid Awards**

For students living on-campus, semester charges include tuition, mandatory fees (not including travel fees), and on-campus room and board charges. For students living off-campus, semester charges include tuition and mandatory fees only. Regardless of the student's housing status, institutional aid (including endowed awards) can never exceed semester charges.

**Students Living On-Campus:** the only types of aid that can exceed semester charges are: Pell Grant, Federal SEOG, Federal Work-Study, and loans. External scholarships (excluding the Nazarene Church Scholarship) can also exceed semester charges, provided the student files a FAFSA and demonstrates unmet financial need at the time the outside scholarship is added to the student's financial aid.

**Students Living Off-Campus:** the only types of aid that can exceed semester charges are: Pell Grant, Federal SEOG, Federal Work-Study, loans, and outside scholarships (excluding the Nazarene Church Scholarship). Exceptions may be granted by written appeal.

**Students Studying Abroad:** PLNU faculty-led programs are run by PLNU faculty through specific departments on campus. PLNU partner programs are sponsored through partner universities around the world. Affiliated programs are sponsored through organizations that have a formal relationship with PLNU. Credits are usually earned in another university and then transferred to PLNU. All study abroad programs must be approved by the PLNU Office of Global Studies.

For approved programs with partner institutions, federal and state grants and loans, along with PLNU institutional scholarships and grants may be used to pay program costs. For PLNU faculty-led programs, federal and state grants and loans may be used; the amount of PLNU institutional scholarships and grants that may be used varies by program. What is included with the cost of each program varies, but tuition, fees, and housing are standard for almost every program. In some cases, meals are also included. Extra travel and normal day-to-day expenses are extra.

Tuition remission benefits (including CCCU) may never be applied to cover study abroad charges.

**Summer Session Financial Aid:** Summer academic sessions at PLNU are considered a "trailer" (or final semester) for the Fall/Spring Academic Year for the purpose of awarding financial aid. Any student accepted for admission to the university as part of the incoming Fall cohort who has been approved to begin taking classes during the summer session prior to the cohort start date will not be eligible for PLNU institutional aid. Students may have remaining eligibility for federal or state financial aid under the appropriate FAFSA year and are advised to meet with a Student Financial Services Advisor prior to enrolling in summer courses.

## **Satisfactory Academic Progress (SAP)**

In accordance with the Higher Education Act of 1965, as amended, all post-secondary institutions must establish a Satisfactory Academic Progress (SAP) policy.

PLNU students must adhere to a policy of Satisfactory Academic Progress (SAP) to retain eligibility for Federal and State financial aid. The policy consists of a qualitative (GPA) and quantitative (unit) standard, and opportunities to appeal for extenuating circumstances. Student Financial Services (SFS) conducts a SAP review at the end of each semester, including summer session.

## **Qualitative Standard (GPA Requirement)**

Undergraduate students must maintain a minimum cumulative grade point average of 2.000 at the end of each semester.

## **Quantitative Standard (two parts):**

### *1. Minimum Unit Completion*

Students must complete at least two-thirds (66.7%) of the cumulative units attempted at the end of each semester or summer session (if registered for summer courses). Units are rounded down to the nearest whole unit.

Example: If a student were to attempt 30 units during the academic year, the SAP policy would require that student to complete at least 20 units ( $30 \times 66.7\% = 20$ ). If a student were to complete fewer than 20 units they would have failed SAP because of a unit deficiency. This deficiency would equal 20 units minus the number of units that were completed. For example, completion of only 15 of 30 attempted units would result in a deficiency of 5 units (20 minus 15). To regain SAP, a student would have to complete 66.7% of the cumulative units attempted at the end of each semester or summer session (if registered for summer courses) in addition to the five deficient units.

The CARES Act of 2020 provides additional flexibilities to institutions regarding the calculation of SAP, up to and including the exclusion of the quantitative component of attempted units given a qualifying emergency, such as the COVID pandemic, without requiring an appeal.

### **2. Maximum Unit Completion**

Under federal regulations, undergraduate students are eligible to receive federal financial aid for up to 150% of the published length of their academic program.

Since the PLNU Undergraduate program is designed to be completed in four years and 128 units, students will not be eligible for federal financial aid after attempting 192 units (including transferred coursework) or beyond the sixth year of undergraduate study (part-time study may extend, but on an appeal basis).

A financial SAP appeal is dependent upon satisfying PLNU's academic Satisfactory Academic Progress standards. For more complete information on the university's financial SAP policies, students may visit the Student Financial Services Undergraduate section of the PLNU website.

## **Academic and General Policies**

### **Applicable Catalog**

The student is ultimately responsible for the fulfillment of all requirements for graduation in the Catalog in effect at initial enrollment. Those who opt for a subsequent Catalog, however, must notify the Office of Records and meet all requirements in that Catalog. Students who have not been registered for two or more consecutive semesters come under

the Catalog in effect at the time of re-entry. Only one Catalog can be selected, and all requirements from that Catalog must be met.

## Course Load

### Traditional Student Population:

The normal academic course load is 15-17 units per semester, including any concurrent units at another institution. Summer academic course load is 6 units per session and 12 units per summer, including concurrent units. Students in their first semester at PLNU are limited to 17 units per semester. Students on academic probation and academic probation alert status are limited to 13 units per semester (a total of 9 in the summer). If a student in good academic standing finds it necessary to carry a load greater than the normal load, the maximum number allowed is determined by the student's grade-point average. Students may, in consultation with the Vice Provost for Academic Administration, assume a course overload according to the following table:

Minimum GPA	Maximum Load
2.500	18 units
2.750	19 units
3.000	20 units

### LEAP Student Population:

The LEAP course load is a maximum of 14 units in the fall semester, 14-17 units in the spring semester, based on fall GPA.

- LEAP students who earn a fall GPA between 1.800 and 2.799 will carry a maximum spring load of 14 units.
- LEAP students who earn a fall GPA of 2.800 or greater will carry a maximum spring load of 17 units.

One semester unit represents an hour (minimum 50 minutes) of class per week for at least 15 weeks (Carnegie definition). Three hours of laboratory are equivalent to one hour of class (minimum 50 minutes). Two hours of preparation are normal for each hour of class. Transfer work on the quarter system converts as three units equal to two semester units. Academic unit leadership will monitor the unit of credit policy through the course syllabus, schedule and faculty governance policies and processes. This information is below under Credit Hour Policy.

## Transcripts

A complete and official transcript is available by ordering through the Office of Records. Official transcripts cost \$5.00 each and can be ordered through the student/alumni portal or by going to the National Student Clearinghouse website (<https://mystudentcenter.org/>). Transcripts marked for pick up will not be released to anyone other than the student except by a signed, written authorization submitted to the Records Office prior to pickup; photo i.d. is required for pick up of transcripts. Unofficial transcripts are free and available through Workday as well as ordering through the Office of Records. Expedited processing and mailing options may be available for an additional fee. Once the Records Office completes transcript processes and mails/releases the transcripts as noted on the order, we cannot guarantee mailing/delivery by outside agencies.

## Academic Calendar

The academic year at PLNU is divided into fall and spring semesters of 15 weeks, followed by two summer sessions. A complete listing of important dates is found in the Catalog as well as on the website. In addition, the university posts on its website class schedules that contain information about course offerings, fees, and other details pertinent to these terms of study.

## Course Schedules

All schedules are posted on the website. Current students, staff, and faculty should refer to the course schedule in the portal for the most up-to-date information. The schedule of course offerings, complete with final examination times, are available each spring for the following year's classes. Also, early in the spring semester a schedule of summer session classes is posted. The university reserves the right to cancel any class with fewer than ten students and make necessary changes in its schedule and programs.

## Credit Hour Policy

According to the United States Department of Education with regard to the credit hour definition, one semester unit represents an hour (minimum fifty minutes) of class time per week for at least 15 weeks (Carnegie definition).

- Face-to-face instructional hours are equivalent to the following:
  - 1 credit hour = 750 minutes instructional time
  - 2 credit hours = 1500 minutes
  - 3 credit hours = 2250 minutes
  - 4 credit hours = 3000 minutes
- Two hours of preparation are normal for each hour of class. Three hours of laboratory are equivalent to one hour of class (minimum 50 minutes). Transfer work on the quarter system converts as three units equal to two semester units.
- Web-Facilitated courses use web based technology to facilitate what is essentially a face to face course. These offerings can be up to 25% online/web based work.
- Hybrid or Blended courses use online and face to face delivery. A substantial proportion of the content (between 26% and 79%) is delivered online, and it typically uses online discussion and has a reduced number of face to face meetings.
- Online courses have the majority of content online and typically do not have face to face meetings.

Academic unit leadership will monitor the unit of credit policy through the course syllabus, schedule, and faculty governance policies and procedures.

## State Authorization: Online Course Enrollment and Physical Location

State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct educational activities regulated by that state. In certain states and U.S. Territories outside California, Point Loma Nazarene University is not authorized to enroll online students. Students not residing in California are required to update their physical locations, and must also report whether they plan to travel or move during an online course. The definition of physical location and the policy on monitoring physical location are noted below.

### Definition of Physical Location

The physical location of each student enrolled at the University is defined as physical location, not state of residency. Physical locations are reported and monitored during the Admissions process, Registration process, and online course enrollment.

### **Policy on Monitoring Physical Location**

Students must disclose their physical locations to the Office of Records prior to program and online course enrollment, and disclose any changes in their physical locations to PLNU during enrollment.

## **Academic Honesty**

The Point Loma Nazarene University community holds the highest standards of honesty and integrity in all aspects of university life. Any violation of the university's commitment is a serious affront to the very nature of Point Loma's mission and purpose.

Violations of academic honesty include cheating, plagiarism, falsification, identity fraud, aiding academic dishonesty, and malicious interference.

*Cheating* is the use of unauthorized assistance that results in an unfair advantage over other students. It includes but is not limited to: Bringing and/or using unauthorized notes, technology or other study aids during an examination; looking at other students' work during an exam or in an assignment where collaboration is not allowed; attempting to communicate with other students in order to get help during an exam or in an assignment where collaboration is not allowed; obtaining an examination prior to its administration; allowing another person to do one's work and submitting it as one's own; submitting work done in one class for credit in another without the instructor's permission.

*Plagiarism* is the use of an idea, phrase or other materials from a source without proper acknowledgment of that source. It includes but is not limited to: The use of an idea, phrase, or other materials from a source without proper acknowledgment of that specific source in a work for which the student claims authorship; the misrepresentation and/or use of sources used in a work for which the student claims authorship; the use of papers purchased online as all or part of an assignment for which the student claims authorship; submitting written work, such as laboratory reports, computer programs, or papers, which have been copied from the work of other students, with or without their knowledge and consent.

*Falsification* is the alteration of information or forging of signatures on academic forms or documents. It includes but is not limited to: using improper methods of collecting or generating data and presenting them as legitimate; altering graded work and submitting it for re-grading; falsifying information on official academic documents such as drop/add forms, incomplete forms, petitions, recommendations, letters of permission, transcripts or any other university document; misrepresenting oneself or one's status in the university.

*Academic identity fraud* is the act of allowing a person to impersonate the registered student, by doing the academic work and by submitting it as if it were the work of the registered person. This encompasses both face to face and online environments. It includes, but is not limited to: having another person complete a course assignment, take an examination, respond to discussion board questions, or complete any kind of academic exercise on behalf of the registered student. In such cases, it may be considered collusion to commit fraud on the part of both parties.

*Aiding academic dishonesty* is assisting another person in violating the standards of academic honesty. It includes but is not limited to: Allowing other students to look at one's own work during an exam or in an assignment where collaboration is not allowed; providing information, material, or assistance to another person knowing that it may be used in violation of academic honesty policies; providing false information in connection with any academic honesty inquiry.

*Malicious intent* is misuse of academic resources or interference with the legitimate academic work of other students. It includes but is not limited to: removing books, journals or pages of these from the library without formal checkout; hiding library materials; refusing to return reserve readings to the library; damaging or destroying the projects, lab or studio work or other academic product of fellow students.

A student remains responsible for the academic honesty of work submitted in PLNU courses and the consequences of academic dishonesty beyond receipt of the final grade in the class and beyond the awarding of the diploma. Ignorance

of these catalog policies will not be considered a valid excuse or defense. Students may not withdraw from a course as a response to a consequence.

### **Response Procedure for First Offense**

The following response procedure must be used by PLNU faculty or administrators who discover a violation of academic honesty in current or previous courses.

1. *Fact-Finding*: The faculty member or administrator should attempt to speak or otherwise communicate informally with the student as the first step.
2. *Internal Communications*: The faculty member must inform in writing the appropriate department chair, school dean or college dean (who oversees the instructor and course in which the violation occurred) about the violation. The dean must also contact the Vice President for Student Development and inquire whether the student engaged in any prior incidents of academic dishonesty. If so, the faculty member and dean should follow the process outlined below under *Repeat Offense(s)*. Otherwise, continue to follow the below response procedure.
3. *Notice of Decision to Student*: Once the violation is discovered, the instructor will send a written communication to the student regarding the incident and the consequence(s). Instructors can give students an "F" on a specific assignment or an "F" in the course as a consequence of a violation of academic honesty. The written communication should inform the student of the right to appeal and provide a link to the appeal procedure from the appropriate catalog. The communication should also inform the student that (i) a repeated violation of academic honesty may result in probation, suspension or expulsion from the university, and/or (ii) depending on the gravity of the offense, a first violation of academic honesty may also result in probation, suspension, or expulsion from the university, in the discretion of the Vice Provost for Academic Administration (see No. 5 below). In cases of academic identity fraud, the violation(s) could be interpreted as a criminal offense and could result in administrative withdrawal from Point Loma Nazarene University.
4. *Notice to PLNU Administration*: The instructor must send in writing a report of the incident to the department chair (if applicable), school dean, or college dean, the Vice President for Student Development and the Vice Provost for Academic Administration. The report should include a description of the violation, the action taken, and evidence of the violation. The official record of the incident and any appeals is maintained by the Office of the Vice President for Student Development.
5. *Further Action*: Upon receiving notice from the instructor of a violation of academic honesty, the Vice Provost for Academic Administration may, in his/her discretion, based on the gravity of the offense and its surrounding circumstances, determine to impose additional consequences on the student, including without limitation probation, suspension, administrative withdrawal or expulsion from the university. If the Vice Provost for Academic Administration takes such further action, he/she shall notify the student in writing within 48 hours (during standard, non-holiday, business/school days) of receiving the instructor's decision.

### **Appeal Procedure**

The following appeal procedure must be used by a student who wishes to appeal consequences associated with a finding of academic dishonesty. Note that some violations may be considered ineligible for appeal, in the discretion of the Vice Provost for Academic Administration. Such violations could include without limitation those that involve or impact the health, safety, or security of any member of the PLNU community.

1. *School or College Dean*: The student should present an appeal of the penalty in writing within 48 hours (counting non-holiday, business/school days) upon receiving the instructor's decision or the Vice Provost for Academic Administration's decision, whichever is later, including all documents and evidence supporting the appeal, to the Vice Provost for Academic Administration who will send the appeal to any two school or college deans. The deans will review the appeal and send a written ruling to the student, instructor, and Vice Provost for Academic Administration. The appeal decision reached by the deans is final.

### **Response Procedure for Repeated Offense(s)**

The following response procedure must be used by faculty or administrators who discover a repeated offense of a violation of academic honesty in current or previous courses.

1. *Fact-Finding*: The faculty member or administrator should attempt to speak or otherwise communicate informally with the student as the first step.
2. *Internal Communications*: The faculty member must inform in writing the school or college dean (who oversees the instructor and course in which the violation occurred) about the violation. The dean must also contact the Vice President for Student Development and inquire whether the student engaged in any prior incidents of academic dishonesty.
3. *Initial Notice to Student*: If a prior offense of academic dishonesty has been noted, the school or college dean must notify the student in writing that such prior offense(s) will be discussed and evaluated by the dean when considering the consequence that should be imposed with respect to the current offense.
4. *Evaluation*: The school or college dean must consult with the instructor about the current incident of academic dishonesty and the instructor's recommendations regarding the consequences for the current violation. The dean may also, in his/her discretion consult with the applicable department chair, the Vice President for Student Development, the Vice Provost of Academic Administration or others in order to evaluate the current incident and any prior offenses of academic dishonesty committed by the student for purposes of determining the appropriate consequences to impose for the current offense. Depending upon the seriousness of the incident or pattern of incidents of academic honesty violations and the circumstances surrounding the current and prior offenses of academic dishonesty, such consequences may include, without limitation, probation, suspension administrative withdrawal or expulsion from the university.
5. *Notice of Decision to Student*: The dean will communicate his/her decision and the consequences in writing to the student. The written communication should inform the student of the right to appeal and provide a link to the appeal procedure from the appropriate catalog.

### **Appeal Procedure**

The following appeal procedure must be used by a student who wishes to appeal consequences associated with a finding of a repeated offense(s) of academic dishonesty. Note that some violations may be considered ineligible for appeal, in the discretion of the Vice Provost for Academic Administration. Such violations could include without limitation those that involve or impact the health, safety, or security of any member of the PLNU community.

1. *Neutral Dean*: The student should submit to the Vice Provost for Academic Administration a written appeal of the dean's decision including all documents and evidence supporting the appeal within 48 hours (counting non-holiday, business/school days) of receiving the dean's decision. The Vice Provost for Academic Administration will select a neutral academic dean to review the appeal. This dean will send a written notice of the decision on the appeal to the student, instructor, original dean, and Vice Provost for Academic Administration.
2. *Administrative Committee*: If the student isn't satisfied with the dean's decision from Step 1 above, the student may submit a further written appeal including all documents and evidence supporting the appeal, to the Vice Provost for Academic Administration within 48 hours (counting non-holiday, business/school days) of receiving the dean's decision on the appeal. The Vice Provost for Academic Administration will distribute the appeal to an administrative committee comprising one uninvolved academic administrator, the Vice Provost for Academic Administration or designee, and the Vice President for Student Development or designee. The appeal decision reached by this committee is final.

## **Class Attendance**

Regular and punctual attendance at all classes in which a student is registered is considered essential to optimum academic achievement. Therefore, regular attendance and participation in each course are minimal requirements to be met. There are no allowed or excused absences except as approved in writing by the Provost for specific students participating in certain university-sanctioned activities.

Excused absences still count toward the 10%-20% limits, but allow students to make up work, quizzes, or tests missed as a result of a university-sanctioned activity. Activities of a unique nature, such as labs or other activities identified

clearly on the syllabus, cannot be made up except in rare instances when instructors have given advanced, written approval for doing so.

Whenever the number of accumulated absences in a class, for any cause, exceeds ten (10) percent of the total number of class meetings, the faculty member should send an e-mail to the student and the Vice Provost for Academic Administration (VPAA) warning of attendance jeopardy.

If more than twenty (20) percent of the total number of class meetings is reported as missed, the faculty member or VPAA may initiate the student's de-enrollment from the course without further advanced notice to the student. For the 2020-2021 academic year, if absences exceed twenty (20) percent of the total number of class meetings but are due to university excused health issues, an exception will be granted (note: special circumstances may apply for Nursing Clinicals).

If the requirements of a university-sanctioned activity extend beyond the normal annual demands, the procedure approved by faculty and outlined in the Student Athletic Handbook will be followed.

If the date of de-enrollment is past the last date to drop from a class, the student may be assigned a grade of W or WF consistent with university policy in the Grading section of the catalog. There are no refunds for courses where a de-enrollment was processed.

Absences are counted from the first official meeting of the class regardless of the date of the student's enrollment. Consequently, a student who registers late must monitor carefully regular attendance during the remainder of the semester. Registered students who neither attend the first class session nor inform the faculty of their desire to remain in the class may, at the request of the instructor, be dropped from the class.

Exceptions to the foregoing attendance regulations due to extenuating circumstances may be granted only by appeal to the Vice Provost for Academic Administration. Students are responsible to consult the syllabus of each course for specific applications of and elaborations on the above attendance policy.

NOTE: Ultimately, students are solely responsible for their registrations and any financial implications. Inaccurate course registrations can lead to a grade of "F" for failure to complete a course and not dropping by the last day to drop, or no credit allowed if the course is not registered for by the last date to add. Please see the academic calendar for appropriate dates.

## **Academic Behavior Policy**

Both faculty and students at Point Loma Nazarene University have the right to expect a safe and ordered environment for learning. Any student behavior that is disruptive or threatening is a serious affront to Point Loma Nazarene University as a learning community. Students who fail to adhere to appropriate academic behavioral standards may be subject to discipline. Although faculty members communicate general student expectations in their syllabi and disruptive student conduct is already addressed in the Undergraduate Student Handbook, the purpose of this policy is to clarify what constitutes disruptive behavior in the academic setting and what actions faculty and relevant administrative offices may take in response to such disruptive student behavior.

"Disruption," as applied to the academic setting, means classroom, instructor or classmate-related student behavior that a reasonable faculty member would view as interfering with or deviating from normal classroom, class-related, or other faculty-student activity (advising, co-curricular involvement, etc.). Faculty members are encouraged to communicate positive behavior expectations at the first class session and to include them in course syllabi. Examples of disruptive classroom or class-related behavior include, but are not limited to:

- persistent speaking without being recognized or interrupting the instructor or other speakers;
- overt inattentiveness (sleeping or reading the newspaper in class);
- inordinate or inappropriate demands for instructor or classroom time or attention;
- unauthorized use of cell phone or computer;

- behavior that distracts the class from the subject matter or discussion;
- unwanted contact with a classmate in person, via social media or other means;
- inappropriate public displays of affection;
- refusal to comply with reasonable instructor direction; and/or
- invasion of personal space, physical threats, harassing behavior or personal insults.

The above types of behavior are prohibited in the classroom, course-related off-campus activities and class-related interactions between students and faculty members or academic administrators. Incidents which involve both academic and non-academic behavior may result in responses coordinated by the Vice Provost for Academic Administration (VPAA) and the Vice President for Student Development or the Dean of Students.

Civil and polite expression of disagreement with the course instructor, during times when the instructor permits discussion, is not in itself disruptive behavior and is not prohibited.

All students, including students with disabilities, are required to comply with this Academic Behavior Policy and related policies in their respective Student Handbooks, Catalogs and/or faculty syllabi. Students with disabilities, however, may be entitled to receive academic adjustments, modifications or auxiliary aids and services as described below under the "Academic Accommodations" section.

### **Response Procedure**

The following response procedure is recommended to faculty who witness or experience disruptive behavior, either in the classroom or in contact with an enrolled student outside the classroom. Depending on its severity, disruptive behavior could result in any of the following responses:

1. Verbal and/or written request to stop behavior and warning of potential consequences.
2. Exclusion from the current class period/activity.
3. E-mailed report to Vice Provost for Academic Administration and/or Vice President for Student Development which, may further result in:
  - Filing of report and no further action.
  - Student meeting with VPAA, the Dean of Students and/or the Vice President for Student Development to develop and sign classroom behavior and growth plan detailing appropriate behaviors and consequences for failure to comply.
4. Depending on the frequency and severity of the student behavior, consequences may also include without limitation permanent exclusion from a specific class, suspension, expulsion or administrative withdrawal from the university.

If events occur in classes or off-campus activities after university business hours, faculty should call Department of Public Safety and ask to speak to the highest ranking officer who will notify administrative personnel.

## **Academic Accommodations**

Pursuant to Section 504 of the Rehabilitation Act and other applicable laws, PLNU prohibits discrimination and harassment against a qualified individual with a disability. While all students are expected to meet the minimum standards for completion of each course as established by the instructor, students with disabilities may request academic adjustments, modifications or auxiliary aids/services. The PLNU Disability Resource Center (DRC), located in the Bond Academic Center (DRC@pointloma.edu or 619-849-2533), is the point of contact for disability issues for all PLNU undergraduate and graduate students, including students enrolled at the Mission Valley Campus and College of Extended Learning students enrolled in PLNU courses at Community College satellite campuses.

Current and prospective students seeking an accommodation must follow the reasonable accommodation procedures described in the Disability and Reasonable Accommodations Policy for Current and Prospective Students. After the student files the required documentation, the DRC, in conjunction with the student, will develop an academic adjustment or accommodation plan (AP) to meet that student's specific learning needs. The DRC, in conjunction with

the student, will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP will be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

## **Examinations and Reports**

Examinations may be deferred due only to illness or because of other equally valid conditions over which the student has no control. Faculty report to administration as early as possible any student who, for any reason, is in danger of failing a course. Those students whose work is falling below a "C" average are referred to the Academic Support Center. Faculty are asked to make mid-semester grades available to students. Grades of "D" and "F" are reported to the Vice Provost for Academic Administration and the Director of Academic Advising for follow-up interventions.

## **Grading**

Letter grades (A, B, C, D, F) including plus and minus grades are used to indicate the level of scholarship earned for each course. Once the degree has been posted on the student's official transcript, no change of grade action is allowed.

### **[CR] Credit**

The grade utilized for designated courses which are graded only on a Credit/No Credit basis. Courses graded by this designation are counted toward a student's total number of units but have no grade-point value and no effect on the grade-point average. The "CR" grade is also assigned to units earned through Pass/No Credit courses as well as Advanced Placement (AP).

### **[NC] No Credit**

The grade recorded for all non-passing work in those courses graded on a Credit/No Credit basis and for those courses taken on a Pass/No Credit basis. The NC grade has no grade-point value, has no effect on the grade-point average and yields no earned credits.

### **[F] Failure**

This grade is given for unsatisfactory performance in a course where an NC is not applicable. If the course taken at this university is repeated here, the F remains on the permanent record, but only the higher grade earned for the course is computed in determining the grade-point average. See "Repeated Courses."

### **[H] Audit**

Students may register for some courses at the university on an audit basis (indicated on the transcript by the letter H). The following conditions apply:

- An audit is taken by students for personal enrichment or review.
- No academic unit credit can be earned for an audited course.
- There is no expectation of interaction on the part of student or faculty member.
- Students may not incur excessive absences, as defined in this Catalog.

- Audits are available on a space-available basis only.
- An audit grading type cannot apply to a physical education activity course, studio art classes, performance classes, skill courses, beginning and intermediate foreign languages, laboratory sciences, fieldwork, internships, practicum experiences, study abroad, research, or private music lessons.
- Courses taken by audit may not revert to a credit course or vice versa after the first two weeks of the semester (or one week of a Quad course); and
- The student must indicate the audit election by the last day to add classes, with the approval of the student's academic advisor, and may not change the basis of registration for this course thereafter.

## **[I] Incomplete**

A grade of Incomplete is given for work which has been completed partially in a satisfactory manner, but which, for valid reasons such as illness or death in the family, is not finished. The grade of "I" is to be given only on the basis of extraordinary circumstances clearly beyond the student's control.

The grade of "I" is regarded as a deficiency grade and may be removed by the assignment of additional work to make up the deficiency; or, in cases where the "incomplete" is assigned because of inability to take a final examination, by a special examination. A grade of "I" must be made up, if at all, by the end of the next regular semester. Until made up, a grade of "I" is considered as "F" in determining the student's grade-point average, and eligibility for financial assistance and intercollegiate competition.

*Note: Federal fair use policy requires ending access to Canvas resources after three weeks. Instructors should keep this in mind when establishing incomplete grade resolution requirements and deadlines.*

## **[IP] In Progress**

A provisional grade used in certain courses which may extend longer than a semester (for a complete list of courses approved for the IP grade, students should contact the Office of Records). The grade of IP carries no grade points, and is replaced by the grade earned when the requirements for the course are properly completed. A grade of IP must be changed at the end of the next regular semester (summer is not a regular semester). If the course is not completed, the IP will be changed to an F.

## **[W] Withdrawn**

This grade is recorded when a student in an individual course doing passing work is given permission by the Vice Provost for Academic Administration to drop a course after the deadline to drop classes. Withdrawal from an individual course past the deadline is only possible due to personal and/or family emergencies beyond the student's control.

## **[WF] Withdrawn under failing conditions**

This grade is recorded when a student in an individual course is given permission by the Vice Provost for Academic Administration to officially withdraw from a course after the last date to drop and when the work is below passing at the time. A grade of WF is considered the same as an F in calculating the grade-point average.

## **Grade Points**

Letter grades are converted to numerical equivalents for computation according to the following scale:

Superior

Failing

The grade-point average is computed for each student, and a satisfactory grade-point average is necessary for continuance and for graduation.

## Earned Grades Policy

In addition to completing a course's academic requirements, PLNU's Earned Grades Policy requires that a student's account be substantially paid in full to receive final course grades in a given term. Please review the complete Earned Grades Policy [here](#).

## Major and Minor Requirements

**The Major.** Point Loma Nazarene University offers four baccalaureate degrees: the Bachelor of Arts (B.A.), the Bachelor of Music (B.Mus.), the Bachelor of Science (B.S.), and the Bachelor of Science in Nursing (B.S.N.). Many of the 50+ major programs also offer in-depth concentrations. If a second major area of study is desired, all requirements for both majors must be met with a minimum of 24 units distinguishing the two areas of study. While working on a single baccalaureate degree, the maximum number of pursuits is two majors and two minors. Students should review the majors and minors list in the catalog.

**The Minor.** Optional minors are offered in several schools and departments. The requirements governing minors are as follows:

- Only minors that appear in the student's catalog of record may be earned at the point of graduation;
- A minor is at least 16 units and is under the direct auspices of the respective school/department;
- Students must earn a 2.000 cumulative GPA in the minor for it to be granted;
- The minor must show a minimum of nine (9) units in residence;
- Of the 16+ units in the minor, nine (9) must be distinct from and not counted in the major;
- Of the 16+ units in the minor, 12 must be at the upper-division level;
- The pass/no credit option is not available for courses within the minor; and
- A second minor, when feasible, requires a minimum of nine (9) units distinct from and not counted either in the major or in the first minor.

## Non-Traditional Delivery Credits

Point Loma Nazarene University recognizes the place of non-traditional delivery systems in education and has developed policies and procedures to guide students in this regard. Online and/or hybrid courses utilizing technology-mediated instruction are also strictly controlled by the university's regional accrediting body. Consequently, the following guidelines both define the boundaries for distance learning modalities and protect the integrity of Point Loma's deeply held commitments to the learning environment.

### Policies:

1. The approval of online courses must always be on a case-by-case basis.
2. As academic units with a non-traditional delivery, online courses must be approved prior to enrollment in those courses and are limited to 12 semester units over the student's total degree program.
3. Online credits submitted to PLNU for approval must be offered by a regionally accredited institution of higher learning (the Western Association of Schools and Colleges, the Northwest Commission on Colleges and Universities, the Higher Learning Commission of the North Central Association of Colleges and Schools, Southern Association of Colleges and Schools, Middle States Association of Colleges and Schools, New England Association of Schools and Colleges).

4. The course must apply to comparable degree programs at the home institution in which it resides.
5. Students requesting consideration of an online course in transfer must submit an Academic Policy Petition, together with a hard-copy print-out of the course description and syllabus.
  1. If the course is to satisfy a major/minor requirement, then approval must be obtained from the department chair/school dean in which the course is required.
  2. If the course is to satisfy general education requirements, approval must be obtained from the department chair/school dean in which the content resides.
6. Following action from the appropriate department chair/school dean, the petition is submitted to the Vice Provost for Academic Administration for final evaluation.
7. All online courses must be graded by traditional methods (letter grades). Courses graded credit/no credit will not be accepted.
8. Proctoring of examinations must be arranged and paid for by the student, as PLNU faculty/staff are not obligated to perform such tasks.
9. Online course approved by PLNU must be completed within twelve months of approval.

## **Procedures:**

1. Students interested in taking an online course should pick up an Academic Policy Petition at the Office of Records.
2. Students should check with the appropriate department chair/school dean for program specific guidelines for an online course.
3. Students should take the completed petition along with a course description and syllabus to the appropriate department chair/school dean as stated in the policy.
4. If approval is given, the completed petition should be taken to the Vice Provost for Academic Administration for final evaluation.
5. If final approval is given the student may enroll in the course.
6. The transcribed course grade must be submitted to the PLNU Office of Records within twelve months of approval of the course.

## **Pass/No-Credit Option**

An undergraduate student may elect to take a course on a Pass/No-Credit basis under the following circumstances:

- Completion of at least 24 semester units;
- Not more than one such course per semester;
- A maximum of 12 units toward graduation to be elected for such courses;
- The course selected must be an elective-not applied toward a requirement, or a required professional course (for credential); and
- The student must indicate the "Pass/No-Credit" election by the last day to add classes, with the approval of the student's academic advisor, and may not change the basis of registration for this course thereafter.

This option is not available for transfer courses taken by on-line delivery, after matriculation at Point Loma.

## **Course Grade Appeal**

It is the responsibility of the faculty to evaluate student performance and assign grades. The university has established a course grade appeal policy, however, that may be used when a student believes the syllabus was not followed in the grade calculation or if it is thought that grading was done in a capricious and arbitrary manner. The appeal policy does not include student dissatisfaction with a grade based on the faculty member's professional judgment. A Course Grade Appeal Form is available from the Vice Provost for Academic Administration and must be filed within one year from the end of the course in which the grade was given.

## **Freshman Forgiveness**

A non-transfer student who does non-passing work (a failing grade) in a class during the first semester of the freshman year may receive a "NC" for one course of up to 5 units and be placed on probation alert. Transfer students who have earned more than 12 units at another college or university, and LEAP students entering with conditional status, are not eligible for the provision of the NC grade.

## **Transfer from Non-Accredited Institutions**

Normally, units presented in transfer from an institution that is not accredited by one of the major regional agencies (the Western Association of Schools and Colleges; the Northwest Commission on Colleges and Universities; the Higher Learning Commission of the North Central Association of Colleges and Schools; Southern Association of Colleges and Schools; Middle States Association of Colleges and Schools; New England Association of Schools and Colleges) are not accepted, including Bible colleges and proprietary schools. Students may petition a limited number of such courses, not to exceed 12 semester units, by the established petition process to the appropriate academic department and schools, through the Vice Provost for Academic Administration. Petitions are accepted for consideration only after satisfactory completion (2.000 or higher) of at least 12 units at PLNU.

## **Repeated Courses**

Courses passed with a C or above may not be repeated (unless the course is noted as repeatable in the course description). However, students desiring to raise an unsatisfactory grade (any grade lower than C) in a course taken at this university may repeat the course. If this is done, the course must be repeated at this university and each grade will appear on the transcript but the lower grade(s) will not be used for grade-point calculations. The lower grade(s) will be removed from the GPA calculation and the highest grade earned will replace it. Only the units associated with the higher grade will be calculated into the total units earned toward graduation.

Students receiving veterans benefits may not be eligible for benefits when repeating courses. Further information regarding authorization of benefits for repeated courses may be obtained in the Office of Student Financial Services.

## **Classification of Students**

Regular undergraduate students are those who pursue, or are entitled to pursue, one of the established programs leading to graduation with the bachelor's degree. Part-time undergraduates are those who, for adequate reasons, are permitted to register for fewer than 12 units per semester. Special students are those who take elective courses not leading to a degree.

The classification for undergraduate students is as follows:

- FRESHMAN 0-24 units
- SOPHOMORE 25-56 units
- JUNIOR 57-88 units
- SENIOR 89+ units

## **Academic Standing**

Point Loma takes seriously a student's ability to make satisfactory progress toward the goal of a degree. At the conclusion of the fall and spring semesters, the academic progress of all undergraduate students is reviewed by the Vice Provost for Academic Administration either to confirm satisfactory standing or to make changes based on student

cumulative or semester GPA. In addition to the category of Satisfactory Standing, student performance can result in classification at any one of four levels of academic concern.

## **Satisfactory Standing**

To maintain satisfactory standing and remain free of academic alert or probation, students must achieve a minimum cumulative 2.000 grade-point average. Those who maintain the minimum required grade-point average are in satisfactory scholastic standing and as such are making progress toward a degree. During their first semester of academic work, first-time freshmen must earn at least a 1.800 GPA, regardless of the number of units taken, to remain in good standing.

## **Levels of Academic Concern**

### **Academic Probation Alert**

Students whose cumulative GPA meets the minimum standard for academic good standing, but whose session GPA for any one semester falls below 2.000, are placed on alert status and limited to 13 units maximum during the probation alert period (a total of nine (9) during the summer). While not technically on academic probation, these students are under the supervision of the Office of the Vice Provost for Academic Administration.

### **Academic Probation**

Students whose cumulative GPA falls below 2.000 are placed on Academic Probation and limited to 13 units maximum during the probation period (a total of nine (9) during the summer). Probationary students who fail to earn a 2.000 session GPA the following semester may be disqualified from continuing at the university.

Students being readmitted to the university after a disqualification or a voluntary withdrawal while on probation or probation alert will be readmitted under probation regardless of their cumulative GPA in order to allow for monitoring of the student's progress and must present official transcripts with pre-approved transfer work that demonstrates a university cumulative GPA of 2.000 or above.

*Note:* Students who receive federal, state, or veterans aid must meet certain qualitative and quantitative standards of academic progress. As a result, it may be possible for a student to be on academic probation at the university but be ineligible for federal, state and veterans aid. Additional information on PLNU's financial aid satisfactory progress policy is available in the PLNU Student Financial Services Office. The university works with students placed on academic probation to create links between them, faculty advisors, the Office of Student Development, and other support programs. Policies concerning students on academic probation are administered by the Vice Provost for Academic Administration.

### **Continuance on Academic Probation**

Students who are on probation and earn at least a 2.000 during the current session, but whose cumulative GPA is below 2.000, may be continued on academic probation. These students are under the supervision of the Office of the Vice Provost for Academic Administration.

### **Academic Disqualification**

Students whose cumulative GPA falls below 2.000 for two consecutive regular semesters and whose semester GPA is also below 2.000 will be disqualified from continuing at the university at the end of that second semester.

To be considered for readmission, students who are disqualified must:

- spend at least one regular semester away from the university (summer is not considered a regular semester);
- take 12 pre-approved units at another institution;
- present official transcripts that demonstrate a university cumulative GPA of 2.000 or above;
- meet with the Vice Provost for Academic Administration; and
- complete an application for readmission.

If readmitted, such students would be placed on Academic Probation and limited to 13 units in their first semester back to allow deep concentration on a lighter class schedule.

## **Veterans and Progress Toward a Degree**

Any students receiving veterans benefits who fail to maintain normal progress because of attendance, poor grades, or by reduction of course load are responsible for notifying the Student Financial Services Office so that it may notify the Veterans Administration. If withdrawal from the university occurs, veterans' benefits will be terminated as of the date of termination of enrollment. Grades of NC and F are reported to the Veterans Administration, and the student may be liable for repayment of benefits received.

## **Athletic Eligibility**

Academic performance must be adequate in order for athletes to participate in intercollegiate athletics. A faculty athletic representative certifies the eligibility of each player, and coaches ensure that only eligible students participate. Athletic eligibility conforms to policies of the National Collegiate Athletic Association Division II (NCAA).

## **LEAP Academic Disqualification or Administrative Withdrawal**

LEAP students who fail to meet certain academic standards may be subject either to disqualification or administrative withdrawal.

**Disqualification.** LEAP students may be disqualified during either fall or spring semesters.

- In fall semester, LEAP participants who receive grades of C- or better in FST 1000 and WRI 1001 but whose cumulative GPA falls below 1.800 will be disqualified.
- In spring semester, LEAP students who receive a grade of C- or better in FST 1001, but whose cumulative GPA falls below 2.000 will be disqualified.

LEAP students who are disqualified will receive a letter from the Vice Provost of Academic Administration indicating they have been disqualified from continuing at the university. To be considered for readmission, LEAP students who are disqualified must:

- spend at least one regular semester away from the university (summer is not considered a regular semester);
- take 12 pre-approved units at another institution;
- present official transcripts that demonstrate a university cumulative GPA of 2.000 or above;
- meet with the Vice Provost for Academic Administration; and
- complete an application for readmission.

If readmitted, such students would sign a proposed Academic Improvement Plan, return on Academic Probation and enroll in a maximum of 13 units in their first semester back to allow deep concentration on a lighter class schedule.

**Administrative Withdrawal.** LEAP students may be disqualified at the end of either fall or spring semester.

- In fall semester, LEAP participants who receive grades of lower than C- in FST 1000 or WRI 1001 and whose cumulative GPA falls below 1.800 will be administratively withdrawn.

- In spring semester, LEAP participants who receive a grade of lower than C- in FST 1001 and whose cumulative GPA falls below 2.000 will be administratively withdrawn.

LEAP students who are administratively withdrawn will receive a letter from the Vice Provost of Academic Administration indicating they have been administratively withdrawn from continuing at the university. Although this withdrawal action offers no opportunity for appeal or readmission to LEAP, administratively withdrawn LEAP students who wish to do so can reapply directly through the Office of Admissions once they have completed 24 or more transferable units at another institution with a 2.800 or higher cumulative GPA.

## **Withdrawal from the University**

There are times when a student finds it necessary to withdraw from the university. In order to avoid being administratively withdrawn, courses and incompletes converted to a failing grade, and financial repayments going into default, students are required to notify the Office of Records of the intent to withdraw from the university and complete a Notice of Intent to Withdraw from the university. The student must contact the Office of Records to begin the formal withdrawal process for any break in registration prior to graduation. If withdrawal from the university occurs while a student is registered for classes prior to the last day to drop a course, the student will be de-enrolled from all courses. If withdrawal from the university occurs while a student is registered for classes after the last day to drop a course, the courses will be graded with a W (withdrawal) unless the faculty deems the student's performance to be unsatisfactory at the time of withdrawing from the university, at which point a WF grade would be assigned.

## **Registration Limitations**

### **Concurrent Enrollment**

A registered student may not transfer credit for a course taken concurrently at another institution if a similar course is offered at the university at any time during the academic year except by prior approval of the Vice Provost for Academic Administration. Forms for such transfer of credit are available in the Office of Records. Course approvals are required for work taken during the summer while the student is not in attendance at this university. In computing a student's maximum load, all courses being taken are considered.

### **Transfer Limitations**

A combined maximum of 70 units may be transferred to PLNU from the following sources: community colleges, AP, CLEP, and IB. All such courses are, by definition, lower-division level. In no case will a lower division course transfer to meet an upper-division course requirement.

### **Curricular Exceptions**

Any petitions for academic exceptions to stated Catalog requirements and policies must be presented to the Vice Provost for Academic Administration. A petition which is denied may be appealed in writing to the Academic Policies Committee, whose ruling is final.

## **Transferring Units while Enrolled at the University**

After matriculation at PLNU, students who wish to augment their experience with coursework from another accredited institution must obtain written approval from the Office of Records prior to registering. In this process, coursework designed to meet PLNU requirements in the academic major requires additional approval of the respective department chair or school dean.

## **Academic Honors**

### **Dean's List**

Each semester the Vice Provost for Academic Administration recognizes honor students who have achieved a grade-point average of 3.500 or higher in at least 12 units of work during the previous semester. The Dean's List is posted on the university's student portal.

### **Honors Scholars**

During the senior year, a student who has demonstrated exceptional scholarship and capacity for serious and creative study or research may propose to graduate as an honors scholar. With the guidance of a major professor, the student submits the results of an approved proposal to a committee and, if accepted and when the project is completed satisfactorily, earns the Honors Scholar classification.

## **Education Records (FERPA) and Directory Information**

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student's education records within 45 days after the day Point Loma Nazarene University ("PLNU") receives a request for access. A student should submit to the Office of Records, a written request that identifies the record(s) the student wishes to inspect. The school official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the requested records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.

A student who wishes to ask PLNU to amend a record should write the Office of Records, clearly identify the part of the record the student wants changed, and specify why it should be changed.

If PLNU decides not to amend the record as requested, PLNU will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to provide written consent before PLNU discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent.

Under FERPA, PLNU may disclose education records without a student's prior written consent to school officials with legitimate educational interests. A school official includes persons employed by PLNU in an administrative, supervisory, academic, research, or support staff position (including security personnel and health staff); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of PLNU who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent, or a student volunteering to assist another school official in performing his or her tasks. A school official typically has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for PLNU.

Upon request, PLNU also discloses education records without consent to officials of another school in which a student seeks or intends to enroll. PLNU will make a reasonable attempt to notify a student of these disclosures, unless the request or disclosure is initiated by the student.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by PLNU to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Student Privacy Policy Office  
U.S. Department of Education  
400 Maryland Avenue  
SW Washington, DC 20202

FERPA also permits PLNU to disclose directory information without student consent. Accordingly, PLNU may, but is not required to, release directory information. PLNU has defined directory information as name, address (including electronic mail), telephone number, date and place of birth, major field of study, dates of attendance, enrollment status, degrees, honors and awards received, participation in officially recognized activities and sports, weight and height of members of athletic teams, degree candidacy, and the most recent previous educational agency or institution attended. This information may be provided, upon review by the Director of Records, as public information to individuals who demonstrate a valid need for the information.

Except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information, and disclosures to the student, FERPA requires PLNU to record such disclosures. Eligible students have a right to inspect and review the record of disclosures.

In addition to the above, FERPA permits postsecondary institutions to disclose PII from the education records without obtaining prior written consent of the student in the following circumstances:

- To officials of another school where the student seeks or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student's enrollment or transfer, subject to specific requirements.
- To authorized representatives of the U. S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local educational authorities. Such disclosures may be made in connection with an audit or evaluation of federal or California supported education programs, or for the enforcement of, or compliance with, federal legal requirements that relate to those programs.
- In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid.
- To organizations conducting studies for, or on behalf of, PLNU in order to: (a) develop, validate, or administer predictive tests; (b) administer student aid programs; or (c) improve instruction.
- To accrediting organizations to carry out their accrediting functions.
- To comply with a judicial order or lawfully issued subpoena.
- To appropriate officials in connection with a health or safety emergency, subject to all FERPA requirements.
- To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to FERPA's requirements. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding.
- To the general public, the final results of a disciplinary proceeding, subject to FERPA's requirements, if PLNU determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and the student has committed a violation of PLNU's rules or policies with respect to the allegation made against him or her.
- To parents of a student regarding the student's violation of any federal, state, or local law, or of any rule or policy of the school, governing the use or possession of alcohol or a controlled substance if PLNU determines the student committed a disciplinary violation and the student is under the age of 21.

Periodically, PLNU conducts formal and informal photo and video shoots (around the campus and at off-campus events and activities) for use in university publications, social media, promotional videos/commercials, and the PLNU Web

site. Students who require that no identifiable image be used by the university must notify Marketing and Creative Services in writing prior to the second Monday of each semester. Students should email their request to [photo-optout@pointloma.edu](mailto:photo-optout@pointloma.edu) and include their full name and student ID number. In addition, PLNU may submit information about students' participation in school activities to media outlets. Students who require that their names be excluded from such stories must notify Marketing and Creative Services in writing prior to the second Monday of each semester.

Questions relative to FERPA policies should be referred to the Office of the Vice Provost for Academic Administration.

## Leave of Absence

For more information regarding Leave of Absence, please refer to the 2020-2021 Main Campus Undergraduate Student Handbook.

## Global Studies Policy

To maintain a high academic standard, Global Studies programs require a minimum cumulative GPA of 2.750 or higher. Students who are on academic or disciplinary probation are not eligible to participate in study abroad programs. Global Studies students will be limited to a maximum of 16 semester units in sessions of 15 weeks or more and to corresponding unit maximum ratios in sessions of other lengths. On a case by case basis as part of their Global Studies application process, students may seek approval to include one PLNU online class of 4 units or fewer within the 16 semester unit maximum.

Grades earned through the following programs are neutral and, as such, not included in PLNU GPA calculation:

- OGS-designated international affiliates
- Non-OGS programs
- Semester-at-Sea programs

Grades earned through the following programs are included in PLNU GPA calculation:

- OGS-designated domestic affiliates
- OGS-designated partner programs
- PLNU faculty-led programs

Students should confirm their program with the Office of Global Studies.

## Teach-Out Policy

For more information regarding Teach-Out Policy, please refer to PLNU's Teach-Out Policy and Procedures.

## Official Catalog

As the online catalog is considered to be the official document relative to academic program offerings and charges, any print-outs of pages taken from the online version are, by definition, unofficial. Also, PLNU reserves the right to amend this Catalog at any time without prior notice. This Catalog, along with the policies herein, supersedes and control over all previous Catalogs, except as otherwise expressly provided herein regarding graduation requirements.

## Transfer Information

PLNU transfers college-level courses from regionally accredited institutions to count toward General Education, major, minor, or elective credit. PLNU will not accept transfer credit from Career or Technical Schools. Transfer work from Foreign Institutions will not be accepted without proper transcript evaluation from an accredited Foreign Transcript evaluation service.

- Remedial level or vocational coursework does not transfer
- Lower division courses do not transfer toward upper-division (3000-4000 level) requirements
- Transfer maximum of 70 junior college units in chronological order (oldest to newest)\*
- All graded transfer courses (A through F) calculate into the cumulative GPA
- Credit/Pass courses transfer for elective units and do not fulfill major, minor, or GE requirements
- Courses must be repeated at the same institution in order to replace a grade of C- or below

## Credit from Other Sources

Sources of Credit	Yes	No	Credit Requirement Accepted	Minimum/Maximum Credit	Comment
Advanced Placement Examinations (AP)	•		Score of 3, 4, or 5	32*	See AP Guide.
College-Level Examination Program (CLEP) Subject Examinations	•			32*	See CLEP Guide.
International Baccalaureate (IB)	•		Score of 5 or higher	32*	Minimum score of 5 on higher level only. See IB Guide.
NLN - National League for Nursing Mobility Profile	•				Granted upon the recommendation of the School of Nursing.
Excelsior College Examinations #554 (Licensed Vocational Nurse)	•		Minimum of "B" or better	8 units	Granted only upon the recommendation of the School of Nursing.
Credit recommendations of the ACE Guide to the Evaluation of Educational Experience in the Armed Services, detailed on the Joint Services Transcript	•			32*	Approved on a case-by-case basis. See Records Office.
Military Discharge Document (DD214), active military identification card or ROTC	•				Waives PED 1000 and physical activity requirement.
Units by non-traditional delivery systems	•			12*	Approved on a case-by-case basis. See Records Office.

Bible colleges not accredited by the Western Association of Schools and Colleges or a comparable regional accrediting association	•			12	Limited credit accepted, reviewed after student attends PLNU for a semester.
Non-U.S. college and university transcripts	•				Only upon receipt of transcript from a PLNU approved foreign evaluation service.
Reserve Officer Training Corps (ROTC)	•				In cooperation with SDSU and USD.
Accredited community college transcripts	•			70*	See Records Office for transfer agreements.  <i>(IGETC approved courses from California community colleges taken prior to enrollment at PLNU will transfer to fulfill a portion of the GE requirements. For students with full IGETC certification (37 units), their transfer courses will be matched to PLNU GE and the remaining PLNU GE categories will need to be completed prior to graduation.)</i>
Associate Degree Transfer (ADT)	•			60 units minimum	
Study Abroad	•				See Office of Records for PRIOR approval.
Continuing Education units		•			
GED	•				In lieu of a high school transcript.
* <b>NOTE:</b> A combined maximum of 70 units may be transferred to PLNU from these sources. Only 32 combined units may be transferred from AP, CLEP, IB, ACE, and online coursework.					

## Foundational Explorations (GE)

## Mission Statement

PLNU provides a foundational course of study in the liberal arts informed by the life, death, and resurrection of Jesus Christ. In keeping with the Wesleyan tradition, the curriculum equips students with a broad range of knowledge and skills within and across disciplines to enrich major study, lifelong learning, and vocational service as Christ-like participants in the world's diverse societies and cultures.

## Foundational Explorations Learning Outcomes (FELO)

*Context #1: Learning, Informed by our Faith in Christ*

**ILO\* #1: Students will acquire knowledge of human cultures and the physical and natural world while developing skills and habits that foster life-long learning.**

FELO 1a. Written: Students will be able to effectively express ideas and information to others through written communication.

FELO 1b. Oral: Students will be able to effectively express ideas and information to others through oral communication.

FELO 1c. Information Literacy: Students will be able to access and cite information as well as evaluate the logic, validity, and relevance of information from a variety of sources.

FELO 1d. Critical Thinking: Students will be able to examine, critique, and synthesize information in order to arrive at reasoned conclusions.

FELO 1e. Quantitative Reasoning: Students will be able to solve problems that are quantitative in nature.

*Context #2: Growing, In a Christ-Centered Faith Community*

**ILO #2: Students will develop a deeper and more informed understanding of self and others as they negotiate complex environments.**

FELO 2a. Students will develop an understanding of self that fosters personal well-being.

FELO 2b. Students will understand and appreciate diverse forms of artistic expression.

FELO 2c. Students will demonstrate an understanding of the complex issues faced by diverse groups in global and/or cross-cultural contexts.

*Context #3: Serving, In a Context of Christian Faith*

**ILO #3: Students will serve locally and/or globally in vocational and social settings.**

FELO 3. Students will demonstrate an understanding of Christian Scripture, Tradition, and Ethics, including engagement in acts of devotion and works of mercy.

*\*ILO - Institutional Learning Objective*

## Committee

The Foundational Explorations Program is approved and sustained by the faculty under direction of the Associate Dean of Foundational Explorations and a faculty committee. The committee directs an on-going cycle of review and improvement based on established goals and objectives.

## Prerequisites

Students are required to demonstrate basic competence in mathematics and writing based on standardized test scores. Any remedial courses, numbered below 1000, taken to satisfy competency requirements, are in addition to the minimum of 128 units required for graduation.

## **Divisions and Requirements**

The Foundational Explorations curriculum is listed under a four-fold division. This structure provides continuity with the Wesleyan approach to knowledge by emphasizing the human response as foundational to the exploring, developing, and seeking aspects of education. The divisions, although not mutually exclusive or all-encompassing, organize similar themes relevant to faith and learning. Each complements the others and, in each, conscious efforts are made to reveal connections, develop perspectives, and build synthetic thinking skills. These divisions are: Exploring Theology and Philosophy; Exploring History, Society, and the Self; Exploring Science and Technology in Society; and Exploring Arts and Culture.

The specific requirements in Foundational Explorations, as established by the faculty, represent a broad-based experience in skills and ideas. The following selection of courses is designed to guide the student toward a liberalizing educational experience in the arts and sciences while allowing for substantial choice in the development of that education.

## **Foundational Explorations**

### **I. Exploring Theology and Philosophy**

The study of Scripture and Christian tradition is essential to Christian faith and practice. Students transferring to the university for the first time with 48 or more units, none of which are in religion, take only five units in this category at Point Loma Nazarene University (three of which must be at the upper-division level).

#### **A. Biblical Foundations [2 courses; 5 units]**

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)

#### **B. The Christian Tradition [1 course; 3 units]**

- CHU 3040 - Women in the Christian Tradition (GE) (3)
- CHU 3095 - The Christian Tradition (GE) (3)
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)
- THE 3060 - Christian Life as Vocation (GE) (3)
- THE 3070 - Global Christianity (GE) (3)

### **II. Exploring History, Society, and the Self**

A pursuit of historical, social, and personal awareness, focusing on the analytical, communication, and quantitative skills necessary for successful living in modern society.

#### **A. Personal Development [1 course; 3 units]**

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3)
- *Required for all first-time freshmen through age 20 (at the start of the Academic Year) who have taken fewer than 24 transferable units after graduation from high school. This course must be completed by the end of the second semester.*
- 
- All others take:
- PSY 1003 - General Psychology (GE) (3)

## **B. Critical Thinking and Communication [2 courses; 5-7 units]**

All students must fulfill the composition requirement by the end of their second semester.

- WRI 1010 - College Composition: Writing and Research - First Year Experience (GE) (4)
- **OR**
- WRI 1016 - College Composition: Research - First Year Experience (GE) (2) \*\*
- 
- COM 1000 - Principles of Human Communication (GE) (3)
- **OR**
- COM 2031 - Argumentation and Debate (GE) (3)

### **Note(s):**

*A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 0097, along with WRI 1010 or WRI 1016.*

*\*\*WRI 1016 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

## **C. The History of World Civilizations [2 courses; 6 units]**

- HIS 1010 - World Civilizations I (GE) (3)
- HIS 1011 - World Civilizations II (GE) (3)

## **D. The Social World [1 course; 3-4 units]**

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- POL 1001 - Introduction to Political Science (GE) (3)
- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 1001 - Introduction to Sociology (GE) (3)
- SOC 2001 - Cultural Anthropology (GE) (3)
- SWF 1000 - Living Justly in Contemporary Society (GE) (3)

### III. Exploring Science and Technology in Society

An introduction to the natural and social sciences as tools for exploring the world, with emphasis on collecting and interpreting empirical data for both theoretical and practical purposes.

#### A. The Natural World [2 courses; one from each group, and at least one with a lab; 8 units]

##### Biological Science [1 course/sequence from this group]

- BIO 1001 - Human Biology and Bioethics (GE) (3) and
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- 
- BIO 1002 - Environment and People (GE) (4)
- 
- BIO 1003 - Introduction to Biology (GE) (3) and
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- 
- BIO 1004 - Biotechnology and Society (GE) (4)
- 
- BIO 1005 - Ecology and Conservation (GE) (3) and
- BIO 1005L - Ecology and Conservation Laboratory (GE) (1)
- 
- BIO 1006 - Global Health and Pathogens (GE) (4)
- 
- BIO 1030 - Human Anatomy and Physiology I (GE) (3) and
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) (1)
- 
- BIO 2010 - Cell Biology and Biochemistry (GE) (3) and
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- 
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3) and
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)

##### Physical Science [1 course/sequence from this group]

- CHE 1001 - Chemistry and Society (GE) (4)
- 
- CHE 1002 - Chemistry in our Everyday Lives (GE) (3) and
- CHE 1002L - Chemistry in Our Everyday Lives Lab (GE) (1)

- 
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) **(4) and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**
- 
- CHE 1052 - General Chemistry I (GE) **(4) and**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- 
- PHY 1034 - The Physics of Sound and Music (GE) **(3) and**
- PHY 1034L - The Physics of Sound and Music Lab (GE) **(1)**
- 
- PHY 1044 - General Physics I (GE) **(3) and**
- PHY 1044L - General Physics I Lab (GE) **(1)**
- 
- PHY 2044 - University Physics I (GE) **(3) and**
- PHY 2044L - University Physics I Lab (GE) **(1)**
- 
- PSC 1004 - The Cosmos (GE) **(4)**
- PSC 1014 - Physical Science for Teachers (GE) **(4)**

## **B. Physical Fitness and Nutrition [2 courses; 3-5 units]**

One of the following courses is required:

- KIN 2030 - Lifestyle as Medicine (GE) **(2)**
- PED 1000 - Fitness Through Movement (GE) **(2)**
- PED 2000 - Optimal Health (GE) **(2)**
- SWF 3015 - Health and Well-Being (GE) **(2)**
- 
- Any one (1) unit activity course numbered PED 1002-PED 1084, PED 1011, PED 1013, PED 1016, PED 1017, PED 1018, PED 1019 **OR** one of the following is required:
- PED 2020 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 2025 - Individual and Dual Sports Fundamentals and Strategies (GE) **(2)**

## **C. Problem Solving [1 course/sequence; 3-4 units]**

- MTH 1044 - Calculus With Applications (GE) **(4)**
- 
- MTH 1064 - Calculus I (GE) **(3) and**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- 
- MTH 1073 - Business Calculus (GE) **(3)**
- MTH 3003 - Problem Solving (GE) **(3)**

## IV. Exploring Arts and Culture

A survey of human endeavors from a historical, cultural, linguistic, and philosophical perspective, including developing critical appreciation of human expression-both artistic and literary.

### A. The Fine Arts [2 courses from distinct areas; 4-5 units]

- ART 1000 - Introduction to Art (GE) (2)
- ART 1002 - Fundamentals of Art (GE) (3)
- ART 2000 - History of Art I (GE) (3)
- ART 2001 - History of Art II (GE) (3)
- 
- MUH 1000 - Introduction to Music (GE) (2)
- MUH 1001 - Introduction to Listening (GE) (2)
- 
- TRE 1001 - Introduction to Theatre (GE) (2)

### B. Literature [2 courses; 5 units]

Two courses; LIT 2000 and one upper division Literature course.

#### Lower Division:

- LIT 2000 - Literature and Culture (GE) (2)

#### Upper Division:

- LIT 3050 - World Literature (GE) (3)
- LIT 3051 - World Cinema (GE) (3)
- LIT 3052 - Diverse Voices in American Literature (GE) (3)
- LIT 3053 - Women Writers (GE) (3)
- 
- *All materials for the following Foundational Explorations (GE) Literature Upper Division Requirement options are written in foreign language:*
- FRE 3020 - Survey of French Literature (3)
- FRE 3025 - Francophone Literature (3)
- SPA 3020 - Mexican American Literature and Culture (3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 4000 - Peninsular Literature Before 1800 (3)
- SPA 4002 - Peninsular Literature Since 1800 (3)
- SPA 4037 - Latin American Literature Before 1910 (3)
- SPA 4039 - Latin American Literature Since 1910 (3)

#### Note(s):

*B.S.N. candidates choose between two Literature options or one Literature and one Philosophy.*

### **C. Foreign Language\* [2 courses; 8 units]**

One of the following sequences in the same language, all or part of which may be waived by examination or by petition when English is not the student's native language:

- CHN 1001 - Elementary Chinese (Mandarin) I (GE) (4)
- CHN 1002 - Elementary Chinese (Mandarin) II (GE) (4)
- 
- GER 1001 - Elementary German I (GE) (4)
- GER 1002 - Elementary German II (GE) (4)
- 
- GRK 2007 - Biblical Greek I (GE) (4)
- GRK 2008 - Biblical Greek II (GE) (4)
- 
- HEB 2005 - Biblical Hebrew I (GE) (4)
- HEB 2006 - Biblical Hebrew II (GE) (4)
- 
- FRE 1001 - Elementary French I (GE) (4)
- FRE 1002 - Elementary French II (GE) (4)
- 
- SPA 1001 - Elementary Spanish I (GE) (4)
- SPA 1002 - Elementary Spanish II (GE) (4)

#### **\*Note(s):**

*A foreign language is not required for B.S.N. candidates.*

*Students who believe they may qualify for a language waiver are advised to make application no later than spring of the sophomore year (or in the semester transfer to PLNU) to avoid possible delay in graduation.*

### **D. Philosophy [1 course; 3 units]**

- PHL 2001 - Introduction to Philosophy (GE) (3)
- PHL 2011 - Ethics (GE) (3)

### **Degree Program Information**

- Baccalaureate Degree Information

### **Majors, Minors and Certificates**

**The Major.** Point Loma Nazarene University offers six baccalaureate degrees: the Bachelor of Arts (B.A.), the Bachelor of Science in Business Administration (B.S. Bus. Admin), the Bachelor of Music (B.Mus.), the Bachelor of Science (B.S.), the Bachelor of Science in Engineering (B.S.E.), and the Bachelor of Science in Nursing (B.S.N.). Many of the 50+ major programs also offer in-depth concentrations. If a second major area of study is desired, all requirements for both majors must be met with a minimum of 24 units distinguishing the two areas of study. While working on a single baccalaureate degree, the maximum number of pursuits is two majors and two minors. Students should review the majors and minors list in the catalog.

Freshman students transferring in 56 credits or fewer must complete all requirements for the degree within 7 years of initial matriculation. Students transferring in 57 credits or more must complete all requirements for the degree within 4 years of initial matriculation.

**The Minor.** Optional minors are offered in several schools and departments. The requirements governing minors are as follows:

- Only minors that appear in the student's catalog of record may be earned at the point of graduation;
- A minor is at least 16 units and is under the direct auspices of the respective school/department;
- Students must earn a 2.000 cumulative GPA in the minor for it to be granted;
- The minor must show a minimum of nine (9) units in residence;
- Of the 16+ units in the minor, nine (9) must be distinct from and not counted in the major or general education;
- Of the 16+ units in the minor, 12 must be at the upper-division level;
- The pass/no credit option is not available for courses within the minor; and
- A second minor, when feasible, requires a minimum of nine (9) units distinct from and not counted either in the major or in the first minor.

**The Certificate.** Optional certificates are offered in some schools or departments. The requirements governing certificates are as follows:

- A certificate is a skill or theme-based program using approved PLNU courses that supplements a student's undergraduate studies.
- Only certificates that appear in the student's catalog of record may be earned at the point of graduation.
- Students must earn a 2.000 cumulative GPA in the certificate for it to be granted.
- A certificate should be between 6-15 units if it is aligned with a major but may be up to 24 units if it is not aligned with a major.
- 50% or more of the units being applied to the certificate must be unique to that certificate.
- Of the total units in the certificate, a minimum of 2/3 must be earned in residence.

## **Major**

### **Accounting, B.S. Business Administration**

#### **Program Learning Outcomes**

Students who complete the program in Accounting will be able to:

1. Exhibit general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical values.

5. Collaborate effectively in teams.
6. Exhibit detailed knowledge of accounting and federal tax regulations.
7. Analyze financial statements using accounting knowledge.
8. Evaluate tax positions and planning opportunities based on federal tax knowledge.

## Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MGT 2012 - Principles of Management (3)
  
- MTH 1053 - Mathematical Analysis for Business and Economics (3)  
**OR**
- MTH 1073 - Business Calculus (GE) (3)
  
- MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

## Upper Division Requirements

- ACC 3070 - Intermediate Accounting I (3)
- ACC 3071 - Intermediate Accounting II (3)
- ACC 3075 - Managerial Cost Accounting (3)
- ACC 4010 - Federal Tax Accounting I (3)
- ACC 4011 - Federal Tax Accounting II (3)
- ACC 4021 - Advanced Accounting (3)
- ACC 4025 - Financial Statement Analysis and Valuation (3)
- ACC 4060 - Auditing (3)
- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 units required (3)**  
Accounting majors may substitute ACC 4089 Internship in Accounting for BUS 4089 Internship in Business in the core (3 total units required).
- FIN 3035 - Business Finance (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Total: 42 Units

Major Total: 70 Units

## Recommended

- Cross-cultural experience
- MTH 1073 - Business Calculus (GE) (3)
- ACC 3050 - Ethics in Accounting (3)
- PHL 2011 - Ethics (GE) (3)

## Note(s):

- ECO 1001 or ECO 1002 fulfills general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills general education Philosophy Requirement.

## Applied Health Science, B.S.

### Department Learning Outcomes

#### All majors within the department of Kinesiology will be able to:

1. Speak and write effectively to a target audience on essential information in their discipline.
2. Critically evaluate and integrate new information into professional practice to solve relevant health and fitness problems.
3. Assess human movement to determine risk for injury and improve human performance.
4. Describe the mechanisms (i.e. metabolic, physiologic, biomechanical, and developmental) by which physical activity aids in health promotion, performance enhancement and disease prevention.
5. Serve others in clinical, educational, or athletic settings by pursuing their vocation and calling.

### Lower-Division Requirements

- BIO 1030 - Human Anatomy and Physiology I (GE) (3)
  - BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) (1)
  - BIO 1040 - Human Anatomy and Physiology II (3)
  - BIO 1040L - Human Anatomy and Physiology II Laboratory (1)
  - BIO 2010 - Cell Biology and Biochemistry (GE) (3)
  - BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
  - BIO 2020 - Microbiology of Infectious Diseases (3)
  - BIO 2020L - Microbiology of Infectious Diseases Laboratory (1)
  - CHE 1052 - General Chemistry I (GE) (4)
  - CHE 1052L - General Chemistry I Lab (GE) (1)
  - CHE 1053 - General Chemistry II (3)
  - CHE 1053L - General Chemistry II Lab (1)
  - KIN 1001 - Orientation to Kinesiology (1)
  - KIN 2080 - Care and Prevention of Athletic Injuries (2)
  - MTH 2003 - Introduction to Statistics (3)
  
  - KIN 2030 - Lifestyle as Medicine (GE) (2)
- OR**

- PED 2000 - Optimal Health (GE) (2)
- PSY 1003 - General Psychology (GE) (3)
- *Certification in CPR. Certification must be current through the date of the Commencement ceremony in which the student is eligible to participate or the date of completion of the student's graduation requirements, whichever occurs first.*

Total: 36 Units

## Upper-Division Requirements

- ATR 3085 - Pathology of Injury and Illness (3)
- KIN 3012 - Motor Learning and Motor Development (3)
- KIN 3025 - Structural Kinesiology (2)
- KIN 3027 - Applied Biomechanics (2)
- KIN 3040 - Physiology of Exercise (3)
- KIN 4095 - Kinesiology Capstone (1)
- PSY 3021 - Abnormal Psychology (3)

## Major Electives

**Complete a minimum of (12) units with at least (7) units being upper division from the following:**

- ATR 3087 - Assessment of Lower Extremity Pathology (3)
- ATR 3088 - Assessment of Head, Spinal, and Upper Extremity Pathology (3)
- ATR 4010 - Therapeutic Exercise (3)
- ATR 4020 - Pharmacology (1)
- ATR 5000 - Seminar in Athletic Training (1)
- ATR 5005 - Research Methods and Statistical Techniques for Clinical Decision Making in Sports Medicine (3)
- ATR 5087 - Evidence-Based Orthopedic Assessment of Lower Extremity (3)
- ATR 5087L - Evidence-Based Orthopedic Assessment of Lower Extremity Laboratory (1)
- ATR 5088 - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity (3)
- ATR 5088L - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity Laboratory (1)
- ATR 5090 - Clinical Internship I (3)
- ATR 5091 - Clinical Internship II (3)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 4070 - Neuroscience (3)
- BIO 4050 - Advanced Biochemistry (3) **and**
- BIO 4050L - Advanced Biochemistry Lab (1)
- OR**
- CHE 4050 - Advanced Biochemistry (3) **and**

- CHE 4050L - Advanced Biochemistry Lab (1)
- CHE 2094 - Organic Chemistry I (3) and
- CHE 2094L - Organic Chemistry I Lab (1)
- CHE 2096 - Organic Chemistry II (3) and
- CHE 2096L - Organic Chemistry II Lab (1)
- CHD 1050 - Human Development (3)
- EXS 3001 - Fitness Assessment and Exercise Prescription (3)
- EXS 3001L - Fitness Assessment and Exercise Prescription Lab (1)
- EXS 3030 - Nutrition for Exercise and Sport Performance (3)
- EXS 3070 - Praxis of Strength Training and Conditioning (3)
- KIN 3027L - Biomechanics Laboratory (1)
- KIN 3040L - Physiology of Exercise Lab (1)
- KIN 3075 - Movement Interventions and Corrective Exercise (2)
- KIN 4030 - Clinical Exercise Physiology (3)
- KIN 4075 - Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities (3)
- KIN 4088 - Internship in Kinesiology (1-3) 3 Units Required
- KIN 5010 - Evidence-Based Practice and Decision Making in Kinesiology (3)
- PHY 1044 - General Physics I (GE) (3)
- PHY 1044L - General Physics I Lab (GE) (1)
- PHY 1054 - General Physics II (GE) (3)
- PHY 1054L - General Physics II Lab (GE) (1)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)

Total: 29 Units Minimum

Total Units for Applied Health Science: 65\*

*\*11 units meet general education requirements*

## **Art Education, B.A.**

### Program Learning Outcomes

**Students who complete the program in Art Education with concentrations in Visual Arts and Graphic Design will be able to:**

1. Produce original, contemporary works of art (visual art or graphic design) using the art elements and design principles, demonstrating current skills and techniques in selected art media and technologies.
2. Write and speak about artists and visual art forms from the history of Western and Non-Western art.
3. Use the elements of art and principles of design to analyze their own artwork.
4. Formulate sequential art curriculum units for use in 7-12 school art programs, using the *California Visual and Performing Arts Art Standards*.
5. Articulate their own philosophy of art education for K-12 grade levels.

### Required Concentrations

**Choose a Concentration from the following:**

Group A – Visual Arts Concentration

Group B – Graphic Design Concentration

## Lower-Division Requirements

- ART 1003 - Two-Dimensional Design **(3)**
- ART 1004 - Three-Dimensional Design: Composition and Space **(3)**
- ART 1015 - Drawing I **(3)**
- ART 2000 - History of Art I (GE) **(3)** \*
- ART 2001 - History of Art II (GE) **(3)** \*
  
- ART 2003 - Graphic Design I: Visual Symbolism **(3)** **OR**
- ART 2006 - Experimental Drawing Studio **(3)**
  
- ART 2010 - Painting: Color and Technique **(3)**
- ART 2002 - Introduction to Computer Graphics **(3)**
- CHD 1050 - Human Development **(3)**
- One college course in ceramics **(3)**

Total: 30 Units

## Upper-Division Requirements

- ART 3019 - Visual Arts in the Classroom I **(3)** *OR*
- ART 4055 - Visual Arts in the Classroom II **(3)** (ART 4055 recommended)
  
- ART 3025 - Non-Western Art History **(3)**
- EDU 3002 - Foundations of Education and Learning Theory **(3)**

Choose one Art History course (3 units):

- ART 3004 - Modern Art History **(3)**
- ART 3005 - Contemporary Art History **(3)**
- ART 3035 - Design History: Industrial Revolution to Contemporary Design **(3)**

Total: 12 Units

## Concentrations

Group A – Visual Arts Concentration

Choose one two-course sequence (6 units):

- ART 2021 - Photography: Darkroom and Film **(3)**
  - ART 3021 - Photography: Alternative Processes **(3)**
- OR*

- ART 2022 - Sculpture: Materials and Fabrication (3)
  - ART 3022 - Sculpture II: Objects and Installation (3)
- OR**
- ART 2023 - Printmaking I (3)
  - ART 3023 - Printmaking II (3)
- OR*
- ART 3010 - Painting II (3)
- AND**
- ART 3030 - Illustration I (3) **OR**
  - ART 3045 - Life Drawing (3)

Total: 6 Units

Capstone courses (9 units):

- ART 3090 - Advanced Studio Practice (3)
- ART 4066 - Senior Studio Exhibition or Research Preparation (3)
- ART 4072 - Exhibition or Research Project (3)

Total: 9 Units

Total: 15 Units

## Group B – Graphic Design Concentration

Two-course sequence (6 units):

- ART 3003 - Graphic Design II: Typography (3)
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)

Capstone courses (7-9 units):

- ART 4068 - Graphic Design Portfolio Preparation (3)
- ART 4071 - Graphic Design Portfolio Review (3)
- ART 4070 - Internship (1-3)

Total: 13-15 Units

Note(s):

\*Meets the general education requirement in the Fine Arts.

## 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3)** \*
- EDU 3006 - Principles of Language Acquisition **(3)** \*
- EDU 4004 - Foundations of Special Education **(3)** \*
- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**
- EDU 4020 - Literacy Instruction for Secondary Teachers **(3)** \*
- EDU 4021 - General Methods for Secondary Teachers **(3)** \*
- EDU 4050 - Secondary Clinical Practice I **(4)**
- EDU 4055 - Secondary Clinical Practice II **(4)**
- EDU 40CP3 - Secondary Clinical Practice Seminar I **(1)**
- EDU 40CP4 - Secondary Clinical Practice Seminar II **(1)**

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics **(3)** (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science **(3)** \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science **(3)** (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language **(3)** (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts **(3)** (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education **(3)** (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers **(3)** \*\*\* (Music Education Majors)

## Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Biology, B.A.**

### Program Learning Outcomes

#### **Students who complete the B.A. program in Biology will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).
2. Participate in the life of the Biology Department by involvement in one or more of the following areas: research, biology clubs, and/or various positions of responsibility serving as graders, tutors, and/or teaching assistants.
3. Develop a rationally defensible integration of science and faith.
4. Be prepared for post-graduate studies or science-related careers.

### Lower-Division Requirements

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)** \*\*
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)** \*\*
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- BIO 2012 - Organismal Biology **(3)**
- BIO 2012L - Organismal Biology Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4)** \*\*
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- MTH 1044 - Calculus With Applications (GE) **(4)** \*\*

Total: 29 Units

### Upper-Division Requirements

- BIO 3045 - Genetics **(3)**
- BIO 3045L - Genetics Laboratory **(1)**
- BIO 3052 - Research Methodology **(3)**
- BIO 3063 - Conservation Ecology **(3)**
- BIO 3063L - Conservation Ecology Laboratory **(1)**

- BIO 4097 - Biology Seminar (1)
- MTH 3063 - Calculus Based Statistics With R (3)

Upper Division Total: 15 Units

Take a minimum of 12 units of electives from the following options:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4050 - Advanced Biochemistry (3)
- BIO 4050L - Advanced Biochemistry Lab (1)
- BIO 4063 - Methods of Teaching Secondary Science (3)
- BIO 4070 - Neuroscience (3)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)
- BIO 4083 - Introduction to Geographic Information Systems (GIS) (3)
  
- BIO 4090 - Internship in Biology (1-3)
- **OR**
- BIO 4099 - Research in Biology (1-3)

Upper Division Elective Total: 12 Units

Bachelor of Arts Total: 56 Units\*\*

\*\* 12 units meet general education requirements

## 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

### Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3) \***
- EDU 3006 - Principles of Language Acquisition **(3) \***
- EDU 4004 - Foundations of Special Education **(3) \***
- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**
- EDU 4020 - Literacy Instruction for Secondary Teachers **(3) \***
- EDU 4021 - General Methods for Secondary Teachers **(3) \***
- EDU 4050 - Secondary Clinical Practice I **(4)**
- EDU 4055 - Secondary Clinical Practice II **(4)**
- EDU 40CP3 - Secondary Clinical Practice Seminar I **(1)**
- EDU 40CP4 - Secondary Clinical Practice Seminar II **(1)**

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics **(3)** (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science **(3)** \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science **(3)** (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language **(3)** (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts **(3)** (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education **(3)** (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers **(3)** \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Biology, B.S.**

### Program Learning Outcomes

**Students who complete the B.S. program in Biology will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).
2. Participate in the life of the Biology Department by involvement in one or more of the following areas: research, biology clubs, and/or various positions of responsibility serving as graders, tutors, and/or teaching assistants.
3. Develop a rationally defensible integration of science and faith.
4. Be prepared for post-graduate studies or science-related careers.

### Lower-Division Requirements

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)** \*\*
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)** \*\*
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- BIO 2012 - Organismal Biology **(3)**
- BIO 2012L - Organismal Biology Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4)** \*\*
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- MTH 1044 - Calculus With Applications (GE) **(4)** \*\*
- PHY 1044 - General Physics I (GE) **(3)** \*\*
- PHY 1044L - General Physics I Lab (GE) **(1)**

- PHY 1054 - General Physics II (GE) (3)
- PHY 1054L - General Physics II Lab (GE) (1)

Total: 37 Units

## Upper-Division Requirements

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3052 - Research Methodology (3)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 4097 - Biology Seminar (1)
- MTH 3063 - Calculus Based Statistics With R (3)

Upper Division Total: 19 Units

Take a minimum of 11 units of electives from the following options:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4050 - Advanced Biochemistry (3)
- BIO 4050L - Advanced Biochemistry Lab (1)
- BIO 4063 - Methods of Teaching Secondary Science (3)
- BIO 4070 - Neuroscience (3)

- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)
- BIO 4083 - Introduction to Geographic Information Systems (GIS) (3)
- BIO 4090 - Internship in Biology (1-3)  
**OR**
- BIO 4099 - Research in Biology (1-3)
- **Approved Off-Campus (1-4)**

Upper Division Elective Total: 11 Units

Bachelor of Science Total: 67 Units \*\*

\*\* 12 units meet general education requirements.

## **Biology-Chemistry, B.S. (Biology)**

The interdepartmental major in Biology-Chemistry is designed for students whose academic needs and interests include both biology and chemistry. A large segment of contemporary scientific investigation lies at the intersection of these two fields. Areas open to students by this preparation include medicine, dentistry, and graduate disciplines such as biochemistry, physiology, and molecular biology.

## **Program Learning Outcomes**

**Students who complete the program in Biology-Chemistry will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.
2. Apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations.
4. Participate in the life of the Biology and/or Chemistry Department by involvement in one or more of the following areas: research, biology and/or chemistry clubs, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
5. Develop a rationally defensible integration of science and faith.
6. Be prepared for post-graduate studies or science-related careers.

## **Lower-Division Requirements**

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)

- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- CHE 2096 - Organic Chemistry II (3)
- CHE 2096L - Organic Chemistry II Lab (1)
- MTH 1044 - Calculus With Applications (GE) (4)

Choose one sequence: 8 Units

- PHY 1044 - General Physics I (GE) (3)
- PHY 1044L - General Physics I Lab (GE) (1) **AND**
  
- PHY 1054 - General Physics II (GE) (3)
- PHY 1054L - General Physics II Lab (GE) (1)
- OR**
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1) **AND**
  
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total: 43 Units

### Upper-Division Requirements

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 4097 - Biology Seminar (1)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
  
- BIO 4050 - Advanced Biochemistry (3) *and*
- BIO 4050L - Advanced Biochemistry Lab (1)
- OR**
- CHE 4050 - Advanced Biochemistry (3) **and**
- CHE 4050L - Advanced Biochemistry Lab (1)

One course from:

- CHE 3026 - Physical Chemistry II (3)
- CHE 3051 - Organic Structure Elucidation (2)
- CHE 3070 - Instrumental Analysis (2)
- CHE 4053 - Advanced Organic Chemistry (2)

- CHE 4066 - Bioinorganic Chemistry (2)
- CHE 4068 - Advanced Inorganic Chemistry (3)

At least five units from:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3052 - Research Methodology (3)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4070 - Neuroscience (3)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)

Total: 24-25 Units

Bachelor of Science Total: 68-69 Units

### **Biology-Chemistry, B.S. (Chemistry)**

The interdepartmental major in Biology-Chemistry is designed for students whose academic needs and interests include both biology and chemistry. A large segment of contemporary scientific investigation lies at the intersection of these two fields. Areas open to students by this preparation include medicine, dentistry, and graduate disciplines such as biochemistry, physiology, and molecular biology.

### **Program Learning Outcomes**

**Students who complete the program in Biology-Chemistry will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.
2. Apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations.
4. Participate in the life of the Biology and/or Chemistry Department by involvement in one or more of the following areas: research, biology and/or chemistry clubs, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
5. Develop a rationally defensible integration of science and faith.
6. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- BIO 2012 - Organismal Biology **(3)**
- BIO 2012L - Organismal Biology Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4)**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2013 - Analytical Chemistry **(3)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- CHE 2096 - Organic Chemistry II **(3)**
- CHE 2096L - Organic Chemistry II Lab **(1)**
- MTH 1044 - Calculus With Applications (GE) **(4)**

## Choose one sequence: 8 Units

- PHY 1044 - General Physics I (GE) **(3)**
- PHY 1044L - General Physics I Lab (GE) **(1) AND**
  
- PHY 1054 - General Physics II (GE) **(3)**
- PHY 1054L - General Physics II Lab (GE) **(1)**
- OR**
- PHY 2044 - University Physics I (GE) **(3)**
- PHY 2044L - University Physics I Lab (GE) **(1) AND**
  
- PHY 2054 - University Physics II **(3)**
- PHY 2054L - University Physics II Lab **(1)**

Total: 43 Units

## Upper-Division Requirements

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 4097 - Biology Seminar (1)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
  
- BIO 4050 - Advanced Biochemistry (3) *and*
- BIO 4050L - Advanced Biochemistry Lab (1)
- OR**
- CHE 4050 - Advanced Biochemistry (3) **and**
- CHE 4050L - Advanced Biochemistry Lab (1)

One course from:

- CHE 3026 - Physical Chemistry II (3)
- CHE 3051 - Organic Structure Elucidation (2)
- CHE 3070 - Instrumental Analysis (2)
- CHE 4053 - Advanced Organic Chemistry (2)
- CHE 4066 - Bioinorganic Chemistry (2)
- CHE 4068 - Advanced Inorganic Chemistry (3)

At least five units from:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3052 - Research Methodology (3)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)

- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4070 - Neuroscience (3)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)

Total: 24-25 Units

Bachelor of Science Total: 68-69 Units

## **Business Administration, B.A.**

### Program Learning Outcomes

Students who complete the program in Business Administration will be able to:

1. Exhibit general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical values.
5. Collaborate effectively in teams.

### Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MTH 1053 - Mathematical Analysis for Business and Economics (3) **Or**
- MTH 1073 - Business Calculus (GE) (3)
- MTH 2003 - Introduction to Statistics (3)
- MGT 2012 - Principles of Management (3)

Total: 28 Units

### Upper-Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 Units required**
- FIN 3035 - Business Finance (3)

- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

### Upper-Division Electives

- Choose 3 units of upper-division elective in Accounting, Business, Finance, Management, or Marketing other than any upper division requirements listed above. (ACC/BUS/FIN/MGT/MKT 3000-4090) (3)
- Choose an additional 3 units of upper-division elective specifically from the Economics group (ECO3000-4090) (3)

Total: 24 Units

Major Total: 52 Units

### Recommended

- Cross-cultural experience
- PHL 2011 - Ethics (GE) (3)

### Note(s):

- ECO 1001 or ECO 1002 fulfills the general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills the general education Philosophy Requirement.

## Chemistry, B.S.

### Program Learning Outcomes

#### Students who complete the program in Chemistry will be able to:

1. Apply key concepts and principles in analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry.
2. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations and analyses.
3. Participate in the life of the Chemistry Department by involvement in one or more of the following areas: research, chemistry club, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
4. Be prepared for post graduate studies or a science-related career.

### Lower-Division Requirements

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)

- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- CHE 2096 - Organic Chemistry II (3)
- CHE 2096L - Organic Chemistry II Lab (1)
  
- MTH 1044 - Calculus With Applications (GE) (4)  
**OR**
- MTH 1064 - Calculus I (GE) (3)
  
- MTH 1074 - Calculus II (3)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total: 36 Units

### Upper-Division Requirements

- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CHE 3026 - Physical Chemistry II (3)
- CHE 3027 - Physical Chemistry II Laboratory (1)
- CHE 3051 - Organic Structure Elucidation (2)
- CHE 3070 - Instrumental Analysis (2)
- CHE 4050 - Advanced Biochemistry (3)
- CHE 4050L - Advanced Biochemistry Lab (1)
- CHE 4053 - Advanced Organic Chemistry (2)
- CHE 4054 - Advanced Organic Chemistry Laboratory (1)
- CHE 4066 - Bioinorganic Chemistry (2)
- CHE 4067 - Advanced Inorganic Chemistry Laboratory (1)
- CHE 4068 - Advanced Inorganic Chemistry (3)
- CHE 4095 - Chemistry Seminar (1)
- *Science and/or Math electives beyond those required for the degree must be approved by the department chair (Biology and Physics 3000-level or higher, Math 2000-level or higher). (3-4)*

Total: 30 Units

### Recommended

- CHE 4099 - Research in Chemistry (1-2)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)

Bachelor of Science Total: 66 Units

Note(s):

Accepting Associate Degree for Transfer (ADT)

## **Child and Adolescent Development, B.A.**

### Program Learning Outcomes

**Students who complete the program in Child and Adolescent Development will be able to:**

1. Identify and describe normative similarities and differences of cognitive, emotional, social and physical theories at each developmental stage from prenatal through adulthood.
2. Illustrate how children's play facilitates integration of cognitive, social, physical, and emotional development.
3. Evaluate the effects of family systems on the development of children and adolescents.
4. Identify and discuss scientific research in understanding different philosophical views of growth and development, both historical and current.
5. Analyze what are developmentally appropriate concepts, activities, materials, and resources as related to infant through adolescent development.
6. Assess research of theoretical and appropriate practical elements of parenting to facilitate decisions for a healthy environment for children and adolescents.
7. Describe the adult-child dynamics and processes essential for building strengths of character and competence in children and adolescents.
8. Examine hereditary, cultural, and environmental factors inherent in ways children and adolescents develop physically, cognitively, morally, socially, and emotionally.
9. Evaluate the effects of society and culture upon the family microsystems, family types, and the subsequent macro systems with which they co-exist.
10. Identify career paths within the child and adolescent professions.

### Lower-Division Requirements

- CHD 1020 - Child and Adolescent Development (4)
- CHD 1050 - Human Development (3)
- NUT 1001 - Introduction to Nutrition (2)
- SWF 1000 - Living Justly in Contemporary Society (GE) (3)

Total: 12 Units

### Upper-Division Requirements

- CHD 3003 - Infant and Toddler Development (3)
  - CHD 3010 - Early Childhood Education (4)
  - CHD 3013 - Adolescent Development in the Family Context (2)
  - CHD 3055 - Development of Special Needs Children (3)
  - CHD 3085 - Parent Education and Family Development (2)
  - CHD 4020 - Child Development in the Family and Community (4)
  - CHD 4025 - Child and Adolescent Nutrition and Health (3)
  
  - CHD 4070 - Practicum in Child Development (3)
- OR**

- CHD 4075 - Internship in Child Development (2 or 4)
- CHD 4097 - Senior Seminar (2)
- LIT 3025 - Children's Literature (3)
- PSY 3021 - Abnormal Psychology (3)
- SWF 3006 - Research Basics (3)
- SWF 3015 - Health and Well-Being (GE) (2)

Select 6 units from:

- ART 3019 - Visual Arts in the Classroom I (3)
- CHD 4060 - Administration and Supervision in Early Childhood Education (4)
- CHD 4075 - Internship in Child Development (2 or 4)
- EDU 3002 - Foundations of Education and Learning Theory (3)
- EDU 3006 - Principles of Language Acquisition (3)
- EDU 4004 - Foundations of Special Education (3)
- MUE 3041 - Music Skills for the Elementary Classroom Teacher (3)
- PED 3008 - Methods of Teaching Physical Education (3)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)
- PSY 3025 - Clinical and Community Interventions (4)
- SOC 3060 - Race and Ethnicity (3)
- SWK 3040 - Child Welfare (3)

Total: 42-43 Units

Major Total: 54 Units

Note(s):

**Students must be fingerprinted through community care licensing to obtain Child Abuse Central Index Clearance.**

**Students graduating with a Child Development major may qualify for the "Child and Adolescent Development Site Supervisor" permit with the California Commission on Teacher Credentialing.**

Accepting Associate Degree for Transfer (ADT)

## **Christian Studies, B.A.**

### Program Learning Outcomes

**Students who complete the program in Christian Studies Majors will be able to:**

- Interpret scripture evidencing biblical literacy.
- Articulate clear theological doctrines relevant to Christian life and ministry.
- Engage the perennial questions of the human condition using resources from philosophy.

- Apply principles of Christian formation for the practice of ministry.

## Concentrations

- |                                  |                                  |
|----------------------------------|----------------------------------|
| • General Concentration          | • Philosophy Concentration       |
| • Biblical Studies Concentration | • Theology Concentration         |
| • Leadership Concentration       | • Youth and Family Concentration |

## Christian Studies Core Course Requirements

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)
- BIB 2040 - Reading Scripture Faithfully (3)
- CMI 1055 - Christian Formation and Ministry (3)
- PHL 2050 - God and Philosophy (3)
- THE 2050 - Introduction to Christian Theology (3)
  
- PHL 2001 - Introduction to Philosophy (GE) (3)  
**OR**
- PHL 2011 - Ethics (GE) (3)
  
- HEB 2005 - Biblical Hebrew I (GE) (4) **and**
- HEB 2006 - Biblical Hebrew II (GE) (4)  
**OR**
- GRK 2007 - Biblical Greek I (GE) (4) **and**
- GRK 2008 - Biblical Greek II (GE) (4)
  
- CHU 3095 - The Christian Tradition (GE) (3)
- THE 4095 - Justice in the Church: Gender, Households, and Unity in the Body of Christ (3)

Total: 34 Units

## Students Must Also Complete a Required Concentration

### General Concentration

- Choose four (4) upper division courses choosing one course in each of these areas: CMI, BIB, THE and PHL (12 units)\*\*
- Choose four (4) upper division courses from the elective choices below (12 units)\*\*

Total: 24 units

Major Total: 58 units

### Biblical Studies Concentration

- Choose three (3) upper division courses choosing one course in each of these areas: CMI, THE and PHL (9 units)\*\*
- Choose five (5) upper division courses from the BIB elective choices below (15 units)\*\*

Total: 24 units

Major Total: 58 units

### Leadership Concentration

- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMI 3050 - Church as a Witness to the World (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 4010 - Leading in Ministry (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- CMI 4050 - Internship (1-3)
  
- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, THE and PHL (9 units)\*\***
  
- **Choose three (3) interdisciplinary units from the following:**
- MGT 2012 - Principles of Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4070 - Nonprofit Organization Management (3)

Total: 31-33 units

Major Total: 65-67 units

### Philosophy Concentration

- Choose three (3) upper division courses choosing one course in each of these areas: BIB, CMI and THE (9 units)\*\*
- Choose five (5) upper division courses from the PHL elective choices below (15 units)\*\*

Total: 24 units

Major Total: 58 units

### Theology Concentration

- Choose three (3) upper division courses choosing one course in each of these areas: BIB, CMI and PHL (9 units)\*\*
- Choose five (5) upper division courses from the THE elective choices below (15 units)\*\*

Total: 24 units

Major Total: 58 units

### Youth and Family Concentration

- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMI 3040 - Foundations for the Practice of Youth Ministry (3)
- CMI 3050 - Church as a Witness to the World (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 4025 - Youth and Family Ministry (3)
- CMI 4050 - Internship (1-3)
- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, THE and PHL (9 units)\*\***
- **Choose two to four (2-4) interdisciplinary units from the following:**
- CHD 3010 - Early Childhood Education (4)
- CHD 3013 - Adolescent Development in the Family Context (2)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)
- PSY 3021 - Abnormal Psychology (3)
- SOC 2050 - Sociology of the Family (3)

Total: 30-34 units

Major Total: 64-68 units

### \*\* Christian Studies Elective Options:

- BIB 3035 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse (3)
- BIB 3078 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- BIB 4001 - Jesus and the Gospels: Four Portraits of One Christ (3)
- BIB 4002 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference (3)
- BIB 4010 - Biblical Theology (3)
- BIB 4013 - Old Testament Torah and Israel's History: God's Story and God's People (3)
- BIB 4014 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics (3)
- BIB 4090 - Special Studies in Bible (1-3)
- BIB 4095 - Seminar in Biblical Literature (3)
- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMI 3040 - Foundations for the Practice of Youth Ministry (3)

- CMI 3045 - Enacting Worship (3)
- CMI 3050 - Church as a Witness to the World (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 4010 - Leading in Ministry (3)
- CMI 4015 - The Church of the Nazarene: History and Polity (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- CMI 4025 - Youth and Family Ministry (3)
- CMI 4090 - Special Studies in Christian Ministry (1-3)
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)
- THE 3015 - Christian and Religious Themes in Literature (3)
- THE 3020 - The World's Faith Traditions (3)
- THE 3025 - The Human Person and Theology and Psychology (3)
- THE 3030 - Christ and the Church (3)
- THE 3035 - Christian Ethics (3)
- THE 4010 - The Ministry and Sermons of John Wesley (3)
- THE 4015 - Three Traditions of Protestant Theology (3)
- PHL 2077 - Logic (3)
- PHL 3001 - Plato and Aristotle (3)
- PHL 3002 - Descartes through Hegel (3)
- PHL 3021 - Justice, Politics, and the Social World (3)
- PHL 3031 - Existential Philosophy and Literature (3)
- PHL 3041 - Philosophy and Art (3)
- PHL 3060 - Philosophy and the Sciences (3)
- PHL 3071 - Education and the Ethical Life (3)
- PHL 3080 - Alienation, Transformation, and Reconciliation in Film (3)
- PHL 3081 - Ethics, Responsibility, and Love (3)

## **Commercial Music, B.A.**

### Program Learning Outcomes

**Students who complete the program in Commercial Music will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Through the medium of a live concert, demonstrate the development of a public persona whose musical style reflects the musical interests that play to the artists' strengths and personality.
6. Produce a demo showcasing at least five original works that demonstrate the artist's ability to effectively collaborate with other artists, working from an initial concept to a finished product.

### Core Curriculum

*(Required of all Music majors)*

## Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

## Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

## Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Concentrations

In addition to the Music Core Requirements above, students in the Commercial Music Program must choose from one of two concentrations.

- **Performance Concentration**
- **Composition Concentration**

## Performance Concentration Requirements

### Applied Music and Ensembles

- **MUA3000-MUA4000 (4)** - Applied lessons in commercial music performing area - 4 semesters
- MUP 3040 - Commercial Music Ensembles **(1/2)** - 4 semesters

### Commercial Music

- MCM 3024 - Songwriting **(2)**
- MCM 3025 - Style and Improvisation **(2)** - 2 semesters (4 units total)
- MCM 4076 - Senior Project **(1)**

### Music History

- MUH 3035 - History of Popular Music (3)

## Music Technology

- MTC 3027 - Digital Audio I (2)
- MTC 3028 - Digital Audio II (2)
- MTC 3033 - Studio Recording (2)
- MTC 4095 - Production Techniques (2)

## Entrepreneurship

- MGT 3081 - Creativity and Innovation (3)

Total Required: 27 Units

## Composition Concentration Requirements

### Applied Music and Ensembles

- **MUC3000-MUC4000 (4)** - Applied commercial composition lessons - 4 semesters
- MUP 3040 - Commercial Music Ensembles (1/2) - 4 semesters

### Commercial Music

- MCM 3024 - Songwriting (2)
- MCM 3035 - Arranging I (2)
- MCM 4035 - Arranging II (2)
- MCM 4076 - Senior Project (1)

### Music History

- MUH 3035 - History of Popular Music (3)

## Music Technology

- MTC 3027 - Digital Audio I (2)
- MTC 3028 - Digital Audio II (2)
- MTC 3033 - Studio Recording (2)
- MTC 4095 - Production Techniques (2)

## Entrepreneurship

- MGT 3081 - Creativity and Innovation (3)

Total Required: 27 Units

Total: 58 Units

**Note(s):**

**Transfer students and PLNU students changing their major to Music in the BA degree must complete one ensemble and one unit of applied music each semester.**

A minor from the following list is recommended:

*Theatre, Media Communication, Graphic Design, Business Administration, Marketing or Accounting*

## **Communication Studies, B.A.**

### Program Learning Outcomes

**Students who complete the program in Communication Studies will be able to:**

1. Learn basic theory and application or performance skills about and within the discipline of communication.
2. Use communication competently in a variety of complex environmental and social contexts.
3. Participate in the disciplines of communication in the collective community around them.

### Lower-Division Core Requirements

- COM 1090 - Interpersonal Communication (3)
- COM 2020 - Small Group Communication (3)
- COM 2031 - Argumentation and Debate (GE) (3)
- COM 2050 - Intercultural Communication (3)
- COM 2065 - Introduction to Research in Communication (3)

Total: 15 Units

### Upper-Division Core Requirements

- COM 4022 - Portfolio Construction (1)
- COM 4060 - Rhetorical Theories and Models (3)
- COM 4085 - Communication, Values, and Society (2)
- COM 3010 - Nonverbal Communication (3)
- COM 3030 - Persuasion (3)

Total: 12 Units

### Lower-Division Electives

Choose 3 units from:

- COM 2010 - Communication Practicum I (1-2)
- JRN 2050 - Introduction to Journalism (3)

- TRE 2070 - Acting (3)

Total: 3 Units

## Upper-Division Electives

Choose 18 units from:

- COM 3012 - Gender and Communication (WS) (3)
- COM 3015 - Oral Interpretation (3)
- COM 3060 - Professional Speaking for Career Settings (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 3095 - Media Literacy (3)
- COM 4020 - Communication Practicum II (1-2)
- COM 4021 - Internship in Communication (3)
- COM 4065 - Communication Theories and Research (3)
- COM 4090 - Special Studies in Communication (1-3) (3) **Units required**
- PSY 3020 - Social Psychology (3)
- WRI 3065 - Writing for Professional Careers (3)

Total: 18 Units

Major Total: 48 Units

## Composition, Bachelor of Music

### Program Learning Outcomes

*Students who complete the program in Composition will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate mastery of advanced tonal, timbral and formal concepts.
6. Synthesize applications of diverse genres and media in the composition of original works using small and large ensembles, atonal materials, and electronic media.
7. Produce a substantial body of original compositions using a variety of tonal languages, performance forces and expressive content.

## Core Curriculum

*(Required of all Music majors)*

## Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

## Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

## Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Requirements

*For the Bachelor in Music with a concentration in Composition, the following courses are required in addition to the Core Curriculum indicated above:*

- MUC 2052 - Private Composition **(1-2) (2) Units required**
  - MUC 3052 - Private Composition **(1-2) (4) Units required**
  - MUC 4052 - Private Composition **(1-2) (4) Units required**
  - MUC 4077 - Senior Recital in Composition **(0)**
  - MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
  
  - MUA 3013 - Instrumental Conducting **(2) OR**
  - MUA 3012 - Choral Conducting and Literature **(2)**
  
  - MUH 3033 - Music History and Literature III **(2)**
  - *Upper-division music theory* **(12)**
  - *Voice (class or private)* **(2)**
  - *One-unit Ensembles* **(4)**
  - *Music Electives* **(15)**
- Total additional requirements: 47 units**

Note(s): Transfer students and PLNU students changing their major to Music in the BMUS degree must complete one ensemble and two units of applied music each semester.

## Special Requirements

1. A solo Junior Recital of at least 30 minutes given during the junior or senior year is required of Music majors selecting majors in Performance and Music Education. The student must achieve the 3000-level of proficiency before scheduling the Junior Recital. The student must also enroll for the appropriate level of applied study during the semester of the recital performance.
2. Students accepted into performance degree programs must achieve the 3000-level of proficiency in their performing area and give a Junior Recital during their junior year. They must also achieve the 4000- level of proficiency and give a solo Senior Recital, one hour in length, during their senior year. The performance degree programs are reserved for students of marked talent and proficiency.
3. For graduation, Bachelor of Music and Music Education majors must earn credit in a one-unit ensemble for a minimum of eight semesters. Bachelor of Arts majors must earn credit in a one-unit ensemble for a minimum of four semesters. Wind, string, and percussion students meet this requirement by performing in the Concert Band or Chamber Orchestra. Vocalists meet this requirement by performing in Chorale, Concert Choir or Point Loma Singers. Keyboard students may choose either choral or instrumental ensembles.
4. Music majors are required to perform in Monday afternoon student recitals at least once per semester until applied study requirements are completed.

## Computer Science: Cyber Security, B.S.

### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)
- MTH 1064 - Calculus I (GE) (3) \*
- MTH 1074 - Calculus II (3)
- MTH 2003 - Introduction to Statistics (3) \*\*

Total Lower-Division Units: 22 (18 units other than GE)

*\*MTH 1044 may substitute for MTH 1064.*

*\*\*MTH 3063 or MTH 3083 may substitute for MTH 2003.*

## Upper-Division Requirements

- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- CSC 4081 - Senior Seminar in Computer Science (1)
- ISS 3073 - Networking and Security (3)
- ISS 3092 - Topics in Cyber Security (2)
- ISS 4003 - Information and Computer Security (3)
- ISS 4012 - Topics in Information Security (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 4102 - Independent Research in Computer Science I (2) **and**
- CSC 4121 - Independent Research in Computer Science II (1)
  
- CSC 4133 - Service Learning in Computer Science (3)
  
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
  
- ISS 4072 - Internship in Information Systems (2) \*\*\*

Total Upper-Division Units: 37-38

5-6 Additional Units Chosen From:

\*\*\*Six (6) units if ISS 4072 chosen for sequence above.

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4091 - Independent Studies in Computer Science (1-4)
- CSC 4093 - Software Project (3)
- CSC 4102 - Independent Research in Computer Science I (2)
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- EGR 2024 - Electronics and Circuit Analysis (3)
- EGR 2024L - Electronics and Circuit Analysis Lab (1)
- EGR 3053 - Analog Electronics (2)

- EGR 3053L - Analog Electronics Lab (1)
- EGR 3093 - Digital Electronics (2)
- EGR 3093L - Digital Electronics Lab (1)
- EGR 4042 - Embedded Systems and Robotics (1)
- EGR 4042L - Embedded Systems and Robotics Lab (1)
- EGR 4103 - Electrical Signals and Systems (3)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 4072 - Internship in Information Systems (2)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)

Total Elective Units: 5-6

Total Units for the Degree: 59 (plus 4 units of GE)

## **Computer Science: Software Engineering, B.A.**

### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)
- MTH 1064 - Calculus I (GE) (3) \*
- MTH 2003 - Introduction to Statistics (3) \*\*

Total Lower-Division Units: 18 (14 non-GE units)

*\*MTH 1044 may substitute for MTH 1064.*

*\*\*MTH 3063 or MTH 3083 may substitute for MTH 2003.*

## Upper-Division Requirements

- BUS 3013 - Administrative Communication (3)
- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- CSC 4081 - Senior Seminar in Computer Science (1)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 4102 - Independent Research in Computer Science I (2) **and**
- CSC 4121 - Independent Research in Computer Science II (1)
  
- CSC 4133 - Service Learning in Computer Science (3)
  
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
  
- ISS 4072 - Internship in Information Systems (2) \*\*\*

Total Upper Division Units: 30-31

4-5 Additional Units Chosen From:

\*\*\* **Five (5) units required if ISS 4072 chosen from sequence above.**

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4091 - Independent Studies in Computer Science (1-4)
- CSC 4093 - Software Project (3)
- CSC 4102 - Independent Research in Computer Science I (2)
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- ISS 3073 - Networking and Security (3)
- ISS 3092 - Topics in Cyber Security (2)
- ISS 4003 - Information and Computer Security (3)

- ISS 4012 - Topics in Information Security (2)
- ISS 4072 - Internship in Information Systems (2)
- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)
- MTH 3073 - Mathematical Modeling (3)

Total Units: 49 Units Without GE

## **Computer Science: Software Engineering, B.S.**

### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)
- MTH 1064 - Calculus I (GE) (3) \*
- MTH 1074 - Calculus II (3)
- MTH 2003 - Introduction to Statistics (3) \*\*

Total Lower-Division Units: 22 (18 units other than GE)

*\*MTH 1044 may substitute for MTH 1064.*

*\*\* MTH 3063 or MTH 3083 may substitute for MTH 2003.*

### Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- CSC 3014 - Operating Systems (4)

- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- CSC 4081 - Senior Seminar in Computer Science (1)
- CSC 4093 - Software Project (3)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 4102 - Independent Research in Computer Science I (2) **and**
- CSC 4121 - Independent Research in Computer Science II (1)
  
- CSC 4133 - Service Learning in Computer Science (3)
  
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
  
- ISS 4072 - Internship in Information Systems (2) \*\*\*

Total Upper-Division Units: 33-34

6-7 Additional Units Chosen From:

\*\*\*Seven (7) units required if ISS 4072 chosen from the sequence above.

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4091 - Independent Studies in Computer Science (1-4)
- CSC 4102 - Independent Research in Computer Science I (2)
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- ISS 3073 - Networking and Security (3)
- ISS 3092 - Topics in Cyber Security (2)
- ISS 4003 - Information and Computer Security (3)
- ISS 4012 - Topics in Information Security (2)
- ISS 4072 - Internship in Information Systems (2)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)

Total Elective Units: 6-7

Total: 59 Units Without GE

## **Computer Science: Technical Applications, B.S.**

### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1074 - Calculus II (3)
- MTH 2003 - Introduction to Statistics (3) \*
- MTH 2033 - Linear Algebra (3)

Total Lower-Division Units: 25 (21 units other than GE)

*\*MTH 3063 or MTH 3083 may substitute for MTH 2003.*

### Upper-Division Requirements

- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- CSC 4081 - Senior Seminar in Computer Science (1)
- CSC 4093 - Software Project (3)
- ISS 3073 - Networking and Security (3)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 4102 - Independent Research in Computer Science I (2) **and**
- CSC 4121 - Independent Research in Computer Science II (1)
  
- CSC 4133 - Service Learning in Computer Science (3)
  
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
  
- ISS 4072 - Internship in Information Systems (2) \*\*

Total Upper-Division Units: 31-32

5-6 Additional Units Chosen From:

**\*\*Six (6) units required if ISS 4072 chosen from sequence above.**

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4091 - Independent Studies in Computer Science (1-4)
- CSC 4102 - Independent Research in Computer Science I (2)
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 3092 - Topics in Cyber Security (2)
- ISS 4003 - Information and Computer Security (3)
- ISS 4012 - Topics in Information Security (2)
- ISS 4072 - Internship in Information Systems (2)
- MTH 2074 - Calculus III (4)
- MTH 3073 - Mathematical Modeling (3)

Total Elective\*\*\* Units: 5-6

*\*\*\*An elective course may not count as both an upper-division requirement and a required "additional elective."*

## **Cross Disciplinary Studies: Integrated Education B.A.**

### **Program Learning Outcomes**

Cross-Disciplinary Studies: Integrated Education offers a broad interdisciplinary education, grounded in educational theory and practice, utilizing courses from the sciences, the humanities and the professional schools. This

degree prepares candidates for a variety of post-graduate professional and academic experiences in workplace training, instructional design, people management and leadership.

Candidates who complete the program in Cross Disciplinary Studies: Integrated Education will be able to do the following:

1. Demonstrate effective presentation skills, one-on-one and with groups.
2. Produce effective written communication.
3. Employ critical thinking and logic to solve problems in a variety of professional environments.
4. Demonstrate information literacy by acquiring and utilizing specific content from a variety of sources to plan teaching and learning events.
5. Apply an interdisciplinary understanding of content regarding diverse and cross-cultural communities.
6. Apply faith-based influences and beliefs within professional/educational settings.
7. Reflect on and engage in spiritual growth opportunities in personal and professional settings.
8. Serve effectively within their communities.

## Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Integrated Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 8 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

Reading, Language and Literature  
Visual and Performing Arts  
Physical Education/Health  
Human Development  
Science  
Math  
History and Social Science  
Pre-Business  
Media Communication

## Lower Division Requirements:

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- COM 1000 - Principles of Human Communication (GE) (3)
- EXS 2001 - Fundamentals of Fitness Assessment and Development (2)
- HIS 1010 - World Civilizations I (GE) (3)
- HIS 1020 - United States History from Early America to the Twentieth Century (3)
- LIT 2000 - Literature and Culture (GE) (2)
- MTH 1013 - College Algebra (3)
- MTH 2013 - Fundamentals of Elementary Mathematics I (3)
- MTH 2023 - Fundamentals of Elementary Mathematics II (3)
- PSC 1014 - Physical Science for Teachers (GE) (4)
- PSC 1023 - Earth and Space Science for Teachers (3)
- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3)  
OR
- PSY 1003 - General Psychology (GE) (3)

- TRE 1001 - Introduction to Theatre (GE) (2)
- WRI 1010 - College Composition: Writing and Research - First Year Experience (GE) (4)  
OR
- WRI 1016 - College Composition: Research - First Year Experience (GE) (2) \*

*\* WRI 1016 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

Choose one course from the following three:

- SWF 3015 - Health and Well-Being (GE) (2)
- PED 1000 - Fitness Through Movement (GE) (2)
- PED 2000 - Optimal Health (GE) (2)

Choose one course from the following two:

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 2001 - Cultural Anthropology (GE) (3)

Choose one course from the following five:

- ART 1000 - Introduction to Art (GE) (2)
- ART 1002 - Fundamentals of Art (GE) (3)
- ART 2000 - History of Art I (GE) (3)
- ART 2001 - History of Art II (GE) (3)
- MUH 1000 - Introduction to Music (GE) (2)

Choose one course from the following two:

- PHL 2001 - Introduction to Philosophy (GE) (3)
- PHL 2011 - Ethics (GE) (3)

Choose one course from the following four:

- LIT 3050 - World Literature (GE) (3)
- LIT 3051 - World Cinema (GE) (3)
- LIT 3052 - Diverse Voices in American Literature (GE) (3)
- LIT 3053 - Women Writers (GE) (3)

Choose one of the following sequences:

- SPA 1001 - Elementary Spanish I (GE) (4) AND
- SPA 1002 - Elementary Spanish II (GE) (4)  
OR
- FRE 1001 - Elementary French I (GE) (4) AND
- FRE 1002 - Elementary French II (GE) (4)

OR

- GER 1001 - Elementary German I (GE) **(4)** AND
- GER 1002 - Elementary German II (GE) **(4)**

## Upper Division Requirements

- COM 2050 - Intercultural Communication **(3)**
- HIS 3070 - California History **(4)**
- LIT 3025 - Children's Literature **(3)**
- SOC 3060 - Race and Ethnicity **(3)**
- MGT 3082 - Applied Entrepreneurship **(3)**
- ECO\*\*\*\* (3) Consult with EDU department for course options.

Choose one course from the following two:

- ART 3025 - Non-Western Art History **(3)**
- MUH 3034 - World Music **(2)**

Choose one course from the following five:

- CHU 3040 - Women in the Christian Tradition (GE) **(3)**
- CHU 3095 - The Christian Tradition (GE) **(3)**
- THE 3005 - Christian Faith and the Natural Sciences (GE) **(3)**
- THE 3060 - Christian Life as Vocation (GE) **(3)**
- THE 3070 - Global Christianity (GE) **(3)**

Choose one course from the following two:

*LIT 3051 cannot count in both the major and GE requirement. Choose LIT 4048 or complete LIT 3051 plus an additional upper division LIT GE option.*

- LIT 3051 - World Cinema (GE) **(3)**
- LIT 4048 - Postcolonial Classics and Theory **(3)**

Choose one course from the following three:

- MTH 1044 - Calculus With Applications (GE) **(4)**
- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 3003 - Problem Solving (GE) **(3)**

Choose one course from the following two:

- PSY 3008 - Developmental Psychology - Birth Through Adolescence **(4)**
- CHD 1020 - Child and Adolescent Development **(4)**

Total: 29 Units

## Integrated Education Upper Division Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3)
- EDU 4004 - Foundations of Special Education (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)

Total: 8 Units

## Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Integrated Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 9 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

## Reading, Language and Literature

### English Emphasis

- LIT 3000 - Literary Analysis (3)

Choose ONE of the following Linguistics and Writing courses:

- LIN 3012 - Introduction to Linguistics (3)
- LIN 3065 - English Grammar and Usage (3)
- WRI 3015 - Advanced English Composition (3)

Choose ONE of the following Lower-Division Literature courses:

- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 2054 - British Writers I (3)
- LIT 2055 - British Writers II (3)
- LIT 2056 - American Writers I (3)
- LIT 2057 - American Writers II (3)

Choose ONE Upper-Division Literature course (NOT to include LIT 3025) - 1 course (3 units)

### French Emphasis

- FRE 2050 - Intermediate French I (3)
- FRE 2051 - Intermediate French II (3)
  
- FRE 3003 - French Conversation (3)  
**OR**
- FRE 3015 - French Culture and Civilization (3)
  
- FRE 3020 - Survey of French Literature (3)  
**OR**
- FRE 3025 - Francophone Literature (3)

## Spanish Emphasis

- SPA 2051 - Intermediate Spanish Conversation II (3)
- SPA 3002 - Advanced Grammar and Reading (3)
- SPA 3000 - Civic Engagement: Conversation, Culture and Community (3)  
Choose one:
- SPA 3010 - Latin American Culture and Civilization (3)
- SPA 3015 - Culture and Civilization of Spain (3)
- SPA 3020 - Mexican American Literature and Culture (3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)

## Visual and Performing Arts

### Art Emphasis

- ART 3019 - Visual Arts in the Classroom I (3)
- TRE 3054 - Movement (3)  
Choose one:
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)  
Choose one:
- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
- ART 3025 - Non-Western Art History (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)

### Music Emphasis

- MUA 2012 - Beginning Conducting (2) (*Requires that candidate knows how to read music*)
- MUE 3041 - Music Skills for the Elementary Classroom Teacher (3)
- TRE 3054 - Movement (3)
- Private Lessons or Instrumental Band (2 units)  
  
Choose one of the following 3 courses:
- MUH 1000 - Introduction to Music (GE) (2)
- MUH 1001 - Introduction to Listening (GE) (2)
- MUH 3034 - World Music (2)

### Theatre Emphasis

- TRE 2070 - Acting (3)
- TRE 3054 - Movement (3)
- ART 3019 - Visual Arts in the Classroom I (3)
- TRE 3050 - Musical Theatre (3)

### Physical Education/Health

- KIN 3012 - Motor Learning and Motor Development (3)

- PED 2020 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 2000 - Optimal Health (GE) (2)
- 2-3 units of an approved Education, Kinesiology or Physical Education course (2-3 units).

Choose one:

- SWF 3015 - Health and Well-Being (GE) (2)
- PSY 3060 - Human Sexuality (3)

## Human Development

- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)

Choose one:

- CHD 1020 - Child and Adolescent Development (4)
- CHD 1050 - Human Development (3)

Choose one:

- PSY 3020 - Social Psychology (3)
- SOC 2050 - Sociology of the Family (3)

Choose one:

- CHD 4020 - Child Development in the Family and Community (4)
- PSY 3080 - Family Development and Family Therapies (3)

## Science

**NOTE: Students who select the Science Concentration are not required to take BIO 1003 and BIO 1003L.**

- BIO 2010 - Cell Biology and Biochemistry (GE) (3) **and**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3) **and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)

Choose one:

- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- OR**
- CHE 1052 - General Chemistry I (GE) (4) **and**
- CHE 1052L - General Chemistry I Lab (GE) (1)

## Math

Individualized programs will be designed with a Math advisor beginning with the sophomore year.

## History and Social Science

### American Studies Emphasis

Required:

- HIS 3070 - California History (4)

Choose two:

- HIS 3016 - Colonial and Revolutionary America (4)
- HIS 3020 - United States History, 1815-1914 (4)
- HIS 4025 - United States Since 1914 (4)
- HIS 4035 - Asian-American History: 1800 to the Present (4)
- HIS 4077 - Gender and Law in the U.S. (WS) (4)
- POL 1065 - American Government (4)
- POL 3041 - Campaigns and Elections (4)
- POL 3060 - Urban Politics (4)
- POL 3080 - Congress and the Presidency (4)
- POL 4041 - Issues in Public Policy (4)

### International Studies Emphasis

Choose one (if 4 units) or two courses:

Choose one (if 4 units) or 2 courses:

- POL 2030 - Introduction to International Relations (4)
- POL 2090 - World Regional Geography (3)
- SOC 2001 - Cultural Anthropology (GE) (3)

Choose two:

- HIS 3055 - Modern Middle East (4)
- HIS 3065 - Modern Japan and Korea (4)
- HIS 4015 - Europe and the World (4)
- HIS 4036 - America in East Asia: 1800 to the Present (4)
- POL 4035 - Global Governance (4)
- POL 4055 - Protest and Social Movements in World Politics (4)

### Business Emphasis

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- MGT 2012 - Principles of Management (3)
- MKT 3032 - Principles of Marketing (3)

Choose one from the following:

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

### Media Communication

- COM 1075 - Scriptwriting for Television and Film (3)
- COM 3095 - Media Literacy (3)
- COM 2043 - Introduction to TV and Film Production (3)
- COM 2050 - Intercultural Communication (3)

## **Cross Disciplinary Studies: Teacher Education, B.A.**

Each course in this section requires 20 hours in a field placement in order to meet the required field hours toward the California Preliminary Teaching Credential.

### **Program Learning Outcomes**

Cross-Disciplinary Studies: Teacher Education prepares candidates for a successful K-12 teaching career. Within the degree are credential courses approved by the California Commission on Teacher Credentialing.

Candidates who complete the program in Cross-Disciplinary Studies: Teacher Education will be able to do the following:

1. Demonstrate effective presentation skills, one-on-one and with groups.
2. Produce effective written communication.
3. Employ critical thinking and logic to solve problems in a variety of environments, to include the K-6 classroom.
4. Demonstrate information literacy by acquiring and utilizing specific content information from a variety of sources for classroom instructional planning.
5. Apply an interdisciplinary understanding of content regarding diverse and cross-cultural communities.
6. Apply faith-based influences and beliefs within professional/educational settings.
7. Reflect on and engage in spiritual and professional growth opportunities in personal and professional and educational settings.
8. Serve effectively within their communities and in educational settings.

### **Concentrations**

- |                                    |                              |
|------------------------------------|------------------------------|
| • Reading, Language and Literature | • Science                    |
| • Visual and Performing Arts       | • Math                       |
| • Physical Education/Health        | • History and Social Science |
| • Human Development                |                              |

### **Lower-Division Requirements**

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- COM 1000 - Principles of Human Communication (GE) (3)
- HIS 1010 - World Civilizations I (GE) (3)
- HIS 1020 - United States History from Early America to the Twentieth Century (3)
- LIT 2000 - Literature and Culture (GE) (2)
- MTH 1013 - College Algebra (3) (or passing placement exam scores)
- MTH 2013 - Fundamentals of Elementary Mathematics I (3)

- MTH 2023 - Fundamentals of Elementary Mathematics II (3)
- PSC 1014 - Physical Science for Teachers (GE) (4)
- PSC 1023 - Earth and Space Science for Teachers (3)
- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3) **OR**
- PSY 1003 - General Psychology (GE) (3)
- TRE 1001 - Introduction to Theatre (GE) (2)
- WRI 1010 - College Composition: Writing and Research - First Year Experience (GE) (4)  
**OR**
- WRI 1016 - College Composition: Research - First Year Experience (GE) (2) \*

*\* WRI 1016 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

Choose one course from the following 3 courses:

- SWF 3015 - Health and Well-Being (GE) (2)
- PED 1000 - Fitness Through Movement (GE) (2)
- PED 2000 - Optimal Health (GE) (2)

Choose one course from the following 2 courses:

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 2001 - Cultural Anthropology (GE) (3)

Choose one course from the following 5 courses:

- ART 1000 - Introduction to Art (GE) (2)
- ART 1002 - Fundamentals of Art (GE) (3)
- ART 2000 - History of Art I (GE) (3)
- ART 2001 - History of Art II (GE) (3)
- MUH 1000 - Introduction to Music (GE) (2)

Choose one course from the following 2 courses:

- PHL 2001 - Introduction to Philosophy (GE) (3)
- PHL 2011 - Ethics (GE) (3)

Choose one of the following sequences:

- SPA 1001 - Elementary Spanish I (GE) (4) **AND**
- SPA 1002 - Elementary Spanish II (GE) (4)
- FRE 1001 - Elementary French I (GE) (4) **AND**
- FRE 1002 - Elementary French II (GE) (4)

- GER 1001 - Elementary German I (GE) **(4) AND**
- GER 1002 - Elementary German II (GE) **(4)**

Total: 65-69 Units

### Upper-Division Requirements

- ART 3019 - Visual Arts in the Classroom I **(3)**
- HIS 3070 - California History **(4)**
- LIT 3025 - Children's Literature **(3)**
- MUE 3041 - Music Skills for the Elementary Classroom Teacher **(3)**
- PED 3008 - Methods of Teaching Physical Education **(3)**

Choose one course from the following 5 courses:

- CHU 3040 - Women in the Christian Tradition (GE) **(3)**
- CHU 3095 - The Christian Tradition (GE) **(3)**
- THE 3005 - Christian Faith and the Natural Sciences (GE) **(3)**
- THE 3060 - Christian Life as Vocation (GE) **(3)**
- THE 3070 - Global Christianity (GE) **(3)**

Choose one course from the following 3 courses:

- MTH 1044 - Calculus With Applications (GE) **(4)**
- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 3003 - Problem Solving (GE) **(3)**

Choose one course from the following 2 courses:

- CHD 1020 - Child and Adolescent Development **(4)**
- PSY 3008 - Developmental Psychology - Birth Through Adolescence **(4)**

Choose one course from the following 4 courses:

- LIT 3050 - World Literature (GE) **(3)**
- LIT 3051 - World Cinema (GE) **(3)**
- LIT 3052 - Diverse Voices in American Literature (GE) **(3)**
- LIT 3053 - Women Writers (GE) **(3)**

Total 29-30 Units

### Upper Division Requirements in Education

Each course in this section has prerequisites and requires 20 hours in a field placement in order to meet the required field hours toward the California Preliminary Teaching Credential. See Notes \*\*

- EDU 3002 - Foundations of Education and Learning Theory (3)
- EDU 3006 - Principles of Language Acquisition (3)
- EDU 3024 - Differentiated Mathematics Instruction for All Learners (3)
- EDU 4004 - Foundations of Special Education (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)

Total: 14 Units

## Teacher Credential Candidates

Teacher Education candidates who complete the above fourteen (14) units of Education coursework required for their bachelor's degree may complete the remainder of the teaching credential within the Master of Arts in Teaching degree, specially choosing to also add the Reading and Literacy Added Authorization eight (8) units and six (6) elective units.

Candidates who take additional education courses would apply as a graduate student to finish their credential coursework and then seek a Master of Arts in Education degree in their concentration of choice.

## Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Teacher Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 8 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

## Reading, Language, and Literature

### English Emphasis

- LIT 3000 - Literary Analysis (3)
- Choose ONE of the following Linguistics and Writing courses (3 units)**
- LIN 3012 - Introduction to Linguistics (3)
  - LIN 3065 - English Grammar and Usage (3)
  - WRI 3015 - Advanced English Composition (3)
- Choose ONE of the following Lower Division Literature courses (3 units)**
- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
  - LIT 2054 - British Writers I (3)
  - LIT 2055 - British Writers II (3)
  - LIT 2056 - American Writers I (3)
  - LIT 2057 - American Writers II (3)
- Choose ONE Upper Division Literature course [NOT to include LIT 3025] (3 units)**

### French Emphasis

- FRE 2050 - Intermediate French I (3)

- FRE 2051 - Intermediate French II **(3)**
- FRE 3003 - French Conversation **(3)**  
**OR**
- FRE 3015 - French Culture and Civilization **(3)**
- FRE 3020 - Survey of French Literature **(3)**  
**OR**
- FRE 3025 - Francophone Literature **(3)**

### Spanish Emphasis

- SPA 2051 - Intermediate Spanish Conversation II **(3)**
- SPA 3002 - Advanced Grammar and Reading **(3)**
- SPA 3000 - Civic Engagement: Conversation, Culture and Community **(3)**

Choose one:

- SPA 3010 - Latin American Culture and Civilization **(3)**
- SPA 3015 - Culture and Civilization of Spain **(3)**
- SPA 3020 - Mexican American Literature and Culture **(3)**
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film **(3)**

### Visual and Performing Arts

#### Music Emphasis

- MUA 2012 - Beginning Conducting **(2)**
- MUE 3041 - Music Skills for the Elementary Classroom Teacher **(3)**
- TRE 3054 - Movement **(3)**
- Private Lessons or Instrumental Band **(2 units)**

Choose one:

- MUH 1000 - Introduction to Music (GE) **(2)**
- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3034 - World Music **(2)**

#### Art Emphasis

- ART 3019 - Visual Arts in the Classroom I **(3)**
- TRE 3054 - Movement **(3)**

Choose one:

- ART 1004 - Three-Dimensional Design: Composition and Space **(3)**
- ART 1015 - Drawing I **(3)**

Choose one:

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
- ART 3025 - Non-Western Art History (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)

### Theatre Emphasis

- TRE 2070 - Acting (3)
- TRE 3054 - Movement (3)
- ART 3019 - Visual Arts in the Classroom I (3)
- TRE 3050 - Musical Theatre (3)

### Physical Education/Health

- KIN 3012 - Motor Learning and Motor Development (3)
- PED 2000 - Optimal Health (GE) (2)
- PED 2020 - Team Sports Fundamentals and Strategies (GE) (2)  
2-3 units of an approved Education, Kinesiology or Physical Education course.

Choose one:

- SWF 3015 - Health and Well-Being (GE) (2)
- PSY 3060 - Human Sexuality (3)

### Human Development

- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)

Choose one:

- CHD 1020 - Child and Adolescent Development (4)
- CHD 1050 - Human Development (3)

Choose one:

- PSY 3020 - Social Psychology (3)
- SOC 2050 - Sociology of the Family (3)

Choose one:

- CHD 4020 - Child Development in the Family and Community (4)
- PSY 3080 - Family Development and Family Therapies (3)

### Science

**NOTE: Students who select the Science Concentration are not required to take BIO 1003 and BIO 1003L.**

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3) and**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
  
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3) and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**

Choose one:

- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) **(4) and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**
- OR**
- CHE 1052 - General Chemistry I (GE) **(4) and**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**

## Math

Individualized programs will be designed with a Math advisor beginning with the sophomore year.

## History and Social Science

### American Studies Emphasis

Required:

- HIS 3070 - California History **(4)**

Choose two:

- HIS 3016 - Colonial and Revolutionary America **(4)**
- HIS 3020 - United States History, 1815-1914 **(4)**
- HIS 4025 - United States Since 1914 **(4)**
- HIS 4035 - Asian-American History: 1800 to the Present **(4)**
- HIS 4077 - Gender and Law in the U.S. (WS) **(4)**
- POL 1065 - American Government **(4)**
- POL 3041 - Campaigns and Elections **(4)**
- POL 3060 - Urban Politics **(4)**
- POL 3080 - Congress and the Presidency **(4)**
- POL 4041 - Issues in Public Policy **(4)**

### International Studies Emphasis

Choose one (if 4 units) or 2 courses:

- POL 2030 - Introduction to International Relations **(4)**

- POL 2090 - World Regional Geography (3)
- SOC 2001 - Cultural Anthropology (GE) (3)

Choose two:

- HIS 3055 - Modern Middle East (4)
- HIS 3065 - Modern Japan and Korea (4)
- HIS 4015 - Europe and the World (4)
- HIS 4036 - America in East Asia: 1800 to the Present (4)
- POL 4035 - Global Governance (4)
- POL 4055 - Protest and Social Movements in World Politics (4)

### \*\* Note(s):

Completion of this program partially fulfills requirements for a Teaching Credential in the State of California. Refer to the School of Education website for further information.

Teacher Education majors must earn a grade of C- or higher in all courses required by the major and in all 4000-level elective courses to get credit towards the major.

Teacher Education majors must earn a grade of C or higher in all Education (EDU) courses, to get credit for credential courses (as per the California Commission for Teacher Credentialing guidelines).

All candidates are required to obtain a Certificate of Clearance, a clear TB test, personal liability insurance, and purchase of a Task stream account prior to registration in any Education course.

Passage of the California Basic Skills Test (CBEST) is required prior to registration in EDU 3006.

Failure to complete the fieldwork requirement in an Education (EDU) course will result in a non-passing grade for that course.

Candidates who entered the Cross-Disciplinary Studies major in the 2016-17 academic year and beyond, and who fulfill all major requirements, are covered by the Elementary Subject Matter Waiver and waived from the CSET exam toward the Multiple Subjects Teaching Credential. Candidates who fulfill major requirement listed in catalogs prior to 2016-17 must pass the Multiple Subjects CSET exam upon complete of 12 Education units.

## Teacher Credential Candidates

Teacher Education candidates who complete the above fourteen (14) units of Education coursework required for their bachelor's degree may complete the remainder of the teaching credential within the Master of Arts in Teaching degree, specially choosing to also add the Reading and Literacy Added Authorization eight (8) units and six (6) elective units.

Candidates who take additional education courses would apply as a graduate student to finish their credential coursework and then seek a Master of Arts in Education degree in their concentration of choice.

## Data Science, B.S.

### Program Learning Outcomes

- Students will be able to demonstrate facility with analytical concepts.

- Students will be able to write proofs.
- Students will be able to demonstrate facility with algebraic structures.
- Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
- Students will be able to speak about their work with precision, clarity, and organization.
- Students will be able to write about their work with precision, clarity, and organization.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Students will collaborate effectively in teams.
- Students will be able to understand and create arguments supported by quantitative evidence.
- Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

## Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)
- MTH 2092 - Applied Project for Data Science (2)

Total Lower-Division Units: 28 (24 non-GE units)

## Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3012 - Number Theory with Proofs (2)
- MTH 3033 - Differential Equations (3)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 3083 - Mathematical Probability and Statistics (3)
- MTH 4053 - Advanced Applied Statistics (3)
- MTH 4081 - Senior Seminar in Mathematics (1)

**Choose one course from:**

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

**Choose one course from:**

- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)

**Choose one course from:**

- MTH 4062 - Research in Data Science (2)
- MTH 4072 - Internship in Data Science (2)

## Biology Track

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

**Choose one of the following:**

- BIO 2011 - Ecological and Evolutionary Systems (GE) (3) **and**
  - BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- OR**
- BIO 3045 - Genetics (3) **and**
  - BIO 3045L - Genetics Laboratory (1)

*Recommended: Take both BIO 2011/BIO 2011L and BIO 3045/BIO 3045L if there is space in your schedule.*

## Finance Track

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- FIN 3035 - Business Finance (3)

**Choose one of the following:**

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

*If you are planning on becoming an Actuary, the Society of Actuaries requires BOTH ECO 1001 and ECO 1002. The Society of Actuaries also requires FIN 3035 and FIN 3085. If you complete these two sequences with a B or better, you will receive credit for two of the 10 requirements for becoming an actuary.*

Total Upper-Division Units: 33-35

Note(s):

*An elective course may not count as both an upper-division requirement and a required "additional elective."*

Total Non-GE Units for Degree: 59

## Dietetics, B.S.

### Program Learning Outcomes

**Students who complete the program in Dietetics will be able to:**

1. Demonstrate content knowledge of nutrient needs of growth and development on nutrient needs during the lifecycle stages of prenatal through elderly.
2. Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
3. Apply content knowledge to disease prevention and treatment, and develop skills in teaching/counseling nutrition knowledge to individuals or groups.
4. Understand the food and food systems foundation through techniques of food preparation and application to the development, modification, and evaluation of recipes, menus and food products acceptable to diverse groups.
5. Apply knowledge of the physical and biological science foundation as it relates to physiology of the body, nutrient sources, and nutrient function.
6. Utilize principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation necessary for the implementation of food and nutrition services in professional settings.
7. Analyze, interpret, and evaluate current evidence-based research related to nutrition topics.
8. Develop skills at writing science-based papers using analyzed research data as references.
9. Examine cultural differences in food choices and ethics when working with peoples of diverse ethnic, religious, and financial backgrounds.
10. Evaluate the effects of societal, cultural, and financial dynamics upon diet trends, dietary choices, and food preparation methods among families and societies.
11. Identify career paths and access appropriate career plans for identifying professional area of service in dietetics.

## Lower-Division Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors **(3)**
- BIO 1030 - Human Anatomy and Physiology I (GE) **(3)**
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) **(1)**
- BIO 1040 - Human Anatomy and Physiology II **(3)**
- BIO 1040L - Human Anatomy and Physiology II Laboratory **(1)**
- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2020 - Microbiology of Infectious Diseases **(3)**
- BIO 2020L - Microbiology of Infectious Diseases Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4)**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- CHD 1050 - Human Development **(3)**
- MGT 2012 - Principles of Management **(3)**
- NUT 1010 - Fundamentals of Food **(2)**
- NUT 2025 - Fundamentals of Nutrition **(3)**
- PHL 2011 - Ethics (GE) **(3)**
- SOC 2001 - Cultural Anthropology (GE) **(3)**
- SWF 1000 - Living Justly in Contemporary Society (GE) **(3)**

Total: 51 Units

## Upper-Division Requirements

- FCS 3000 - Quantity Food Production (3)
- NUT 3003 - Cultural Foods (2)
- NUT 3020 - Nutrition Assessment (2)
- NUT 3030 - Community Nutrition (3)
- NUT 3031 - Community Nutrition Practicum (1)
- NUT 3035 - Nutrition Research Through the Life Cycle (2)
- NUT 3065 - Advanced Nutrition (3)
- NUT 4014 - Practices in Nutrition Education and Dietary Counseling (2)
- NUT 4015 - Medical Nutrition Therapy (3)
- NUT 4017 - Medical Nutrition Therapy Practicum (1)
- NUT 4035 - Food Service Management (2)
- NUT 4055 - Food Science (3)
- NUT 4097 - Senior Seminar (2)
- SWF 3006 - Research Basics (3)
- SWF 3015 - Health and Well-Being (GE) (2)

Total: 35 Units

Major Total: 86 Units

### Recommended Courses

- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)
- MKT 3032 - Principles of Marketing (3)
- KIN 3040 - Physiology of Exercise (3)

### Additional Information

The major in Dietetics requires 132 units to graduate, four (4) more than the minimum 128 units required for most majors at PLNU. Students are encouraged to take one or two courses in the summer to lighten their course loads during the regular semester.

Students interested in becoming a Registered Dietitian should consult the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2190, Chicago IL 60606-6995, 312-899-5400.

Graduates in the Dietetics major will require further training by applying to an AND-accredited internship program in order to complete AND requirements to be a registered dietitian (R.D.). (The Commission on Dietetic Registration will require a minimum of a master's degree to take the credentialing exam for registered dietitians beginning on January 1, 2024.)

### Majoring in Dietetics

Graduates in the Dietetics major from PLNU earn a Verification Statement that will allow them to apply to an AND-accredited dietetic internship program, the second step to becoming a Registered Dietitian (R.D.)

#### **To be verified at PLNU, the student must:**

- Earn a "C" or better in all courses for the Dietetics major required for the DPD

- Maintain a GPA of 2.800 or higher
- Earn a B.S. degree (official transcripts, including the one that shows an earned bachelor's degree, must be in the DPD file)
- Participate in community service learning activities during the program, as evidenced in the senior portfolio or in a project
- Demonstrate ethical principles and follow AND's Code of Ethics

## Students with a Bachelor's Degree from Another University Seeking a Verification Statement

If a student has earned a bachelor's degree from another university, and is seeking a Verification Statement for the Dietetics program, the student may choose one of the two following paths:

1. Apply to PLNU for a Verification Statement in the Dietetics program, with no degree attached (no second bachelor's degree). This pathway requires:
  - a. A bachelor's degree from a college/university in another major
  - b. Official transcripts reviewed by the Director of Dietetics and the undergraduate Director of Admissions
  - c. A minimum 24 units of upper-division Dietetics courses and prerequisites taken at PLNU. (Courses required will be based on previous coursework transferred, and the date that courses were taken)
  - d. Acceptance to PLNU

OR

2. Apply to PLNU for a second Bachelor of Science degree in Dietetics. This pathway requires:
  - a. Official transcripts reviewed by the Director of Dietetics and the undergraduate Director of Admissions
  - b. Coursework and prerequisites required for the Dietetics major
  - c. Coursework to meet all general education requirements at PLNU
  - d. Acceptance to PLNU

## International Students Seeking a Verification Statement

If a student is an International Student seeking a Verification Statement in Dietetics from PLNU, the student must apply to the University and submit the following:

- a. All documents including high school and college transcripts translated into English and evaluated by an approved credential evaluation service before being sent to the Admissions Office. The student may contact any credential evaluator approved by the National Association of Credential Evaluators (NACES), such as World Education Services, Inc. (WES), Academic Credentials Evaluation Institute, Inc. (ACEI), and Educational Credential Evaluators, Inc. (ECE).
- b. English proficiency: A 550 paper based TOEFL or 216 computer based TOEFL.
- c. An original notarized copy of an Affidavit of Support (financial statement) submitted by a sponsor or bank, indicating sufficient funds for the educational expenses for one academic year at PLNU. (Point Loma Nazarene is a private university: therefore, tuition is the same for U.S. residents and international students.)
- d. Acceptance to PLNU
- e. A minimum 24 units of upper-division Dietetics courses and prerequisites at PLNU. (Courses required will be based on previous coursework transferred, and the date that courses were taken.)

**To be verified at PLNU, the student must:**

- Earn a "C" or better in all core curriculum DPD classes
- Maintain a GPA of 2.800 or higher
- Take at least 24 units of upper-division DPD classes at PLNU

- Demonstrate ethical principles and follow AND's Code of Ethics

## **Environmental Science (Biology), B.S.**

The interdepartmental major in Environmental Science is designed to prepare students to monitor the quality of the environment, interpret the impact of human actions on terrestrial and aquatic ecosystems, and develop strategies for ecosystem restoration. Career opportunities in this field include conservation biology, environmental analysis, wildlife biology, environmental education, ecological research, environmental planning, resource management, and environmental chemistry.

### **Program Learning Outcomes**

**Students who complete the program in Environmental Science will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological.
2. Apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.
5. Develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.
6. Be prepared for post-graduate studies or science-related careers.

### **Lower-Division Requirements**

- BIO 1002 - Environment and People (GE) **(4)** \*\*
- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)** \*\*
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)** \*\*
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- BIO 2012 - Organismal Biology **(3)**
- BIO 2012L - Organismal Biology Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4)** \*\*
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2013 - Analytical Chemistry **(3)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- MTH 1044 - Calculus With Applications (GE) **(4)** \*\*

**Choose one of three: 3 Units**

- ECO 1001 - Principles of Macroeconomics (GE) **(3)** \*\*
- ECO 1002 - Principles of Microeconomics (GE) **(3)** \*\*
- SOC 2001 - Cultural Anthropology (GE) **(3)** \*\*

Total: 39 Units

## Upper-Division Requirements

- BIO 3045 - Genetics **(3)**
- BIO 3045L - Genetics Laboratory **(1)**
- BIO 3063 - Conservation Ecology **(3)**
- BIO 3063L - Conservation Ecology Laboratory **(1)**
- BIO 4083 - Introduction to Geographic Information Systems (GIS) **(3)**
- BIO 4097 - Biology Seminar **(1)**
- CHE 3070 - Instrumental Analysis **(2)**
- MTH 3063 - Calculus Based Statistics With R **(3)**

Total: 17 Units

## Upper-Division Electives (12 units minimum)

*Of the 12 required upper division electives, a minimum of 8 units of upper-division electives are required from approved environmental off-campus programs. Both departmental chairs (Biology and Chemistry) or their designees are responsible for approving all off-campus courses. At least one-half of upper-division units in the major must be taken at PLNU.*

*The following courses can be used to transfer in these 8 units:*

- EVS 3096 - Advanced Biology **(3)**
- EVS 3097 - Advanced Ecology **(3)**
- EVS 3098 - Advanced Ecological Applications **(3)**
- EVS 3099 - Public Policy and Stewardship **(3)**

## Advanced Science Electives (8 units minimum)

*One or more approved off-campus environmental course(s) may fulfill part or all of this requirement. Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology **(2)**
- BIO 3015 - Microbiology **(3)**
- BIO 3015L - Microbiology Laboratory **(1)**
- BIO 3023 - Introduction to Oceanography **(3)**
- BIO 3023L - Introduction to Oceanography Laboratory **(1)**
- BIO 3033 - Marine Biology **(3)**
- BIO 3033L - Marine Biology Laboratory **(1)**
- BIO 3040 - Field Biology: Neotropical Ecology **(2)**
- BIO 4010 - Vertebrate Biology **(3)**
- BIO 4010L - Vertebrate Biology Laboratory **(1)**
- BIO 4023 - Advanced Human Physiology **(3)**
- BIO 4023L - Advanced Human Physiology Laboratory **(1)**

- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)
  
- BIO 4050 - Advanced Biochemistry (3)
- BIO 4050L - Advanced Biochemistry Lab (1)
- OR**
- CHE 4050 - Advanced Biochemistry (3)
- CHE 4050L - Advanced Biochemistry Lab (1)
  
- CHE 2096 - Organic Chemistry II (3)
- CHE 2096L - Organic Chemistry II Lab (1)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CHE 3051 - Organic Structure Elucidation (2)
- CHE 4066 - Bioinorganic Chemistry (2)
- CHE 4068 - Advanced Inorganic Chemistry (3)

#### Other Related Electives (4 units minimum)

*Students can customize their degree by taking one course from each of the two categories below. One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

#### Methodology:

- BIO 3052 - Research Methodology (3)
- BIO 4090 - Internship in Biology (1-3)
- BIO 4099 - Research in Biology (1-3)
- CHE 4090 - Internship in Chemistry (1-3)
- CHE 4099 - Research in Chemistry (1-2)

#### Public Policy and Stewardship:

- BUS 4075 - Sustainability in Action (3)
- PHL 3060 - Philosophy and the Sciences (3)
- POL 2090 - World Regional Geography (3)
- POL 4035 - Global Governance (4)
- POL 4041 - Issues in Public Policy (4)

Upper-Division Total: 29 Units

Bachelor of Science Total: 68 Units \*\*

*\*\*15 units meet general education requirements.*

**Environmental Science (Chemistry), B.S.**

The interdepartmental major in Environmental Science is designed to prepare students to monitor the quality of the environment, interpret the impact of human actions on terrestrial and aquatic ecosystems, and develop strategies for ecosystem restoration. Career opportunities in this field include conservation biology, environmental analysis, wildlife biology, environmental education, ecological research, environmental planning, resource management, and environmental chemistry.

## Program Learning Outcomes

**Students who complete the program in Environmental Science will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological.
2. Apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.
5. Develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.
6. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 1002 - Environment and People (GE) **(4)** \*\*
- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)** \*\*
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)** \*\*
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- BIO 2012 - Organismal Biology **(3)**
- BIO 2012L - Organismal Biology Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4)** \*\*
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2013 - Analytical Chemistry **(3)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- MTH 1044 - Calculus With Applications (GE) **(4)** \*\*

Choose one of three: 3 Units

- ECO 1001 - Principles of Macroeconomics (GE) **(3)** \*\*
- ECO 1002 - Principles of Microeconomics (GE) **(3)** \*\*
- SOC 2001 - Cultural Anthropology (GE) **(3)** \*\*

Total: 39 Units

## Upper-Division Requirements

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- BIO 4083 - Introduction to Geographic Information Systems (GIS) (3)
- BIO 4097 - Biology Seminar (1)
- CHE 3070 - Instrumental Analysis (2)
- MTH 3063 - Calculus Based Statistics With R (3)

Total: 17 Units

## Upper-Division Electives (12 units minimum)

*Of the 12 required upper division electives, a minimum of 8 units of upper-division electives are required from approved environmental off-campus programs. Both departmental chairs (Biology and Chemistry) or their designees are responsible for approving all off-campus courses. At least one-half of upper-division units in the major must be taken at PLNU.*

*The following courses can be used to transfer in these 8 units:*

- EVS 3096 - Advanced Biology (3)
- EVS 3097 - Advanced Ecology (3)
- EVS 3098 - Advanced Ecological Applications (3)
- EVS 3099 - Public Policy and Stewardship (3)

## Advanced Science Electives (8 units minimum)

*One or more approved off-campus environmental course(s) may fulfill part or all of this requirement. Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)

- BIO 4050 - Advanced Biochemistry (3)
- BIO 4050L - Advanced Biochemistry Lab (1)
- OR**
- CHE 4050 - Advanced Biochemistry (3)
- CHE 4050L - Advanced Biochemistry Lab (1)
  
- CHE 2096 - Organic Chemistry II (3)
- CHE 2096L - Organic Chemistry II Lab (1)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CHE 3051 - Organic Structure Elucidation (2)
- CHE 4066 - Bioinorganic Chemistry (2)
- CHE 4068 - Advanced Inorganic Chemistry (3)

### Other Related Electives (4 units minimum)

*Students can customize their degree by taking one course from each of the two categories below. One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

#### Methodology:

- BIO 3052 - Research Methodology (3)
- BIO 4090 - Internship in Biology (1-3)
- BIO 4099 - Research in Biology (1-3)
- CHE 4090 - Internship in Chemistry (1-3)
- CHE 4099 - Research in Chemistry (1-2)

#### Public Policy and Stewardship:

- BUS 4075 - Sustainability in Action (3)
- PHL 3060 - Philosophy and the Sciences (3)
- POL 2090 - World Regional Geography (3)
- POL 4035 - Global Governance (4)
- POL 4041 - Issues in Public Policy (4)

Upper-Division Total: 29 Units

Bachelor of Science Total: 68 Units \*\*

\*\*15 units meet general education requirements.

## **Environmental Studies, B.A.**

What kind of environmental ethic would you have if you lived with compassion for other humans? This is the question that Point Loma Nazarene University equips students to answer in its Environmental Studies program. Jesus tells us that the two commandments which encompass all others are love God and love your neighbor (Matthew 22:37-39). Yet we often miss the connection that loving God and neighbor has with the natural world. Cultural geographer Carolyn

Finney claims it is necessary for humans to "understand how our unhealthy relationships with the natural environment are intimately linked to our unhealthy relationships with each other." PLNU's Environmental Studies program makes that link by providing cultural context along with foundational scientific knowledge. Our goal is that students leave the program with compassion for all of creation and other humans, created by listening to and understanding the context of the human story across cultures; with foundational knowledge of ecosystems and the human relationship to them; with communication skills in writing, media, and verbal avenues; and with the agency to use these traits to serve in the world.

Students with an Environmental Studies BA find careers in diverse fields that address human relationships with the natural world. From public relations and fundraising to design and engineering, Environmental Studies majors find jobs that rely on compassion, knowledge, and the ability to communicate well. Situated as a truly interdisciplinary major at PLNU with contributions across diverse disciplines, the focus of the program is to provide the cultural context, scientific foundation, and communication skills as they relate to humans and the environment. Different from many environmental sciences and other environmental studies programs, PLNU's Environmental Studies program prepares students for multiple career paths by offering foundational courses in biology, the social and political sciences, and the arts and humanities, along with focused concentrations of study, ranging from creative writing or literature to media arts or public policy, which provide depth of expertise as well as breadth of perspective.

Environmental Studies at PLNU: we put the human element into the environment.

## Program Learning Outcomes

Students who complete the program in Environmental Studies will be able to:

1. Integrate scientific and humanistic environmental studies with ongoing reflection and community engagement.
2. Employ strong research and analytical skills with diverse sources of information, demonstrating critical thinking and quantitative reasoning appropriately.
3. Identify and articulate sociocultural dynamics as they relate to the natural world.
4. Present analyses to formal audiences, demonstrating appropriate strategies for audience engagement and oral communication of written work.

## Required Concentration

*Choose one of the following concentrations:*

- Biology
- Cultural Studies
- Design
- Social Impact
- Writing and Communication

## Lower-Division Core Requirements

- BIO 1002 - Environment and People (GE) (4)
- CHE 1001 - Chemistry and Society (GE) (4)
- ESI 2050 - Introduction to Environmental Studies (3)
- LIT 2000 - Literature and Culture (GE) (2) **Select the course section for "Nature Writing"**
- PHL 2011 - Ethics (GE) (3)

Choose One from Each Group:

**BIOLOGY:**

- BIO 1005 - Ecology and Conservation (GE) **(3) and**
  - BIO 1005L - Ecology and Conservation Laboratory (GE) **(1)**
- OR**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3) and**
  - BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**

**SOCIAL IMPACT:**

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) **(4)**
- SOC 2001 - Cultural Anthropology (GE) **(3)**
- SWF 1000 - Living Justly in Contemporary Society (GE) **(3)**

Total Lower Division Units: 23-24

## Upper-Division Core Requirements

- BUS 4075 - Sustainability in Action **(3)**
- ESI 4020 - Advanced Environmental Studies **(3)**
- ESI 4070 - Internship in Environmental Studies **(2)**
- POL 4035 - Global Governance **(4)**
- THE 3005 - Christian Faith and the Natural Sciences (GE) **(3)**

Choose One from Each Group:

**SOCIAL JUSTICE:**

- SOC 4044 - Globalization and Culture **(3)**
- SOC 4090 - Special Topics in Sociology **(1-4)**
- THE 4090 - Special Studies in Theology **(1-3)**

**WRITING:**

- WRI 3015 - Advanced English Composition **(3)**
- WRI 3065 - Writing for Professional Careers **(3)**
- WRI 3021 - Creative Writing: Poetry **(3)**
- WRI 3022 - Creative Writing: Fiction **(3)**
- WRI 3023 - Creative Writing: Creative Nonfiction **(3)**

**CULTURAL STUDIES:**

- LIT 4046 - Romantic Literature **(3)**
- LIT 4048 - Postcolonial Classics and Theory **(3)**
- HIS 4090 - Special Studies in History **(1-4)**

**LANGUAGE:**

- FRE 2050 - Intermediate French I **(3)**
- FRE 2051 - Intermediate French II **(3)**
- FRE 3003 - French Conversation **(3)**
- SPA 2050 - Intermediate Spanish Conversation I **(3)**

- SPA 2051 - Intermediate Spanish Conversation II **(3)**
- SPA 3000 - Civic Engagement: Conversation, Culture and Community **(3)**
- Approved immersion experience in another language

Total Upper Division Units: 21-23

## Concentrations

### BIOLOGY

A strong background in the biology and chemistry of environmental systems empowers environmental justice with the ability to evaluate and use scientific data. With a concentration in biology, an Environmental Studies major can bring her biological expertise to educate and inform environmental social action. Careers include: sustainability officer, lab management, science writer.

#### Lower-Division Requirements

- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3) and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**

#### Upper-Division Requirements

- BIO 3063 - Conservation Ecology **(3) and**
- BIO 3063L - Conservation Ecology Laboratory **(1)**

Choose 9 units of approved electives from the following:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology **(2)**
- BIO 3023 - Introduction to Oceanography **(3) and**
- BIO 3023L - Introduction to Oceanography Laboratory **(1)**
- BIO 3033 - Marine Biology **(3) and**
- BIO 3033L - Marine Biology Laboratory **(1)**
- BIO 3040 - Field Biology: Neotropical Ecology **(2) and Costa Rica field trip**
- BIO 4010 - Vertebrate Biology **(3) and**
- BIO 4010L - Vertebrate Biology Laboratory **(1)**
- BIO 4030 - Animal Behavior **(3) and**
- BIO 4030L - Animal Behavior Laboratory **(1)**
- BIO 4073 - Experimental Marine Ecology **(3) and**
- BIO 4073L - Experimental Marine Ecology Laboratory **(1)**
- BIO 4083 - Introduction to Geographic Information Systems (GIS) **(3)**

#### **Choose one:**

- ACC 2000 - Principles of Accounting for Non-Business Majors **(3)**
- MTH 2003 - Introduction to Statistics **(3)**
- MTH 3063 - Calculus Based Statistics With R **(3)**

## CULTURAL STUDIES

Understanding where our current ideas about environmental and social justice come from is vital to having agency for positive change. Environmental Studies majors with a cultural studies concentration will be able to identify, critique, challenge, or champion cultural stories and themes about humanity's relationship with the environment. Careers include: teaching, nonprofit management, public relations.

### Upper-Division Requirements

- HIS 3070 - California History (4)
- HIS 4090 - Special Studies in History (1-4)
- LIT 3000 - Literary Analysis (3)
- LIT 4046 - Romantic Literature (3)

Choose Two (if choose a 305x then must choose three):

- HIS 3011 - European Intellectual History (4)
- HIS 3068 - Modern China Through Film (4)
- HIS 3072 - Two Years Before the Mast and the History of Coastal California (2)
- HIS 4013 - Nineteenth-Century Europe (4)
- HIS 4014 - Twentieth-Century Europe (4)
- HIS 4015 - Europe and the World (4)
- HIS 4025 - United States Since 1914 (4)
- HIS 4035 - Asian-American History: 1800 to the Present (4)
- HIS 4036 - America in East Asia: 1800 to the Present (4)
- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 3050 - World Literature (GE) (3)
- LIT 3051 - World Cinema (GE) (3)
- LIT 3052 - Diverse Voices in American Literature (GE) (3)
- LIT 3053 - Women Writers (GE) (3)
- LIT 4000 - American Literature to 1900 (3)
- LIT 4045 - 17th Century English Literature (3)
- LIT 4061 - Shakespeare (3)
- SPA 3010 - Latin American Culture and Civilization (3)
- SPA 3020 - Mexican American Literature and Culture (3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)

## DESIGN

Good design can capture the imagination and bring about powerful change. With a concentration in design, Environmental Studies majors gain valuable skills in presenting information and arguments in a visually pleasing format to reach a wide audience for environmental change. Careers include: graphic design, science illustration, biodesign, branding.

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)

## Upper-Division Requirements

- ART 3015 - Introduction to Interactive Web Design **(3)**

Choose 6 units of approved electives from the following:

- ART 1015 - Drawing I **(3)**
- ART 2002 - Introduction to Computer Graphics **(3)**
- ART 2026 - Photography: Digital **(3)**
- ART 3003 - Graphic Design II: Typography **(3)**
- ART 3030 - Illustration I **(3)**
- ART 3031 - Illustration II **(3)**
- ART 3033 - Graphic Design III: Branding and Identity Programs **(3)**
- ART 4050 - Interactive Web Design **(3)**

## SOCIAL IMPACT

Social service impacts the way the world works. With a social impact concentration, Environmental Studies majors will understand the structures and policies that govern our culture and find avenues of service that will let them be a powerful force for environmental change in the world. Careers include: law, urban planning, social work, public administration.

## Lower-Division Requirements

- COM 2031 - Argumentation and Debate (GE) **(3)**
- SOC 2001 - Cultural Anthropology (GE) **(3)**
- SWF 1000 - Living Justly in Contemporary Society (GE) **(3)**

## Upper-Division Requirements

- SOC 4090 - Special Topics in Sociology **(1-4)**
- THE 4090 - Special Studies in Theology **(1-3)**

Choose 6 units of approved electives from the following:

- COM 3030 - Persuasion **(3)**
- COM 3040 - Organizational Communication **(3)**
- COM 3090 - Introduction to Public Relations **(3)**
- COM 3095 - Media Literacy **(3)**
- COM 4005 - Public Relations Cases and Campaigns **(3)**
- COM 4060 - Rhetorical Theories and Models **(3)**
- COM 4090 - Special Studies in Communication **(1-3)**
- ECO 3015 - Theories of Economic Development **(3)**
- JRN 4030 - Multimedia Journalism **(3)**
- POL 2090 - World Regional Geography **(3)**
- POL 3060 - Urban Politics **(4)**
- POL 4038 - International Law **(4)**

- POL 4050 - Issues of Global Human Rights (2)
- POL 4055 - Protest and Social Movements in World Politics (4)
- SOC 3005 - Social Stratification (3)
- SOC 3050 - Urban Sociology (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4020 - Social Change (3)
- SOC 4070 - Medical Sociology (3)
- SOC 4080 - Restorative Justice (3)

## WRITING AND COMMUNICATION

A clearly communicated idea has the most impact. With a writing and communication concentration, Environmental Studies majors will develop the skills to share their ideas and stories both in writing and verbally. Clear communicators can take the complexity of many environmental issues and present them so that a wide audience can understand. Careers include: editing, writing, screenwriting, journalism, branding.

### Lower-Division Requirements

- JRN 2050 - Introduction to Journalism (3)
- WRI 2020 - Introduction to Creative Writing (3)

### Upper-Division Requirements

- WRI 3015 - Advanced English Composition (3)
- WRI 3065 - Writing for Professional Careers (3)

Choose 6 units of approved electives from the following:

- COM 2031 - Argumentation and Debate (GE) (3)
- COM 3000 - Narrative and Documentary Film (3)
- COM 3030 - Persuasion (3)
- COM 3050 - Electronic Media in Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 3095 - Media Literacy (3)
- COM 4005 - Public Relations Cases and Campaigns (3)
- COM 4090 - Special Studies in Communication (1-3)
- JRN 3010 - Advanced Reporting (3)
- JRN 3012 - Television News Writing (3)
- JRN 3013 - Television News Production (3)
- JRN 3014 - Computer-Assisted Reporting (3)
- JRN 3040 - Media Law and Ethics (3)
- JRN 3045 - Editing (3)
- JRN 3050 - Special Topics in Journalism (3)
- JRN 3055 - Public Relations Writing (3)
- JRN 4013 - Advanced Television News Production (3)
- JRN 4030 - Multimedia Journalism (3)
- JRN 4040 - Magazine Editing and Concepts (3)

- WRI 3021 - Creative Writing: Poetry (3)
- WRI 3022 - Creative Writing: Fiction (3)
- WRI 3023 - Creative Writing: Creative Nonfiction (3)
- WRI 4020 - Advanced Writing Workshop (3)

Total: 107-111 Units

## POSSIBLE MINORS

- Biology: Environmental Biology Minor
- French Minor
- History Minor
- International Development Minor
- Literature Minor
- Media Communication Minor
- Multimedia Journalism Minor
- Nonprofit Organization Management Minor
- Public Relations Minor
- Spanish Minor
- Sustainability Studies Minor
- Writing Minor

## POSSIBLE DOUBLE MAJORS

- International Studies, B.A.
- Literature, B.A.
- Multimedia Journalism, B.A.
- Writing, B.A.

## **Finance, B.S. Business Administration**

### Program Learning Outcomes

Students who complete the program in Finance will be able to :

1. Exhibit general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical values.
5. Collaborate effectively in teams.
6. Exhibit an in-depth knowledge of financial management, investment and international finance theories.
7. Prepare a business valuation using finance tools and theories.

### Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)

- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MGT 2012 - Principles of Management (3)
  
- MTH 1053 - Mathematical Analysis for Business and Economics (3)  
**OR**
- MTH 1073 - Business Calculus (GE) (3)
  
- MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

### Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 units required (3)**
- FIN 3035 - Business Finance (3)
- FIN 3085 - Intermediate Finance (3)
- FIN 4015 - Investments (3)
- FIN 4025 - Financial Statement Analysis and Valuation (3)
- FIN 4035 - International Finance (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Choose One Elective From the Following Upper Division BUS/ECO Courses:

- BUS 3040 - Real Estate Principles and Practices (3)
- ECO 3080 - Money and Banking (3)

Choose One Elective From the Following Upper Division ACC Courses:

- ACC 3070 - Intermediate Accounting I (3)
- ACC 3075 - Managerial Cost Accounting (3)
- ACC 4010 - Federal Tax Accounting I (3)

Total: 36 Units

Major Total: 64 Units

### Recommended

Cross-cultural experience

- PHL 2011 - Ethics (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

### Note(s):

- ECO 1001 or ECO 1002 fulfills general education Social World Requirement.
- PHL 2011 fulfills general education Philosophy Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.

## French, B.A.

### Program Learning Outcomes

#### Students who complete the program in French will be able to:

1. Write essays without significant errors of grammar, spelling, or vocabulary usage that would impede comprehension by a native speaker.
2. Comprehend the main idea and most details of connected oral discourse by a native speaker on a variety of topics.
3. Converse in a participatory fashion with a native speaker using a variety of language strategies to convey meaning.
4. Analyze and interpret target language texts and data sets according to their cultural, literary, and/or linguistic content.
5. Display knowledge of the nature and structure of language.
6. Discuss the influence of their own perspective on cultural interconnections through engagement with local, national, or international communities.

### Lower-Division Requirements

- FRE 1001 - Elementary French I (GE) (4)
- FRE 1002 - Elementary French II (GE) (4)
- FRE 2050 - Intermediate French I (3)
- FRE 2051 - Intermediate French II (3)

Total: 14 Units

### Upper-Division Requirement

*In addition to the courses listed below, two courses must be taken abroad in France or a Francophone country (6 units) or 9 units of which 3 could be equivalent to one PLNU courses. Subject to Department approval. 6-9 Units.*

- FRE 3003 - French Conversation (3)
- FRE 3015 - French Culture and Civilization (3)
- FRE 3020 - Survey of French Literature (3)
- FRE 3025 - Francophone Literature (3)
- FRE 4020 - Studies in French Literature (3)
- FRE 4095 - Literary Theory Capstone (3)

Total: 24-27 Units

Total Major: 38-41 Units

## 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3)** \*
- EDU 3006 - Principles of Language Acquisition **(3)** \*
- EDU 4004 - Foundations of Special Education **(3)** \*
- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**
- EDU 4020 - Literacy Instruction for Secondary Teachers **(3)** \*
- EDU 4021 - General Methods for Secondary Teachers **(3)** \*
- EDU 4050 - Secondary Clinical Practice I **(4)**
- EDU 4055 - Secondary Clinical Practice II **(4)**
- EDU 40CP3 - Secondary Clinical Practice Seminar I **(1)**
- EDU 40CP4 - Secondary Clinical Practice Seminar II **(1)**

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics **(3)** (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science **(3)** \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science **(3)** (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language **(3)** (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts **(3)** (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education **(3)** (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers **(3)** \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **General Engineering: Computer Science Engineering, B.S.E. (Mathematics and Computer Science)**

### Program Learning Outcomes

- Develop an understanding of the fundamental principles of physics and of engineering.
- Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
- Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
- Effectively communicate complicated technical information in writing.
- Effectively communicate complicated technical information orally.
- Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Effectively collaborate in teams.

### Lower Division Requirements

- CSC 2054 - Data Structures and Algorithms **(3)**
- CSC 2054L - Data Structures and Algorithms Lab **(1)**
- EGR 1012 - Introduction to Engineering I **(1)**
- EGR 1012L - Introduction to Engineering I Lab **(1)**
- EGR 1023 - Introduction to Engineering II **(2)**
- EGR 1023L - Introduction to Engineering II Lab **(1)**
- EGR 1043 - Introduction to Computer Programming **(2)**
- EGR 1043L - Introduction to Computer Programming Lab **(1)**
- EGR 1054 - Objects and Elementary Data Structures **(3)**
- EGR 1054L - Objects and Elementary Data Structures Lab **(1)**
- EGR 2024 - Electronics and Circuit Analysis **(3)**

- EGR 2024L - Electronics and Circuit Analysis Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 1074L - Calculus II Lab (1)
- MTH 2074 - Calculus III (4)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total Lower-Division Units: 40

### Upper Division Requirements

- EGR 3014 - Operating Systems (4)
- EGR 3023 - Software Engineering (3)
- EGR 3053 - Analog Electronics (2)
- EGR 3053L - Analog Electronics Lab (1)
- EGR 3073 - Networking and Security (3)
- EGR 3093 - Digital Electronics (2)
- EGR 3093L - Digital Electronics Lab (1)
- EGR 4003 - Information and Computer Security (3)
- EGR 4054 - Computer Architecture and Assembly Language (4)
- EGR 4072 - Senior Project I (2)
- EGR 4082 - Senior Project II (2)
- EGR 4092 - Internship in Engineering (2)
- EGR 4103 - Electrical Signals and Systems (3)
- MTH 3033 - Differential Equations (3)

**Choose one of the following:**

- MTH 3063 - Calculus Based Statistics With R (3)
- MTH 3083 - Mathematical Probability and Statistics (3)

Total Upper-Division Units: 38

Total: 78 Units (70 without GE)

Recommended:

- MTH 3043 Discrete Mathematics
- EGR 4042 Embedded Systems and Robotics and EGR 4042L Embedded Systems and Robotics Lab

**General Engineering: Computer Science Engineering, B.S.E. (Physics and Engineering)**

## Program Learning Outcomes

- Develop an understanding of the fundamental principles of physics and of engineering.
- Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
- Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
- Effectively communicate complicated technical information in writing.
- Effectively communicate complicated technical information orally.
- Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Effectively collaborate in teams.

## Lower Division Requirements

- CSC 2054 - Data Structures and Algorithms **(3)**
- CSC 2054L - Data Structures and Algorithms Lab **(1)**
- EGR 1012 - Introduction to Engineering I **(1)**
- EGR 1012L - Introduction to Engineering I Lab **(1)**
- EGR 1023 - Introduction to Engineering II **(2)**
- EGR 1023L - Introduction to Engineering II Lab **(1)**
- EGR 1043 - Introduction to Computer Programming **(2)**
- EGR 1043L - Introduction to Computer Programming Lab **(1)**
- EGR 1054 - Objects and Elementary Data Structures **(3)**
- EGR 1054L - Objects and Elementary Data Structures Lab **(1)**
- EGR 2024 - Electronics and Circuit Analysis **(3)**
- EGR 2024L - Electronics and Circuit Analysis Lab **(1)**
- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 1074 - Calculus II **(3)**
- MTH 1074L - Calculus II Lab **(1)**
- MTH 2074 - Calculus III **(4)**
- PHY 2044 - University Physics I (GE) **(3)**
- PHY 2044L - University Physics I Lab (GE) **(1)**
- PHY 2054 - University Physics II **(3)**
- PHY 2054L - University Physics II Lab **(1)**

Total Lower-Division Units: 40

## Upper Division Requirements

- EGR 3014 - Operating Systems **(4)**
- EGR 3023 - Software Engineering **(3)**
- EGR 3053 - Analog Electronics **(2)**
- EGR 3053L - Analog Electronics Lab **(1)**
- EGR 3073 - Networking and Security **(3)**
- EGR 3093 - Digital Electronics **(2)**

- EGR 3093L - Digital Electronics Lab (1)
- EGR 4003 - Information and Computer Security (3)
- EGR 4054 - Computer Architecture and Assembly Language (4)
- EGR 4072 - Senior Project I (2)
- EGR 4082 - Senior Project II (2)
- EGR 4092 - Internship in Engineering (2)
- EGR 4103 - Electrical Signals and Systems (3)
- MTH 3033 - Differential Equations (3)

**Choose one of the following:**

- MTH 3063 - Calculus Based Statistics With R (3)
- MTH 3083 - Mathematical Probability and Statistics (3)

Total Upper-Division Units: 38

Total: 78 Units (70 without GE)

**Recommended:**

- MTH 3043 Discrete Mathematics
- EGR 4042 Embedded Systems and Robotics and EGR 4042L Embedded Systems and Robotics Lab

**General Engineering: Electrical Engineering, B.S.E.**

**Program Learning Outcomes**

*Students who complete the Engineering program will:*

1. Develop an understanding of the fundamental principles of physics and engineering.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.
5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
7. Effectively collaborate in teams.

**Lower-Division Requirements**

- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- EGR 1023 - Introduction to Engineering II (2)
- EGR 1023L - Introduction to Engineering II Lab (1)
- EGR 1043 - Introduction to Computer Programming (2)
- EGR 1043L - Introduction to Computer Programming Lab (1)
- EGR 1054 - Objects and Elementary Data Structures (3)

- EGR 1054L - Objects and Elementary Data Structures Lab (1)
- EGR 2014 - Engineering Mechanics: Statics (3)
- EGR 2014L - Engineering Mechanics: Statics Lab (1)
- EGR 2024 - Electronics and Circuit Analysis (3)
- EGR 2024L - Electronics and Circuit Analysis Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 1074L - Calculus II Lab (1)
- MTH 2074 - Calculus III (4)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total Lower-Division Units: 40

### Upper-Division Requirements

- EGR 3013 - Nuclear Physics (2)
- EGR 3013L - Nuclear Physics Lab (1)
- EGR 3053 - Analog Electronics (2)
- EGR 3053L - Analog Electronics Lab (1)
- EGR 3063 - Electricity, Magnetism, and Waves I (3)
- EGR 3083 - Electricity, Magnetism, and Waves II (3)
- EGR 3093 - Digital Electronics (2)
- EGR 3093L - Digital Electronics Lab (1)
- EGR 4042 - Embedded Systems and Robotics (1)
- EGR 4042L - Embedded Systems and Robotics Lab (1)
- EGR 4013 - Thermodynamics (3)
- EGR 4063 - Solid State Physics (3)
- EGR 4072 - Senior Project I (2)
- EGR 4082 - Senior Project II (2)
- EGR 4092 - Internship in Engineering (2)
- EGR 4103 - Electrical Signals and Systems (3)
- MTH 3033 - Differential Equations (3)

Choose one from the following:

- MTH 3063 - Calculus Based Statistics With R (3)
- MTH 3083 - Mathematical Probability and Statistics (3)

Total Upper-Division Units: 38

Total Units for Degree: 78 (70 without GE)

# **General Engineering: Mechanical Engineering Physics, B.S.E.**

## **Program Learning Outcomes**

### **Students who complete the Engineering program will:**

1. Develop an understanding of the fundamental principles of physics and of engineering.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.
5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
7. Effectively collaborate in teams.

## **Lower-Division Requirements**

- EGR 1012 - Introduction to Engineering I **(1)**
- EGR 1012L - Introduction to Engineering I Lab **(1)**
- EGR 1023 - Introduction to Engineering II **(2)**
- EGR 1023L - Introduction to Engineering II Lab **(1)**
- EGR 1043 - Introduction to Computer Programming **(2)**
- EGR 1043L - Introduction to Computer Programming Lab **(1)**
- EGR 1054 - Objects and Elementary Data Structures **(3)**
- EGR 1054L - Objects and Elementary Data Structures Lab **(1)**
- EGR 2014 - Engineering Mechanics: Statics **(3)**
- EGR 2014L - Engineering Mechanics: Statics Lab **(1)**
- EGR 2024 - Electronics and Circuit Analysis **(3)**
- EGR 2024L - Electronics and Circuit Analysis Lab **(1)**
- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 1074 - Calculus II **(3)**
- MTH 1074L - Calculus II Lab **(1)**
- MTH 2074 - Calculus III **(4)**
- PHY 2044 - University Physics I (GE) **(3)**
- PHY 2044L - University Physics I Lab (GE) **(1)**
- PHY 2054 - University Physics II **(3)**
- PHY 2054L - University Physics II Lab **(1)**

**Total Lower-Division Units: 40**

## **Upper-Division Requirements**

- EGR 3013 - Nuclear Physics **(2)**
- EGR 3013L - Nuclear Physics Lab **(1)**
- EGR 3034 - Mechanics of Materials **(3)**

- EGR 3034L - Mechanics of Materials Lab (1)
- EGR 3043 - Analytical Mechanics: Dynamics (3)
- EGR 3063 - Electricity, Magnetism, and Waves I (3)
- EGR 3083 - Electricity, Magnetism, and Waves II (3)
- EGR 4013 - Thermodynamics (3)
- EGR 4063 - Solid State Physics (3)
- EGR 4072 - Senior Project I (2)
- EGR 4082 - Senior Project II (2)
- EGR 4092 - Internship in Engineering (2)
- MTH 3033 - Differential Equations (3)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)

Choose one from the following:

- MTH 3063 - Calculus Based Statistics With R (3)
- MTH 3083 - Mathematical Probability and Statistics (3)

Total Upper-Division Units: 38

Total Units for Degree: 78 (70 without GE)

Recommended:

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- MTH 2033 - Linear Algebra (3)

## Graphic Design, B.A.

### Program Learning Outcomes

*Students who complete the program in Graphic Design with concentrations in Marketing, Interdisciplinary, Interactive Web, and Illustration will be able to:*

1. Use current graphic design tools and technologies to create, produce, and distribute visual messages.
2. Identify historically important design styles, movements, artists, and designers.
3. Write and speak intelligently about their design strategies, problem solving, aesthetic choices, and contemporary design trends.
4. Produce an entry-level professional quality portfolio of graphic design work to help secure employment in a design-related career or pursue graduate studies.
5. Articulate their own philosophy regarding mass media and its relationship to graphic design.

### Concentrations

- Marketing Concentration
- Interdisciplinary Concentration
- Interactive Web Design Concentration
- Illustration Design Concentration

## Marketing Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
  
- ART 2000 - History of Art I (GE) (3) \*
- OR**
- ART 2001 - History of Art II (GE) (3) \*
  
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)

Total Lower-Division: 18 Units

### Upper-Division Requirements

- ART 3003 - Graphic Design II: Typography (3)
  
- ART 3004 - Modern Art History (3)
- OR**
- ART 3005 - Contemporary Art History (3)
  
- ART 3015 - Introduction to Interactive Web Design (3)
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 4050 - Interactive Web Design (3)
- ART 4068 - Graphic Design Portfolio Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4071 - Graphic Design Portfolio Review (3)
  
- MKT 3032 - Principles of Marketing (3) - **required**
  
- Choose three (3) courses from the following:**
- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)
- MGT 3082 - Applied Entrepreneurship (3)

Total Upper-Division: 37 Units

## Interdisciplinary Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)

- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)

- ART 2000 - History of Art I (GE) (3) \*

**OR**

- ART 2001 - History of Art II (GE) (3) \*
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)
- ART 2026 - Photography: Digital (3)

**Choose one from the following:**

- ART 2006 - Experimental Drawing Studio (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2022 - Sculpture: Materials and Fabrication (3)
- ART 2023 - Printmaking I (3)

Total Lower-Division: 24 Units

### Upper-Division Requirements

- ART 3003 - Graphic Design II: Typography (3)
  - ART 3004 - Modern Art History (3)
- OR**
- ART 3005 - Contemporary Art History (3)
  - ART 3015 - Introduction to Interactive Web Design (3)
  - ART 3033 - Graphic Design III: Branding and Identity Programs (3)
  - ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)
  - ART 4050 - Interactive Web Design (3)
  - ART 4068 - Graphic Design Portfolio Preparation (3)
  - ART 4070 - Internship (1-3) - **1 unit required**
  - ART 4071 - Graphic Design Portfolio Review (3)

**Choose one course from the following:**

- ART 3010 - Painting II (3)
- ART 3021 - Photography: Alternative Processes (3)
- ART 3022 - Sculpture II: Objects and Installation (3)
- ART 3023 - Printmaking II (3)
- ART 3026 - Photography II: Contemporary Images (3)
- ART 3031 - Illustration II (3)

Total Upper-Division: 28 Units

### Interactive Web Design Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- OR**
- ART 2001 - History of Art II (GE) (3) \*
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)
- Choose one course from the following:**
- ART 2006 - Experimental Drawing Studio (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2022 - Sculpture: Materials and Fabrication (3)
- ART 2023 - Printmaking I (3)
- ART 2026 - Photography: Digital (3)

Total Lower-Division: 21 Units

### Upper-Division Requirements

- ART 3003 - Graphic Design II: Typography (3)
- ART 3004 - Modern Art History (3)
- OR**
- ART 3005 - Contemporary Art History (3)
- ART 3015 - Introduction to Interactive Web Design (3)
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 4050 - Interactive Web Design (3)
- ART 4068 - Graphic Design Portfolio Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4071 - Graphic Design Portfolio Review (3)
- Choose one course from the following:**
- ART 3021 - Photography: Alternative Processes (3)
- ART 3031 - Illustration II (3)
- MGT 3082 - Applied Entrepreneurship (3)

Total Upper-Division: 28 Units

### Illustration Design Concentration

#### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)

- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- **OR**
- ART 2001 - History of Art II (GE) (3) \*
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)
- ART 2010 - Painting: Color and Technique (3)
- **Choose one course from the following:**
- ART 2006 - Experimental Drawing Studio (3)
- ART 2023 - Printmaking I (3)
- ART 2026 - Photography: Digital (3)

Total Lower-Division: 24 Units

### Upper Division Requirements

- ART 3003 - Graphic Design II: Typography (3)
- ART 3004 - Modern Art History (3)
- **OR**
- ART 3005 - Contemporary Art History (3)
- ART 3015 - Introduction to Interactive Web Design (3)
- ART 3030 - Illustration I (3)
- ART 3031 - Illustration II (3)
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)
- **OR**
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 3045 - Life Drawing (3)
- ART 4050 - Interactive Web Design (3)
- ART 4068 - Graphic Design Portfolio Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4071 - Graphic Design Portfolio Review (3)

Total Upper-Division: 31 Units

Note(s):

*\*Meets general education requirement in the fine arts.*

## **Health and Human Performance, B.A.**

Department Learning Outcomes

**All majors within the department of Kinesiology will be able to:**

1. Speak and write effectively to a target audience on essential information in their discipline.
2. Critically evaluate and integrate new information into professional practice to solve relevant health and fitness problems.
3. Assess human movement to determine risk for injury and improve human performance.
4. Describe the mechanisms (i.e. metabolic, physiologic, biomechanical, and developmental) by which physical activity aids in health promotion, performance enhancement and disease prevention.
5. Serve others in clinical, educational, or athletic settings by pursuing their vocation and calling.

## Lower-Division Requirements

- BIO 1030 - Human Anatomy and Physiology I (GE) **(3) and**
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) **(1)**
- BIO 1040 - Human Anatomy and Physiology II **(3) and**
- BIO 1040L - Human Anatomy and Physiology II Laboratory **(1)**
  
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) **(4) and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**  
**OR**
- CHE 1052 - General Chemistry I (GE) **(4) and**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
  
- KIN 1001 - Orientation to Kinesiology **(1)**
- KIN 1002 - Emergency Medical Technician - Basic **(4)**  
**OR** Certification in CPR or EMT\*
- KIN 2080 - Care and Prevention of Athletic Injuries **(2) and**
- KIN 2080L - Care and Prevention of Athletic Injuries Lab **(1)**
  
- KIN 2030 - Lifestyle as Medicine (GE) **(2)**  
**OR**
- PED 2000 - Optimal Health (GE) **(2)**  
*\*Student must provide proof of certification to the records office. Certification must be current through the date of the Commencement ceremony in which the student is eligible to participate or the date of completion of the student's graduation requirements, whichever occurs first.*

## Lower-Division Elective

### Exercise and Sport Science

Choose one course from the following (2-3 units):

- EXS 2001 - Fundamentals of Fitness Assessment and Development **(2)**
- NUT 2025 - Fundamentals of Nutrition **(3)**
- PED 2020 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 2025 - Individual and Dual Sports Fundamentals and Strategies (GE) **(2)**

### Pre-Allied Health

Choose one course from the following (2-4 units):

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3) and**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2020 - Microbiology of Infectious Diseases **(3) and**
- BIO 2020L - Microbiology of Infectious Diseases Laboratory **(1)**
- CHD 1050 - Human Development **(3)**
- EXS 2001 - Fundamentals of Fitness Assessment and Development **(2)**
- PHY 1044 - General Physics I (GE) **(3) and**
- PHY 1044L - General Physics I Lab (GE) **(1)**
- PHY 1054 - General Physics II (GE) **(3) and**
- PHY 1054L - General Physics II Lab (GE) **(1)**
- PSY 1003 - General Psychology (GE) **(3)**

Lower-Division Total: 21-24 Units

### Upper-Division Requirements

- EXS 3030 - Nutrition for Exercise and Sport Performance **(3)**
- EXS 3001 - Fitness Assessment and Exercise Prescription **(3)**
- EXS 3001L - Fitness Assessment and Exercise Prescription Lab **(1)**
- EXS 3070 - Praxis of Strength Training and Conditioning **(3)**
- KIN 3012 - Motor Learning and Motor Development **(3)**
- KIN 3025 - Structural Kinesiology **(2)**
- KIN 3027 - Applied Biomechanics **(2)**
- KIN 3040 - Physiology of Exercise **(3)**
- KIN 3040L - Physiology of Exercise Lab **(1)**
- KIN 4095 - Kinesiology Capstone **(1)**
  
- KIN 4040 - Measurement, Statistics, and Evaluation of Human Performance **(3)**
- **OR**
- MTH 2003 - Introduction to Statistics **(3)**

### Required Concentration

*Students must select a minimum of 11 additional units below that are not counting in the major requirements above.*

### Exercise and Sport Science

**Required:**

- EXS 4080 - Leadership in the Fitness Professions **(3)**

**Choose 8-9 units from the following:**

- ATR 3085 - Pathology of Injury and Illness **(3)**
- ATR 4010 - Therapeutic Exercise **(3)**
- BUS 3013 - Administrative Communication **(3)**
- EDU 3002 - Foundations of Education and Learning Theory **(3)**

- KIN 1002 - Emergency Medical Technician - Basic (4)
- KIN 1003 - Emergency Medical Technician Laboratory - Basic (4)
- KIN 3027L - Biomechanics Laboratory (1)
- KIN 3075 - Movement Interventions and Corrective Exercise (2)
- KIN 4030 - Clinical Exercise Physiology (3)
- KIN 4084 - Practicum in Kinesiology (1-3)
- KIN 4088 - Internship in Kinesiology (1-3)
- KIN 4090 - Special Studies in Kinesiology (1-3)
- PED 3008 - Methods of Teaching Physical Education (3)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)

## Pre-Allied Health

### **Required:**

- KIN 3027L - Biomechanics Laboratory (1)
- KIN 3075 - Movement Interventions and Corrective Exercise (2)

### **Choose 8-9 units from the following:**

- ATR 3085 - Pathology of Injury and Illness (3)
- ATR 3087 - Assessment of Lower Extremity Pathology (3)
- ATR 3088 - Assessment of Head, Spinal, and Upper Extremity Pathology (3)
- ATR 4010 - Therapeutic Exercise (3)
- ATR 5000 - Seminar in Athletic Training (1)
- ATR 5005 - Research Methods and Statistical Techniques for Clinical Decision Making in Sports Medicine (3)
- ATR 5087 - Evidence-Based Orthopedic Assessment of Lower Extremity (3)
- ATR 5087L - Evidence-Based Orthopedic Assessment of Lower Extremity Laboratory (1)
- ATR 5088 - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity (3)
- ATR 5088L - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity Laboratory (1)
- ATR 5090 - Clinical Internship I (3)
- ATR 5091 - Clinical Internship II (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2020 - Microbiology of Infectious Diseases (3)
- BIO 2020L - Microbiology of Infectious Diseases Laboratory (1)
- BUS 3013 - Administrative Communication (3)
- CHD 1050 - Human Development (3)
- KIN 1002 - Emergency Medical Technician - Basic (4)
- KIN 1003 - Emergency Medical Technician Laboratory - Basic (4)
- KIN 4075 - Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities (3)
- KIN 4088 - Internship in Kinesiology (1-3)
- KIN 5010 - Evidence-Based Practice and Decision Making in Kinesiology (3)
- PED 3008 - Methods of Teaching Physical Education (3)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)
- PHY 1044 - General Physics I (GE) (3)
- PHY 1044L - General Physics I Lab (GE) (1)
- PHY 1054 - General Physics II (GE) (3)
- PHY 1054L - General Physics II Lab (GE) (1)

- PSY 3021 - Abnormal Psychology (3)

Upper-Division Total: 36-37 Units

Major Total: 57-61 Units

### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

### Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3) \*
- EDU 3006 - Principles of Language Acquisition (3) \*
- EDU 4004 - Foundations of Special Education (3) \*
- EDU 4009 - Classroom Assessment and Research Practices (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)
- EDU 4020 - Literacy Instruction for Secondary Teachers (3) \*
- EDU 4021 - General Methods for Secondary Teachers (3) \*
- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)

- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## History, B.A.

### Program Learning Outcomes

**Students who complete the program in History will be able to:**

1. Complete a substantial historical project autonomously.
2. Demonstrate the relationship between primary and secondary materials by assessing a historian's work and recognizing the evidence used to construct that historical argument.
3. Present and analyze, in written or oral presentation, different perspectives on an event from the past.
4. Find appropriate materials online, in a library, or in the community and know how to cite them.

### Lower-Division Requirements

- HIS 1010 - World Civilizations I (GE) (3)
- HIS 1011 - World Civilizations II (GE) (3)
- HIS 2070 - Doing History (4)

Total Lower Division Units: 10 (4 Non-GE Units)

### Upper-Division Requirements

- HIS 4060 - Internship in History (1-4) **2 units required**
- HIS 4070 - Senior Seminar in History (4)

Global Electives

Select 8 units from the following

- HIS 3008 - Early Modern Europe (4)
- HIS 3011 - European Intellectual History (4)
- HIS 3040 - Russia to 1900 (4)
- HIS 3042 - Twentieth-Century Russia and the Soviet Union (4)
- HIS 3050 - Islamic Civilization (4)
- HIS 3055 - Modern Middle East (4)
- HIS 3056 - Early East Asia (4)
- HIS 3060 - Modern South Asia (4)
- HIS 3065 - Modern Japan and Korea (4)
- HIS 3068 - Modern China Through Film (4)
- HIS 3069 - China in Revolution (4)
- HIS 4013 - Nineteenth-Century Europe (4)
- HIS 4014 - Twentieth-Century Europe (4)
- HIS 4015 - Europe and the World (4)

U.S. Electives

Select 8 units from the following

- HIS 3016 - Colonial and Revolutionary America (4)
- HIS 3020 - United States History, 1815-1914 (4)
- HIS 3070 - California History (4)
- HIS 3080 - America in the 1960's (4)
- HIS 4025 - United States Since 1914 (4)
- HIS 4035 - Asian-American History: 1800 to the Present (4)
- HIS 4036 - America in East Asia: 1800 to the Present (4)
- HIS 4077 - Gender and Law in the U.S. (WS) (4)
- HIS 4080 - San Diego Urban History (4)

18 Additional Upper-Division History Units

*Choose from any of the courses listed above, below, or from an approved study abroad program.*

- HIS 3072 - Two Years Before the Mast and the History of Coastal California (2)
- HIS 3075 - African Cultures and Histories (3)
- HIS 4060 - Internship in History (1-4) \*
- HIS 4075 - Topics in Women's History (WS) (4)
- HIS 4084 - Ancient and Medieval Christianity (3)
- HIS 4086 - Modern Christianity (3)
- HIS 4087 - The Ancient Historians (4)
- HIS 4090 - Special Studies in History (1-4)

**\* HIS 4060 may be completed for a total of 4 units. Students are required to complete 2 units to fulfill the Upper Division Requirements. Therefore, students may complete 2 units maximum in the Additional Upper Division History Units requirement.**

Total Upper Division Units: 40

Total Non-GE Units for Major: 44

Note(s):

Accepting Associate Degree for Transfer (ADT)

### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

### Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3) \***
- EDU 3006 - Principles of Language Acquisition **(3) \***
- EDU 4004 - Foundations of Special Education **(3) \***
- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**
- EDU 4020 - Literacy Instruction for Secondary Teachers **(3) \***
- EDU 4021 - General Methods for Secondary Teachers **(3) \***

- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)
- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Information Systems (Fermanian School of Business), B.S.**

### **Program Learning Outcomes**

Students who complete the program in Information Systems will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
  - a. *Students will be able to speak about their work with precision, clarity and organization*
  - b. *Students will be able to write about their work with precision, clarity and organization*
  - c. *Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.*
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Write correct and robust software.
7. Analyze the interaction between hardware and software.
8. Apply critical thinking, technical and information systems knowledge to solve problems.
9. Understand and create arguments supported by quantitative evidence.
10. Demonstrate knowledge of information systems and be prepared for careers that use information systems, and graduate study in fields related to information systems.

### **Lower Division Requirements**

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)

- BUS 2001 - Legal Environment of Business (3)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)
- ECO 1000 - Survey of Economics (GE) (3)
- MGT 2012 - Principles of Management (3)
- MTH 1073 - Business Calculus (GE) (3)
- MTH 2003 - Introduction to Statistics (3)

Total: 34 Units

### Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- CSC 3014 - Operating Systems (4)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 3073 - Networking and Security (3)
- ISS 4003 - Information and Computer Security (3)
- ISS 4014 - Data Base Systems and Web Integration (4)
- ISS 4072 - Internship in Information Systems (2)
- ISS 4081 - Senior Seminar in Information Systems (1)
- FIN 3035 - Business Finance (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Total: 34 Units

Major Total: 68 Units

### Recommended:

- Cross-cultural experience.
- PHL 2011 Ethics (GE) (3)

### Notes:

- MTH 1044 or MTH 1064 may substitute for MTH 1073. MTH 1044, MTH 1064 or MTH 1073 fulfills the General Education Problem Solving requirement.
- ECO 1001 and ECO 1002 may substitute for ECO 1000. ECO 1000, ECO 1001 or ECO 1002 fulfills the General Education Social World requirement.

- PHL 2011 fulfills the General Education Philosophy requirement.

## **Information Systems (Mathematical, Information, and Computer Science), B.S.**

### **Program Learning Outcomes**

Students who complete the program in Information Systems will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
  - a. *Students will be able to speak about their work with precision, clarity and organization*
  - b. *Students will be able to write about their work with precision, clarity and organization*
  - c. *Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.*
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Write correct and robust software.
7. Analyze the interaction between hardware and software.
8. Apply their technical knowledge and critical thinking to solve problems.
9. Understand and create arguments supported by quantitative evidence.
10. Demonstrate knowledge of information systems and be prepared for careers that use information systems, and graduate study in fields related to information systems.

### **Lower Division Requirements**

- ACC 2001 - Principles of Financial Accounting **(4)**
- ACC 2002 - Principles of Managerial Accounting **(3)**
- BUS 1000 - Introduction to Business and Systems **(3)**
- BUS 2001 - Legal Environment of Business **(3)**
- CSC 1043 - Introduction to Computer Programming **(2)**
- CSC 1043L - Introduction to Computer Programming Lab **(1)**
- CSC 1054 - Objects and Elementary Data Structures **(3)**
- CSC 1054L - Objects and Elementary Data Structures Lab **(1)**
- CSC 2052 - Data Structures in C++ **(1)**
- CSC 2052L - Data Structures in C++ Lab **(1)**
- ECO 1000 - Survey of Economics (GE) **(3)**
- MGT 2012 - Principles of Management **(3)**
- MTH 1073 - Business Calculus (GE) **(3)**
- MTH 2003 - Introduction to Statistics **(3)**

**Total: 34 Units**

### **Upper Division Requirements**

- BUS 3013 - Administrative Communication **(3)**
- BUS 4080 - International Business **(3)**

- CSC 3014 - Operating Systems (4)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 3073 - Networking and Security (3)
- ISS 4003 - Information and Computer Security (3)
- ISS 4014 - Data Base Systems and Web Integration (4)
- ISS 4072 - Internship in Information Systems (2)
- ISS 4081 - Senior Seminar in Information Systems (1)
- FIN 3035 - Business Finance (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Total: 34 Units

Major Total: 68 Units

Recommended:

- Cross-cultural experience
- ISS 3092 - Topics in Cyber Security (2)
- PHL 2011 (GE) (3)
- CSC 3023 Software Engineering (3)

Notes:

- MTH 1044 or MTH 1064 may substitute for MTH 1073.
- MTH 1044, MTH 1064 or MTH 1073 fulfills the General Education Problem Solving requirement.
- ECO 1001 and ECO 1002 may substitute for ECO 1000.
- ECO 1000, ECO 1001 or ECO 1002 fulfills the General Education Social World requirement.
- PHL 2011 fulfills the General Education Philosophy requirement.

## **Instrumental Performance, Bachelor of Music**

### **Program Learning Outcomes**

*Students who complete the program in Instrumental Performance will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

## Core Curriculum

*(Required of all Music majors)*

### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 1001 - Recital Attendance - 4 semesters **(0)**
- MUA 3013 - Instrumental Conducting **(2)**
- MUA 3076 - Junior Recital **(0)**
- MUA 4076 - Senior Recital **(0)**
- *Applied Music in major performance area* **(12)**
- MUE 4051 - Internship in Music **(2)**
- MUH 3033 - Music History and Literature III **(2)**
- MUP 3039 - Small Ensemble **(1/2) 4 Units required**
- *One-unit Ensembles* **(4)**
- *Upper-division Theory* **(6)**
- *Music Electives* **(11)**

Total: 47 Units

Note(s): Transfer students and PLNU students changing their major to Music in the BMUS degree must complete one ensemble and two units of applied music each semester.

## **International Development, B.S. Business Administration**

### **Program Learning Outcomes**

Students who complete the program in International Development will be able to :

1. Exhibit general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical values.
5. Collaborate effectively in teams.
6. Exhibit an in-depth knowledge of International Development theories and concepts.
7. Compare approaches to decision making in for-profit and non-profit environments based on International Development concepts.
8. Evaluate the similarities and differences of the economic conditions between developed and developing countries based on International Development knowledge.

### **Lower-Division Requirements**

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MGT 2012 - Principles of Management (3)
  
- MTH 1053 - Mathematical Analysis for Business and Economics (3)  
**OR**
- MTH 1073 - Business Calculus (GE) (3)
  
- MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

### **Upper Division Requirements**

- BUS 3013 - Administrative Communication (3)
- BUS 4075 - Sustainability in Action (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 units required**
- ECO 3015 - Theories of Economic Development (3)
- ECO 4050 - History of Economic Thought (3)
- FIN 3035 - Business Finance (3)
- MGT 4070 - Nonprofit Organization Management (3)

- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

### Choose Two Courses From the Following:

- ECO 4010 - International Economics (3) \*
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3) \*
- ECO 4090 - Special Studies in Economics (3) \*  
\* Recommended for students interested in studying graduate level Economics or pursuing careers involving the application of Economics in an International Development context.
- MGT 3081 - Creativity and Innovation (3) \*\*
- MGT 3082 - Applied Entrepreneurship (3) \*\*  
\*\* Recommended for students interested in pursuing careers involving the application of Entrepreneurship or Social Entrepreneurship in an International Development context.
- FRE 2050 - Intermediate French I (3) \*\*\* **and**
- FRE 2051 - Intermediate French II (3) \*\*\* **or**
- GER 2050 - Intermediate German I (3) \*\*\* **and**
- GER 2051 - Intermediate German II (3) \*\*\* **or**
- SPA 2050 - Intermediate Spanish Conversation I (3) \*\*\* **and**
- SPA 2051 - Intermediate Spanish Conversation II (3)  
\*\*\* Recommended for students interested in careers of appropriate regional studies in a developing country where applicable language skills are required.
- SOC 3060 - Race and Ethnicity (3) \*\*\*\*
- SOC 4044 - Globalization and Culture (3) \*\*\*\*  
\*\*\*\* Recommended for students interested in sociological perspective of the field of International Development.

Total: 36 Units

### Required Off Campus Program

- **A Fermanian School of Business approved semester or summer study abroad in a developing country or an approved three (3) unit internship in a developing country is required.**
- **In addition, a comparative analysis paper associated with the study abroad or internship must be completed during the student's final semester prior to graduation, and must meet the minimum standards of quality as determined by the Dean or his/her designee.**

Major Total: 64 Units

### Recommended

- PHL 2011 - Ethics (GE) (3)

### Note(s):

- ECO 1001 or ECO 1002 fulfills the general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills the general education Philosophy Requirement.

# International Studies, B.A.

## Program Learning Outcomes

*Students who graduate with a degree in International Studies will be able to:*

1. Evaluate, design, and apply social science research with respect to global phenomena.
2. Understand and critically assess the processes, theories, and outcomes of global institutions and systems.
3. Demonstrate social scientific information literacy.
4. Develop and express ideas in written communication in an effective and scholarly manner.
5. Demonstrate oral communication abilities, particularly to convey complex ideas, recognize diverse viewpoints, and offer empirical evidence of an argument.
6. Construct and evaluate analytical, comprehensive arguments.

## Concentrations

- Peace Studies
- Europe
- Middle East
- Russia and the Former Soviet Union
- Asia
- Latin America
- Africa

## Lower-Division Requirements

- POL 2030 - Introduction to International Relations **(4)**
- POL 2070 - Scope and Methods of Political Science **(4)**
- POL 2090 - World Regional Geography **(3)**
- ECO 1001 - Principles of Macroeconomics (GE) **(3) \***

Total: 14 Units

## Upper-Division Core Requirements

- POL 3070 - Comparative Politics **(4)**
- POL 4015 - Women and Politics (WS) **(4)**
- POL 4035 - Global Governance **(4)**
- POL 4050 - Issues of Global Human Rights **(2)**
- POL 4060 - Internship in Political Science **(2-4) (3) Units required**
- HIS 4015 - Europe and the World **(4)**
- POL 4073 - Senior Seminar in Political Science and International Studies **(3)**

Note(s):

*\*Requirement in general education*

## Off-Campus Cooperative Program (OCP)

Students must enroll in a minimum of 3 units of an approved Off-Campus Cooperative Program. Acceptable programs must involve a significant period of study outside of the United States. The International Studies advisor in the Department of History and Political Science makes the final determination on acceptable programs and the major requirement that they fulfill.

## Electives: Minimum 6 units from the following (not counted toward concentration)

**Other Upper Division units pertaining to International Studies may be substituted upon approval by the academic advisor.**

- POL 3001 - Transitions to Democracy (4)
- POL 3051 - War and Peace Studies (4)
- POL 4020 - United States Foreign Policy (4)
- POL 4038 - International Law (4)
- POL 4042 - Contemporary Issues in World Politics (4)
- POL 4044 - Contemporary Political Ideologies (4)
- POL 4055 - Protest and Social Movements in World Politics (4)
- HIS 3040 - Russia to 1900 (4)
- HIS 3042 - Twentieth-Century Russia and the Soviet Union (4)
- HIS 3050 - Islamic Civilization (4)
- HIS 3055 - Modern Middle East (4)
- HIS 3056 - Early East Asia (4)
- HIS 3060 - Modern South Asia (4)
- HIS 3065 - Modern Japan and Korea (4)
- HIS 3069 - China in Revolution (4)
- HIS 3075 - African Cultures and Histories (3)
- HIS 4014 - Twentieth-Century Europe (4)
- ECO 3015 - Theories of Economic Development (3)
- ECO 4010 - International Economics (3) \*
- SWF 3015 - Health and Well-Being (GE) (2)
- SOC 3050 - Urban Sociology (3) \*
- SOC 4020 - Social Change (3) \*

### Note(s):

*\*These courses have prerequisites and may increase the total number of units needed for the major.*

## Concentrations: 8 Units

Students must declare a concentration in either Peace Studies or a Geographic Region. Students may also complete an individualized concentration consisting of 8 units of relevant coursework and an approved Off-campus Cooperative Program (OCP). Many OCPs have relevant coursework that will meet the concentration requirements with the advisor's approval. Individualized concentrations must be approved by the Department of History and Political Science.

### Peace Studies

- POL 3051 - War and Peace Studies (4)

- POL 4055 - Protest and Social Movements in World Politics (4)

## Europe

- HIS 4013 - Nineteenth-Century Europe (4)
- HIS 4014 - Twentieth-Century Europe (4)

## Middle East

- HIS 3050 - Islamic Civilization (4)
- HIS 3055 - Modern Middle East (4)

## Russia and the Former Soviet Union

- HIS 3040 - Russia to 1900 (4)
- HIS 3042 - Twentieth-Century Russia and the Soviet Union (4)

## Asia

Eight units from:

- HIS 3060 - Modern South Asia (4)
- HIS 3065 - Modern Japan and Korea (4)
- HIS 3069 - China in Revolution (4)

## Latin America

Coursework for concentration available through Off-campus Cooperative Programs.

## Africa

Coursework for concentration available through Off-campus Cooperative Programs.

Total: 52 Units

## **Literature, B.A.**

### Concentrations

- Literature
- English Education

## Program Learning Outcomes

**Students who complete the program in Literature - Concentrations in Literature and English Education will be able to:**

1. Integrate their literature studies with ongoing reflection and hospitable engagement with a diverse world.
2. Identify and articulate characteristics and trends of diverse literatures and historical periods: dates, styles, authors, and canon formation.
3. Develop and support close readings of texts using literary theory and terminology.
4. Employ strong research, rhetorical, linguistics, literary, and analytical skills in their writing.
5. Present literary analysis to formal audiences, demonstrating strategies for audience engagement and oral communication of written work.

## Concentrations

### Literature

#### Lower-Division Requirements

- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 2054 - British Writers I (3)
- LIT 2055 - British Writers II (3)
- LIT 2056 - American Writers I (3)
- LIT 2057 - American Writers II (3)

Total Lower Division Units: 15

#### Upper-Division Requirements

- LIT 3000 - Literary Analysis (3)
- LIT 4000 - American Literature to 1900 (3)
- LIT 4048 - Postcolonial Classics and Theory (3)
- LIT 4050 - The Novel (3)
- LIT 4061 - Shakespeare (3)
- LIT 4095 - Literary Theory and Scholarship (3)

One course from the following:

- LIN 3012 - Introduction to Linguistics (3)
- LIN 3065 - English Grammar and Usage (3)

One course from the following:

- LIT 3050 - World Literature (GE) (3)
- LIT 3051 - World Cinema (GE) (3)

One course from the following:

- LIT 3052 - Diverse Voices in American Literature (GE) (3)
- LIT 3053 - Women Writers (GE) (3)

One course from the following:

- LIT 4020 - American Literature Since 1900 (3)
- SPA 3020 - Mexican American Literature and Culture (3)

Three courses from the following:

- LIT 4044 - Medieval Literature (3)
- LIT 4045 - 17th Century English Literature (3)
- LIT 4046 - Romantic Literature (3)
- LIT 4047 - Victorian Literature (3)

Total Upper Division Units: 39

Total Major: 54 Units

## English Education

### Lower-Division Requirements

- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 2054 - British Writers I (3)
- LIT 2055 - British Writers II (3)
- LIT 2056 - American Writers I (3)
- LIT 2057 - American Writers II (3)

**Choose one course from:**

- WRI 2020 - Introduction to Creative Writing (3)
- JRN 2050 - Introduction to Journalism (3)

Total Lower Division Units: 18

### Upper-Division Requirements

- LIT 3000 - Literary Analysis (3)
- LIN 3012 - Introduction to Linguistics (3)
- LIN 3065 - English Grammar and Usage (3)
- LIT 4048 - Postcolonial Classics and Theory (3)
- LIT 4050 - The Novel (3)
- LIT 4061 - Shakespeare (3)
- LIT 4095 - Literary Theory and Scholarship (3)
- WRI 3015 - Advanced English Composition (3)
- WRI 3070 - Writing Theory and Pedagogy (2)

One course from the following:

- LIT 4000 - American Literature to 1900 (3)
- LIT 4020 - American Literature Since 1900 (3)
- SPA 3020 - Mexican American Literature and Culture (3)

One course from the following:

- LIT 4044 - Medieval Literature (3)
- LIT 4045 - 17th Century English Literature (3)

One course from the following:

- LIT 4046 - Romantic Literature (3)
- LIT 4047 - Victorian Literature (3)

Total Upper Division Units: 35

Total Major: 53 Units

### Teacher Preparation

To complete requirements for a preliminary Single Subject (Secondary) California teaching credential, students who pursue the concentration in English Education must pass the CSET Examination in English (including Composition and Rhetoric, Literature, and Linguistics) to demonstrate Subject Matter Competency and complete the Professional Preparation coursework and other items as required by the commission on Teacher Credentialing (CTC).

### Note(s):

Accepting Associate Degree for Transfer (ADT)

## Management, B.S. Business Administration

This major is diversified with the required choice of a concentration in Entrepreneurship or Global Business as specified below.

### Program Learning Outcomes

Students who complete the program in Management will be able to :

1. Exhibit general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical values.
5. Collaborate effectively in teams.
6. Exhibit an in-depth knowledge of management theory.
7. Assess the competitive advantage of a business based on management concepts.

Students who complete the concentration in Entrepreneurship will be able to:

1. Analyze a startup pitch based on entrepreneurship knowledge and concepts.

Students who complete the concentration in Global Business will be able to:

1. Analyze essential elements of conducting business globally.

## Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MGT 2012 - Principles of Management (3)
  
- MTH 1053 - Mathematical Analysis for Business and Economics (3)  
**OR**
- MTH 1073 - Business Calculus (GE) (3)
  
- MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

## Upper-Division Requirement

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 units required**
- FIN 3035 - Business Finance (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 4084 - Operations Management (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Choose one (1) course:

- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4016 - Perspectives on Leadership (3)

## Choose a Required Concentration

### Entrepreneurship

- MGT 3081 - Creativity and Innovation (3)
- MGT 3082 - Applied Entrepreneurship (3)

### Global Business

- ECO 4010 - International Economics (3)

Choose one (1) course from the following:

- FIN 4035 - International Finance (3)
- POL 3070 - Comparative Politics (4)
- POL 4035 - Global Governance (4)
- SOC 4044 - Globalization and Culture (3)

### Off-Campus Program

Required: approved semester study abroad

Total: 36-37 Units

Major Total: 64-65 Units

### Recommended

- PHL 2011 - Ethics (GE) (3)

Note(s):

- ECO 1001 or ECO 1002 fulfills the general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills the general education Philosophy Requirement.

## **Marketing, B.S. Business Administration**

### Program Learning Outcomes

Students who complete the program in Marketing will be able to :

1. Exhibit general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
4. Formulate decisions informed by ethical values.
5. Collaborate effectively in teams.
6. Exhibit an in-depth knowledge of marketing theory and concepts.
7. Evaluate a marketing strategy based on marketing knowledge and concepts.

### Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)

- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MGT 2012 - Principles of Management (3)
  
- MTH 1053 - Mathematical Analysis for Business and Economics (3)  
**OR**
- MTH 1073 - Business Calculus (GE) (3)
  
- MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

### Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 units required**
- FIN 3035 - Business Finance (3)
- MKT 3032 - Principles of Marketing (3)
- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)
- MKT 4032 - Marketing Research and Analytics (3)
- MKT 4050 - Digital Marketing Content (3)
- MKT 4060 - Marketing Strategy (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)

Total Upper-Division: 36 Units

Major Total: 64 Units

### Recommended

- Cross-cultural Experience
- PHL 2011 - Ethics (GE) (3)

### Note(s):

- ECO 1001 *or* ECO 1002 fulfills the general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills the general education Philosophy Requirement.

### Mathematics, B.A.

## Program Learning Outcomes

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to write proofs.
3. Students will be able to demonstrate facility with algebraic structures.
4. Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
5. Students will be able to use technology to solve problems.
6. Students will be able to speak about their work with precision, clarity, and organization.
7. Students will be able to write about their work with precision, clarity, and organization.
8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
9. Students will collaborate effectively in teams.
10. Students will be able to understand and create arguments supported by quantitative evidence.
11. Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

## Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)

Total Lower-Division Units: 24 (20 non-GE units)

## Upper-Division Requirements

- MTH 3012 - Number Theory with Proofs (2)
- MTH 3052 - History of Mathematics (2)
- MTH 3083 - Mathematical Probability and Statistics (3)
- MTH 4081 - Senior Seminar in Mathematics (1)

Choose one course from:

- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)

Choose one course from:

- MTH 3033 - Differential Equations (3)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)

- MTH 4013 - Complex Analysis (3)

Choose one sequence from:

- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- MTH 4102 - Independent Research in Mathematics I (2) **and**
- MTH 4121 - Independent Research in Mathematics II (1)
- MTH 4133 - Service Learning in Mathematics (3)

Total Upper-Division Units: 18

8 Additional Elective Units\* From:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- MTH 3033 - Differential Equations (3)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 4002 - Topics in Geometry (2)
- MTH 4013 - Complex Analysis (3)
- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)
- MTH 4053 - Advanced Applied Statistics (3)
- MTH 4062 - Research in Data Science (2)
- MTH 4071 - History of Mathematics Study Tour (1)
- MTH 4072 - Internship in Data Science (2)
- MTH 4091 - Independent Study in Mathematics (1-4)
- MTH 4092 - Special Topics in Mathematics (2)
- MTH 4102 - Independent Research in Mathematics I (2)
- MTH 4121 - Independent Research in Mathematics II (1)
- MTH 4133 - Service Learning in Mathematics (3)

Total Elective Units: 8

*\*An elective course may not count as both an upper-division requirement and a required "additional elective."*

Total Non-GE Units for Degree: 44

**Mathematics, B.A. for Associate Degree for Transfer (ADT) Students**

Note that all lower division mathematics courses will be transferred in from the community college. Students will bring in 18 units of mathematics (4 units are GE).

## Program Learning Outcomes

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to write proofs.
3. Students will be able to demonstrate facility with algebraic structures.
4. Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
5. Students will be able to use technology to solve problems.
6. Students will be able to speak about their work with precision, clarity, and organization.
7. Students will be able to write about their work with precision, clarity, and organization.
8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
9. Students will collaborate effectively in teams.
10. Students will be able to understand and create arguments supported by quantitative evidence.
11. Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

## Upper Division Requirements

- MTH 3012 - Number Theory with Proofs **(2)**
- MTH 3052 - History of Mathematics **(2)**
- MTH 3083 - Mathematical Probability and Statistics **(3)**
- MTH 4081 - Senior Seminar in Mathematics **(1)**

Choose one course from:

- MTH 4024 - Real Analysis **(4)**
- MTH 4044 - Abstract Algebra **(4)**

Choose one course from:

- MTH 3033 - Differential Equations **(3)**
- MTH 3043 - Discrete Mathematics **(3)**
- MTH 3073 - Mathematical Modeling **(3)**
- MTH 4013 - Complex Analysis **(3)**

Choose one sequence from:

- HON 4098 - Honors Project I **(2) and**
- HON 4099 - Honors Project II **(1)**
  
- MTH 4102 - Independent Research in Mathematics I **(2) and**
- MTH 4121 - Independent Research in Mathematics II **(1)**
  
- MTH 4133 - Service Learning in Mathematics **(3)**

Total Upper-Division Units: 18

12 Additional Elective Units from:

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- MTH 3033 - Differential Equations (3)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 4002 - Topics in Geometry (2)
- MTH 4013 - Complex Analysis (3)
- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)
- MTH 4071 - History of Mathematics Study Tour (1)
- MTH 4091 - Independent Study in Mathematics (1-4)
- MTH 4092 - Special Topics in Mathematics (2)
- MTH 4102 - Independent Research in Mathematics I (2)
- MTH 4121 - Independent Research in Mathematics II (1)
- MTH 4133 - Service Learning in Mathematics (3)

Total Elective Units: 12

Total Units for Degree: 48 (44 non-GE units)

Note(s):

**Associate Degree for Transfer (ADT) students only.**

## **Mathematics, B.S.**

### Program Learning Outcomes

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to write proofs.
3. Students will be able to demonstrate facility with algebraic structures.
4. Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
5. Students will be able to use technology to solve problems.
6. Students will be able to speak about their work with precision, clarity, and organization.
7. Students will be able to write about their work with precision, clarity, and organization.

8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
9. Students will collaborate effectively in teams.
10. Students will be able to understand and create arguments supported by quantitative evidence.
11. Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

## Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)

Total Lower-Division Units: 30 (22 non-GE units)

## Upper-Division Requirements

- MTH 3012 - Number Theory with Proofs (2)
- MTH 3033 - Differential Equations (3)
- MTH 3052 - History of Mathematics (2)
- MTH 3083 - Mathematical Probability and Statistics (3)
- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)
- MTH 4081 - Senior Seminar in Mathematics (1)
- MTH 4092 - Special Topics in Mathematics (2)

Choose two courses from:

- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 4013 - Complex Analysis (3)

Choose one sequence from:

- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)

- MTH 4102 - Independent Research in Mathematics I (2) **and**
- MTH 4121 - Independent Research in Mathematics II (1)
- MTH 4133 - Service Learning in Mathematics (3)

Five (5) additional elective units\* from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 4002 - Topics in Geometry (2)
- MTH 4013 - Complex Analysis (3)
- MTH 4053 - Advanced Applied Statistics (3)
- MTH 4062 - Research in Data Science (2)
- MTH 4071 - History of Mathematics Study Tour (1)
- MTH 4072 - Internship in Data Science (2)
- MTH 4091 - Independent Study in Mathematics (1-4)
- MTH 4092 - Special Topics in Mathematics (2)
- MTH 4102 - Independent Research in Mathematics I (2)
- MTH 4121 - Independent Research in Mathematics II (1)
- MTH 4133 - Service Learning in Mathematics (3)

Total Upper-Division Units: 36

*\*An elective course may not count as both an upper-division requirement and a required "additional elective."*

Total Non-GE Units for Degree: 58

Recommended Electives for Mathematics Tracks:

**Graduate School:** One semester of independent study continuing Abstract Algebra or Real Analysis, Complex Analysis, Honors Project or Independent Research in Mathematics.

**Industry:** Complex Analysis, Mathematical Probability, and Mathematical Modeling. Additional knowledge of computer programming and software tools such as Matlab and R can be helpful in this field.

**Actuary:** MTH 3083 Mathematical Probability and Statistics, MTH 3043 Discrete Mathematics, MTH 3073 Mathematical Modeling will help you prepare for actuarial exams. We recommend that you take the first exam as soon as you finish MTH 3083 . The Society of Actuaries has also approved ECO 1001 Macroeconomics, ECO 1002 Microeconomics to meet their economics requirement (you must get at least a B in each). The Society of Actuaries has also approved the sequence: ACC 2000 ( ACC 2001 Principles of Financial Accounting I can be substituted), FIN 3035 Business Finance and FIN 3085 Intermediate Finance to meet their finance requirement. So with some work you can meet 3 of the 10 items required for becoming a Fellow of the Society of Actuaries before you graduate from college. It is also worth noting that by adding a few classes to this list, you can earn a minor in Finance.

If you are planning on becoming an actuary, we recommend that you earn a BS in Data Science rather than a BS in Mathematics.

*Teaching:* PLNU has a waiver on the CSET: Mathematics exams, if a student takes a specific set of mathematics classes as part of the BS program. These include MTH 4002 Topics in Geometry, MTH 3043 Discrete Mathematics, MTH 4013 Complex Analysis and EDU 3002 Foundations of Education and Learning Theory and EDU 4004 Foundations of Special Education. Please see your advisor for further details. PLNU does offer the option of earning a BS in Mathematics and a teaching credential in four years and the details of that can be found in the description of the Blending Single Subject Teaching Credential below.

## 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3)** \*
- EDU 3006 - Principles of Language Acquisition **(3)** \*
- EDU 4004 - Foundations of Special Education **(3)** \*
- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**
- EDU 4020 - Literacy Instruction for Secondary Teachers **(3)** \*
- EDU 4021 - General Methods for Secondary Teachers **(3)** \*

- EDU 4050 - Secondary Clinical Practice I **(4)**
- EDU 4055 - Secondary Clinical Practice II **(4)**
- EDU 40CP3 - Secondary Clinical Practice Seminar I **(1)**
- EDU 40CP4 - Secondary Clinical Practice Seminar II **(1)**

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics **(3)** (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science **(3)** \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science **(3)** (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language **(3)** (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts **(3)** (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education **(3)** (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers **(3)** \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Media Communication, B.A.**

### Program Learning Outcomes

**Students who complete the program in Media Communication will be able to:**

1. Demonstrate skills in the theoretical and/or historical critique of media. This includes the integration of a Christian worldview and ethical framework for viewing, interpreting, and critiquing media messages.
2. Demonstrate scriptwriting skills for radio, TV, film, internet, church media, and/or corporate media industries.
3. Demonstrate production and/or performance skills in radio, TV, film, internet, church media, and/or corporate media industries.
4. Demonstrate professional socialization skills in a radio, TV, film, internet, church media, and/or corporate media internship.

### Lower-Division Core Requirements

- COM 1050 - Introduction to Media Communication **(3)**
- COM 1075 - Scriptwriting for Television and Film **(3)**
- COM 2043 - Introduction to TV and Film Production **(3)**
- COM 2065 - Introduction to Research in Communication **(3)**
- COM 2075 - Audio Production **(2)**
- JRN 2015 - Newspaper Workshop **(1) OR**
- JRN 2017 - Yearbook Workshop **(1) OR**
- JRN 2018 - Multimedia Workshop **(1) OR**

- WRI 2016 - Literary Magazine Workshop (1)

Total: 15 Units

## Upper-Division Core Requirements

- COM 3095 - Media Literacy (3)
- COM 4021 - Internship in Communication (3)  
*(Not required for the Film Studies concentration)*
- COM 4022 - Portfolio Construction (1)
- COM 4085 - Communication, Values, and Society (2)

Total: 9 Units

## Upper-Division Electives

Choose nine (9) units from:

- COM 3000 - Narrative and Documentary Film (3)
- COM 3040 - Organizational Communication (3)
- COM 3050 - Electronic Media in Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 4065 - Communication Theories and Research (3)
- COM 4090 - Special Studies in Communication (1-3)
- JRN 3040 - Media Law and Ethics (3) \*

Students with a Film Studies concentration may also select the following two courses:

- COM 4042 - Field Television Production (3)
- COM 4043 - Studio Television Production (3)

Total: 9 Units

## Writing Electives

Choose one (1) course from:

- WRI 2020 - Introduction to Creative Writing (3)
- JRN 2050 - Introduction to Journalism (3)
- WRI 3022 - Creative Writing: Fiction (3)
- WRI 3023 - Creative Writing: Creative Nonfiction (3)

Total: 3 Units

## Concentrations

**Choose one track and select electives among the choices.** To complete the major, there must be a minimum of 24 upper division units between the core and concentration.

## Multimedia

Requirements: 12 units

- ART 1003 - Two-Dimensional Design **(3)**
- ART 2002 - Introduction to Computer Graphics **(3)**
- ART 3015 - Introduction to Interactive Web Design **(3)**
- ART 4050 - Interactive Web Design **(3)**

Total: 12 Units

## Screen Performance

Take a total of 8 units from:

- COM 3013 - Television News Production **(3)**
- COM 4020 - Communication Practicum II **(1-2) 1 Unit required**
- COM 4025 - Advanced Television Workshop **(1)**
- COM 4035 - Advanced Audio Production **(1)**
- TRE 2050 - Voice and Diction **(2)**
- TRE 2070 - Acting **(3)**

Total: 8 Units

## Production

Take a total of 8 units from:

- COM 3013 - Television News Production **(3)**
- COM 4020 - Communication Practicum II **(1-2)**
- COM 4025 - Advanced Television Workshop **(1)**
- COM 4035 - Advanced Audio Production **(1)**
- COM 4042 - Field Television Production **(3)**
- COM 4043 - Studio Television Production **(3)**

Total: 8 Units

## Film Studies

*NOTE: Student must be accepted into the LAFSC program in order to complete this concentration.*

- COM 4070 - Hollywood Production Workshop (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) **(4)**

- COM 4071 - Faith and Artistic Development in Film (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)
- COM 4072 - Internship: Inside Hollywood (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (6) **6 Units required**

Choose one of the following:

- COM 3071 - Professional Acting for the Camera (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)
- COM 4073 - Narrative Storytelling (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)
- COM 4074 - Professional Screenwriting (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)
- COM 4080 - Independent Study (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)

Total: 16 Units (taken at LAFSC)

## **Multimedia Journalism, B.A.**

### Program Learning Outcomes

**Students who complete the program in Multimedia Journalism will be able to:**

1. Exhibit effective research and reporting practices including the creation and editing of a news story based on accepted industry standards and values.
2. Display strong interpretive, analytic, and critical thinking skills by writing news copy clearly and accurately, demonstrating quantitative and qualitative reasoning in forms appropriate to the purpose, medium, and audience.
3. Identify and apply appropriate ethical and legal standards in their service to their communities and cultures.
4. Employ delivery skills appropriate to various news performance situations.
5. Describe how technologies shape the way people perceive and interact with the world and apply these digital tools and technologies appropriately for the communications professions in which they work.

### Lower-Division Requirements

- JRN 2015 - Newspaper Workshop (1) \*
- JRN 2050 - Introduction to Journalism (3)
- COM 1050 - Introduction to Media Communication (3)
- COM 2043 - Introduction to TV and Film Production (3)

One course from the following:

- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 2054 - British Writers I (3)
- LIT 2055 - British Writers II (3)
- LIT 2056 - American Writers I (3)
- LIT 2057 - American Writers II (3)

Total: 15 Units

Note(s):

*\* Three units of Newspaper Workshop. WRI 2016 , JRN 2017 , JRN 2018 , or COM 2075 may substitute for two of those units.*

## Upper-Division Requirements

- JRN 3014 - Computer-Assisted Reporting (3)
- JRN 3040 - Media Law and Ethics (3)
- JRN 3050 - Special Topics in Journalism (3)
- JRN 4030 - Multimedia Journalism (3)
- JRN 4070 - Internship in Journalism (2)
- JRN 4095 - Senior Seminar in Multimedia Journalism (3)
- **One additional upper-division literature course beyond GE from the courses listed under Literature, Spanish, or French.**

Total: 20 Units

Choose One Concentration:

### Concentration in Writing

- JRN 3010 - Advanced Reporting (3)
  - JRN 3045 - Editing (3)
  - JRN 4040 - Magazine Editing and Concepts (3)
- Choose one course from the following:**
- WRI 3015 - Advanced English Composition (3)
  - WRI 3021 - Creative Writing: Poetry (3)
  - WRI 3022 - Creative Writing: Fiction (3)
  - WRI 3023 - Creative Writing: Creative Nonfiction (3)

Total: 12 Units

### Concentration in Visual Storytelling

- JRN 3012 - Television News Writing (3)
- JRN 3013 - Television News Production (3)
- JRN 4013 - Advanced Television News Production (3)
- JRN 4014 - Long-Form Broadcast News (3)
- JRN 4025 - Advanced Television Workshop (1)

Total: 13 Units

Major Total: 47-48 Units

## Multimedia Journalism Major with a Minor in Spanish

The Department offers a Multimedia Journalism major with a Spanish Minor. This extremely marketable and desirable combination is recommended for Multimedia Journalism majors who desire to work in American border cities or in Latin American countries, as well as for students seeking a Single-Subject Teaching Credential. The student completes an internship at a bilingual newspaper, magazine, radio, or television station. A maximum of two of the required upper-division literature courses in the Multimedia Journalism major may be in Spanish or Latin American literature.

### Note(s):

Accepting Associate Degree for Transfer (ADT)

## Music Education, B.A.

### Program Learning Outcomes

**Students who complete the program in Music Education will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Develop a broad conceptual understanding of music learning in elementary and secondary school settings and pedagogical methods appropriate to each level.
6. Develop more advance applied music skills in a principal performance area.

### Core Curriculum

*(Required of all Music majors)*

### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**

- MUH 3034 - World Music (2)
- MUH 4031 - Faith, Life, and Music (2)

### Music Theory:

- MUT 1020 - Music Theory I (4)
- MUT 1021 - Music Theory II (4)
- MUT 2020 - Music Theory III (3)

Total: 31 Units

### Requirements

**The following courses are required in addition to the Core Curriculum indicated above:**

- MUE 2001 - Woodwind Instruments (1)
- MUE 2002 - Brass Instruments (1)
- MUE 2003 - Percussion Instruments (1)
- MUE 2004 - String Instruments (1)
- MUE 3003 - Choral and Vocal Techniques (2)
- MUE 4041 - Elementary School Music Methods (3)
- MUE 4054 - Secondary School Music Methods (3)
- MUH 3033 - Music History and Literature III (2)
- MUA 1001 - Recital Attendance - 4 semesters (0)
- MUA 3012 - Choral Conducting and Literature (2)
- MUA 3013 - Instrumental Conducting (2)
- MUA 3076 - Junior Recital (0)
- *Applied Music in major performing area (4)*
- *Voice (class or private) (2)*
- *One-unit Ensembles (4)*
- Upper Division MUT (3)
- Music Electives (2)

Total: 33 Units

### Note(s):

Transfer students and PLNU students changing their major to Music in the BA degree must complete one ensemble and one unit of applied music each semester.

Additional requirements for the California Teaching Credential are listed in the School of Education under the Single-Subject credential. The Teaching Credential requires an extra year after the B.A. degree is earned.

### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3)** \*
- EDU 3006 - Principles of Language Acquisition **(3)** \*
- EDU 4004 - Foundations of Special Education **(3)** \*
- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**
- EDU 4020 - Literacy Instruction for Secondary Teachers **(3)** \*
- EDU 4021 - General Methods for Secondary Teachers **(3)** \*
- EDU 4050 - Secondary Clinical Practice I **(4)**
- EDU 4055 - Secondary Clinical Practice II **(4)**
- EDU 40CP3 - Secondary Clinical Practice Seminar I **(1)**
- EDU 40CP4 - Secondary Clinical Practice Seminar II **(1)**

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics **(3)** (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science **(3)** \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science **(3)** (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language **(3)** (French/Spanish Majors)

- EDU 4037 - Methods for Teaching Secondary Visual Arts **(3)** (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education **(3)** (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers **(3)** \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Music with a Concentration in Music and Ministry, B.A.**

### Program Learning Outcomes

**Students who complete the program in Music with a Concentration in Music and Ministry will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate substantial knowledge of the traditions, techniques and materials used in worship music.
6. Complete a semester-long internship where students are placed in church music ministry settings and given leadership responsibilities with the support of a professional music staff member.

### Core Curriculum

*(Required of all Music majors)*

#### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

#### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

## Music Theory:

- MUT 1020 - Music Theory I (4)
- MUT 1021 - Music Theory II (4)
- MUT 2020 - Music Theory III (3)

Total: 31 Units

## Requirements

**The following courses are required in addition to the Core Curriculum indicated above:**

- CMU 2001 - Instruments in Worship (2)
- CMU 2002 - Multi-Media for Worship Ministry (2)
- CMU 3014 - Music and Worship (3)
- CMU 3015 - Church Music Administration and Materials (2)
- CMU 4033 - Hymnology (3)
- CMU 4051 - Internship in Church Music (2)
- MUA 3012 - Choral Conducting and Literature (2)
- MUH 3033 - Music History and Literature III (2)

Total: 16 Units

## Note(s):

Transfer students and PLNU students changing their major to Music in the BA degree must complete one ensemble and one unit of applied music each semester.

**A minor from the following list is recommended:**

Youth Ministry, Theatre, Communication, or Media Communication

## Music, B.A.

### Program Learning Outcomes

*Students who complete the program in Music will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.

## Core Curriculum

*(Required of all Music majors)*

### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

### Requirements

**In addition to the Core Curriculum Requirements Above:**

- **Choose 2 units of upper division MUH chosen from: MUH 3009, MUH 3011, or MUH 3033**
- **Choose 2 units from upper division MUE OR any two from MUE 2001, MUE 2002, MUE 2003 and MUE 2004**
- **AND an additional 13 units of which 7 must be Upper Division**

Total: 17 Units

### Note(s):

Transfer students and PLNU students changing their major to Music in the BA degree must complete one ensemble and one unit of applied music each semester.

*A minor from the following list is recommended:*

Theatre, Media Communication, or Business Administration

Accepting Associate Degree for Transfer (ADT)

## **Nursing, B.S.N.**

### Program Learning Outcomes

**INQUIRING FAITHFULLY:** The student will demonstrate knowledge, skill and behavior of the evidence-based practice of nursing which integrates growth in reasoning, analysis, decision-making and the application of theory with the goal of advocating for others and/or self. This includes holistic nursing skills and the nursing process.

**LEADING FAITHFULLY:** The student will incorporate a foundational relationship with Christ and others and embrace a willingness to serve others in the midst of life circumstances (e.g., illness, injustice, poverty). The student will role-model the need for "Sabbath Rest" as a means of personal renewal, and true care of the self, so that service to others is optimally achieved. The student will incorporate the characteristics of a servant leader including: humility, courage, forgiveness, discernment.

**COMMUNICATING FAITHFULLY:** The student will actively engage in the dynamic interactive process that is intrapersonal and interpersonal with the goal of advocating for others and/or self. This includes effective, culturally appropriate communication which conveys information, thoughts, actions and feelings through the use of verbal and nonverbal skills.

**FOLLOWING FAITHFULLY** As defined as claiming the challenge from Florence Nightingale that nursing is a "divine imposed duty of ordinary work." The nursing student will integrate the ordinary work by complying with and adhering to regulatory and professional standards (e.g. ANA Code of Ethics, the California Board of Registered Nursing, Scope of Nursing Practice, SON Handbook). This includes taking responsibility, being accountable for all actions and treating others with respect and dignity.

**CARING FAITHFULLY:** The student will embrace a calling to the ministry of compassionate care for all people in response to God's grace, which aims to foster optimal health and bring comfort in suffering and death.

### Lower-Division Requirements

- NSG 1050 - Caring Faithfully: An Introduction to Nursing (2) \*
- NSG 2050 - Nursing of Individuals: Adult Health I (3)
- NSG 2051 - Nursing of Individuals: Clinical Practicum I (3)
- NSG 2055 - Changing Minds, Changing Lives (1)
- NSG 2060 - Nursing of Individuals: Adult Health II (4)
- NSG 2061 - Nursing of Individuals: Clinical Practicum II (3)
- NSG 2070 - Pharmacology in Nursing (2)
- BIO 1030 - Human Anatomy and Physiology I (GE) (3) \*
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) (1)
- BIO 1040 - Human Anatomy and Physiology II (3) \*
- BIO 1040L - Human Anatomy and Physiology II Laboratory (1)
- BIO 2020 - Microbiology of Infectious Diseases (3) †
- BIO 2020L - Microbiology of Infectious Diseases Laboratory (1)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) \*
- CHD 1050 - Human Development (3) ††
- NUT 2025 - Fundamentals of Nutrition (3) ††
- MTH 2003 - Introduction to Statistics (3)
- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3) \*

Select 3-4 General Education units from The Social World

Total: 52 Units

Note(s):

*\*Prerequisite to Nursing program, i.e., admission to NSG 2050 and NSG 2051.*

*†May be allowed to complete concurrent with first Nursing course.*

*††Must be completed by the end of the sophomore year.*

*A grade of at least "B" in NSG 1050 and a cumulative GPA of 3.000 are required for consideration for admission to the Nursing Major.*

*A grade of at least "C" is required in WRI 1010, MTH 2003, BIO 2020, and BIO 2020L.*

## Upper-Division Requirements

- NSG 3010 - Nursing of Families: Child/Adolescent Focus (2)
- NSG 3011 - Nursing of Families: Child/Adolescent Clinical Practicum (3)
- NSG 3030 - Nursing of Families: The Childbearing Process (2)
- NSG 3031 - Nursing of Families: The Childbearing Process Clinical Practicum (3)
- NSG 3040 - Nursing of Families: Adult Health III (2)
- NSG 3041 - Nursing of Families: Adult Health III Clinical Practicum (3)
- NSG 3099 - Nursing Research (2)
- NSG 4050 - Nursing of Communities: Mental Health Focus (3)
- NSG 4051 - Nursing of Communities: Mental Health Clinical Practicum (3)
- NSG 4060 - Nursing of Communities: Community Health Focus (3)
- NSG 4061 - Nursing of Communities: Community Health Focus Clinical Practicum (1)
- NSG 4070 - Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice (3)
- NSG 4080 - Nursing Capstone (1)
- NSG 4081 - Nursing Capstone Practicum (3)
- PSY 3021 - Abnormal Psychology (3)
- SOC 3060 - Race and Ethnicity (3)

Total: 40 Units

## **Nutrition, B.A.**

### Program Learning Outcomes

**Students who complete the program in Nutrition will be able to:**

1. Demonstrate critical thinking skills and analytical abilities to identify and solve problems in nutritional science.
2. Critically evaluate and interpret research for various life-cycle stages and develop practical approaches to address specific nutrition-related conditions and diseases within the life-span.

3. Plan and implement advanced educational principles for nutrition behavior change and communicate effectively with diverse populations.
4. Evaluate the effects of societal, cultural, ethical and financial dynamics upon diet trends, dietary choices, and food preparation methods among individuals, families and societies.
5. Develop and articulate a professional philosophy and personal code of ethics aimed at improving professional career.

## Lower-Division Requirements

- BIO 1030 - Human Anatomy and Physiology I (GE) (3)
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) (1)
- BIO 1040 - Human Anatomy and Physiology II (3)
- BIO 1040L - Human Anatomy and Physiology II Laboratory (1)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4)
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- NUT 1010 - Fundamentals of Food (2)
- NUT 2025 - Fundamentals of Nutrition (3)
- PHL 2011 - Ethics (GE) (3)
- SWF 1000 - Living Justly in Contemporary Society (GE) (3)

Total: 28 Units

## Upper-Division Requirements

- NUT 3030 - Community Nutrition (3)
- NUT 3031 - Community Nutrition Practicum (1)
- NUT 3035 - Nutrition Research Through the Life Cycle (2)
- NUT 3065 - Advanced Nutrition (3)
- NUT 4014 - Practices in Nutrition Education and Dietary Counseling (2)
- NUT 4080 - Internship in Nutrition (2 or 4)
- NUT 4097 - Senior Seminar (2)
- SWF 3006 - Research Basics (3)
- SWF 3015 - Health and Well-Being (GE) (2)

Total: 19-21 Units

Core Total: 47-49 Units

## Concentrations

**Choose one required concentration from:**

- **Counseling**
- **Food**
- **Sports and Fitness**

## Counseling

### Upper Division Requirements

- PSY 3020 - Social Psychology (3)
- PSY 3021 - Abnormal Psychology (3)
- PSY 3025 - Clinical and Community Interventions (4)
- PSY 3041 - Group Counseling (1-3)
- PSY 3080 - Family Development and Family Therapies (3)

Total: 14-16 Units

Major Total: 63-65 Units

### Recommended Courses for Counseling Concentration:

- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)
- NUT 4090 - Special Studies in Nutrition (1-4)
- PSY 3045 - Group Dynamics (3)

## Food

### Upper Division Requirements

- FCS 3000 - Quantity Food Production (3)
- MKT 3032 - Principles of Marketing (3)
- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- NUT 3003 - Cultural Foods (2)
- NUT 4035 - Food Service Management (2)
- NUT 4055 - Food Science (3)

Total: 16 Units

Major Total: 65 Units

### Recommended Courses for Food Concentration:

- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)
- NUT 4090 - Special Studies in Nutrition (1-4)
- PSY 3025 - Clinical and Community Interventions (4)
- PSY 3045 - Group Dynamics (3)

## Sports and Fitness

### Lower Division Requirements

- EXS 2001 - Fundamentals of Fitness Assessment and Development (2)

Total: 2 Units

### Upper Division Requirements

- EXS 3030 - Nutrition for Exercise and Sport Performance (3)
- EXS 3001 - Fitness Assessment and Exercise Prescription (3)
- EXS 3001L - Fitness Assessment and Exercise Prescription Lab (1)
- KIN 3040 - Physiology of Exercise (3)
- KIN 3040L - Physiology of Exercise Lab (1)
- PSY 3021 - Abnormal Psychology (3)

Total: 14 Units

Major Total: 65 Units

### Recommended Course for Sports and Fitness Concentration:

- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)
- NUT 4090 - Special Studies in Nutrition (1-4)
- PSY 3025 - Clinical and Community Interventions (4)
- PSY 3045 - Group Dynamics (3)

## **Organizational Communication, B.A.**

### Program Learning Outcomes

**Students who complete the program in Organizational Communication will be able to:**

1. Develop a sophisticated understanding of communication as the negotiation of meaning.
2. Display communication competence both verbally and nonverbally in interpersonal, small group, organizational, and intercultural contexts.
3. Formulate a thesis, organize a complex idea, and support it with appropriate evidence using proper grammar and punctuation.
4. Demonstrate an ability to present themselves in a professional manner including resume, interview skills, and presentations.
5. Demonstrate an understanding and ability to work collaboratively in a group.
6. Analyze and conduct original communication research (quantitative and qualitative) using scholarly journals, data bases, and collecting and analyzing empirical data.
7. Demonstrate an understanding of basic theoretical concepts relative to organizational behavior including scientific management, systems theory, and organizational culture.
8. Integrate a Christian perspective of values and ethics in their communication in interpersonal, small group organizational and intercultural contexts.
9. Develop an awareness of multiple approaches to leadership and develop a personal leadership philosophy.

### Lower-Division Core Requirements

- COM 1090 - Interpersonal Communication (3)
- COM 2020 - Small Group Communication (3)
- COM 2065 - Introduction to Research in Communication (3)
- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
  
- ECO 1000 - Survey of Economics (GE) (3) \*\*  
OR
- ECO 1001 - Principles of Macroeconomics (GE) (3) \*\*  
OR
- ECO 1002 - Principles of Microeconomics (GE) (3) \*\*

### Lower-Division Units: 15 Units

#### Note(s):

*\*\*Meets a general education requirement.*

*All majors take COM 1000 (3) or COM 2031 (3) as an additional general education requirement.*

### Upper-Division Core Requirements

- COM 3030 - Persuasion (3)
- COM 3040 - Organizational Communication (3)
- COM 3045 - Leadership Communication (3)
- COM 4021 - Internship in Communication (3)
- COM 4022 - Portfolio Construction (1)
- COM 4065 - Communication Theories and Research (3)
- COM 4085 - Communication, Values, and Society (2)

Total: 18 Units

#### Take one (1) course from the following:

- COM 3060 - Professional Speaking for Career Settings (3)
- WRI 3065 - Writing for Professional Careers (3)

#### Take one (1) course from the following:

- COM 3090 - Introduction to Public Relations (3)
- COM 4050 - Communication Training and Development (2)

Take six (6) units selected from upper-division courses with the following prefixes: ACC, BUS, COM, ECO, FIN, HON, MGT, MKT at the 3000 or 4000 level (selections must include at least 2 different courses AND 6 units total).

Upper-Division Units: 29-30

## Total Units Required for Major: 44-45\*

*\*Depending on specific courses selected and not including units counted toward general education requirements.*

*+The BA in Organizational Communication is an approved program under PLNU's WASC Regional Accreditation. Since it is not a business major, it is not an Accreditation Council for Business Schools and Programs (ACBSP) approved program.*

## Philosophy, B.A.

The discipline of philosophy, the critical inquiry into the structure of reality, knowledge, and values, seeks to clarify and explicate the presuppositions and implications of various interpretations of human experience. The purposes of the Philosophy major are:

- To develop critical and creative thinking, soundness of argument, clarity of thought, and precision in expression;
- To cultivate a critical appreciation of the enduring questions constituting the philosophical heritage;
- To explore the relation between philosophical and religious thought; and
- To prepare students for graduate study.

## Program Learning Outcomes

*Students who complete the program in Philosophy will be able to:*

1. Engage in the disciplined practice of asking questions about God, the world, and themselves, including questions for which there may be no easy answers.
2. Differentiate among interrelated movements or figures in the history of philosophy.
3. Evaluate the strengths and weaknesses of human reasoning or experience to provide an adequate account of the human condition, the world, ethics and Christian life.

## Lower-Division Requirements

- PHL 2001 - Introduction to Philosophy (GE) **(3)**  
**OR**
- PHL 2011 - Ethics (GE) **(3)**
- PHL 2077 - Logic **(3)**

Total: 6 Units

## Upper-Division Requirements

- PHL 3001 - Plato and Aristotle **(3)**
- PHL 3002 - Descartes through Hegel **(3)**
- PHL 4001 - Contemporary Voices in Philosophy, Theology, and Ethics **(3)**  
**OR**
- PHL 4011 - The Search for Meaning: Goodness, Being, and Truth **(3)**

- PHL 4090 - Special Studies in Philosophy (1-3)
- **Eighteen (18) additional SOTCM upper-division major elective units, 15 of which will need to be upper-division PHL courses.**

Total: 28 Units

Major Total: 34 Units

Recommended

*Greek, German, or French should be used to fulfill the general education foreign language requirement.*

Note(s):

Accepting Associate Degree for Transfer (ADT)

## **Physics, B.A.**

### Program Learning Outcomes

**Students who complete the Physics B.A. program will:**

1. Develop an understanding of the fundamental principles of physics.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.
5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
7. Effectively collaborate in teams.

### Lower-Division Requirements

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- EGR 1023 - Introduction to Engineering II (2)
- EGR 1023L - Introduction to Engineering II Lab (1)
- EGR 1043 - Introduction to Computer Programming (2)
- EGR 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 1074L - Calculus II Lab (1)
- MTH 2074 - Calculus III (4)

- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total Lower-Division Units: 33

### Upper-Division Requirements

- MTH 3033 - Differential Equations (3)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)
- PHY 3043 - Analytical Mechanics: Dynamics (3)
- PHY 3063 - Electricity, Magnetism, and Waves I (3)
- PHY 4013 - Thermodynamics (3)
- PHY 4053 - Quantum Mechanics (3)
- PHY 4072 - Senior Project (2)

Total Upper-Division Units: 21

### Electives

#### One of the following courses:

- PHY 3013 - Nuclear Physics (2) **and**
- PHY 3013L - Nuclear Physics Lab (1)
- PHY 3083 - Electricity, Magnetism, and Waves II (3)
- PHY 4063 - Solid State Physics (3)

Total Elective Units: 3

Total Units for Degree: 57

### Recommended:

- CHE 1053 - General Chemistry II (3) **and**
- CHE 1053L - General Chemistry II Lab (1)
- EGR 1054 - Objects and Elementary Data Structures (3) **and**
- EGR 1054L - Objects and Elementary Data Structures Lab (1)
- MTH 2033 - Linear Algebra (3)

### Physics, B.A. for Associate Degree Transfer (ADT) Students

Note that all lower division physics and mathematics courses will be transferred in from the community college. Students will bring in 24 units of mathematics (8 units are GE).

## Core Curriculum

- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)
- PHY 3043 - Analytical Mechanics: Dynamics (3)
- PHY 3063 - Electricity, Magnetism, and Waves I (3)
- PHY 4013 - Thermodynamics (3)
- PHY 4053 - Quantum Mechanics (3)
- PHY 4072 - Senior Project (2)
- MTH 3033 - Differential Equations (3)

Total: 22 Units

Take a minimum of 11 units of electives from the following options:

- PHY 3013 - Nuclear Physics (2)
- PHY 3013L - Nuclear Physics Lab (1)
- PHY 3083 - Electricity, Magnetism, and Waves II (3)
- PHY 4063 - Solid State Physics (3)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- EGR 1043 - Introduction to Computer Programming (2)
- EGR 1043L - Introduction to Computer Programming Lab (1)

Total: 11 Units

Total Units for the Degree: 57 (49 without GE)

Note(s):

Associate Degree for Transfer (ADT) students only.

## Physics, B.S.

### Program Learning Outcomes

**Students who complete the Physics B.S. program will:**

1. Develop an understanding of the fundamental principles of physics.
2. Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
3. Design and conduct experiments as well as analyze and interpret data.
4. Effectively communicate complicated technical information in writing.
5. Effectively communicate complicated technical information orally.
6. Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
7. Effectively collaborate in teams.

## Lower-Division Requirements

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- EGR 1023 - Introduction to Engineering II (2)
- EGR 1023L - Introduction to Engineering II Lab (1)
- EGR 1043 - Introduction to Computer Programming (2)
- EGR 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 1074L - Calculus II Lab (1)
- MTH 2074 - Calculus III (4)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total Lower-Division Units: 33

## Upper-Division Requirements

- MTH 3033 - Differential Equations (3)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)
- PHY 3013 - Nuclear Physics (2)
- PHY 3013L - Nuclear Physics Lab (1)
- PHY 3043 - Analytical Mechanics: Dynamics (3)
- PHY 3063 - Electricity, Magnetism, and Waves I (3)
- PHY 3083 - Electricity, Magnetism, and Waves II (3)
- PHY 4013 - Thermodynamics (3)
- PHY 4053 - Quantum Mechanics (3)
- PHY 4063 - Solid State Physics (3)
- PHY 4072 - Senior Project (2)

Total Upper-Division Units: 30

## Electives

**Complete one of the following courses and the associated lab:**

- EGR 2014 - Engineering Mechanics: Statics (3) **and**
- EGR 2014L - Engineering Mechanics: Statics Lab (1)
- EGR 2024 - Electronics and Circuit Analysis (3) **and**

- EGR 2024L - Electronics and Circuit Analysis Lab (1)
- EGR 3034 - Mechanics of Materials (3) **and**
- EGR 3034L - Mechanics of Materials Lab (1)

Total Elective Units: 4

Total Units for Degree: 67

Recommended:

- CHE 1053 - General Chemistry II (3) **and**
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2094 - Organic Chemistry I (3) **and**
- CHE 2094L - Organic Chemistry I Lab (1)
- EGR 1054 - Objects and Elementary Data Structures (3) **and**
- EGR 1054L - Objects and Elementary Data Structures Lab (1)
- MTH 2033 - Linear Algebra (3)

## Piano Performance, Bachelor of Music

### Program Learning Outcomes

**Students who complete the program in Piano Performance will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

### Core Curriculum

*(Required of all Music majors)*

#### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters (0) - 4 semesters
- MUA 2001 - Piano Proficiency Exam (0)
- MUA 2012 - Beginning Conducting (2)
- *Applied Music in major performing area (4)*
- *One-unit Ensembles (4)*

Music History:

- MUH 1001 - Introduction to Listening (GE) (2)
- MUH 3031 - Music History and Literature I (2)
- MUH 3032 - Music History and Literature II (2)
- MUH 3034 - World Music (2)
- MUH 4031 - Faith, Life, and Music (2)

### Music Theory:

- MUT 1020 - Music Theory I (4)
- MUT 1021 - Music Theory II (4)
- MUT 2020 - Music Theory III (3)

Total: 31 Units

### Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 1001 - Recital Attendance - 4 semesters (0)
- MUA 2056 Piano (4)
- MUA 3056 Piano (4)
- MUA 4056 Piano (4)
- MUA 3013 - Instrumental Conducting (2) *OR*
- MUA 3012 - Choral Conducting and Literature (2)
- MUA 3076 - Junior Recital (0)
- MUA 4076 - Senior Recital (0)
- Voice (class or private) (2)
- MUE 3011 - Piano Pedagogy I (2)
- MUH 3011 - Piano Literature (3)
- MUH 3033 - Music History and Literature III (2)
- MUP 3039 - Small Ensemble (1/2) **2 Units required**
- *One-unit Ensembles* (4)
- Upper-division Theory (6)
- Music Electives (10)

Total: 47 Units

Note(s): Transfer students and PLNU students changing their major to Music in the BMUS degree must complete one ensemble and two units of applied music each semester.

### Political Science, B.A.

#### Program Learning Outcomes

Students who complete the program in Political Science will be able to:

1. Develop an appreciation of the field of politics.
2. Evaluate, design, and apply social science research with respect to political phenomena.
3. Understand and critically assess the processes, theories, and outcomes of political institutions and political behavior.
4. Demonstrate social scientific information literacy.
5. Develop and express ideas in written communication in an effective and scholarly manner.
6. Demonstrate oral communication abilities, particularly to convey complex ideas, recognize diverse viewpoints, and offer empirical evidence of an argument.
7. Construct and evaluate analytical, comprehensive arguments.

## Lower-Division Requirements

- POL 1001 - Introduction to Political Science (GE) **(3)** \*
- POL 1065 - American Government **(4)**
- POL 2030 - Introduction to International Relations **(4)**
- POL 2070 - Scope and Methods of Political Science **(4)**

Total: 15 Units

Note(s):

*\*Meets a requirement in general education*

## Upper-Division Requirements

### American Government

Four units from:

- POL 3041 - Campaigns and Elections **(4)**
- POL 3080 - Congress and the Presidency **(4)**
- POL 4041 - Issues in Public Policy **(4)**

### Global Politics

Four units from:

- POL 4020 - United States Foreign Policy **(4)**
- POL 4035 - Global Governance **(4)**

### Comparative Government

- POL 3070 - Comparative Politics **(4)**

### Political Theory

- POL 3021 - Western Political Thought (4)

### Senior Seminar

- POL 4073 - Senior Seminar in Political Science and International Studies (3)

### Off-Campus Political Studies Program

- POL 3091 - Off-Campus Political Studies Program (3-12) \* 6 Units Required

### Internships

- POL 4060 - Internship in Political Science (2-4) \* 4 Units required

### Electives

Eight additional units from:

- POL 3001 - Transitions to Democracy (4)
- POL 3020 - U.S. Constitution and Civil Liberties Law (4)
- POL 3025 - American Political Thought (4)
- POL 3030 - The Development of Feminist Thought (WS) (4)
- POL 3041 - Campaigns and Elections (4)
- POL 3051 - War and Peace Studies (4)
- POL 3060 - Urban Politics (4)
- POL 3080 - Congress and the Presidency (4)
- POL 4015 - Women and Politics (WS) (4)
- POL 4020 - United States Foreign Policy (4)
- POL 4035 - Global Governance (4)
- POL 4037 - International Economics (4) \*
- POL 4038 - International Law (4)
- POL 4041 - Issues in Public Policy (4)
- POL 4042 - Contemporary Issues in World Politics (4)
- POL 4044 - Contemporary Political Ideologies (4)
- POL 4050 - Issues of Global Human Rights (2)
- POL 4055 - Protest and Social Movements in World Politics (4)
- POL 4090 - Special Studies in Political Science (1-4)

Total: 52 Units

Note(s):

*\*Required prerequisite for this course increases the number of units in the major.*

Accepting Associate Degree for Transfer (ADT)

# Psychology, B.A.

## Program Learning Outcomes

*Students who complete the program in Psychology will be able to:*

1. Identify basic tenets of psychology.
2. Summarize and apply facets of "The Good Life" as conceptualized in contemporary positive-moral psychology.
3. Display an increase in personal growth and development (for the purpose of serving others).
4. Demonstrate care for others.
5. Understand careers in psychology.

## Required Concentrations

*Choose a concentration from the following:*

Concentration A: Character Morality and Culture

Concentration B: General Psychology

Concentration C: Therapeutic and Community Psychology

## Lower-Division Requirements

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) **(3)** *(required of all students who graduated from high school the year prior to enrollment at PLNU)*
- PSY 1003 - General Psychology (GE) **(3)**

Total: 6 Units

## Upper-Division Requirements

- PSY 3000 - Personality and Adult Development **(4)**
- PSY 3008 - Developmental Psychology - Birth Through Adolescence **(4)**
- PSY 3021 - Abnormal Psychology **(3)**
- PSY 3090 - Research Methods and Statistics I **(4)**
- PSY 3091 - Research Methods and Statistics II **(4)**
- PSY 4000 - History and Contemporary Issues in Psychology **(2)**
- PSY 4009 - Psychology of Cognition and Learning **(4)**
- PSY 4020 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) **(4)**

Total: 29 Units

Core Total: 35 Units

## Required Concentrations

Concentration A: Character, Morality, and Culture Psychology

## Upper-Division Requirements

- PSY 3015 - Positive Psychology (3)
- PSY 3030 - Moral Psychology and Cultural Values (4)

One course from the following:

- PSY 4010 - Issues in Psychotherapy-Theology Integration (3) \*
- PSY 4040 - Psychology of Religion (4)
- **Plus three (3) units of Psychology electives** (*may also substitute MTH 3063 or MTH 3083 for Psychology elective*).

Total: 13-14 Units

Note(s):

*Electives - According to individual goals*

*\*If course is selected, must also take PSY 3025 (4)*

Recommended

## Concentration B: General Psychology

### Upper-Division Requirements

- **Fifteen units of Psychology electives** (*can also substitute either MTH 3063 or MTH 3083 for Psychology elective*).

Concentration Total: 15 Units

Note(s):

*Electives - According to individual goals*

## Concentration C: Therapeutic and Community Psychology

### Upper-Division Requirements

- PSY 3001 - Physiological and Neuropsychology (4)
- PSY 3025 - Clinical and Community Interventions (4)
- PSY 3050 - Clinical and Research Assessment (3)

- PSY 3080 - Family Development and Family Therapies (3)
- PSY 4010 - Issues in Psychotherapy-Theology Integration (3)

Concentration Total: 17 Units

### Recommended

- PSY 3015 - Positive Psychology (3)
- PSY 3041 - Group Counseling (1-3)
- PSY 3045 - Group Dynamics (3) (PSY341 is a pre-requisite)

## Social Work, B.A.

The Social Work program prepares students to be leaders in service to the community through generalist practice. A career in Social Work offers a wide range of opportunities, including direct practice in social work with families, individuals or community-based organizations, as well as jobs in research, public relations, human services, probation and criminal justice, social welfare, counseling, or health care administration.

### Program Learning Outcomes

#### Students who complete the program in Social Work will be able to:

1. Demonstrate understanding of integrated body of knowledge required of a general practitioner as defined by the Council on Social Work Education.
2. Demonstrate a command of the professional values and ethics required of a general practitioner.
3. Demonstrate competence in the concrete practice of professional skills, especially those skills required by the Council on Social Work Education of a general practitioner.
4. Demonstrate an awareness of the influence of Christian and Wesleyan perspectives on social work practice.
5. Demonstrate preparation to transition to careers and/or graduate education in social work.

### Lower-Division Requirements

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- ECO 1000 - Survey of Economics (GE) (3) **or**
- ECO 1002 - Principles of Microeconomics (GE) (3)
- PSY 1003 - General Psychology (GE) (3)
- SOC 2050 - Sociology of the Family (3)
- SWF 1000 - Living Justly in Contemporary Society (GE) (3)

Total: 16 Units

### Upper-Division Requirements

- SWF 3006 - Research Basics (3)
- SWF 3015 - Health and Well-Being (GE) (2)

- SWK 3003 - Introduction to Social Work (3)
- SWK 3030 - Social Welfare Policy (3)
- SWK 3040 - Child Welfare (3) **OR**
- SOC 3016 - Sociology of Aging (3)
- SOC 3060 - Race and Ethnicity (3)
- SWK 3065 - Human Behavior in the Social Environment (3)
- SWK 3070 - Social Work Practice I (3)
- SWK 3071 - Social Work Practice II (3)
- SWK 4070 - Social Work Practicum (2-5)
- SWK 4071 - Social Work Practicum (2-5)
- SWK 4072 - Seminar in Social Work I (2)
- SWK 4073 - Seminar in Social Work II (2)

Total: 38 Units

### Recommended Electives

- SOC 3005 - Social Stratification (3)
- SOC 3030 - The Development of Feminist Thought (WS) (4)
- CHD 1050 - Human Development (3)
- PSY 3021 - Abnormal Psychology (3)
- PSY 3000 - Personality and Adult Development (4)

Total: 54 Units

Note(s):

Accepting Associate Degree for Transfer (ADT)

## **Sociology, B.A.**

### Concentrations

General Sociology

Criminal Justice

### Program Learning Outcomes

**Students who complete the program in Sociology will be able to:**

1. Understand society and social behavior in groups and society.
2. Develop competency in social research and social analysis.
3. Demonstrate preparation for post-graduate education.
4. Demonstrate preparation for employment.

**Students who complete the program in Criminal Justice will be able to:**

1. Demonstrate comprehension of the theoretical and legal foundations of criminal justice.
2. Demonstrate knowledge of each of the components of the criminal justice system: the historical background, structure, function, and purpose.
3. Demonstrate understanding and appreciation of the social realities, discrimination, and conflicts in the criminal justice system resulting from racial, socio-economic, and cultural inequities.
4. Demonstrate ethical and professional behavior, and apply critical thinking and problem-solving skills, in an approved internship setting.

## Lower-Division Core Requirements

- SWF 1000 - Living Justly in Contemporary Society (GE) (3)
- SOC 1001 - Introduction to Sociology (GE) (3)

Total: 6 Units

## Upper-Division Core Requirements

- SWF 3006 - Research Basics (3)
- SWF 3015 - Health and Well-Being (GE) (2)
- SOC 4015 - Social Theory (3)
- SOC 4060 - Applied Research Methods and Design (3)
- SOC 4076 - Senior Seminar in Sociology (3)

Total: 14 Units

## Concentrations

### General Sociology

#### General Sociology Core

- SOC 4044 - Globalization and Culture (3)
- SOC 4071 - Internship in Sociology (2-4) (4 Units Required)

Select 6 units from the following:

- (Diversity) Select one of the following courses:**
- SOC 3005 - Social Stratification (3)
  - SOC 3060 - Race and Ethnicity (3)
- (Institutions) Select one of the following courses:**
- SOC 2050 - Sociology of the Family (3)
  - SOC 4030 - Sociology of Religion (3)
  - SOC 4075 - Sociology of Education (3)

Select 12 units from the following:

- SOC 3005 - Social Stratification (3)
- SOC 3010 - Criminology (3) \*
- SOC 3014 - Juvenile Delinquency (3) \*
- SOC 3016 - Sociology of Aging (3)
- SOC 3020 - Social Psychology (3)
- SOC 3021 - Justice, Politics, and the Social World (3)
- SOC 3030 - The Development of Feminist Thought (WS) (4)
- SOC 3050 - Urban Sociology (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4020 - Social Change (3)
- SOC 4030 - Sociology of Religion (3)
- SOC 4070 - Medical Sociology (3)
- SOC 4075 - Sociology of Education (3)
- SOC 4090 - Special Topics in Sociology (1-4)
- SOC 4091 - Independent Studies in Sociology (1-4)

\* Student may take SOC 3010 **or** SOC 3014 but not both to fulfill the requirement.

Total: 25 Units

Total Major: 45 Units

## Criminal Justice

### Criminal Justice Lower-Division Requirements

- SOC 2009 - Introduction to Criminal Justice (3)
- POL 1065 - American Government (4)

Total: 7 Units

### Criminal Justice Upper-Division Requirements

- SOC 3010 - Criminology (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4009 - Criminal Law (3)
- SOC 4010 - Constitutional Foundations of Criminal Justice (3)
- SOC 4072 - Internship in Criminal Justice (2-4) **4 Units required**
- SOC 4080 - Restorative Justice (3)
- PSY 3021 - Abnormal Psychology (3)

Total: 22 Units

Total Major Units: 49

Note(s):

Accepting Associate Degree for Transfer (ADT)

## **Spanish, B.A.**

### Program Learning Outcomes

**Students who complete the program in Spanish will be able to:**

1. Write essays without significant errors of grammar, spelling, or vocabulary usage that would impede comprehension by a native speaker.
2. Comprehend the main idea and most details of connected oral discourse by a native speaker on a variety of topics.
3. Converse in a participatory fashion with a native speaker using a variety of language strategies to convey meaning.
4. Analyze and interpret target language texts and data sets according to their cultural, literary, and/or linguistic content.
5. Display knowledge of the nature and structure of language.
6. Discuss the influence of their own perspective on cultural interconnections through engagement with local, national, or international communities.

### Lower-Division Requirements

- SPA 1001 - Elementary Spanish I (GE) **(4)**
- SPA 1002 - Elementary Spanish II (GE) **(4)**
  
- SPA 2050 - Intermediate Spanish Conversation I **(3)**
- SPA 2051 - Intermediate Spanish Conversation II **(3)**

Total: 14 Units

### Upper-Division Requirements

- SPA 3000 - Civic Engagement: Conversation, Culture and Community **(3)**
- SPA 3002 - Advanced Grammar and Reading **(3)**
- SPA 3010 - Latin American Culture and Civilization **(3)**
- SPA 3015 - Culture and Civilization of Spain **(3)**
- SPA 3020 - Mexican American Literature and Culture **(3)**
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film **(3)**
- SPA 3090 - Current Spanish Linguistics **(3)**
- SPA 4085 - Senior Seminar in Spanish **(3)**

One of the following:

- SPA 4000 - Peninsular Literature Before 1800 **(3)**
- SPA 4002 - Peninsular Literature Since 1800 **(3)**

One of the following:

- SPA 4037 - Latin American Literature Before 1910 (3)
- SPA 4039 - Latin American Literature Since 1910 (3)

Note(s):

Take six upper-division study-abroad units approved by the Department and Dean of the College of Arts and Humanities. Study abroad courses can substitute for or complement courses required in the major.

Total: 30 Units

Total Major: 44 Units

### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

### Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3) \*

- EDU 3006 - Principles of Language Acquisition (3) \*
- EDU 4004 - Foundations of Special Education (3) \*
- EDU 4009 - Classroom Assessment and Research Practices (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)
- EDU 4020 - Literacy Instruction for Secondary Teachers (3) \*
- EDU 4021 - General Methods for Secondary Teachers (3) \*
- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)
- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Visual Arts, B.A.**

### **Program Learning Outcomes**

**Students who complete the program of Visual Arts with concentrations in Painting, Drawing, and Printmaking, Sculpture and Installation, and Photography will be able to:**

1. Apply the art elements and design principles to two-and/or three-dimensional visual art forms to critically analyze works of art.
2. Create original works of art that demonstrate a contemporary approach to theory, media, and technology.
3. Write and speak knowledgeably and critically about issues relevant to historically important artists, art styles, and art movements.
4. Write and speak with coherency and self-awareness about their own artwork or research, and its relationship to contemporary culture and art history.
5. Pursue graduate or artist/scholars-in-residency programs, gallery and museum exhibitions, and public art commissions.

*Students who complete the program in Visual Art with a concentration in Art History will be able to:*

1. Recognize a wide range of artists, visual art forms, and cultures from the history of Western and Non-Western art.

2. Create original, contemporary artworks in studio and/or design that illustrate current skills and techniques in selected art media and technologies.
3. Use the elements of art and principles of design to critically analyze and interpret historical and contemporary art forms.

**Students who complete the program in Visual Art with a concentration in Video, Performance, and Interactive Media will be able to:**

1. Perform technological skills and techniques to produce time-based artworks in video, performance, or interactive media.
2. Use the elements of art and principles of design to describe, analyze, and evaluate works of time-based art.
3. Apply historical and contemporary art forms and theories to time-based media.

## Concentrations

- Drawing/Painting/Printmaking Concentration
- Sculpture and Installation Concentration
- Photography Concentration
- Art History Concentration
- Video, Performance, and Interactive Media Concentration

## Art History Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design **(3)**
- ART 1004 - Three-Dimensional Design: Composition and Space **(3)**
- ART 1015 - Drawing I **(3)**
- ART 2000 - History of Art I (GE) **(3) \***
- ART 2001 - History of Art II (GE) **(3) \***
- HIS 2070 - Doing History **(4)**

### Electives (Lower-Division)

Choose one:

- ART 2006 - Experimental Drawing Studio **(3)**
- ART 2010 - Painting: Color and Technique **(3)**
- ART 2022 - Sculpture: Materials and Fabrication **(3)**
- ART 2023 - Printmaking I **(3)**

Total: 22 Units

### Upper-Division Requirements

- ART 3004 - Modern Art History **(3)**
- ART 3005 - Contemporary Art History **(3)**
- ART 3025 - Non-Western Art History **(3)**
- ART 3035 - Design History: Industrial Revolution to Contemporary Design **(3)**
- ART 4020 - Contemporary Studio Seminar **(3)**
- ART 4066 - Senior Studio Exhibition or Research Preparation **(3)**

- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4072 - Exhibition or Research Project (3)

#### Electives (Upper-Division)

- **Choose one four unit upper-division history course (4)**

Choose two:

- COM 3000 - Narrative and Documentary Film (3)
- HIS 3075 - African Cultures and Histories (3)
- PHL 3041 - Philosophy and Art (3)
- Upper-division transfer courses in Art History (3-6)

Total: 32 Units

### Drawing/Painting/Printmaking Concentration

#### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- ART 2001 - History of Art II (GE) (3) \*
- ART 2006 - Experimental Drawing Studio (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2023 - Printmaking I (3)

Total: 27 Units

#### Upper-Division Requirements

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
- ART 3010 - Painting II (3) **OR**
- ART 3023 - Printmaking II (3)
- ART 3045 - Life Drawing (3)
- ART 3090 - Advanced Studio Practice (3)
- ART 4020 - Contemporary Studio Seminar (3)
- ART 4066 - Senior Studio Exhibition or Research Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4072 - Exhibition or Research Project (3)
- **Complete one additional upper-division Art course (2-3 units)**

Total: 27-28 Units

## Photography Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- ART 2001 - History of Art II (GE) (3) \*
- ART 2006 - Experimental Drawing Studio (3)
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2021 - Photography: Darkroom and Film (3)

### Electives (Lower Division)

Choose one:

- ART 2003 - Graphic Design I: Visual Symbolism (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2022 - Sculpture: Materials and Fabrication (3)
- ART 2023 - Printmaking I (3)
- ART 2026 - Photography: Digital (3)

Total: 27 Units

### Upper-Division Requirements

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
- ART 3021 - Photography: Alternative Processes (3)
- ART 3026 - Photography II: Contemporary Images (3)
- ART 3090 - Advanced Studio Practice (3)
- ART 4020 - Contemporary Studio Seminar (3)
- ART 4066 - Senior Studio Exhibition or Research Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4072 - Exhibition or Research Project (3)
- **Complete one additional upper-division Art course (2-3 units)**

Total: 27-28 Units

## Sculpture and Installation Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)

- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- ART 2001 - History of Art II (GE) (3) \*
- ART 2006 - Experimental Drawing Studio (3)
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2022 - Sculpture: Materials and Fabrication (3)

#### Electives (Lower-Division)

Choose one:

- ART 2003 - Graphic Design I: Visual Symbolism (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2026 - Photography: Digital (3)
- ART 2021 - Photography: Darkroom and Film (3)
- ART 2023 - Printmaking I (3)
- TRE 2070 - Acting (3)

Total: 27 Units

#### Upper-Division Requirements

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
- ART 3022 - Sculpture II: Objects and Installation (3)
- ART 3090 - Advanced Studio Practice (3)
- ART 4020 - Contemporary Studio Seminar (3)
- ART 4066 - Senior Studio Exhibition or Research Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4072 - Exhibition or Research Project (3)

#### Electives (Upper-Division)

- **Choose five to six units from any upper-division Art, Design, or Art History courses offered by the Department of Art and Design or choose from the following:**
- COM 3000 - Narrative and Documentary Film (3)
- TRE 3054 - Movement (3) **OR**

Total: 27-28 Units

#### Video, Performance, and Interactive Media Concentration

#### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design **(3) OR**
- ART 1004 - Three-Dimensional Design: Composition and Space **(3)**
- ART 1015 - Drawing I **(3)**
- ART 2000 - History of Art I (GE) **(3) \***
- ART 2001 - History of Art II (GE) **(3) \***
- ART 2002 - Introduction to Computer Graphics **(3)**
- ART 2026 - Photography: Digital **(3)**
- COM 2043 - Introduction to TV and Film Production **(3)**
- COM 2075 - Audio Production **(2)**

Note(s):

*\*Fulfills general education requirement*

Total: 23 Units

### Upper-Division Requirements

- ART 3005 - Contemporary Art History **(3)**
- ART 3015 - Introduction to Interactive Web Design **(3)**
- ART 3090 - Advanced Studio Practice **(3)**
- ART 4050 - Interactive Web Design **(3)**
- COM 3000 - Narrative and Documentary Film **(3)**
- COM 4042 - Field Television Production **(3)**
- COM 4043 - Studio Television Production **(3)**

### Capstone Courses

- ART 4020 - Contemporary Studio Seminar **(3)**
- ART 4066 - Senior Studio Exhibition or Research Preparation **(3)**
- ART 4070 - Internship **(1-3) - 1 unit required**
- ART 4072 - Exhibition or Research Project **(3)**

Total: 31 Units

### Recommended Electives\*

- TRE 2070 - Acting **(3)**
- TRE 3054 - Movement **(3)**

Note(s):

*\*Also recommended in Sculpture and Installation Concentration*

Note(s):

*\*Meets the general education requirement in the Fine Arts*

Accepting Associate Degree for Transfer (ADT)

## **Vocal Performance, Bachelor of Music**

### **Program Learning Outcomes**

*Students who complete the program in Vocal Performance will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

### **Core Curriculum**

*(Required of all Music majors)*

#### **Applied Music and Ensembles:**

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

#### **Music History:**

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

#### **Music Theory:**

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 1001 - Recital Attendance - 4 semesters **(0)**
- MUA 2050 - Diction for Singers I **(1)**
- MUA 2051 - Diction for Singers II **(1)**
- MUA 2055 - Private Voice **(1-2) (4 units required)**
- MUA 3055 - Private Voice **(1-2) (4 units required)**
- MUA 4055 - Private Voice **(1-2) (4 units required)**
- MUA 3012 - Choral Conducting and Literature **(2)**
- MUA 3076 - Junior Recital **(0)**
- MUA 4076 - Senior Recital **(0)**
- MUE 3010 - Vocal Pedagogy **(2)**
- MUE 4051 - Internship in Music **(2)**
- MUH 3009 - Vocal Literature I **(2)**
- MUH 3033 - Music History and Literature III **(2)**
- *Upper-division Theory* **(6)**
- *One-unit Ensembles* **(4)**
- *Music Electives* **(8)**

Three units from:

- MUA 3031 - Acting for Singers **(1)**
- MUA 3032 - Musical Theatre Production **(1-2)**

Total: Units 47

Note(s):

Vocal Performance majors must complete their General Education language requirement in French or German. Approved transfer courses in Italian will also fulfill this requirement.

Transfer students and PLNU students changing their major to Music in the BMUS degree must complete one ensemble and two units of applied music each semester.

## **Writing, B.A.**

### Program Learning Outcomes

**Students will be able to:**

1. Apply artistry and advanced skills in various forms and genres of writing.
2. Demonstrate knowledge of the conventions and terminology of various forms and genres of writing.
3. Engage in writing and editorial processes in a professional environment.

4. Present written work to live audiences, demonstrating strategies for audience engagement and oral communication.

## Lower-Division Requirements

- WRI 2020 - Introduction to Creative Writing (3)
- JRN 2050 - Introduction to Journalism (3)

One course from the following:

- LIT 2054 - British Writers I (3)
- LIT 2055 - British Writers II (3)
- LIT 2056 - American Writers I (3)
- LIT 2057 - American Writers II (3)

Four units from the following:

- JRN 2015 - Newspaper Workshop (1) \*\*
- WRI 2016 - Literary Magazine Workshop (1) \*\*
- JRN 2017 - Yearbook Workshop (1) \*\*

Note(s):

*\*\*Each may be taken more than once (may substitute JRN 3014 for two units of JRN 2015/WRI 2016/JRN 2017).*

Total: 13 Units

## Creative Writing Courses

Six (6) units from the following list:

**WRI 3021, WRI 3022, and WRI 3023 may be repeated once for credit with instructor's consent.**

- WRI 3021 - Creative Writing: Poetry (3)
- WRI 3022 - Creative Writing: Fiction (3)
- WRI 3023 - Creative Writing: Creative Nonfiction (3)

Total: 6 Units

## Upper-Division Requirements

- WRI 3015 - Advanced English Composition (3)
- JRN 3045 - Editing (3) **OR**
- JRN 4040 - Magazine Editing and Concepts (3)

- WRI 4020 - Advanced Writing Workshop (3)
- WRI 3065 - Writing for Professional Careers (3)
- WRI 4070 - Internship in Writing (2)
- LIT 3000 - Literary Analysis (3)

One course from the following:

- LIN 3012 - Introduction to Linguistics (3)
- LIN 3065 - English Grammar and Usage (3)

One course from the following not already taken:

- WRI 3070 - Writing Theory and Pedagogy (2)
- JRN 4030 - Multimedia Journalism (3)
- JRN 4040 - Magazine Editing and Concepts (3)

Upper Division Literature course

One additional upper division literature course beyond GE from courses listed under Literature, Spanish or French. (3)

Total: 22-23 Units

Total Major: 44-45 Units

## **Minor**

### **Accounting Minor**

A minor in Accounting is for students who are interested in an understanding of accounting principles and techniques, but who do not want to pursue a major in Accounting.

### **Lower-Division Requirements**

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)

Total: 7 Units

### **Upper-Division Requirements**

- ACC 3070 - Intermediate Accounting I (3)
- ACC 3071 - Intermediate Accounting II (3)

Two (2) of the following:

- ACC 3075 - Managerial Cost Accounting (3)
- ACC 4010 - Federal Tax Accounting I (3)
- ACC 4021 - Advanced Accounting (3)
- ACC 4025 - Financial Statement Analysis and Valuation (3)
- ACC 4060 - Auditing (3)

Total: 12 Units

Minor Total: 19 Units

## **Art & Design Minor**

### **Required**

#### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3) *OR*
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
  
- ART 1015 - Drawing I (3)

Total: 6 Units Lower Division

#### Upper-Division Requirements

**Choose one of the following Art History Courses:**

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)

Total: 3 Units

Electives: 9 Units

**Choose nine upper-division units from Studio and Graphic Design courses listed in the Catalog.**

Total: 12 Units Upper Division

Minor Total: 18 Units

Note(s):

*It is highly recommended that Art minors take either ART 2000 or ART 2001 to fulfill the general education requirement in the Fine Arts.*

## Art History Minor

### Program Learning Outcomes

*Students who complete the program in Art History will be able to:*

1. Recognize a wide range of artists, visual art forms, and cultures from the history of Western and Non-Western art.
2. Create original, contemporary artworks in studio and/or design that illustrate current skills and techniques in selected art media and technologies.
3. Use the elements of art and principles of design to critically analyze and interpret historical and contemporary art forms.

### Lower-Division Requirements

- ART 2000 - History of Art I (GE) **(3)** \*
- ART 2001 - History of Art II (GE) **(3)** \*

Total: 6 Units

### Upper-Division Requirements

- ART 3004 - Modern Art History **(3)**
- ART 3005 - Contemporary Art History **(3)**
- ART 3025 - Non-Western Art History **(3)**
- ART 3035 - Design History: Industrial Revolution to Contemporary Design **(3)**

Total: 12 Units

Minor Total: 18 Units

Note(s):

**\*Meets the general education requirement in the Fine Arts.**

## Biblical Studies Minor

### Lower Division Requirements

- BIB 1001 - Old Testament History and Religion (GE) **(2)**
- BIB 1002 - New Testament History and Religion (GE) **(3)**
- BIB 2040 - Reading Scripture Faithfully **(3)**

Total: 8 units

## Upper Divisions Requirements

- **Choose four (4) upper division BIB courses with at least one focusing on the Old Testament and at least one focusing on the New Testament.**

Total: 12 units

Minor Total: 20 units

### **Biology: Cell and Molecular Biology Minor**

#### Required

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)

Eight units from the following electives:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3052 - Research Methodology (3)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)

Total: 25 Units

### **Biology: Environmental Biology Minor**

#### Required

- BIO 1002 - Environment and People (GE) (4)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- CHE 1001 - Chemistry and Society (GE) (4)  
OR
- CHE 1052 - General Chemistry I (GE) (4) and
- CHE 1052L - General Chemistry I Lab (GE) (1)

Lower Division Total: 12-13 Units

### Upper-Division Requirements

- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)

Choose 5 units of Approved Electives from the following:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)
- BIO 4083 - Introduction to Geographic Information Systems (GIS) (3)

### Off-Campus Requirement

- **One approved off-campus field-immersion course (4)**

Upper Division Total: 13 Units

Total for Minor: 25-26 Units

## **Biology: Organismal Biology Minor**

Required

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)

Eight units from the following electives:

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)

Total: 24 Units

## **Business Administration Minor**

A minor in Business Administration is for those who wish to complement study in another area with a basic background in business. The minor consists of introductory courses in Economics, Accounting, and upper-division courses designed to acquaint the student with disciplines essential to business success.

### **Lower-Division Requirements**

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)  
\* ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.
- MGT 2012 - Principles of Management (3)

One (1) of the following:

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

Total: 9 Units

### Upper-Division Requirements

- MKT 3032 - Principles of Marketing (3)
- Nine units selected from any upper-division course in Business, Accounting, Marketing, Management, Finance or Economics (9)

Total: 12 Units

Minor Total: 21 Units

### Child Development Minor

This minor is for students who desire an introductory exposure to the study of child development. It will also meet the requirements for the Associate Teacher Permit needed for teachers in Early Childhood.

A minimum of 19-21 units are required for this minor, including the following lower and upper-division courses.

### Requirements

- CHD 1020 - Child and Adolescent Development (4)
- CHD 3010 - Early Childhood Education (4)
- CHD 3055 - Development of Special Needs Children (3) \*
- CHD 3085 - Parent Education and Family Development (2)
- CHD 4020 - Child Development in the Family and Community (4)

Total: 17 Units

Take one (1) additional course from the following:

- CHD 3003 - Infant and Toddler Development (3)
- CHD 3013 - Adolescent Development in the Family Context (2)
- CHD 4060 - Administration and Supervision in Early Childhood Education (4)
- SWF 3015 - Health and Well-Being (GE) (2)

Total: 2-4 Units

Minor Total: 19-21 Units

Note(s):

\* EDU 4004 is an accepted substitute for students who plan to pursue a credential.

### Christian Mission & Intercultural Ministry Minor

## Lower Division Requirements

- CMI 1055 - Christian Formation and Ministry (3)
- SOC 2001 - Cultural Anthropology (GE) (3)

Total: 6 units

## Upper Division Requirements

- CMI 3050 - Church as a Witness to the World (3)
- CMI 4010 - Leading in Ministry (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- THE 3020 - The World's Faith Traditions (3)

Total: 12 units

Minor Total: 18 units

## Christian Studies Minor

### Lower Division Requirements

- BIB 2040 - Reading Scripture Faithfully (3)
- CMI 1055 - Christian Formation and Ministry (3)
- PHL 2050 - God and Philosophy (3)
- THE 2050 - Introduction to Christian Theology (3)

Total: 12 units

### Upper Division Requirements

- **Choose four (4) upper division courses from the following electives\*\***

#### \*\* Christian Studies Elective Options:

- BIB 3035 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse (3)
- BIB 3078 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- BIB 4001 - Jesus and the Gospels: Four Portraits of One Christ (3)
- BIB 4002 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference (3)
- BIB 4010 - Biblical Theology (3)
- BIB 4013 - Old Testament Torah and Israel's History: God's Story and God's People (3)
- BIB 4014 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics (3)
- BIB 4090 - Special Studies in Bible (1-3)
- BIB 4095 - Seminar in Biblical Literature (3)

- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMI 3040 - Foundations for the Practice of Youth Ministry (3)
- CMI 3045 - Enacting Worship (3)
- CMI 3050 - Church as a Witness to the World (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 4010 - Leading in Ministry (3)
- CMI 4015 - The Church of the Nazarene: History and Polity (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- CMI 4025 - Youth and Family Ministry (3)
- CMI 4090 - Special Studies in Christian Ministry (1-3)
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)
- THE 3015 - Christian and Religious Themes in Literature (3)
- THE 3020 - The World's Faith Traditions (3)
- THE 3025 - The Human Person and Theology and Psychology (3)
- THE 3030 - Christ and the Church (3)
- THE 3035 - Christian Ethics (3)
- THE 4010 - The Ministry and Sermons of John Wesley (3)
- THE 4015 - Three Traditions of Protestant Theology (3)
- PHL 2077 - Logic (3)
- PHL 3001 - Plato and Aristotle (3)
- PHL 3002 - Descartes through Hegel (3)
- PHL 3021 - Justice, Politics, and the Social World (3)
- PHL 3031 - Existential Philosophy and Literature (3)
- PHL 3041 - Philosophy and Art (3)
- PHL 3060 - Philosophy and the Sciences (3)
- PHL 3071 - Education and the Ethical Life (3)
- PHL 3080 - Alienation, Transformation, and Reconciliation in Film (3)
- PHL 3081 - Ethics, Responsibility, and Love (3)

Total: 12 units

Minor Total: 24 units

### **Cinema Studies Minor - Communication Studies**

This is an interdisciplinary minor in cinema which draws from historical, religious, philosophical, theoretical, and aesthetic perspectives. Students are encouraged to select courses which are based on students' intellectual and professional interests. Students interested in film criticism and/or writing and teaching may take electives in film theory and criticism, while students interested in scriptwriting and production may take courses in those areas. The minor is structured as interdisciplinary in its electives so that students will truly be studying in the liberal arts tradition. All students must take the required courses, and then must select from the elective courses to complete the minor.

### **Program Learning Outcomes**

1. Identify and articulate the relationships among film styles, genres, and techniques.

2. Demonstrate knowledge of the relationship between films and the historical moments from which they emerge.
3. Analyze and interpret the film images and narratives using film theory and terminology.
4. Evaluate films, including from a faith based perspective, by using higher and lower order thinking and writing skills.
5. Construct film scripts and create films by using film production techniques.

## Core Courses

- LIT 2000 - Literature and Culture (GE) (2) \*
- COM 2043 - Introduction to TV and Film Production (3)
- COM 3000 - Narrative and Documentary Film (3)

Total: 8 Units

Notes:

\*LIT 2000 Literature and Culture course subtitle must be "Film Adaptation".

COM 1075 is recommended, but cannot be substituted for required or elective course for this minor.

Elective Courses: Nine (9) elective units taken from three (3) separate disciplines

## Communication

- COM 4020 - Communication Practicum II (1-2)
- COM 4042 - Field Television Production (3)
- COM 4043 - Studio Television Production (3)
- COM 4090 - Special Studies in Communication (1-3)

## History

- HIS 3068 - Modern China Through Film (4)
- HIS 4090 - Special Studies in History (1-4)

## Literature, Journalism, Writing, and Languages

- LIT 3051 - World Cinema (GE) (3)
- LIT 4090 - Special Studies in Literature (1-3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 4090 - Special Studies in Spanish (1-3)

## Theology and Christian Ministry

- PHL 3080 - Alienation, Transformation, and Reconciliation in Film (3)

Total for Minor: 17-20 Units

## **Cinema Studies Minor - Literature, Journalism, Writing, and Languages**

This is an interdisciplinary minor in cinema which draws from historical, religious, philosophical, theoretical, and aesthetic perspectives. Students are encouraged to select courses which are based on students' intellectual and professional interests. Students interested in film criticism and/or writing and teaching may take electives in film theory and criticism, while students interested in scriptwriting and production may take courses in those areas. The minor is structured as interdisciplinary in its electives so that students will truly be studying in the liberal arts tradition. All students must take the required courses, and then must select from the elective courses to complete the minor.

### **Program Learning Outcomes**

1. Identify and articulate the relationships among film styles, genres, and techniques.
2. Demonstrate knowledge of the relationship between films and the historical moments from which they emerge.
3. Analyze and interpret the film images and narratives using film theory and terminology.
4. Evaluate films, including from a faith based perspective, by using higher and lower order thinking and writing skills.
5. Construct film scripts and create films by using film production techniques.

### **Core Courses**

- LIT 2000 - Literature and Culture (GE) (2) \*
- COM 2043 - Introduction to TV and Film Production (3)
- COM 3000 - Narrative and Documentary Film (3)

**Total: 8 Units**

### **Notes:**

\*LIT 2000 Literature and Culture course subtitle must be "Film Adaptation".

COM 1075 is recommended, but cannot be substituted for required or elective course for this minor.

**Elective Courses: Nine (9) elective units taken from three (3) separate disciplines**

### **Communication**

- COM 4020 - Communication Practicum II (1-2)
- COM 4042 - Field Television Production (3)
- COM 4043 - Studio Television Production (3)
- COM 4090 - Special Studies in Communication (1-3)

## **History**

- HIS 3068 - Modern China Through Film (4)
- HIS 4090 - Special Studies in History (1-4)

## **Literature, Journalism, Writing, and Languages**

- LIT 3051 - World Cinema (GE) (3)
- LIT 4090 - Special Studies in Literature (1-3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 4090 - Special Studies in Spanish (1-3)

## **Theology and Christian Ministry**

- PHL 3080 - Alienation, Transformation, and Reconciliation in Film (3)

## **Total for Minor: 17-20 Units**

### **Communication Minor**

#### Lower-Division Requirements

Choose two (2) courses from the following:

- COM 1090 - Interpersonal Communication (3)
- COM 2020 - Small Group Communication (3)
- COM 2031 - Argumentation and Debate (GE) (3)

Total: 6 Units

#### Upper-Division Requirements

Choose any four (4) courses from the following:

- COM 3010 - Nonverbal Communication (3)
- COM 3012 - Gender and Communication (WS) (3)
- COM 3015 - Oral Interpretation (3)
- COM 3040 - Organizational Communication (3)
- COM 3045 - Leadership Communication (3)
- COM 3060 - Professional Speaking for Career Settings (3)

Total: 12 Units

Minor Total: 18 Units

## **Computational Science Minor - Biology/Environmental Science (Biology)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### **Courses for Biology/Environmental Science Emphasis**

#### **Lower-Division Requirements**

- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- CSC 1043 - Introduction to Computer Programming **(2)**
- CSC 1043L - Introduction to Computer Programming Lab **(1)**

#### **Upper-Division Requirements**

- BIO 3063 - Conservation Ecology **(3)**
- BIO 3063L - Conservation Ecology Laboratory **(1)**
- CSC 3002 - UNIX and Python Scripting for Computational Science **(2)**

#### **Choose one course from:**

- CSC 3011 - Machine Learning and Multivariate Modeling in R **(1)**
- CSC 3031 - Data Visualization and Communication with R **(1)**

#### **Project (Choose at least 3 units):**

- CSC 4133 - Service Learning in Computer Science **(3)**
- **OR**
- HON 4098 - Honors Project I **(2) and**
- HON 4099 - Honors Project II **(1)**
- **OR**
- MTH 4133 - Service Learning in Mathematics **(3)**

### **Biology Major - Required Courses**

- CSC 3022 - Data Management for Computational Science **(2)**
- MTH 1044 - Calculus With Applications (GE) **(4)**
- MTH 3063 - Calculus Based Statistics With R **(3)**

## **Minor Total for Biology Majors: 26**

### **Computer Science Majors - Required Courses**

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- 
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

## **Minor Total for Computer Science Majors: 28**

### **Mathematics Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

## **Minor Total for Mathematics Majors: 26**

### **Computational Science Minor - Biology/Environmental Science (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### **Courses for Biology/Environmental Science Emphasis**

#### **Lower-Division Requirements**

- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)

#### **Upper-Division Requirements**

- BIO 3063 - Conservation Ecology **(3)**
- BIO 3063L - Conservation Ecology Laboratory **(1)**
- CSC 3002 - UNIX and Python Scripting for Computational Science **(2)**

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R **(1)**
- CSC 3031 - Data Visualization and Communication with R **(1)**

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science **(3)**  
**OR**
- HON 4098 - Honors Project I **(2) and**
- HON 4099 - Honors Project II **(1)**  
**OR**
- MTH 4133 - Service Learning in Mathematics **(3)**

### Biology Major - Required Courses

- CSC 3022 - Data Management for Computational Science **(2)**
- MTH 1044 - Calculus With Applications (GE) **(4)**
- MTH 3063 - Calculus Based Statistics With R **(3)**

Minor Total for Biology Majors: 26

### Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration **(4)**
- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 3063 - Calculus Based Statistics With R **(3)**  
**OR**
- MTH 3083 - Mathematical Probability and Statistics **(3)**

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CSC 3022 - Data Management for Computational Science **(2)**
- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 3083 - Mathematical Probability and Statistics **(3)**

Minor Total for Mathematics Majors: 26

## **Computational Science Minor - Biology/Genetics (Biology)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### **Core Courses for Biology/Genetics Emphasis**

#### **Lower-Division Requirements**

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)

#### **Upper-Division Requirements**

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CSC 3002 - UNIX and Python Scripting for Computational Science (2)

#### **Choose one course from:**

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

#### **Project (Choose at least 3 units):**

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

### **Biology Major - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 3063 - Calculus Based Statistics With R (3)

**Minor Total for Biology Majors: 26**

## **Computer Science Majors - Required Courses**

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

**Minor Total for Computer Science Majors: 28**

## **Mathematics Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

**Minor Total for Mathematics Majors: 26**

## **Computational Science Minor - Biology/Genetics (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### **Core Courses for Biology/Genetics Emphasis**

#### **Lower-Division Requirements**

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)

#### **Upper-Division Requirements**

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CSC 3002 - UNIX and Python Scripting for Computational Science (2)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)  
**OR**
- MTH 4133 - Service Learning in Mathematics (3)

### Biology Major - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 3063 - Calculus Based Statistics With R (3)

Minor Total for Biology Majors: 26

### Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 26

## **Computational Science Minor - Chemistry (Chemistry)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## **Core Courses for Chemistry Emphasis**

### **Lower-Division Requirements**

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)

## Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)

### Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

### Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

## Chemistry Major - Required Courses

- CHE 2013 - Analytical Chemistry (3)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CSC 3022 - Data Management for Computational Science (2)
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

## Minor Total for Chemistry Majors: 34

## Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)
-

- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Minor Total for Computer Science Majors: 28**

### **Mathematics Majors - Required Courses**

- CHE 2013 - Analytical Chemistry (3)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CSC 3022 - Data Management for Computational Science (2)
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Minor Total for Mathematics Majors: 34**

### **Computational Science Minor - Chemistry (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### **Core Courses for Chemistry Emphasis**

#### **Lower-Division Requirements**

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)

#### **Upper-Division Requirements**

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)  
**OR**
- MTH 4133 - Service Learning in Mathematics (3)

### Chemistry Major - Required Courses

- CHE 2013 - Analytical Chemistry (3)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CSC 3022 - Data Management for Computational Science (2)
- MTH 3063 - Calculus Based Statistics With R (3)  
**OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Chemistry Majors: 34

### Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3063 - Calculus Based Statistics With R (3)  
**OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CHE 2013 - Analytical Chemistry (3)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CSC 3022 - Data Management for Computational Science (2)
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 34

### **Computational Science Minor - Physics (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## Core Courses for Physics Emphasis

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

### Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- MTH 3063 - Calculus Based Statistics With R (3)  
**OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

### Physics or Engineering-Physics Major - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)

### Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)  
**OR**
- MTH 4133 - Service Learning in Mathematics (3)

Minor Total for PHY & PHY/EGR Majors: 31

### Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)  
**OR**
- MTH 4133 - Service Learning in Mathematics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)  
**OR**
- MTH 4133 - Service Learning in Mathematics (3)

Minor Total for Mathematics Majors: 32

### **Computational Science Minor - Physics (Physics and Engineering)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### **Core Courses for Physics Emphasis**

### **Lower-Division Requirements**

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

## Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- 
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

## Physics or Engineering-Physics Major - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)

## Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

## Minor Total for PHY & PHY/EGR Majors: 31

## Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)

## Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)

- CSC 3031 - Data Visualization and Communication with R (1)

**Project (Choose at least 3 units):**

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

**Minor Total for Computer Science Majors: 28**

**Mathematics Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)

**Choose one course from:**

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

**Project (Choose at least 3 units):**

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

**Minor Total for Mathematics Majors: 32**

**Computational Science Minor - Psychology (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics, or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross-disciplinary teams to solve challenging research problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## Core Courses for Psychology Emphasis

### Lower Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- PSY 1003 - General Psychology (GE) (3)

### Upper Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- PSY 3020 - Social Psychology (3)
  
- PSY 3001 - Physiological and Neuropsychology (4)  
**OR**
- PSY 4009 - Psychology of Cognition and Learning (4)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

Any project must have a computational science emphasis.

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)  
**OR**
- MTH 4133 - Service Learning in Mathematics (3)

## Psychology Majors - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 3063 - Calculus Based Statistics With R (3)

Minor Total for Psychology Majors: 28

## Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)

- MTH 3063 - Calculus Based Statistics With R (3)
- OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 30

### Mathematics Majors - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 28

### Computational Science Minor - Psychology (Psychology)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics, or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross-disciplinary teams to solve challenging research problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### Core Courses for Psychology Emphasis

#### Lower Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- PSY 1003 - General Psychology (GE) (3)

#### Upper Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- PSY 3020 - Social Psychology (3)
- 
- PSY 3001 - Physiological and Neuropsychology (4)
- **OR**
- PSY 4009 - Psychology of Cognition and Learning (4)

#### Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

### **Project (Choose at least 3 units):**

Any project must have a computational science emphasis.

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

### **Psychology Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 3063 - Calculus Based Statistics With R (3)

### **Minor Total for Psychology Majors: 28**

### **Computer Science Majors - Required Courses**

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- 
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Minor Total for Computer Science Majors: 30**

### **Mathematics Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Minor Total for Mathematics Majors: 28**

### **Computer Science Minor**

A minor in Computer Science is offered to those who wish to complement study in another discipline. This minor is not available to students who earn a major in Information Systems.

## Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)

Total: 11 Units

## Upper-Division Requirements

Choose 10 units from:

- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- ISS 3073 - Networking and Security (3)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Total: 10 Units

Minor Total: 21 Units

## Computer Technology - Business Minor (Business Majors)

The Computer Technology - Business minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for business students who desire to enter business or accounting careers with a greater knowledge of information and computer technology.

## Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)

- MGT 2012 - Principles of Management (3)

Total: 16 Units

### Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3022 - Data Management for Computational Science (2)
- ISS 3042 - Project Management and Quality Assurance (2)
- MKT 3032 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 3000-4099 for three (3) units.**

Total: 12 Units

Minor Total: 28 Units

### **Computer Technology - Business Minor (Math and Computer Science Majors)**

The Computer Technology - Business minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for math and computer science students who desire to enter the technology or computer science careers with a greater knowledge of business.

### Lower-Division Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors (3) \*
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- MGT 2012 - Principles of Management (3)

Choose one course from the following:

- CSC 2052 - Data Structures in C++ (1) **and**
- CSC 2052L - Data Structures in C++ Lab (1)
- OR**
- CSC 2054 - Data Structures and Algorithms (3) **and**
- CSC 2054L - Data Structures and Algorithms Lab (1)

Total: 15-17 Units

Note(s):

\* The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MKT 3032 - Principles of Marketing (3)

Choose one course from the following:

- BUS 4075 - Sustainability in Action (3)
- BUS 4080 - International Business (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4016 - Perspectives on Leadership (3)
- MGT 4070 - Nonprofit Organization Management (3)
- MGT 4084 - Operations Management (3)

Total: 14 Units

Minor Total: 29-31 Units

## **Computer Technology - Marketing Minor (Business Majors)**

The Computer Technology - Marketing minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for marketing students who desire to enter marketing or business careers with a greater knowledge of information and computer technology.

## Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)

Total: 13 Units

## Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3022 - Data Management for Computational Science (2)
- MKT 3032 - Principles of Marketing (3)

- **Choose two additional courses from MKT 3000-4059 for six (6) units.**

Total: 13 Units

Minor Total: 26 Units

## **Computer Technology - Marketing Minor (Math and Computer Science Majors)**

The Computer Technology - Marketing minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for math and computer science students who desire to enter technology or computer science careers with a greater knowledge of marketing.

### Lower-Division Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors (3) \*
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)

Choose one course from the following:

- CSC 2052 - Data Structures in C++ (1) **and**
- CSC 2052L - Data Structures in C++ Lab (1)
- OR**
- CSC 2054 - Data Structures and Algorithms (3) **and**
- CSC 2054L - Data Structures and Algorithms Lab (1)

Total Lower-Division: 12-14 Units

*\*The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.*

### Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MKT 3032 - Principles of Marketing (3)

Choose two courses from the following:

- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)
- MKT 4032 - Marketing Research and Analytics (3)

Total Upper-Division: 15 Units

Minor Total: 27-29 Units

## **Criminal Justice Minor**

The minor in Criminal Justice consists of five required courses and one additional course.

### **Program Learning Outcomes**

Students who complete the program in Criminal Justice will be able to:

- Demonstrate comprehension of the theoretical and legal foundations of criminal justice
- Demonstrate knowledge of each of the components of the criminal justice system: the historical background, structure, function, and purpose.
- Demonstrate understanding and appreciation of the social realities, discriminations, and conflicts in the criminal justice system resulting from racial, socio-economic, and cultural inequities.
- Demonstrate ethical and professional behavior and apply critical thinking and problem-solving skills in an approved internship setting.

### **Lower-Division Requirements**

- SOC 1001 - Introduction to Sociology (GE) **(3)**
- SOC 2009 - Introduction to Criminal Justice **(3)**

### **Upper-Division Requirements**

- SOC 3010 - Criminology **(3) OR**
- SOC 3014 - Juvenile Delinquency **(3)**
  
- SOC 3060 - Race and Ethnicity **(3)**
  
- SOC 4009 - Criminal Law **(3) OR**
- SOC 4010 - Constitutional Foundations of Criminal Justice **(3)**

One of the following courses (3-4 units):

- SOC 3005 - Social Stratification **(3)**
- SOC 3020 - Social Psychology **(3)**
- SOC 3050 - Urban Sociology **(3)**
- SOC 4072 - Internship in Criminal Justice **(2-4) 4 Units required**
- PSY 3021 - Abnormal Psychology **(3)**

Total: 18-19 Units

## **Economics Minor**

A minor in economics is for students who are interested in critical analysis of resource use and evidence-based analysis of broad social issues and their economic consequences.

### Lower Division Requirements

- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

Total: 6 Units

### Upper Division Requirements

Choose four (4) of the following:

- ECO 3015 - Theories of Economic Development (3)
- ECO 3080 - Money and Banking (3)
- ECO 4010 - International Economics (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- ECO 4050 - History of Economic Thought (3)

Total: 12 Units

Minor Total: 18 Units

### Finance Minor

A minor in Finance is for students who are interested in an understanding of finance concepts and applications, but who do not want to pursue a major in Finance.

### Lower-Division Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)  
\*ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

One (1) of the following:

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

Total: 6 Units

### Upper-Division Requirements

- FIN 3035 - Business Finance (3)

Three (3) of the following:

- FIN 3085 - Intermediate Finance (3)
- FIN 4015 - Investments (3)
- FIN 4025 - Financial Statement Analysis and Valuation (3)
- FIN 4035 - International Finance (3)

Total: 12 Units

Total Minor: 18 Units

## **French Minor**

A minor in French is offered to those who wish to complement study in another discipline. Course work can only approximate a bilingual setting and does not necessarily guarantee appropriate language proficiency. Therefore, students are encouraged to immerse themselves in the target language and to complete more than the minimum amount of language classes.

### **Requirements**

- Undergo a complete summative evaluation of language skills by way of an exit interview.
- Successfully complete at least 9 upper-division units in residence.
- Successfully complete the following courses:

### **Lower-Division Requirements**

- FRE 1001 - Elementary French I (GE) (4)
  - FRE 1002 - Elementary French II (GE) (4)
  - FRE 2050 - Intermediate French I (3)
  - FRE 2051 - Intermediate French II (3)
- OR** Equivalent

Total: 14 Units

### **Upper-Division Requirements**

- FRE 3003 - French Conversation (3)
- FRE 3015 - French Culture and Civilization (3)
- FRE 3020 - Survey of French Literature (3)
- FRE 3025 - Francophone Literature (3)

Total: 12 Units

Total for Minor: 26 Units

## History Minor

A History minor, consisting of 18 units, is available for those in other majors who nevertheless desire to learn some of the skills and content available to History majors. The requirements are:

### Requirements

- HIS 1010 - World Civilizations I (GE) (3)
- HIS 1011 - World Civilizations II (GE) (3)
- Upper-Division Global Elective (4)
- Upper-Division U.S. Elective (4)
- Additional Upper-Division History Electives (4)

Total: 18 Units

## International Development Minor

A minor in International Development is for students who wish to complement study in another area with a basic background in economic development. Study in this discipline seeks to equip students in other majors to address the issues of material welfare that have an impact on their study of the issues facing disadvantaged populations.

### Lower-Division Requirements

- SOC 2001 - Cultural Anthropology (GE) (3) \*

Choose one (1) of the following:

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

Total: 6 Units

Note(s):

*\*Fulfills the general education Social World requirement .*

### Upper-Division Requirements

- BUS 4075 - Sustainability in Action (3)
- ECO 3015 - Theories of Economic Development (3)
- MGT 4070 - Nonprofit Organization Management (3)

Choose one (1) of the following:

- ECO 3080 - Money and Banking (3)
- ECO 4010 - International Economics (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- ECO 4050 - History of Economic Thought (3)
- ECO 4090 - Special Studies in Economics (3)
- SWF 3015 - Health and Well-Being (GE) (2)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4012 - Leadership Theory and Practice (3)
- POL 3001 - Transitions to Democracy (4)
- POL 3070 - Comparative Politics (4)
- POL 4020 - United States Foreign Policy (4)
- POL 4035 - Global Governance (4)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4044 - Globalization and Culture (3)

Total: 12-13 Units

Minor Total: 18-19 Units

## **Literature Minor**

### Lower Division Requirements

- LIT 2000 - Literature and Culture (GE) (2)
- LIT 3000 - Literary Analysis (3)

Total Lower Division Units: 5

### Upper Division Requirements

- LIT 4061 - Shakespeare (3)
- **One Course From:**
- LIT 3050 - World Literature (GE) (3)
- LIT 3051 - World Cinema (GE) (3)
- LIT 3052 - Diverse Voices in American Literature (GE) (3)
- LIT 3053 - Women Writers (GE) (3)
- *Two Additional Non-GE Upper Division LIT courses (6 units)*

Total Upper Division Units: 12

Total Units: 17

## **Marketing Minor**

A minor in Marketing is for students who are interested in an understanding of marketing concepts and applications, but who do not want to pursue a major in marketing.

## Lower-Division Requirements

Choose two (2) of the following:

- ACC 2000 - Principles of Accounting for Non-Business Majors (3) \*\*
- ECO 1000 - Survey of Economics (GE) (3) \*
- **OR**
- ECO 1001 - Principles of Macroeconomics (GE) (3) \*
- **OR**
- ECO 1002 - Principles of Microeconomics (GE) (3) \*
- MGT 2012 - Principles of Management (3)

Total Lower-Division: 6 Units

*\* Fulfills the general education Social World Requirement.*

*\*\* ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.*

## Upper Division Requirements:

- MKT 3032 - Principles of Marketing (3)

Choose three (3) of the following:

- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)
- MKT 4032 - Marketing Research and Analytics (3)
- MKT 4050 - Digital Marketing Content (3)

Total Upper-Division: 12 Units

Total Minor: 18 units

## Mathematics Minor

### Required Courses

- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)

Choose 12 additional units from:

- MTH 3012 - Number Theory with Proofs (2)
- MTH 2074 - Calculus III (4)
- MTH 3033 - Differential Equations (3)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3052 - History of Mathematics (2)
- MTH 3063 - Calculus Based Statistics With R (3) \*
- MTH 3073 - Mathematical Modeling (3)
- MTH 3083 - Mathematical Probability and Statistics (3) \*
- MTH 4002 - Topics in Geometry (2)
- MTH 4013 - Complex Analysis (3)
- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)
- MTH 4071 - History of Mathematics Study Tour (1)
- MTH 4092 - Special Topics in Mathematics (2)

Minor Total: 23 Units

Note(s):

\*Only one of these may be taken

## **Media Communication Minor**

### Core Requirements

- COM 1050 - Introduction to Media Communication (3)
- COM 1075 - Scriptwriting for Television and Film (3)
- COM 2043 - Introduction to TV and Film Production (3)
- COM 2075 - Audio Production (2)

Total: 11 Units

### Upper-Division Requirements

Choose twelve (12) units from the following courses:

- COM 3000 - Narrative and Documentary Film (3)
- COM 3050 - Electronic Media in Communication (3)
- COM 4020 - Communication Practicum II (1-2)
- COM 4025 - Advanced Television Workshop (1)
- COM 4035 - Advanced Audio Production (1)
- COM 4042 - Field Television Production (3)
- COM 4043 - Studio Television Production (3)

- COM 4090 - Special Studies in Communication **(1-3) (3) Units required**

Total: 12 Units

Minor Total: 23 Units

## **Multimedia Journalism Minor**

The multimedia journalism minor allows students to major in other fields such as the sciences, psychology, music, art, literature, theology, etc., while adding a marketable dimension to their studies. That dimension is the training to communicate ideas from those other fields in a manner that is clear and concise, for a specific kind of audience. With this minor, students will learn how to gather information from reliable sources, organize information in a skillful manner, and communicate that information in a compelling way that uses several media platforms.

### **Program Learning Outcomes**

Students who complete the minor program will be able to:

1. Exhibit effective research and reporting practices.
2. Display strong interpretive, analytic, quantitative reasoning, and critical thinking skills in their assignments.
3. Communicate ideas clearly and accurately in forms appropriate to the purpose, medium, and audience.

### **Required Courses**

- COM 2043 - Introduction to TV and Film Production **(3)**
- JRN 2015 - Newspaper Workshop **(1)**
- JRN 2050 - Introduction to Journalism **(3)**
- JRN 3040 - Media Law and Ethics **(3)**

Select 1 from the following:

- JRN 3014 - Computer-Assisted Reporting **(3)**
- JRN 3050 - Special Topics in Journalism **(3)**
- JRN 4030 - Multimedia Journalism **(3)**

Select 1 from the following:

- JRN 3010 - Advanced Reporting **(3)**
  - JRN 3045 - Editing **(3)**
  - JRN 4040 - Magazine Editing and Concepts **(3)**
- OR**

Select 1 from the following:

- JRN 3012 - Television News Writing **(3)**
- JRN 3013 - Television News Production **(3)**

Total Units in Minor: 16

## **Music Minor**

### Requirements

- MUH 1001 - Introduction to Listening (GE) (2)
- MUT 1020 - Music Theory I (4)
- *Applied study in instrument or voice* (2)
- *One-unit Ensembles* (2)
- *Additional upper-division units in Music* (8)
- MUH 3033 - Music History and Literature III (2)  
OR
- MUH 3034 - World Music (2)

Total: 20 Units

## **Nonprofit Organization Management Minor**

A minor in Nonprofit Organization Management is for students who wish to complement study in another area with a basic background in managing nonprofit organizations. The program is designed to acquaint the student with a few essentials of nonprofit organization management.

### Lower-Division Requirements

Choose two (2) of the following:

- ACC 2000 - Principles of Accounting for Non-Business Majors (3) \*\*
- ECO 1000 - Survey of Economics (GE) (3) \*  
or ECO 1001 (3) Principles of Macroeconomics (GE)\*  
or ECO 1002 (3) Principles of Microeconomics (GE)\*
- MGT 2012 - Principles of Management (3)

Total: 6 Units

Note(s):

\* Fulfills the general education Social World requirement.

\*\* ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

### Upper-Division Requirements

- BUS 4075 - Sustainability in Action (3)
- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4070 - Nonprofit Organization Management (3)

Choose one (1) of the following:

- ECO 3015 - Theories of Economic Development (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4044 - Globalization and Culture (3)

Total: 12 Units

Minor Total: 18 Units

### **Nutrition Minor**

The minor in Nutrition is for students interested in the field of nutrition and well-being. The program consists of a foundation in food, nutrition and disease prevention as it relates to one's health.

Twenty-one to twenty-two (21-22) units are required for this minor, including the following:

#### **Lower-Division Requirements**

- NUT 1010 - Fundamentals of Food (2)
- CHD 1050 - Human Development (3)
- NUT 2025 - Fundamentals of Nutrition (3)

Total: 8 Units

#### **Upper-Division Requirements**

- NUT 3000 - Quantity Food Production (3)
- NUT 3003 - Cultural Foods (2)
- NUT 3030 - Community Nutrition (3)
- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)

Take one (1) additional course from the following:

- SWF 3015 - Health and Well-Being (GE) (2)
- NUT 4014 - Practices in Nutrition Education and Dietary Counseling (2)
- CHD 4025 - Child and Adolescent Nutrition and Health (3)

Total: 13-14 Units

Minor Total: 21-22 Units

## **Philosophy Minor**

### Lower-Division Requirements

- PHL 2001 - Introduction to Philosophy (GE) **(3)**

Total: 3 Units

### Upper-Division Requirements

- PHL 3001 - Plato and Aristotle **(3)**
- PHL 3002 - Descartes through Hegel **(3)**
- **Nine (9) additional units in PHL of which six (6) units must be upper division**

Total: 15 Units

Minor Total: 18 Units

## **Physics Minor**

### Requirements

- PHY 2044 - University Physics I (GE) **(3)**
- PHY 2044L - University Physics I Lab (GE) **(1)**
- PHY 2054 - University Physics II **(3)**
- PHY 2054L - University Physics II Lab **(1)**
- PHY 3004 - Modern Physics **(3)**
- PHY 3004L - Modern Physics Lab **(1)**
- Eight additional upper-division units in Physics or Engineering.

Minor Total: 20 Units

## **Pre-Therapeutic Psychology Minor**

This minor is for non-Psychology majors who desire an introductory exposure to therapeutic psychology. It is especially suited for individuals who plan to enter careers in social services, i.e. ministry, nursing, medicine, or social work. Students minoring in this program complete the following courses.

### Requirements

- PSY 3021 - Abnormal Psychology **(3)**

One course from the following:

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3)
- PSY 1003 - General Psychology (GE) (3)

One course from the following:

- PSY 3025 - Clinical and Community Interventions (4)
- PSY 3080 - Family Development and Family Therapies (3)

One course from the following:

- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)
- CHD 1050 - Human Development (3)

Three units from the following:

- PSY 3015 - Positive Psychology (3)
- PSY 3020 - Social Psychology (3)
- PSY 3041 - Group Counseling (1-3) (Must be taken for 3 units)
- PSY 3045 - Group Dynamics (3) (PSY341 is a pre-requisite)
- PSY 3049 - Intimate Couples (3) (Must take with fiance or spouse)
- PSY 3060 - Human Sexuality (3)

One course from the following:

- PSY 4010 - Issues in Psychotherapy-Theology Integration (3)
- PSY 4020 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) (4)

Minor Total: 18-21

## **Public Relations Minor**

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, Writing, and Languages, and the Department of Communication Studies.

### **Requirements**

- COM 3030 - Persuasion (3)
- COM 3040 - Organizational Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 4005 - Public Relations Cases and Campaigns (3)
- JRN 2050 - Introduction to Journalism (3)
- JRN 3055 - Public Relations Writing (3)
- MKT 3032 - Principles of Marketing (3)

Minor Total: 21 Units

## **Public Relations Minor**

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, Writing, and Languages, and the Department of Communication Studies.

### Requirements

- COM 3030 - Persuasion (3)
- COM 3040 - Organizational Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 4005 - Public Relations Cases and Campaigns (3)
- JRN 2050 - Introduction to Journalism (3)
- JRN 3055 - Public Relations Writing (3)
- MKT 3032 - Principles of Marketing (3)

Minor Total: 21 Units

## **Public Relations Minor**

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, Writing, and Languages, and the Department of Communication Studies.

### Requirements

- COM 3030 - Persuasion (3)
- COM 3040 - Organizational Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 4005 - Public Relations Cases and Campaigns (3)
- JRN 2050 - Introduction to Journalism (3)
- JRN 3055 - Public Relations Writing (3)
- MKT 3032 - Principles of Marketing (3)

Minor Total: 21 Units

## **Science and Christian Faith Minor**

### Lower Division Requirements

- THE 2050 - Introduction to Christian Theology (3)

Total: 3 units

### Upper Division Requirements

- CHU 3095 - The Christian Tradition (GE) (3)

- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)
- THE 3025 - The Human Person and Theology and Psychology (3)
- PHL 3060 - Philosophy and the Sciences (3)
- **Choose three (3) additional upper division units from any THE, BIB, or CMI course.**

Total: 15 units

Minor Total: 18 units

### **Science Business Minor -Ecology Emphasis**

### **Science Business Minor-Chemistry Emphasis**

### **Science-Business Minor with Chemistry Emphasis**

#### **Lower Division Requirements:**

- ACC 2001 - Principles of Financial Accounting (4)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- MGT 2012 - Principles of Management (3)

#### **Choose one (1) course from the following:**

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

#### **Choose one (1) course from the following:**

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 29-31 units**

#### **Upper Division Requirements:**

- MKT 3032 - Principles of Marketing (3)
- **Choose three (3) additional courses from BUS or MGT3000-4099 for nine (9) units.**

**Total: 12 units**

Total Minor: 41-43 units

## Science-Business Minor (Business Majors)

The Science-Business minors, joint minors between the Fermanian School of Business and the Biology and Chemistry Departments, are for business students who are interested in pursuing business careers in innovative science-related industries such as biotechnology, medical device, and pharmaceutical. Three emphases are available:

- Molecular Emphasis
- Ecology Emphasis
- Chemistry Emphasis

## Science-Business Minor with Molecular Emphasis

### Lower Division Requirements:

- ACC 2001 - Principles of Financial Accounting (4)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- MGT 2012 - Principles of Management (3)

### Choose one (1) course from the following:

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) and
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4) and
- CHE 1052L - General Chemistry I Lab (GE) (1)

### Choose one (1) course from the following:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 22-24 Units**

### Upper Division Requirements:

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3052 - Research Methodology (3)
- MKT 3032 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 300-499 for three (3) units**

### Choose one (1) course from the following:

- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)

- BIO 3050 - Advanced Cell Biology (3)
  - BIO 3050L - Advanced Cell Biology Laboratory (1)
  - BIO 3080 - Molecular Biology (3)
  - BIO 3080L - Molecular Biology Laboratory (1)
  - BIO 3090 - Immunology (3)
  - BIO 3090L - Immunology Laboratory (1)
  - BIO 4000 - Developmental Biology (3)
  - BIO 4000L - Developmental Biology Laboratory (1)
  - BIO 4010 - Vertebrate Biology (3)
  - BIO 4010L - Vertebrate Biology Laboratory (1)
  - BIO 4050 - Advanced Biochemistry (3) and
  - BIO 4050L - Advanced Biochemistry Lab (1)
- Total: 17 Units**

Total Units: 39-41

## Science-Business Minor with Ecology Emphasis

### Lower Division Requirements:

- ACC 2001 - Principles of Financial Accounting (4)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)  
(BIO 1005 and BIO 1005L may be substituted with the permission of the Biology Department.)
- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)
- MGT 2012 - Principles of Management (3)

### Choose one (1) course from the following:

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) and
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4) and
- CHE 1052L - General Chemistry I Lab (GE) (1)

### Choose one (1) course from the following:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 22-24 units**

### Upper Division Requirements:

- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- MKT 3032 - Principles of Marketing (3)

- **Choose one additional course from BUS or MGT 3000-4099 for three (3) units.**

**Choose 3-4 units from the following:**

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)

*The following Environmental Science/Biology courses could be taken at Au Sable or Costa Rica with our sister school (prior permission is required for any substitutions). The following courses can be used to transfer in these units:*

- EVS 3096 - Advanced Biology (3)
- EVS 3097 - Advanced Ecology (3)
- EVS 3098 - Advanced Ecological Applications (3)

**TOTAL: 13-14 units**

Total Units: 35-38

## Science-Business Minor with Chemistry Emphasis

**Lower Division Requirements:**

- ACC 2001 - Principles of Financial Accounting (4)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- MGT 2012 - Principles of Management (3)

**Choose one (1) course from the following:**

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

**Choose one (1) course from the following:**

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 29-31 units**

**Upper Division Requirements:**

- MKT 3032 - Principles of Marketing (3)
- **Choose three (3) additional courses from BUS or MGT3000-4099 for nine (9) units.**

**Total: 12 units**

Total Minor: 41-43 units

## **Science-Business Minor (Science Majors - Biology Department)**

Science-Business Minor for Biology, Chemistry and Environmental (Science majors)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with business knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- MGT 2012 - Principles of Management (3)
- MKT 3032 - Principles of Marketing (3)
- MTH 1044 - Calculus With Applications (GE) (4)
- OR
- MTH 1064 - Calculus I (GE) (3)

Select one course from:

- BUS 4075 - Sustainability in Action (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4016 - Perspectives on Leadership (3)

- MGT 4070 - Nonprofit Organization Management (3)
- MGT 4084 - Operations Management (3)

28 total units

### **Science-Business Minor (Science Majors - Chemistry Department)**

Science-Business Minor for Biology, Chemistry and Environmental (Science majors)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with business knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- MGT 2012 - Principles of Management (3)
- MKT 3032 - Principles of Marketing (3)
- MTH 1044 - Calculus With Applications (GE) (4)
- OR
- MTH 1064 - Calculus I (GE) (3)

Select one course from:

- BUS 4075 - Sustainability in Action (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4016 - Perspectives on Leadership (3)
- MGT 4070 - Nonprofit Organization Management (3)
- MGT 4084 - Operations Management (3)

28 total units

### **Science-Business Minor Molecular Emphasis**

### **Science-Marketing Minor (Business Majors)**

The Science-Marketing minors, joint minors between the Fermanian School of Business and the Biology and Chemistry Departments, are for business students who are interested in pursuing marketing careers in innovative science-related industries such as biotechnology, medical device, and pharmaceutical. Three emphases are available:

- Molecular Emphasis
- Ecology Emphasis
- Chemistry Emphasis

## Science-Marketing Minor with Molecular Emphasis

### **Lower Division Requirements:**

- ACC 2001 - Principles of Financial Accounting (4)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)

### **Choose one (1) of the following courses:**

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4) **and**
- CHE 1052L - General Chemistry I Lab (GE) (1)

### **Choose one (1) of the following courses:**

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 19-21 units**

### **Upper Division Requirements:**

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3052 - Research Methodology (3)
- MKT 3032 - Principles of Marketing (3)
- **Choose two (2) additional courses from MKT3000-4059 for six (6) units**

### **Choose one (1) of the following courses:**

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)

- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4050 - Advanced Biochemistry (3) and
- BIO 4050L - Advanced Biochemistry Lab (1)

**Total: 20 units**

Total Minor: 39-41 units

## Science-Marketing Minor with Ecology Emphasis

### Lower Division Requirements:

- ACC 2001 - Principles of Financial Accounting (4)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)  
(BIO 1005 and BIO 1005L may be substituted with the permission of the Biology Department.)
- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)

### Choose one (1) of the following courses:

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) and
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4) and
- CHE 1052L - General Chemistry I Lab (GE) (1)

### Choose one (1) of the following courses:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 19-21 units**

### Upper Division Requirements:

- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- MKT 3032 - Principles of Marketing (3)
- **Choose two (2) additional courses from MKT 3000-4059 for six (6) units.**

### Choose 3-4 units of the following courses:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)

- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)

*The following Environmental Science/Biology courses could be taken at Au Sable or in Costa Rica with our sister school (prior permission is required for any substitutions). The following courses can be used to transfer in these units:*

- EVS 3096 - Advanced Biology (3)
  - EVS 3097 - Advanced Ecology (3)
  - EVS 3098 - Advanced Ecological Applications (3)
- Total: 16-17 units**

Total Minor: 35-38 units

## Science-Marketing Minor with Chemistry Emphasis

### **Lower Division Requirements:**

- ACC 2001 - Principles of Financial Accounting (4)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)

### **Choose one (1) from the following courses:**

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

### **Choose one (1) from the following courses:**

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 26-28 units**

### **Upper Division Requirements:**

- MKT 3032 - Principles of Marketing (3)
- **Choose three (3) additional courses from MKT3000-4059 for nine (9) units.**

**Total: 12 units**

Total Minor: 38-40 units

### **Science-Marketing Minor (Science Majors - Biology Department)**

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with marketing knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

#### Science-Marketing Minor for Biology, Chemistry, and Environmental Science Majors

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- MKT 3032 - Principles of Marketing (3)

Choose one (1) Mathematics course:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)

Select two (2) courses from the following Marketing courses:

- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)

Total Minor: 24 units

*\*The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.*

### **Science-Marketing Minor (Science Majors - Chemistry Department)**

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with marketing knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

#### Science-Marketing Minor for Biology, Chemistry, and Environmental Science Majors

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 3045 - Genetics (3)

- BIO 3045L - Genetics Laboratory (1)
- MKT 3032 - Principles of Marketing (3)

Choose one (1) Mathematics course:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)

Select two (2) courses from the following Marketing courses:

- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)

Total Minor: 24 units

*\*The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.*

## Science-Marketing Minor Chemistry Emphasis

### Science-Marketing Minor with Chemistry Emphasis

#### Lower Division Requirements:

- ACC 2001 - Principles of Financial Accounting (4)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)

#### Choose one (1) from the following courses:

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

#### Choose one (1) from the following courses:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 26-28 units**

**Upper Division Requirements:**

- MKT 3032 - Principles of Marketing (3)
- **Choose three (3) additional courses from MKT3000-4059 for nine (9) units.**

**Total: 12 units**

Total Minor: 38-40 units

## **Sociology Minor**

The Sociology minor consists of a minimum of six courses from the list below (three from the required core and three electives). The student must select a minimum of 12 units of upper-division credits in Sociology and may include no more than three units of SOC 4090 - Special Topics in Sociology.

### **Lower-Division Requirements**

- SOC 1001 - Introduction to Sociology (GE) (3)

### **Upper-Division Requirements**

- SOC 4015 - Social Theory (3)
- SWF 3006 - Research Basics (3) \* **OR**
- SOC 4060 - Applied Research Methods and Design (3) \*

Note(s):

\*Students who have completed a research methods course for their major--HIS 2070, NSG 3099, POL 2070, PSY 3090 and PSY 3091--may substitute for SWF 3006 or SOC 4060.

Select at least 9 units from the following:

- SOC 3003 - Urban Issues (3)
- SOC 3005 - Social Stratification (3)
  
- SOC 3010 - Criminology (3) **OR**
- SOC 3014 - Juvenile Delinquency (3)
  
- SOC 3016 - Sociology of Aging (3)
- SOC 3020 - Social Psychology (3)
- SOC 3030 - The Development of Feminist Thought (WS) (4)
- SOC 3050 - Urban Sociology (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4020 - Social Change (3)
- SOC 4030 - Sociology of Religion (3)
- SOC 4044 - Globalization and Culture (3)
- SOC 4070 - Medical Sociology (3)

- SOC 4075 - Sociology of Education (3)
- SOC 4090 - Special Topics in Sociology (1-4) \*\*

Note(s):

\*\*No more than three units of SOC 4090 may count toward the 12 units of upper-division course work required for the minor.

Total: 18-19 Units

### Recommended Courses

- SOC 2001 - Cultural Anthropology (GE) (3)
- SOC 2050 - Sociology of the Family (3)

## Software Engineering Minor

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)

### Upper Division Requirements

- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- MTH 3043 - Discrete Mathematics (3)

### Choose One Course From:

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3022 - Data Management for Computational Science (2)

Total Units: 23

## Spanish Minor

A minor in Spanish is offered to those who wish to complement study in another discipline. Course work can only approximate a bilingual setting and does not necessarily guarantee appropriate language proficiency. Therefore, students are encouraged to immerse themselves in the target language and to complete more than the minimum amount of language classes.

## Lower Division Requirements:

- SPA 1001 - Elementary Spanish I (GE) (4)
- SPA 1002 - Elementary Spanish II (GE) (4)
- SPA 2050 - Intermediate Spanish Conversation I (3)
- SPA 2051 - Intermediate Spanish Conversation II (3)

## Upper Division Requirements:

- SPA 3000 - Civic Engagement: Conversation, Culture and Community (3)
- SPA 3002 - Advanced Grammar and Reading (3)

Complete a total of two courses from two different categories below:

### Literature

- SPA 3020 - Mexican American Literature and Culture (3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 4000 - Peninsular Literature Before 1800 (3)
- SPA 4002 - Peninsular Literature Since 1800 (3)
- SPA 4037 - Latin American Literature Before 1910 (3)
- SPA 4039 - Latin American Literature Since 1910 (3)

### Culture

- SPA 3010 - Latin American Culture and Civilization (3)
- SPA 3015 - Culture and Civilization of Spain (3)

### Linguistics

- SPA 3090 - Current Spanish Linguistics (3)

Total: 26 Units

### Notes:

- Student will undergo a complete summative evaluation of language skills by way of an exit interview.
- Student will successfully complete at least 9 upper-division units in residency.

## Sustainability Studies Minor

This Sustainability Studies minor is an interdisciplinary program designed to help students develop a broad perspective on the issues and challenges of creation care and to acquire skills and tools for personally addressing those challenges. The minor consists of introductory courses in Biology, Sociology and/or Personal and Consumer Financial Management, and upper-division courses drawn from Sociology, Theology, Political Science, International

Development, and Business, and a Sustainability practicum or internship experience. All of the courses in the minor will significantly address sustainability issues from the perspective of their respective disciplines.

## Requirements

Select one (1) course from the following:

- BIO 1002 - Environment and People (GE) **(4)**
- BIO 1005 - Ecology and Conservation (GE) **(3) and**
- BIO 1005L - Ecology and Conservation Laboratory (GE) **(1)**

Select one (1) course from the following:

- FCS 2030 - Personal and Consumer Financial Management **(2)**
- SOC 2001 - Cultural Anthropology (GE) **(3)**

Lower Division: 6-7 Units

Each of the following:

- BUS 4075 - Sustainability in Action **(3) and**
- THE 3005 - Christian Faith and the Natural Sciences (GE) **(3) OR**
- THE 3060 - Christian Life as Vocation (GE) **(3)**

Select Two 2 Course from the following:

- ECO 3015 - Theories of Economic Development **(3)**
- MGT 4070 - Nonprofit Organization Management **(3)**
- POL 3060 - Urban Politics **(4)**
- POL 4035 - Global Governance **(4)**
- POL 4041 - Issues in Public Policy **(4)**
- SOC 4044 - Globalization and Culture **(3)**

Upper Division: 12-14 Units

Internship, Practicum or Research Project

(Minimum of 40 hours work requirement; may be taken for credit)

- An Internship, Practicum or Research Project addressing sustainability **(0-4) \***

Minor Total: 18-21 Units

Note(s):

\*The project must be approved by the Sustainability Studies minor advisor. It may consist of an experience (no formal course credit) with a local NGO or business on a sustainability project, or may be a for-credit course drawn from any major's internship, research project or practicum courses.

## **Theatre Minor**

### Core Requirements

- TRE 2070 - Acting (3)
- TRE 3054 - Movement (3)
- TRE 3071 - Playwriting (3)
- TRE 3085 - Directing (2)

Total: 11 Units

### Elective Courses

Choose 6 units from the following courses:

- TRE 2010 - Theatre Practicum I (1-2) (up to 3 units toward minor)
- TRE 3050 - Musical Theatre (3)
- TRE 4020 - Theatre Practicum II (1-2) (up to 3 units toward minor)
- TRE 4052 - Improvisation and Devising (3)

Minor Total: 17 Units

## **Vocational Ministry Minor**

### Lower-Division Requirements

- BIB 2040 - Reading Scripture Faithfully (3)
- CMI 1055 - Christian Formation and Ministry (3)
- THE 2050 - Introduction to Christian Theology (3)

Total: 9 units

### Upper-Division Requirements

- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)

**Choose one of the following:**

- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3050 - Church as a Witness to the World (3)
- THE 3030 - Christ and the Church (3)

**Choose one of the following:**

- BIB 4001 - Jesus and the Gospels: Four Portraits of One Christ **(3)**
- BIB 4002 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference **(3)**
- BIB 4010 - Biblical Theology **(3)**
- BIB 4013 - Old Testament Torah and Israel's History: God's Story and God's People **(3)**
- BIB 4014 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics **(3)**
- CMI 4010 - Leading in Ministry **(3)**
- **OR**
- CMI 4020 - Compassionate Ministry in Local Context **(3)**
- CMI 4050 - Internship **(1-3)** - students take three 1-unit internship annually is required for the minor

Total: 15 units

Minor Total: 24 units

## Women's Studies Minor

The minor in Women's Studies affirms the equality and value of women in the university community and curriculum. Significant women in the Wesleyan/holiness movement have consistently contributed to Christian feminism as a central principle of academic and church life. Point Loma has developed a sequence of courses of interest to both women and men that examines important gender issues across a wide variety of academic fields, in light of the university's commitment to the Christian faith.

The minor in Women's Studies is for students who wish to complement study in another area with an interdisciplinary study of women's status and contribution to the world. The program consists of an introductory course, a capstone course, and a selection of applied topics courses at the upper-division level.

Graduation with a minor in Women's Studies requires the following lower-division and upper-division courses:

### Women's Studies Minor

#### Lower-Division Requirements

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) **(4)**

#### Upper-Division Requirements

- POL 3030 - The Development of Feminist Thought (WS) **(4)**

A minimum of nine units from:

- CHU 3040 - Women in the Christian Tradition (GE) **(3)**
- COM 3012 - Gender and Communication (WS) **(3)**
- ECO 4040 - The Economics of Race, Class and Gender (WS) **(3)**
- HIS 4077 - Gender and Law in the U.S. (WS) **(4)**
- LIT 3053 - Women Writers (GE) **(3)**
- NUT 3040 - Nutrition in Women's Wellbeing (WS) **(2)**

- POL 4015 - Women and Politics (WS) (4)
- PSY 3060 - Human Sexuality (3)

Total: 17 Units

## **Women's Studies Minor**

The minor in Women's Studies affirms the equality and value of women in the university community and curriculum. Significant women in the Wesleyan/holiness movement have consistently contributed to Christian feminism as a central principle of academic and church life. Point Loma has developed a sequence of courses of interest to both women and men that examines important gender issues across a wide variety of academic fields, in light of the university's commitment to the Christian faith.

The minor in Women's Studies is for students who wish to complement study in another area with an interdisciplinary study of women's status and contribution to the world. The program consists of an introductory course, a capstone course, and a selection of applied topics courses at the upper-division level.

Graduation with a minor in Women's Studies requires the following lower-division and upper-division courses:

### **Women's Studies Minor**

#### **Lower-Division Requirements**

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)

#### **Upper-Division Requirements**

- POL 3030 - The Development of Feminist Thought (WS) (4)

A minimum of nine units from:

- CHU 3040 - Women in the Christian Tradition (GE) (3)
- COM 3012 - Gender and Communication (WS) (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- HIS 4077 - Gender and Law in the U.S. (WS) (4)
- LIT 3053 - Women Writers (GE) (3)
- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)
- POL 4015 - Women and Politics (WS) (4)
- PSY 3060 - Human Sexuality (3)

Total: 17 Units

## **Worship Arts Minor**

#### **Lower Division Requirements**

- CMI 1055 - Christian Formation and Ministry (3)

- CMU 2001 - Instruments in Worship (2)
- **OR**
- CMU 2002 - Multi-Media for Worship Ministry (2)

Total: 5 units

## Upper Division Requirements

- CMI 3045 - Enacting Worship (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)

**Choose two (2) course from the following:**

- BIB 3078 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMU 3014 - Music and Worship (3)
- THE 3030 - Christ and the Church (3)

Total: 12 units

Minor Total: 17 units

## Writing Minor

A minor in Writing is offered to those who wish to complement study in another discipline. The ability to write effectively and interpret written material skillfully makes Writing a marketable minor in all fields.

## Lower-Division Requirements

Select one course from the following:

- WRI 2020 - Introduction to Creative Writing (3)
- JRN 2050 - Introduction to Journalism (3)
- COM 1075 - Scriptwriting for Television and Film (3)

## Upper-Division Requirements

- WRI 3065 - Writing for Professional Careers (3)

Select three courses from the following:

- JRN 3012 - Television News Writing (3) \*
- JRN 3014 - Computer-Assisted Reporting (3) \*
- WRI 3015 - Advanced English Composition (3)

- WRI 3021 - Creative Writing: Poetry (3)
- WRI 3022 - Creative Writing: Fiction (3)
- WRI 3023 - Creative Writing: Creative Nonfiction (3)
- JRN 3045 - Editing (3) \*
- JRN 3055 - Public Relations Writing (3) \*
- WRI 3070 - Writing Theory and Pedagogy (2) \*
- WRI 4020 - Advanced Writing Workshop (3) \*
- JRN 4040 - Magazine Editing and Concepts (3) \*
- WRI 4090 - Special Studies in Writing/Journalism (1-3) \*
- LIN 3012 - Introduction to Linguistics (3)
- LIN 3065 - English Grammar and Usage (3)
- COM 4014 - Long-Form Broadcast News (3) \*
- TRE 4090 - Special Studies in Theatre (1-3) (with playwriting content)

Note(s):

*\*Course carries a pre-requisite.*

Select two units from the following:

- JRN 2015 - Newspaper Workshop (1) \*\*
- WRI 2016 - Literary Magazine Workshop (1) \*\*
- JRN 2017 - Yearbook Workshop (1) \*\*

Note(s):

\*\*Each may be taken more than once (may substitute WRI 4070 - Internship in Writing for two units of JRN 2015/WRI 2016/JRN 2017).

Total: 16-17 Units

## **Youth and Family Ministries Minor**

### Lower Division Requirements

- CMI 1055 - Christian Formation and Ministry (3)

Total: 3 units

### Upper Division Requirements

- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMI 4015 - The Church of the Nazarene: History and Polity (3)
- CMI 4025 - Youth and Family Ministry (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)

- CHD 3010 - Early Childhood Education (4)  
**OR**
- CHD 3013 - Adolescent Development in the Family Context (2)

Total: 17-19 units

Minor Total: 20-22 units

## Requirements

### First Year Experience

Required first year courses

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3)
- WRI 1010 - College Composition: Writing and Research - First Year Experience (GE) (4)  
OR
- WRI 1016 - College Composition: Research - First Year Experience (GE) (2) \*  
*\* WRI 1016 is for transfer students who have completed an additional approved WRI course or for students who have transferred in approved AP work.*

## Foundational Explorations

Foundational Explorations

### I. Exploring Theology and Philosophy

The study of Scripture and Christian tradition is essential to Christian faith and practice. Students transferring to the university for the first time with 48 or more units, none of which are in religion, take only five units in this category at Point Loma Nazarene University (three of which must be at the upper-division level).

#### A. Biblical Foundations [2 courses; 5 units]

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)

#### B. The Christian Tradition [1 course; 3 units]

- CHU 3040 - Women in the Christian Tradition (GE) (3)
- CHU 3095 - The Christian Tradition (GE) (3)
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)
- THE 3060 - Christian Life as Vocation (GE) (3)
- THE 3070 - Global Christianity (GE) (3)

### II. Exploring History, Society, and the Self

A pursuit of historical, social, and personal awareness, focusing on the analytical, communication, and quantitative skills necessary for successful living in modern society.

#### A. Personal Development [1 course; 3 units]

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) **(3)**  
*Required for all first-time freshmen through age 20 (at the start of the Academic Year) who have taken fewer than 24 transferable units after graduation from high school. This course must be completed by the end of the second semester.*

All others take:

- PSY 1003 - General Psychology (GE) **(3)**

#### B. Critical Thinking and Communication [2 courses; 5-7 units]

All students must fulfill the composition requirement by the end of their second semester.

- WRI 1010 - College Composition: Writing and Research - First Year Experience (GE) **(4)**  
**OR**
- WRI 1016 - College Composition: Research - First Year Experience (GE) **(2)** \*\*
- COM 1000 - Principles of Human Communication (GE) **(3)**  
**OR**
- COM 2031 - Argumentation and Debate (GE) **(3)**

Note(s):

*A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 0097, along with WRI 1010 or WRI 1016.*

*\*\*WRI 1016 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

#### C. The History of World Civilizations [2 courses; 6 units]

- HIS 1010 - World Civilizations I (GE) **(3)**
- HIS 1011 - World Civilizations II (GE) **(3)**

#### D. The Social World [1 course; 3-4 units]

- ECO 1000 - Survey of Economics (GE) **(3)**
- ECO 1001 - Principles of Macroeconomics (GE) **(3)**
- ECO 1002 - Principles of Microeconomics (GE) **(3)**
- POL 1001 - Introduction to Political Science (GE) **(3)**
- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) **(4)**
- SOC 1001 - Introduction to Sociology (GE) **(3)**
- SOC 2001 - Cultural Anthropology (GE) **(3)**
- SWF 1000 - Living Justly in Contemporary Society (GE) **(3)**

### III. Exploring Science and Technology in Society

An introduction to the natural and social sciences as tools for exploring the world, with emphasis on collecting and interpreting empirical data for both theoretical and practical purposes.

#### A. The Natural World [2 courses; one from each group, and at least one with a lab; 8 units]

Biological Science [1 course/sequence from this group]

- BIO 1001 - Human Biology and Bioethics (GE) **(3) and**
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) **(1)**
  
- BIO 1002 - Environment and People (GE) **(4)**
  
- BIO 1003 - Introduction to Biology (GE) **(3) and**
- BIO 1003L - Introduction to Biology Laboratory (GE) **(1)**
  
- BIO 1004 - Biotechnology and Society (GE) **(4)**
  
- BIO 1005 - Ecology and Conservation (GE) **(3) and**
- BIO 1005L - Ecology and Conservation Laboratory (GE) **(1)**
  
- BIO 1006 - Global Health and Pathogens (GE) **(4)**
  
- BIO 1030 - Human Anatomy and Physiology I (GE) **(3) and**
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) **(1)**
  
- BIO 2010 - Cell Biology and Biochemistry (GE) **(3) and**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
  
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3) and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**

Physical Science [1 course/sequence from this group]

- CHE 1001 - Chemistry and Society (GE) **(4)**
  
- CHE 1002 - Chemistry in our Everyday Lives (GE) **(3) and**
- CHE 1002L - Chemistry in Our Everyday Lives Lab (GE) **(1)**
  
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) **(4) and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**
  
- CHE 1052 - General Chemistry I (GE) **(4) and**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
  
- PHY 1034 - The Physics of Sound and Music (GE) **(3) and**
- PHY 1034L - The Physics of Sound and Music Lab (GE) **(1)**
  
- PHY 1044 - General Physics I (GE) **(3) and**

- PHY 1044L - General Physics I Lab (GE) **(1)**
- PHY 2044 - University Physics I (GE) **(3) and**
- PHY 2044L - University Physics I Lab (GE) **(1)**
- PSC 1004 - The Cosmos (GE) **(4)**
- PSC 1014 - Physical Science for Teachers (GE) **(4)**

## B. Physical Fitness and Nutrition [2 courses; 3-5 units]

One of the following courses is required:

- KIN 2030 - Lifestyle as Medicine (GE) **(2)**
- PED 1000 - Fitness Through Movement (GE) **(2)**
- PED 2000 - Optimal Health (GE) **(2)**
- SWF 3015 - Health and Well-Being (GE) **(2)**
- Any one (1) unit activity course numbered PED 1002-PED 1084, PED 1011, PED 1013, PED 1016, PED 1017, PED 1018, PED 1019 **OR** one of the following is required:
- PED 2020 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 2025 - Individual and Dual Sports Fundamentals and Strategies (GE) **(2)**

## C. Problem Solving [1 course/sequence; 3-4 units]

- MTH 1044 - Calculus With Applications (GE) **(4)**
- MTH 1064 - Calculus I (GE) **(3) and**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 1073 - Business Calculus (GE) **(3)**
- MTH 3003 - Problem Solving (GE) **(3)**

## IV. Exploring Arts and Culture

A survey of human endeavors from a historical, cultural, linguistic, and philosophical perspective, including developing critical appreciation of human expression-both artistic and literary.

### A. The Fine Arts [2 courses from distinct areas; 4-5 units]

- ART 1000 - Introduction to Art (GE) **(2)**
- ART 1002 - Fundamentals of Art (GE) **(3)**
- ART 2000 - History of Art I (GE) **(3)**
- ART 2001 - History of Art II (GE) **(3)**
- MUH 1000 - Introduction to Music (GE) **(2)**
- MUH 1001 - Introduction to Listening (GE) **(2)**
- TRE 1001 - Introduction to Theatre (GE) **(2)**

### B. Literature [2 courses; 5 units]

Two courses; LIT 2000 and one upper division Literature course.

Lower Division:

- LIT 2000 - Literature and Culture (GE) **(2)**

Upper Division:

- LIT 3050 - World Literature (GE) **(3)**
- LIT 3051 - World Cinema (GE) **(3)**
- LIT 3052 - Diverse Voices in American Literature (GE) **(3)**
- LIT 3053 - Women Writers (GE) **(3)**

*All materials for the following Foundational Explorations (GE) Literature Upper Division Requirement options are written in foreign language:*

- FRE 3020 - Survey of French Literature **(3)**
- FRE 3025 - Francophone Literature **(3)**
- SPA 3020 - Mexican American Literature and Culture **(3)**
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film **(3)**
- SPA 4000 - Peninsular Literature Before 1800 **(3)**
- SPA 4002 - Peninsular Literature Since 1800 **(3)**
- SPA 4037 - Latin American Literature Before 1910 **(3)**
- SPA 4039 - Latin American Literature Since 1910 **(3)**

Note(s):

*B.S.N. candidates choose between two Literature options or one Literature and one Philosophy.*

### C. Foreign Language\* [2 courses; 8 units]

One of the following sequences in the same language, all or part of which may be waived by examination or by petition when English is not the student's native language:

- CHN 1001 - Elementary Chinese (Mandarin) I (GE) **(4)**
- CHN 1002 - Elementary Chinese (Mandarin) II (GE) **(4)**
  
- GER 1001 - Elementary German I (GE) **(4)**
- GER 1002 - Elementary German II (GE) **(4)**
  
- GRK 2007 - Biblical Greek I (GE) **(4)**
- GRK 2008 - Biblical Greek II (GE) **(4)**
  
- HEB 2005 - Biblical Hebrew I (GE) **(4)**
- HEB 2006 - Biblical Hebrew II (GE) **(4)**
  
- FRE 1001 - Elementary French I (GE) **(4)**
- FRE 1002 - Elementary French II (GE) **(4)**
  
- SPA 1001 - Elementary Spanish I (GE) **(4)**

- SPA 1002 - Elementary Spanish II (GE) (4)

\*Note(s):

*A foreign language is not required for B.S.N. candidates.*

*Students who believe they may qualify for a language waiver are advised to make application no later than spring of the sophomore year (or in the semester transfer to PLNU) to avoid possible delay in graduation.*

#### D. Philosophy [1 course; 3 units]

- PHL 2001 - Introduction to Philosophy (GE) (3)
- PHL 2011 - Ethics (GE) (3)

## Humanities Honors Program General Education

Students in the Humanities Honors Program must complete all General Education requirements as outlined below. HON 1050 can be replaced with elective units, per Director approval.

### Humanities Honors Program General Education Requirements (36 units)

#### I. Humanities Core [2-3 courses; 2-5 units]

- HON 1000 - Introduction to Christian Scholarship (GE) (1)
- HON 1050 - Humanities Honors Abroad (GE) (3) \*
- HON 3050 - Humanities Honors Integrative Seminar (GE) (1)

\* HON 1050 is optional and can be replaced with a three (3) unit elective approved by the Director of the Humanities Honors Program.

#### II. Responding to the Sacred

##### A. Biblical Foundations [2 courses; 5 units]

- HON 2001 - Old Testament History and Religion (GE) (2)
- HON 2002 - New Testament History and Religion (GE) (3)

##### B. The Christian Tradition [1 course; 3 units]

- HON 3010 - Christianity in Global Perspective (GE) (3)

#### III. Developing Cognitive Abilities

##### A. Personal Development [1 course; 3 units]

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3)

## B. Critical Thinking and Communication [1 course; 4 units]

- HON 1001 - Rhetoric: Critical Communication (GE) (4)

## C. Problem Solving [1 course; 3-4 units]

- MTH 1044 - Calculus With Applications (GE) (4) **OR**
- MTH 1064 - Calculus I (GE) (3) **OR**
- MTH 1073 - Business Calculus (GE) (3) **OR**
- MTH 3003 - Problem Solving (GE) (3)

## IV. Exploring an Interdependent World

### A. The Natural World [2 courses; one from each group, and at least one with a lab; 8-9 units]

#### Biological Science [1 course from this group]

- BIO 1001 - Human Biology and Bioethics (GE) (3)  
**and**
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1002 - Environment and People (GE) (4)
- BIO 1003 - Introduction to Biology (GE) (3)  
**and**
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- BIO 1004 - Biotechnology and Society (GE) (4)
- BIO 1005 - Ecology and Conservation (GE) (3)  
**and**
- BIO 1005L - Ecology and Conservation Laboratory (GE) (1)
- BIO 1030 - Human Anatomy and Physiology I (GE) (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)

#### Physical Science [ 1 course from this group]

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1002 - Chemistry in our Everyday Lives (GE) (3)  
**and**
- CHE 1002L - Chemistry in Our Everyday Lives Lab (GE) (1)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4)  
**and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4)
- PHY 1044 - General Physics I (GE) (3)
- PHY 2044 - University Physics I (GE) (3)
- PSC 1004 - The Cosmos (GE) (4)

### B. Physical Fitness and Nutrition [2 courses; 2-4 units]

*One of the following courses is required:*

- PED 1000 - Fitness Through Movement (GE) (2)
- PED 2000 - Optimal Health (GE) (2)
- SWF 3015 - Health and Well-Being (GE) (2)

*Additionally, any one (1) unit activity course numbered PED1002 - PED1084 **OR** one of the following is required:*

- PED 2020 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 2025 - Individual and Dual Sports Fundamentals and Strategies (GE) (2)

### C. The Social World [1 course; 4 units]

- HON 2010 - Politics of Race, Class and Gender (GE) (4)

## V. Seeking Cultural Perspective

### A. Foundations in Humanities [3 courses; 12 units]

- HON 1020 - Foundations in Humanities I: Ancient/Medieval (GE) (4)
- HON 2020 - Foundations in Humanities II: Renaissance/Enlightenment (GE) (4)
- HON 3020 - Foundations in Humanities III: 19th/20th Centuries (GE) (4)

### B. Philosophy [1 course; 3 units]

- HON 1002 - Introduction to Philosophy (GE) (3)

### C. Foreign Language [2 courses; 8-9 units]

- SPA 1001 - Elementary Spanish I (GE) (4)
- SPA 1002 - Elementary Spanish II (GE) (4)
  
- FRE 1001 - Elementary French I (GE) (4)
- FRE 1002 - Elementary French II (GE) (4)
  
- GER 1001 - Elementary German I (GE) (4)
- GER 1002 - Elementary German II (GE) (4)
  
- HEB 2005 - Biblical Hebrew I (GE) (4)
- HEB 2006 - Biblical Hebrew II (GE) (4)
  
- GRK 2007 - Biblical Greek I (GE) (4)
- GRK 2008 - Biblical Greek II (GE) (4)

## Certificate

## Business Certificate

A certificate in Business is for students who are interested in an understanding of basic business (accounting, economics, management, and marketing) concepts and applications, but who do not want to pursue a minor or major in Business Administration.

## Certificate Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors **(3)** \*  
\* ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.
- MGT 2012 - Principles of Management **(3)**
- MKT 3032 - Principles of Marketing **(3)**

Select one (1) of the following:

- ECO 1000 - Survey of Economics (GE) **(3)**
- ECO 1001 - Principles of Macroeconomics (GE) **(3)**
- ECO 1002 - Principles of Microeconomics (GE) **(3)**

Total: 12 Units

## Certificate in Intercultural Engagement at Community Classroom

The Certificate in Intercultural Engagement at Community Classroom is designed for students who want part of their academic experience to include a focused engagement in a multicultural setting that will nurture their Christian formation academically and vocationally.

## Certificate Requirements

Students pursuing the Certificate in Intercultural Engagement at Community Classroom must complete:

- Twenty (20) hours of co-curricular service learning . Ten (10) hours are built into each Community Classroom course.
- Complete six (6) units from the following Community Classroom courses when offered at City Heights. A Minimum of three (3) units must be unique to the certificate.

Choose six (6) units from the following:

- CHU 3095 - The Christian Tradition (GE) **(3)**
- CMI 1055 - Christian Formation and Ministry **(3)**
- CMI 3050 - Church as a Witness to the World **(3)**
- PHL 2011 - Ethics (GE) **(3)**
- SOC 3060 - Race and Ethnicity **(3)**
- SPA 1001 - Elementary Spanish I (GE) **(4)**
- SPA 1002 - Elementary Spanish II (GE) **(4)**
- THE 3006 - The Life of Holiness **(3)**

## French Language Certificate

A French Language Certificate is for students interested in improving their conversational skills but who cannot complete the minor.

## Certificate Requirements

*FRE 1001 and FRE 1002 are pre-requisites to FRE 2050.*

- FRE 2050 - Intermediate French I (3)
- FRE 2051 - Intermediate French II (3)
- FRE 3003 - French Conversation (3)

Total Units for the Certificate: 9

## Intercultural Ministries Certificate

Purpose: The Intercultural Ministries Certificate is designed to help students develop a theoretical and practical understanding of ministry in diverse cultural contexts.

Objectives:

- To develop a theological framework of intercultural ministry
- To understand diverse cultures, religions, and people groups.

Students are to complete nine (9) academic units from the course requirements listed below, and engage in 20 hours of approved intercultural ministries experiences offered by the office of spiritual development.

Required Course (3 units):

- CMI 1055 - Christian Formation and Ministry (3)

Choose two (2) of the following courses (6 units):

- CMI 3050 - Church as a Witness to the World (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- SOC 2001 - Cultural Anthropology (GE) (3)
- SOC 3050 - Urban Sociology (3)
- SOC 4044 - Globalization and Culture (3)
- MGT 4070 - Nonprofit Organization Management (3)
- THE 3020 - The World's Faith Traditions (3)
- PHL 3021 - Justice, Politics, and the Social World (3)

**AND**

Complete 20 hours of intercultural service through approved off-campus intercultural service opportunities through Spiritual Development office (Love Works, Ministry with Mexico, Student Ministries).

Total: 9 Units

## Leadership in Ministry Certificate

Purpose: The Leadership in Ministry Certificate is designed for students to gain knowledge and experience in leading and serving in a variety of ministry contexts.

Objectives:

- To develop of theological framework of Christian leadership.
- To understand leadership theories and approaches and their relationship to complex organizations.

Students are to complete nine (9) academic units from the course requirements listed below, and engage in 20 hours of approved leadership sponsored experiences offered by the Office of Spiritual Development.

### Required Courses (6 units):

- MGT 2012 - Principles of Management (3)
- CMI 4010 - Leading in Ministry (3)

Choose one of the following courses (3 units):

- COM 3012 - Gender and Communication (WS) (3)
- CMI 3040 - Foundations for the Practice of Youth Ministry (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- MGT 4016 - Perspectives on Leadership (3)
- MGT 4070 - Nonprofit Organization Management (3)
- NSG 4070 - Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice (3)
- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)
- POL 4015 - Women and Politics (WS) (4)
- PSY 3020 - Social Psychology (3)
- PSY 3041 - Group Counseling (1-3)
- SOC 4020 - Social Change (3)

**AND**

Complete 20 hours of approved leadership practicum from the Office of Spiritual Development in the following areas.

Students are to verify service by having the supervisor verify practicum.

PLNU Approved Leadership Practicum Opportunities:

- Alpha Groups Leadership
- D Groups Leadership
- Internship with Center of Pastoral Leadership
- PSY101 Group Leadership
- Resident Directors
- Student Ministries Leadership
- MOSAIC Leadership
- Diversity Leadership Program
- LINK Program

Total: 9 units

## Software Engineering Certificate

### Lower Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)

## Upper Division Requirements

- CSC 3012 - Operating Systems for Software Engineering Certificate (2)
- CSC 3023 - Software Engineering (3)

Total units for the certificate: 16

## Spanish Language Certificate

A Spanish Language Certificate is for students interested in improving their conversational skills but who cannot complete the minor.

### Certificate Requirements

*SPA 1001 and SPA 1002 are pre-requisites to SPA 2050.*

- SPA 2050 - Intermediate Spanish Conversation I (3)
- SPA 2051 - Intermediate Spanish Conversation II (3)
- SPA 3000 - Civic Engagement: Conversation, Culture and Community (3)

Total Units for the Certificate: 9

## Spiritual Formation Certificate

Purpose: The Spiritual Formation Certificate is designed to help students engage in spiritual formation practices that help them grow in love of God, neighbor, and self.

Objectives:

- To develop a theological framework for spiritual formation.
- To understand inward, outward, and corporate spiritual formation practices.
- To gain an appreciation for setting boundaries and self-care.

Students are to complete nine (9) academic units from the course requirements listed below, and engage in 20 hours of approved leadership sponsored experiences offered by the Office of Spiritual Development.

### Required Courses (6 units):

- CMI 1055 - Christian Formation and Ministry (3)
- CMI 3025 - Christian Care of Souls (3)

Choose one of the following courses (3 units):

- BIB 2040 - Reading Scripture Faithfully (3)
- PSY 3030 - Moral Psychology and Cultural Values (4)
- PSY 4010 - Issues in Psychotherapy-Theology Integration (3)
- PSY 4020 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) (4)
- SOC 3020 - Social Psychology (3)
- THE 3025 - The Human Person and Theology and Psychology (3)

**AND**

Complete 20 hours of approved spiritual development experiences through Office of Spiritual Development.

- Leading a D Group or Alpha Group
- Participating in a Spiritual Mentoring
- Take CMI 4050 Internship (1-3) to cover 20 hours of experience

Total: 7-9 units

## **Other Programs**

### **4-Year Credential Track: Single Subject Teaching Credential**

#### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3)** \*
- EDU 3006 - Principles of Language Acquisition **(3)** \*
- EDU 4004 - Foundations of Special Education **(3)** \*
- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**
- EDU 4020 - Literacy Instruction for Secondary Teachers **(3)** \*
- EDU 4021 - General Methods for Secondary Teachers **(3)** \*
- EDU 4050 - Secondary Clinical Practice I **(4)**
- EDU 4055 - Secondary Clinical Practice II **(4)**
- EDU 40CP3 - Secondary Clinical Practice Seminar I **(1)**
- EDU 40CP4 - Secondary Clinical Practice Seminar II **(1)**

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics **(3)** (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science **(3)** \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science **(3)** (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language **(3)** (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts **(3)** (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education **(3)** (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers **(3)** \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## Post-Baccalaureate Multiple Subjects Teaching Credentials

### Multiple Subjects Teaching Credential

Cross Disciplinary Studies: Teacher Education, B.A. majors complete a 130-unit undergraduate degree program which includes five required Education courses in partial fulfillment toward the Multiple Subjects Teaching Credential. Teacher Education majors have the option of adding 19 additional units to the undergraduate degree in fulfillment of the Multiple Subjects Teaching Credential. Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). The following 4000-level credential courses are cross listed with the 6000-level credential courses, and cross listed courses cannot be repeated between the undergraduate and graduate programs. These courses represent the required courses for the California SB2042 Multiple Subjects Teaching Credential. At the point that the 130-unit undergraduate degree is fulfilled, the candidate would

apply to the Graduate School of Education and complete the remaining courses required for the credential post-baccalaureate.

Students desiring to enroll in the Multiple Subjects credential course listed below would need to make application to the Teacher Education program, meeting all program, university and state requirements for classroom observation and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching.

The following courses may be used for credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

Prerequisites: passage of prior Education coursework and the CBEST test of basic skills

## Requirements

- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4010 - Methods of Teaching Reading and Writing **(3)** (with fieldwork) \*
- EDU 4022 - Interdisciplinary Approaches to Teaching in the Content Areas **(3)**
- EDU 4040 - Elementary Clinical Practice I **(4)**
- EDU 4060 - Elementary Clinical Practice II **(4)**
- EDU 40CP1 - Elementary Clinical Practice Seminar I **(1)**
- EDU 40CP2 - Elementary Clinical Practice Seminar II **(1)**

Note(s):

*\* Requires 20 hours of supervised field experience working with students in a classroom setting.*

## Special Education Teaching Credentials

Cross Disciplinary Studies: Teacher Education, B.A. majors have the option of adding additional units to the undergraduate degree in fulfillment of a Special Education Teaching Credential. Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). The following 4000-level credential courses are cross listed with the 6000-level credential courses, and cross listed courses cannot be repeated between the undergraduate and graduate programs. These courses represent the required course for the California SB2042 Multiple Subjects Teaching Credential. At the point that the 130-unit undergraduate degree is fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

## Requirements

- EDU 4053 - Organization and Management for Success in the Moderate/Severe Classroom **(3)**
- EDU 4054 - Methods of Teaching Candidates with Moderate/Severe Disabilities **(3)**
- EDU 4092 - Assessment and Services for Students with Disabilities **(3)**
- EDU 4093 - Curricular and Instructional Adaptations for Students with Mild/Moderate Disabilities **(3)**
- EDU 4094 - Collaboration and Consultation for IEP Implementation, Evaluation, and Program Improvement **(3)**
- EDU 4096 - Principles of Language Acquisition for Students with Moderate/Severe Disabilities **(3)**
- EDU 4070M - Special Education Mild/Moderate Clinical Practice I **(4)**

- EDU 4074M - Special Education Mild/Moderate Clinical Practice II (4)
- EDU 4070S - Special Education Moderate/Severe Clinical Practice I
- EDU 4074S - Special Education Moderate/Severe Clinical Practice II
- EDU 40CP1 - Elementary Clinical Practice Seminar I (1)
- EDU 40CP2 - Elementary Clinical Practice Seminar II (1)

## Special Program Information

### Honors Scholars Program

Near the end of the junior year, a student who has demonstrated exceptional scholarship and capacity for serious and creative study or research, and who has maintained a 3.500 cumulative GPA, may apply for entry into the Honors Scholars program. With the guidance of a faculty mentor, and in community with other Honors Scholars, the student will complete an honors project during the senior year. Successful scholars will receive special recognition at commencement ceremonies and on the university transcript of record. Criteria, qualifications, and procedures are available in the Wesleyan Center, located on the second floor of Smee Hall.

Students who are accepted into the Honors Scholars program register in the fall semester for HON 4098 (two units), as listed below. This represents the initial phase of work on the required project. In the spring of the senior year, students register for HON 4099 (one unit) in order to complete the project.

- HON 4098 - Honors Project I
- HON 4099 - Honors Project II

### Teaching Credentials

*Jen Lineback, Advisor*

Courses necessary to satisfy the requirements for the following teaching credentials are offered. The requirements presented in the School of Education section are in addition to the requirements for the baccalaureate major.

- Single-Subject Teaching Credential - 2042 (Secondary) (Teacher Education)
- Multiple-Subject Teaching Credential - 2042 (Elementary) (Teacher Education)
- Special Education Teaching Credential - Mild/Moderate and Moderate/Severe

## Pre-Professional and Cooperative Programs

### Engineering

**Maria Zack, Advisor**

Three options are open to students who wish to work toward a degree in some branch of engineering.

- Those interested in engineering with an electronics emphasis such as electrical, hardware or systems engineering may choose to earn a general engineering degree in Electrical Engineering at Point Loma Nazarene University (see Department of Physics and Engineering).
- Those interested in engineering that combines knowledge of electrical engineering and computer science may choose the general engineering major in Computer Science Engineering (see Department of Physics and Engineering).

- Those interested in engineering with a mechanical emphasis may choose to earn a general engineering degree in Mechanical Engineering Physics at Point Loma Nazarene University (see Department of Physics and Engineering).
- Those interested in software engineering may choose to major in Software Engineering (see Department of Mathematical, Information, and Computer Sciences).
- Those interested in pursuing further study towards a M.S. degree will be well prepared by majoring in any of the general engineering area of Computer Science Engineering, Electrical Engineering or Mechanical Engineering Physics at Point Loma Nazarene University (see Department of Physics and Engineering).

Interested students may seek counsel from the Engineering advisor.

## **Pre-law**

### **Jeff Birdsell, Advisor**

Students from all majors who are considering a legal career should contact the Pre-Law Advisor to receive the most current information about how best to prepare for law school. Pre-Law advising is designed to provide all interested students with the information and support they need to successfully apply to law school. The Pre-Law Advisor is available for individual consultation with students and also hosts events each semester aimed at providing information and networking opportunities to all PLNU students who are considering law-related careers.

There is no "Pre-Law Major" or list of required courses. Instead, PLNU's Pre-Law advising focuses on assisting students of any major with information on the best preparation for law school, including: investigating program options, preparing for the Law School Admissions Test (LSAT), revising application materials, and exploring internships.

Pre-Law advising particularly takes a personal approach to connecting students' interests in legal careers to God's calling in their lives. Additionally, there are opportunities for networking with legal professionals in small-group settings. Students considering going to law school should contact the Pre-Law Advisor early in their academic career to ensure that they are on the distribution list for all Pre-Law information and events.

## **Pre-dental/Pre-medical/Pre-optometry/Pre-pharmacy/Pre-veterinary**

### **Sara Yu Choung, Advisor**

Students from any major who are considering a career in dentistry, medicine, optometry, pharmacy, or veterinary medicine should contact the Pre-Health Advisor to ensure that they receive information about pre-health events, course requirements, volunteer opportunities, application process, advising, etc. The Pre-Health program is designed to help students determine whether a career in the health professions is right for them and support those who choose to apply to be the most successful and competitive applicants they can be. This includes, but is not limited to, speaker series, informational meetings, shadowing and volunteer opportunities, practice interviews, review of application materials, and recommendation letters.

There is no "Pre-Health or Pre-Med Major," but each health professions school has specific course requirements for admission that generally include one year each of biology, general chemistry, organic chemistry, English (composition and/or literature), and physics, and one semester of biochemistry and mathematics. Health professions schools make no requirements regarding the choice of major for students preparing for the health professions but encourage a broad liberal arts background in the humanities, social and behavioral sciences, natural sciences, and mathematics. Most students interested in careers in the health professions at PLNU choose to major in the natural sciences.

## **Pre-Physical Therapy and Pre-Physician Assistant**

### **Brandon Sawyer, Advisor**

Students of various academic majors intending to attend physical therapy and/or physician assistant school must prepare adequately for the rigors of graduate school and groom themselves for the application process. Interested

students will receive advisement on accredited programs, prerequisites, and admission standards. The advisor assists in internship placement, preparation for the application process including letter of recommendation decisions and the admission interview paradigm. Graduate Record Examination (GRE) preparation strategies and course sequence advising are offered. Prospective students are advised that high grades and entrance exam scores along with clinical hours are essential.

Interaction with professionals in the physical therapy and medical fields is encouraged through multiple clinical internship placements, the first of which can occur as early as the second semester of the sophomore year, advanced courses in injury assessment and rehabilitation, pathology of disease, and original research leading to Honors Scholar status at graduation. These interactions are beneficial to personal and pre-professional development and enhance the prospect of graduate school admission.

## **AFROTC, AROTC, and NROTC Programs**

### **Scott Shoemaker, Advisor**

Two- to four-year programs in Air Force, Army, and Navy Reserve Officer Training Corps, are offered in cooperation with San Diego State University and the University of San Diego. Upon completion of the program and all requirements for a bachelor's degree, cadets are commissioned as second lieutenants in the Air Force, Army, and Marines, and as Ensigns in the Navy. In addition to the leadership courses listed on the admissions office website, students are typically required to take a four to six-week Field Training Camp or cruise during the summer. Further information on these programs may be obtained from the ROTC advisor at Point Loma Nazarene University or from the Aerospace Studies Department, 619-594-5545, and the Military Science Department, 619-594-4943, at San Diego State University or the Department of Naval Science, 619-260-2288, at the University of San Diego.

## **Office of Global Studies Programs**

In an ever-changing and interdependent global community, Point Loma Nazarene University recognizes the value of providing for students the opportunity to live, learn, and engage in service in another culture. Such an experience allows students to expand their appreciation and understanding of other world cultures. It also strengthens their abilities to become global citizens.

In recognition and strong support of Point Loma Nazarene University's mission and core values, the Office of Global Studies actively encourages all students to participate in learning opportunities overseas for an academic year, semester or summer term, or with a faculty-led program. It works with the PLNU community to develop a global perspective in its study abroad curriculum and promotes academic integration in all the programs.

In addition to the programs listed on the Office of Global Studies website, which have been approved to offer PLNU course credit, the Office of Global Studies offers a selected group of programs through affiliated universities and program providers. Students applying to study abroad enroll by registering with the Office of Global Studies. All students must determine, in advance, with the approval of their faculty advisors and the Director of the Office of Global Studies, how courses taken through these programs will be applied to their specific graduation requirements. Furthermore, although most financial aid applies, all study abroad applicants are required to meet with Student Financial Services (SFS) to review their eligibility for federal and university-funded scholarships and financial aid. Program information and application materials may be obtained online at the Office of Global Studies website, via e-mail at [globalstudies@pointloma.edu](mailto:globalstudies@pointloma.edu), by telephone at 619-849-2387, or by visiting the Office of Global Studies.

To maintain a high academic standard, our programs requires minimum cumulative GPA of 2.750 or higher. Students who are on academic or disciplinary probation, or those who are not cleared by the Dean of Students, are not eligible to participate in study abroad programs.

Grades earned through the following programs are neutral and, as such, not included in PLNU GPA calculation:

- OGS-designated international affiliates

- Non-OGS programs
- Semester-at-Sea programs

Grades earned through the following programs are included in PLNU GPA calculation:

- OGS-designated domestic affiliates
- OGS-designated partner programs
- PLNU faculty-led programs

Students should confirm their program with the Office of Global Studies.

Students can apply for fall semester and summer programs by March 15th and spring programs by October 15th.

## Academic Co-curricular

Co-curricular activities in the area of Academic Affairs include, but are not limited to, the following: a nationally ranked forensic team; the annual Sunset Cliffs National Forensics Tournament hosted by the university; California Board of Registered Nursing-approved continuing education courses; the Intercultural Pathways Program, the Phi Alpha Theta society for history students; the Point Loma String Project; a wide variety of activities directed by the Fermanian Business and Economic Institute; and student summer research in biology, chemistry, mathematics, computer information systems, and computer sciences.

Other opportunities directly or indirectly related to specific majors and programs include a host of ensembles in the Department of Music such as Chorale, Concert Choir, Point Loma Singers, Choral Union, Chamber Orchestra, Concert Band, and Jazz Band; radio station KPLR and the university television station, supported by the Department of Communication Studies; international study trips sponsored by the Center for International Development; summer marketing research, an honors program in the Fermanian School of Business; and an annual series of literary teas, Poetry Day, and a writer's symposium featuring nationally known personalities, sponsored by the Department of Literature, Journalism, and Modern Languages.

## Learning Experiences for Academic Progress (LEAP)

Learning Experiences for Academic Progress (LEAP) provides a small group of freshmen with a year of selected activities, structured academic programming, and on-campus support services in order to facilitate the transition from high school into a four-year, residential environment, and to increase academic success, retention, and degree attainment. The cornerstone Freshman Studies Seminar courses (FST 1000, FST 1001) guide students to develop functional learning strategies which are broadly applicable to a collegiate context. Although students in LEAP do not participate in ROTC or intercollegiate athletics, they do participate in the purposeful and holistic co-curricular opportunities incorporated into LEAP, in addition to curricular programming and academic enrichment. Faculty members, along with professionals from Academic Advising, Engagement and Retention, and Residential Life, serve as advocates and facilitators to encourage students to achieve their educational goals.

Students in LEAP are expected to meet or exceed predetermined academic standards. Students who fail to meet these standards may be subject either to disqualification or administrative withdrawal.

### Course Load in LEAP.

The academic course load for students in LEAP is a maximum of 14 units in the fall semester, and 14-17 units in the spring semester, based on a student's fall GPA:

- LEAP participants whose fall GPA stands between 1.800 and 2.799 will carry a maximum spring load of 14 units.
- LEAP participants whose fall GPA is 2.800 or greater will carry a maximum spring load of 17 units.

**Disqualification.** Students in LEAP may be disqualified during either fall or spring semesters.

- In fall semester, LEAP participants who receive grades of C- or better in FST 1000 and WRI 1001 but whose cumulative GPA falls below 1.800 will be disqualified.
- In spring semester, LEAP participants who receive a grade of C- or better in FST 1001, but whose cumulative GPA falls below 2.000 will be disqualified.

Students in LEAP who are disqualified will receive a letter from the Vice Provost of Academic Administration indicating they have been disqualified from continuing at the university. To be considered for readmission, students must:

- spend at least one regular semester away from the university (summer is not considered a regular semester);
- take 12 pre-approved units at another institution;
- present official transcripts that demonstrate a university cumulative GPA of 2.000 or above;
- meet with the Vice Provost for Academic Administration; and
- complete an application for readmission.

If readmitted, such students would sign a proposed Academic Improvement Plan, return on Academic Probation and enroll in a maximum of 13 units in their first semester back to allow deep concentration on a lighter class schedule.

**Administrative Withdrawal.** Students in LEAP may be administratively withdrawn at the end of either fall or spring semester.

- In fall semester, LEAP participants who receive grades of lower than C- in FST 1000 or WRI 1001 and whose cumulative GPA falls below 1.800 will be administratively withdrawn.
- In spring semester, LEAP participants who receive a grade of lower than C- in FST 1001 and whose cumulative GPA falls below 2.000 will be administratively withdrawn.

Students in LEAP who are administratively withdrawn will receive a letter from the Vice Provost of Academic Administration indicating they have been administratively withdrawn from continuing at the university. Although this withdrawal action offers no opportunity for appeal or readmission to LEAP, students who wish to do so can reapply directly through the Office of Admissions once they have completed 24 or more transferable units at another institution with a 2.800 or higher cumulative GPA.

## **Intercultural Pathways Program**

Intercultural Pathways (IP) is a global citizenship skill-building program. A desired marker of all graduates is that they are able to embody meaningful community engagement in a complex world which demands intercultural awareness and skills. IP endeavors to make clear the various ways students can navigate the multiple options at the university to promote growth in intercultural competency. In addition, the program incentivizes participation in coursework, forums, and experiential programs that prepare students for meaningful intercultural engagement throughout life.

Students who join the Intercultural Pathways program will be awarded points for participation in designated courses, forums, and experiential engagements. Each academic year, students who earn four or more Pathway points that year will be recognized and awarded a gift. An "*Intercultural Pathways Scholar*" is identified as a student who completes 12 Pathway points (with at least two courses included) and writes a reflection essay assessed at a level 4 or 5 on the IP Essay Rubric (scale of 1 to 5). IP Scholars will receive a Scholar Award, recognition in their commencement program, and permission to use the IP logo and program descriptor on their resume and LinkedIn. (Program Descriptor: Intercultural Pathways (IP) Scholars are ready for the global workplace. IP Scholars participate in relevant courses and unique experiences that enhance their intercultural fluency and global awareness.)

## **Graduation Requirements**

## **General Requirements**

Undergraduate students all share certain general requirements for earning and receiving the baccalaureate degree (B.A., B.S. Bus. Admin, B.Mus., B.S.N., and B.S.). These include all of the following:

- Freshman and students transferring in 56 credits or fewer must complete all requirements for the degree within 7 years of initial matriculation. Students transferring in 57 credits or more must complete all requirements for the degree within 4 years of initial matriculation.
  - Filing an application for advancement to degree candidacy with the Office of Records.
  - Satisfactory completion of a total of a minimum of 128 semester units (courses numbered 1000 and above) with a minimum cumulative grade-point average of 2.000.
  - Satisfactory completion of all general education requirements.
  - Completion of an approved program of study in a major area with the minimum number of upper-division units and a minimum cumulative grade-point average of 2.000 unless stipulated higher.
  - If a minor is declared, a minimum GPA of 2.000 unless stipulated higher.
  - Residency at the university during the final 24 semester units of study (not applicable to PLNU-sponsored study abroad).
  - Fulfillment of all academic and institutional requirements and obligations.
  - Payment in full of all financial obligations to the university, including a degree processing fee.
1. **Candidacy for a Degree.** An application for advancement to candidacy for a degree must be filed after the student has completed at least 92 semester units of work and has an approved program of study. Although students may view Academic Requirements in Workday, an official "Graduation Check" must be conducted by the Office of Records which subsequently communicates with the degree applicant regarding appropriate details. A special application must be made, and a fee paid, for students who must attend a final summer session in order to complete all requirements for graduation (see below under Degree Processing Fees).
  2. **Semester Units.** A minimum cumulative grade-point average of 2.000 is required for graduation. None of the minimum 128 semester units required for the baccalaureate degree may include those taken at the remedial level (numbered below 1000).
  3. **General Education.** Students must meet the stated requirements in general education, a broad-based liberalizing experience in the arts and sciences. Transfer students are responsible to make sure any course work done prior to admission to the university fulfills the categories that are unique to PLNU.
  4. **Mathematics.** To graduate from Point Loma Nazarene University, a student must demonstrate ability in mathematics by submitting an adequate SAT or ACT score as defined by faculty policy, by successfully challenging on a department placement examination, or by completing the remedial course for establishing this competency. This ability must be met *prior to junior classification*.
  5. **Completion of the Major.** All major programs of study are sanctioned by the Point Loma faculty and listed in detail in this Catalog. Of the units completed in a major, at least 24 must be taken at the upper-division level (numbered 3000 and above). In addition, a minimum of one-half of the upper-division units in the major must be completed in residence. A 2.000 cumulative grade-point average is required for all academic majors. An academic minor, though available in various academic areas, is not a requirement for graduation.
  6. **Residency.** Candidates for the baccalaureate degree must be in residence during the final 24 units (study abroad students excluded) applied toward the degree. A minimum of one-half of the upper-division units in the major also must be taken in residence. Exceptions are granted only by petition to the Vice Provost for Academic Administration.

## Completion of All Requirements

Commencement convocation is two times a year, at the close of the fall and spring semesters. All work taken toward a degree must be completed in full before a student can participate in commencement ceremonies. Likewise, the awarding of a diploma is dependent on clearance by a variety of university offices and services, such as Residential Life, Student Accounts, and Ryan Library. Degrees are posted in the semester of final registration and/or completion of final requirements.

Students may petition to participate in the Spring or Winter Commencement convocation and complete their final requirements in the subsequent Summer or Spring semester. In order to do so, students may have no more than nine (9) units remaining to be completed in the subsequent semester. A completed Application for Graduation for the Spring or Winter Commencement must be filed with the Office of Records along with an action plan/petition that is a binding contract of the work to be completed by the end of the next semester. Approval by the Vice Provost for Academic Administration and fee payment constitute final approval.

## Degree Processing Fees

All students eligible for graduation are charged a fee. This fee is applied to the student's account and is non-refundable. The fee is charged regardless of whether the student participates in the commencement ceremonies or is not currently studying in residence. Students who find it necessary to file an application for graduation in the term beyond commencement participation must pay an additional special fee. This fee is refundable only if all requirements are met satisfactorily by the conclusion of the summer (for May Commencement) or the spring (for December Commencement) and all official documentation is filed no later than October 1 for students completing in the summer and July 1 for students completing in spring, according to the application agreement as approved by the Vice Provost for Academic Administration.

## Final Clearance

In order to receive final approval for participation in commencement activities, and/or in order to earn and receive a baccalaureate degree, students must resolve any outstanding charges of fees or misconduct. The university does not guarantee the awarding of a diploma or degree.

## Bachelor of Science in Nursing Degree

The requirements for the Bachelor of Science in Nursing (B.S.N.) degree are the same as for the other baccalaureate degrees except that no foreign language is required and students may choose between a second literature course or a philosophy course. A larger concentration of work is required in the Nursing major.

## Second Baccalaureate Degree

A second baccalaureate degree may be earned at Point Loma Nazarene University. After applying for re-admission, a minimum of 32 units must be completed. Twenty-four of these units must be taken at the 3000 level or above. A minimum of 24 units must be earned in the new major, with no duplication of units from a previous major. Twenty-four units must be taken in residence at PLNU. All general education (if different from first degree), the additional major, and specific academic major requirements for the second degree must be met. Candidates for a second degree are eligible for honors at graduation and for the Dean's List but not for a repetition of membership in Phi Delta Lambda. The second baccalaureate degree is distinguished from multiple majors within a first degree.

## Graduation Honors

**Honoris Causa.** The university occasionally grants honorary degrees to worthy recipients, as recommended by the President to the Board of Trustees.

**Graduation with Latin Honors.** The university recognizes academic excellence with the following honors designation based exclusively on the residential grade-point average (GPA earned in residence at PLNU):

- **Summa cum Laude** (highest honors), 3.900 and above
- **Magna cum Laude** (high honors), 3.700 to 3.899

- **Cum Laude** (honors), 3.500 to 3.699

Honors, designated on diplomas, require a minimum of 36 residential units after all course work has been completed for the degree. To be considered for honors a student also must have a cumulative minimum grade-point average of 3.500, including all transfer work. Grades earned through OGS-designated affiliate or non-OGS programs are neutral and, as such, not included in this calculation. Grades earned through OGS-designated partner programs are included in PLNU GPA calculation (students should confirm affiliate and partner school designations with the Office of Global Studies).

**The university announces unofficial honors during the commencement ceremony using these calculations and based on a minimum of 36 residential units earned by the conclusion of the fall semester. Official honors are posted with the degree.**

## The Honors Scholars Program

Special recognition is given to successful scholars during commencement ceremonies, on diplomas, and official transcripts of record. Criteria, qualifications, and procedures for graduating with this distinction are available in the Wesleyan Center. See "Honors Scholars Program" in this Catalog.

## The Humanities Honors Program

Special recognition is also given to students who successfully complete all coursework in PLNU's Humanities Honors Program with a 3.500 cumulative GPA. Students will receive this recognition during commencement ceremonies and on official transcripts of record. See "Humanities Honors Program" for program and course requirements.

## Baccalaureate Degree Information

Point Loma Nazarene University offers a wide range of majors, minors, and concentrations within five baccalaureate categories: the Bachelor of Arts (B.A.), the Bachelor of Science in Business Administration (B.S.B.A.), the Bachelor of Science (B.S.), the Bachelor of Science in Nursing (B.S.N.), and the Bachelor of Music (B.Mus.). All programs of study reflect PLNU's **mission and core values to engage and challenge minds, to model and form character, and to express our faith in service**. As such, each of the baccalaureate degrees listed above shares the core commitments of a liberal arts education. Each baccalaureate degree meets specific student needs and is characterized by a balance of general education courses and content-specific offerings. All baccalaureate degrees follow policies, standards, and student learning outcomes set by the university faculty and respected accrediting agencies, such as the total semester units required, upper-division level minimums, and optional minors where applicable.

The nature of the content and focus of B.S.N. and B.Mus. programs may be self-evident and share much in common with similar designations at other institutions. The distinctions between the B.A. and the B.S. degrees, however, are less specific within academe with each institution attempting a definition consistent with its mission and purpose. The faculty at Point Loma has therefore determined to reserve to itself the appropriate definition of arts and sciences baccalaureate programs.

For most of PLNU's history, the B.A. degree has been the most prominent in the university's liberal arts tradition. Generally speaking, the B.A. degree can be characterized by a concern for more breadth of subject material, a more extensive distribution of requirements, fewer designated-content units, an increased opportunity for electives outside the declared major, and enhanced capacity for mobility from one program to another. As a reflection of these characteristics, B.A. programs of study **are generally** smaller in size. The faculty has established **that a typical B.A. degree have no more than 49 units beyond general education requirements. Exceptions to the number of units allowable are based on discipline-specific criteria or on requirements set by external accrediting agencies.**

The Bachelor of Science (B.S.) degree is generally characterized by increased units of study in the major field and related areas; an increase in the total number of required units in the program; in-depth scientific, technical, or

professional study; attention to scientific methodologies; a more developed pattern of course sequencing; and a relatively greater degree of specialization. As a reflection of these characteristics, B.S. programs of study tend to be larger than B.A. programs. The faculty has established **that a typical B.S. degree have no more than 59 units beyond general education requirements. Exceptions to the number of units allowable are based on discipline-specific criteria or on requirements set by external accrediting agencies.**

All baccalaureate programs listed above are designed in service of a defined set of student learning outcomes that state the anticipated results of completing the degree program. These programmatic learning outcomes are consonant with the broader institutional learning outcomes that flow out of PLNU's mission and core values.

## Colleges, Schools and Departments

## Index of Offerings

The following pages offer a complete summary of teaching/learning content areas with department/school general information, degree requirements (including majors and minors offered), and course descriptions. They are in the order listed below.

## Point Loma Nazarene University

### Requirements

### Foundational Explorations

#### Foundational Explorations

##### I. Exploring Theology and Philosophy

The study of Scripture and Christian tradition is essential to Christian faith and practice. Students transferring to the university for the first time with 48 or more units, none of which are in religion, take only five units in this category at Point Loma Nazarene University (three of which must be at the upper-division level).

##### A. Biblical Foundations [2 courses; 5 units]

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)

##### B. The Christian Tradition [1 course; 3 units]

- CHU 3040 - Women in the Christian Tradition (GE) (3)
- CHU 3095 - The Christian Tradition (GE) (3)
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)
- THE 3060 - Christian Life as Vocation (GE) (3)
- THE 3070 - Global Christianity (GE) (3)

##### II. Exploring History, Society, and the Self

A pursuit of historical, social, and personal awareness, focusing on the analytical, communication, and quantitative skills necessary for successful living in modern society.

#### A. Personal Development [1 course; 3 units]

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) **(3)**  
*Required for all first-time freshmen through age 20 (at the start of the Academic Year) who have taken fewer than 24 transferable units after graduation from high school. This course must be completed by the end of the second semester.*

All others take:

- PSY 1003 - General Psychology (GE) **(3)**

#### B. Critical Thinking and Communication [2 courses; 5-7 units]

All students must fulfill the composition requirement by the end of their second semester.

- WRI 1010 - College Composition: Writing and Research - First Year Experience (GE) **(4)**  
**OR**
- WRI 1016 - College Composition: Research - First Year Experience (GE) **(2)** \*\*
- COM 1000 - Principles of Human Communication (GE) **(3)**  
**OR**
- COM 2031 - Argumentation and Debate (GE) **(3)**

Note(s):

*A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 0097, along with WRI 1010 or WRI 1016.*

*\*\*WRI 1016 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

#### C. The History of World Civilizations [2 courses; 6 units]

- HIS 1010 - World Civilizations I (GE) **(3)**
- HIS 1011 - World Civilizations II (GE) **(3)**

#### D. The Social World [1 course; 3-4 units]

- ECO 1000 - Survey of Economics (GE) **(3)**
- ECO 1001 - Principles of Macroeconomics (GE) **(3)**
- ECO 1002 - Principles of Microeconomics (GE) **(3)**
- POL 1001 - Introduction to Political Science (GE) **(3)**
- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) **(4)**
- SOC 1001 - Introduction to Sociology (GE) **(3)**
- SOC 2001 - Cultural Anthropology (GE) **(3)**
- SWF 1000 - Living Justly in Contemporary Society (GE) **(3)**

### III. Exploring Science and Technology in Society

An introduction to the natural and social sciences as tools for exploring the world, with emphasis on collecting and interpreting empirical data for both theoretical and practical purposes.

#### A. The Natural World [2 courses; one from each group, and at least one with a lab; 8 units]

Biological Science [1 course/sequence from this group]

- BIO 1001 - Human Biology and Bioethics (GE) **(3) and**
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) **(1)**
  
- BIO 1002 - Environment and People (GE) **(4)**
  
- BIO 1003 - Introduction to Biology (GE) **(3) and**
- BIO 1003L - Introduction to Biology Laboratory (GE) **(1)**
  
- BIO 1004 - Biotechnology and Society (GE) **(4)**
  
- BIO 1005 - Ecology and Conservation (GE) **(3) and**
- BIO 1005L - Ecology and Conservation Laboratory (GE) **(1)**
  
- BIO 1006 - Global Health and Pathogens (GE) **(4)**
  
- BIO 1030 - Human Anatomy and Physiology I (GE) **(3) and**
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) **(1)**
  
- BIO 2010 - Cell Biology and Biochemistry (GE) **(3) and**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
  
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3) and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**

Physical Science [1 course/sequence from this group]

- CHE 1001 - Chemistry and Society (GE) **(4)**
  
- CHE 1002 - Chemistry in our Everyday Lives (GE) **(3) and**
- CHE 1002L - Chemistry in Our Everyday Lives Lab (GE) **(1)**
  
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) **(4) and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**
  
- CHE 1052 - General Chemistry I (GE) **(4) and**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
  
- PHY 1034 - The Physics of Sound and Music (GE) **(3) and**
- PHY 1034L - The Physics of Sound and Music Lab (GE) **(1)**
  
- PHY 1044 - General Physics I (GE) **(3) and**

- PHY 1044L - General Physics I Lab (GE) **(1)**
- PHY 2044 - University Physics I (GE) **(3) and**
- PHY 2044L - University Physics I Lab (GE) **(1)**
- PSC 1004 - The Cosmos (GE) **(4)**
- PSC 1014 - Physical Science for Teachers (GE) **(4)**

#### B. Physical Fitness and Nutrition [2 courses; 3-5 units]

One of the following courses is required:

- KIN 2030 - Lifestyle as Medicine (GE) **(2)**
- PED 1000 - Fitness Through Movement (GE) **(2)**
- PED 2000 - Optimal Health (GE) **(2)**
- SWF 3015 - Health and Well-Being (GE) **(2)**
- Any one (1) unit activity course numbered PED 1002-PED 1084, PED 1011, PED 1013, PED 1016, PED 1017, PED 1018, PED 1019 **OR** one of the following is required:
- PED 2020 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 2025 - Individual and Dual Sports Fundamentals and Strategies (GE) **(2)**

#### C. Problem Solving [1 course/sequence; 3-4 units]

- MTH 1044 - Calculus With Applications (GE) **(4)**
- MTH 1064 - Calculus I (GE) **(3) and**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 1073 - Business Calculus (GE) **(3)**
- MTH 3003 - Problem Solving (GE) **(3)**

### IV. Exploring Arts and Culture

A survey of human endeavors from a historical, cultural, linguistic, and philosophical perspective, including developing critical appreciation of human expression-both artistic and literary.

#### A. The Fine Arts [2 courses from distinct areas; 4-5 units]

- ART 1000 - Introduction to Art (GE) **(2)**
- ART 1002 - Fundamentals of Art (GE) **(3)**
- ART 2000 - History of Art I (GE) **(3)**
- ART 2001 - History of Art II (GE) **(3)**
- MUH 1000 - Introduction to Music (GE) **(2)**
- MUH 1001 - Introduction to Listening (GE) **(2)**
- TRE 1001 - Introduction to Theatre (GE) **(2)**

#### B. Literature [2 courses; 5 units]

Two courses; LIT 2000 and one upper division Literature course.

Lower Division:

- LIT 2000 - Literature and Culture (GE) **(2)**

Upper Division:

- LIT 3050 - World Literature (GE) **(3)**
- LIT 3051 - World Cinema (GE) **(3)**
- LIT 3052 - Diverse Voices in American Literature (GE) **(3)**
- LIT 3053 - Women Writers (GE) **(3)**

*All materials for the following Foundational Explorations (GE) Literature Upper Division Requirement options are written in foreign language:*

- FRE 3020 - Survey of French Literature **(3)**
- FRE 3025 - Francophone Literature **(3)**
- SPA 3020 - Mexican American Literature and Culture **(3)**
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film **(3)**
- SPA 4000 - Peninsular Literature Before 1800 **(3)**
- SPA 4002 - Peninsular Literature Since 1800 **(3)**
- SPA 4037 - Latin American Literature Before 1910 **(3)**
- SPA 4039 - Latin American Literature Since 1910 **(3)**

Note(s):

*B.S.N. candidates choose between two Literature options or one Literature and one Philosophy.*

### C. Foreign Language\* [2 courses; 8 units]

One of the following sequences in the same language, all or part of which may be waived by examination or by petition when English is not the student's native language:

- CHN 1001 - Elementary Chinese (Mandarin) I (GE) **(4)**
- CHN 1002 - Elementary Chinese (Mandarin) II (GE) **(4)**
  
- GER 1001 - Elementary German I (GE) **(4)**
- GER 1002 - Elementary German II (GE) **(4)**
  
- GRK 2007 - Biblical Greek I (GE) **(4)**
- GRK 2008 - Biblical Greek II (GE) **(4)**
  
- HEB 2005 - Biblical Hebrew I (GE) **(4)**
- HEB 2006 - Biblical Hebrew II (GE) **(4)**
  
- FRE 1001 - Elementary French I (GE) **(4)**
- FRE 1002 - Elementary French II (GE) **(4)**
  
- SPA 1001 - Elementary Spanish I (GE) **(4)**

- SPA 1002 - Elementary Spanish II (GE) (4)

\*Note(s):

*A foreign language is not required for B.S.N. candidates.*

*Students who believe they may qualify for a language waiver are advised to make application no later than spring of the sophomore year (or in the semester transfer to PLNU) to avoid possible delay in graduation.*

#### D. Philosophy [1 course; 3 units]

- PHL 2001 - Introduction to Philosophy (GE) (3)
- PHL 2011 - Ethics (GE) (3)

## First Year Experience

Point Loma Nazarene University places great value on integrating key components of a liberal arts education as foundational in pursuing and successfully completing a major field of study and a bachelor's degree.

The following course has been identified as pivotal and is required to be experienced during the first year of study at Point Loma Nazarene University:

### Requirements

#### First Year Experience

#### Required first year courses

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3)
  - WRI 1010 - College Composition: Writing and Research - First Year Experience (GE) (4)
  - OR
  - WRI 1016 - College Composition: Research - First Year Experience (GE) (2) \*
- \* WRI 1016 is for transfer students who have completed an additional approved WRI course or for students who have transferred in approved AP work.*

## College of Arts and Humanities

### Administration

Dean of the Colleges: James Daichendt, Ed.D.

Office: Bond Academic Center, Deans' Suite

Telephone: (619) 849-2412

Fax: (619) 849-7018

Email: [gdaichen@pointloma.edu](mailto:gdaichen@pointloma.edu)

Administrative Assistant: Kami Leone

### General Information

The College of Arts and Humanities is at the very heart of liberal arts education at Point Loma Nazarene University. Programs in the arts and humanities are offered through five academic departments and the School of Theology and Christian Ministry. Course offerings in the arts and humanities are designed to help students explore a wide range of ideas. The college's highly qualified faculty members are professionally active and committed to engaging students in the learning experience. By emphasizing the university's mission to engage and challenge minds, to form and model character, and to see service as an expression of faith, the faculty challenge students to become life-long learners, to value the process of personal and intellectual development, and to give their lives in meaningful service to others.

## **Credential and Internship Programs**

California Commission of Teacher Credentialing (CCTC) in single-subject arts and science content areas, Christian Ministries Internship, Institute for Holy Land Studies (a division of Jerusalem University College).

## **Centers**

Point Loma Nazarene University maintains the following center within the organization of the College of Arts and Humanities:

- The Margaret Stevenson Center for Women's Studies

## **Accreditations and Affiliations**

Point Loma Nazarene University is accredited by the WASC Senior College and University Commission (WSCUC) and the National Association of Schools of Music (NASM). WSCUC may be contacted at 985 Atlantic Avenue, Suite 100, Alameda, CA 94501, or by telephone at 510-748-9001.

## **Academic Organization**

The College of Arts and Humanities, under the direction of the dean of the college, functions with the supervision of academic departments, schools, and centers. The following is a list of chairs, directors, and deans in the college.

## **Departments**

**Department of Art and Design** - David Carlson, chair

**Department of Communication Studies** - Skip Rutledge, chair

**Department of History and Political Science** - Lindsey Lupo, chair

**Department of Literature, Journalism, Writing and Languages** - James Wicks, chair

**Department of Music** - Daniel Jackson, chair

## **Centers**

**The Margaret Stevenson Center for Women's Studies** - Kelli McCoy, co-director; Kara Lyons-Pardue, co-director

## **Curricula**

Students should refer to the information in the Undergraduate Catalog or the separate Graduate and Professional Studies Catalog for a complete listing of program characteristics, degree requirements, and course descriptions offered by academic areas within the College of Arts and Humanities.

# College of Arts and Humanities

## Department of Art and Design

### Purposes

Through the making of art and the study of art history, criticism and aesthetics, the department seeks to:

- Develop proficiencies in the studio and design arts.
- Advance visual literacy through the study of art history, art criticism and aesthetics.
- Promote the cultural, intellectual, spiritual, and aesthetic life of students and the university.
- Prepare students for art-related careers or graduate studies.

### Tradition of Excellence

The Department of Art and Design considers the visual arts to be an essential means of communicating societal values, images, and identities. The program builds on the university's liberal arts foundation of general education. Students explore relationships between the art disciplines, and build connections with other academic fields. Studies in traditional, non-traditional, western, and non-western art forms encourage students to develop a broad understanding of the visual arts.

The Department of Art and Design offers three majors - Visual Arts, Art Education, and Graphic Design. In all majors a core of foundation courses lead to advanced studies in the discipline. Independent studies and study abroad programs are available, as well as internships in local museums and art and design-related businesses. The Keller Gallery program includes both professional and student exhibitions. A visiting artist program provides bridges into the professional community of practicing artists. Students also benefit from the university's proximity to the arts community and prominent art museums, galleries and collections in San Diego, Los Angeles, and Baja California, Mexico.

### Career Opportunities

Alumni from the Department of Art and Design have earned advanced degrees from some of the top graduate programs in the country while others have achieved professional careers in art related fields: fine arts, graphic design, web design, publishing, museum and gallery work, arts management, and art education.

### Faculty

David Adey, M.F.A.  
*Cranbook Academy of Art*

J. David Carlson, M.F.A., Chair  
*Vermont College of Fine Art*

Lael Corbin, M.F.A.  
*San Diego State University*

Karah Lain, M.F.A.  
*Oregon College of Art & Craft*

Courtney Mayer, M.F.A.  
*Washington State University*

## Major

### Art Education, B.A.

#### Program Learning Outcomes

**Students who complete the program in Art Education with concentrations in Visual Arts and Graphic Design will be able to:**

1. Produce original, contemporary works of art (visual art or graphic design) using the art elements and design principles, demonstrating current skills and techniques in selected art media and technologies.
2. Write and speak about artists and visual art forms from the history of Western and Non-Western art.
3. Use the elements of art and principles of design to analyze their own artwork.
4. Formulate sequential art curriculum units for use in 7-12 school art programs, using the *California Visual and Performing Arts Art Standards*.
5. Articulate their own philosophy of art education for K-12 grade levels.

#### Required Concentrations

**Choose a Concentration from the following:**

Group A – Visual Arts Concentration

Group B – Graphic Design Concentration

#### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design **(3)**
- ART 1004 - Three-Dimensional Design: Composition and Space **(3)**
- ART 1015 - Drawing I **(3)**
- ART 2000 - History of Art I (GE) **(3) \***
- ART 2001 - History of Art II (GE) **(3) \***
  
- ART 2003 - Graphic Design I: Visual Symbolism **(3) OR**
- ART 2006 - Experimental Drawing Studio **(3)**
  
- ART 2010 - Painting: Color and Technique **(3)**
- ART 2002 - Introduction to Computer Graphics **(3)**
- CHD 1050 - Human Development **(3)**
- One college course in ceramics **(3)**

Total: 30 Units

#### Upper-Division Requirements

- ART 3019 - Visual Arts in the Classroom I **(3)** *OR*
- ART 4055 - Visual Arts in the Classroom II **(3)** (ART 4055 recommended)
- ART 3025 - Non-Western Art History **(3)**
- EDU 3002 - Foundations of Education and Learning Theory **(3)**

Choose one Art History course (3 units):

- ART 3004 - Modern Art History **(3)**
- ART 3005 - Contemporary Art History **(3)**
- ART 3035 - Design History: Industrial Revolution to Contemporary Design **(3)**

Total: 12 Units

## Concentrations

### Group A – Visual Arts Concentration

Choose one two-course sequence (6 units):

- ART 2021 - Photography: Darkroom and Film **(3)**
- ART 3021 - Photography: Alternative Processes **(3)**  
*OR*
- ART 2022 - Sculpture: Materials and Fabrication **(3)**
- ART 3022 - Sculpture II: Objects and Installation **(3)**  
**OR**
- ART 2023 - Printmaking I **(3)**
- ART 3023 - Printmaking II **(3)**  
*OR*
- ART 3010 - Painting II **(3)**  
**AND**
- ART 3030 - Illustration I **(3)** **OR**
- ART 3045 - Life Drawing **(3)**

Total: 6 Units

Capstone courses (9 units):

- ART 3090 - Advanced Studio Practice **(3)**
- ART 4066 - Senior Studio Exhibition or Research Preparation **(3)**
- ART 4072 - Exhibition or Research Project **(3)**

Total: 9 Units

Total: 15 Units

### Group B – Graphic Design Concentration

Two-course sequence (6 units):

- ART 3003 - Graphic Design II: Typography (3)
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)

Capstone courses (7-9 units):

- ART 4068 - Graphic Design Portfolio Preparation (3)
- ART 4071 - Graphic Design Portfolio Review (3)
- ART 4070 - Internship (1-3)

Total: 13-15 Units

Note(s):

\*Meets the general education requirement in the Fine Arts.

## 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3) \*
- EDU 3006 - Principles of Language Acquisition (3) \*
- EDU 4004 - Foundations of Special Education (3) \*
- EDU 4009 - Classroom Assessment and Research Practices (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)
- EDU 4020 - Literacy Instruction for Secondary Teachers (3) \*
- EDU 4021 - General Methods for Secondary Teachers (3) \*
- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)
- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## Graphic Design, B.A.

### Program Learning Outcomes

*Students who complete the program in Graphic Design with concentrations in Marketing, Interdisciplinary, Interactive Web, and Illustration will be able to:*

1. Use current graphic design tools and technologies to create, produce, and distribute visual messages.
2. Identify historically important design styles, movements, artists, and designers.
3. Write and speak intelligently about their design strategies, problem solving, aesthetic choices, and contemporary design trends.
4. Produce an entry-level professional quality portfolio of graphic design work to help secure employment in a design-related career or pursue graduate studies.
5. Articulate their own philosophy regarding mass media and its relationship to graphic design.

### Concentrations

- Marketing Concentration
- Interdisciplinary Concentration
- Interactive Web Design Concentration
- Illustration Design Concentration

## Marketing Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- **OR**
- ART 2001 - History of Art II (GE) (3) \*
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)

Total Lower-Division: 18 Units

### Upper-Division Requirements

- ART 3003 - Graphic Design II: Typography (3)
- ART 3004 - Modern Art History (3)
- **OR**
- ART 3005 - Contemporary Art History (3)
- ART 3015 - Introduction to Interactive Web Design (3)
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 4050 - Interactive Web Design (3)
- ART 4068 - Graphic Design Portfolio Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4071 - Graphic Design Portfolio Review (3)
- MKT 3032 - Principles of Marketing (3) - **required**
- **Choose three (3) courses from the following:**
- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)
- MGT 3082 - Applied Entrepreneurship (3)

Total Upper-Division: 37 Units

## Interdisciplinary Concentration

## Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
  
- ART 2000 - History of Art I (GE) (3) \*
- OR**
- ART 2001 - History of Art II (GE) (3) \*
  
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)
- ART 2026 - Photography: Digital (3)
  
- Choose one from the following:**
- ART 2006 - Experimental Drawing Studio (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2022 - Sculpture: Materials and Fabrication (3)
- ART 2023 - Printmaking I (3)

Total Lower-Division: 24 Units

## Upper-Division Requirements

- ART 3003 - Graphic Design II: Typography (3)
  
- ART 3004 - Modern Art History (3)
- OR**
- ART 3005 - Contemporary Art History (3)
  
- ART 3015 - Introduction to Interactive Web Design (3)
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 4050 - Interactive Web Design (3)
- ART 4068 - Graphic Design Portfolio Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4071 - Graphic Design Portfolio Review (3)
  
- Choose one course from the following:**
- ART 3010 - Painting II (3)
- ART 3021 - Photography: Alternative Processes (3)
- ART 3022 - Sculpture II: Objects and Installation (3)
- ART 3023 - Printmaking II (3)
- ART 3026 - Photography II: Contemporary Images (3)
- ART 3031 - Illustration II (3)

Total Upper-Division: 28 Units

## Interactive Web Design Concentration

## Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
  
- ART 2000 - History of Art I (GE) (3) \*
- OR**
- ART 2001 - History of Art II (GE) (3) \*
  
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)
  
- Choose one course from the following:**
- ART 2006 - Experimental Drawing Studio (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2022 - Sculpture: Materials and Fabrication (3)
- ART 2023 - Printmaking I (3)
- ART 2026 - Photography: Digital (3)

Total Lower-Division: 21 Units

## Upper-Division Requirements

- ART 3003 - Graphic Design II: Typography (3)
  
- ART 3004 - Modern Art History (3)
- OR**
- ART 3005 - Contemporary Art History (3)
  
- ART 3015 - Introduction to Interactive Web Design (3)
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 4050 - Interactive Web Design (3)
- ART 4068 - Graphic Design Portfolio Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4071 - Graphic Design Portfolio Review (3)
  
- Choose one course from the following:**
- ART 3021 - Photography: Alternative Processes (3)
- ART 3031 - Illustration II (3)
- MGT 3082 - Applied Entrepreneurship (3)

Total Upper-Division: 28 Units

## Illustration Design Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
  
- ART 2000 - History of Art I (GE) (3) \*
- OR**
- ART 2001 - History of Art II (GE) (3) \*
  
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)
- ART 2010 - Painting: Color and Technique (3)
  
- Choose one course from the following:**
- ART 2006 - Experimental Drawing Studio (3)
- ART 2023 - Printmaking I (3)
- ART 2026 - Photography: Digital (3)

Total Lower-Division: 24 Units

### Upper Division Requirements

- ART 3003 - Graphic Design II: Typography (3)
  
- ART 3004 - Modern Art History (3)
- OR**
- ART 3005 - Contemporary Art History (3)
  
- ART 3015 - Introduction to Interactive Web Design (3)
- ART 3030 - Illustration I (3)
- ART 3031 - Illustration II (3)
  
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)
- OR**
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)
  
- ART 3045 - Life Drawing (3)
- ART 4050 - Interactive Web Design (3)
- ART 4068 - Graphic Design Portfolio Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4071 - Graphic Design Portfolio Review (3)

Total Upper-Division: 31 Units

Note(s):

*\*Meets general education requirement in the fine arts.*

**Visual Arts, B.A.**

## Program Learning Outcomes

**Students who complete the program of Visual Arts with concentrations in Painting, Drawing, and Printmaking, Sculpture and Installation, and Photography will be able to:**

1. Apply the art elements and design principles to two-and/or three-dimensional visual art forms to critically analyze works of art.
2. Create original works of art that demonstrate a contemporary approach to theory, media, and technology.
3. Write and speak knowledgeably and critically about issues relevant to historically important artists, art styles, and art movements.
4. Write and speak with coherency and self-awareness about their own artwork or research, and its relationship to contemporary culture and art history.
5. Pursue graduate or artist/scholars-in-residency programs, gallery and museum exhibitions, and public art commissions.

*Students who complete the program in Visual Art with a concentration in Art History will be able to:*

1. Recognize a wide range of artists, visual art forms, and cultures from the history of Western and Non-Western art.
2. Create original, contemporary artworks in studio and/or design that illustrate current skills and techniques in selected art media and technologies.
3. Use the elements of art and principles of design to critically analyze and interpret historical and contemporary art forms.

**Students who complete the program in Visual Art with a concentration in Video, Performance, and Interactive Media will be able to:**

1. Perform technological skills and techniques to produce time-based artworks in video, performance, or interactive media.
2. Use the elements of art and principles of design to describe, analyze, and evaluate works of time-based art.
3. Apply historical and contemporary art forms and theories to time-based media.

## Concentrations

- Drawing/Painting/Printmaking Concentration
- Sculpture and Installation Concentration
- Photography Concentration
- Art History Concentration
- Video, Performance, and Interactive Media Concentration

## Art History Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- ART 2001 - History of Art II (GE) (3) \*
- HIS 2070 - Doing History (4)

### Electives (Lower-Division)

Choose one:

- ART 2006 - Experimental Drawing Studio (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2022 - Sculpture: Materials and Fabrication (3)
- ART 2023 - Printmaking I (3)

Total: 22 Units

### Upper-Division Requirements

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
- ART 3025 - Non-Western Art History (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)
- ART 4020 - Contemporary Studio Seminar (3)
- ART 4066 - Senior Studio Exhibition or Research Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4072 - Exhibition or Research Project (3)

### Electives (Upper-Division)

- **Choose one four unit upper-division history course (4)**

Choose two:

- COM 3000 - Narrative and Documentary Film (3)
- HIS 3075 - African Cultures and Histories (3)
- PHL 3041 - Philosophy and Art (3)
- Upper-division transfer courses in Art History (3-6)

Total: 32 Units

### Drawing/Painting/Printmaking Concentration

#### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- ART 2001 - History of Art II (GE) (3) \*
- ART 2006 - Experimental Drawing Studio (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2023 - Printmaking I (3)

Total: 27 Units

## Upper-Division Requirements

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
  
- ART 3010 - Painting II (3) **OR**
- ART 3023 - Printmaking II (3)
  
- ART 3045 - Life Drawing (3)
- ART 3090 - Advanced Studio Practice (3)
- ART 4020 - Contemporary Studio Seminar (3)
- ART 4066 - Senior Studio Exhibition or Research Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4072 - Exhibition or Research Project (3)
- **Complete one additional upper-division Art course (2-3 units)**

Total: 27-28 Units

## Photography Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- ART 2001 - History of Art II (GE) (3) \*
- ART 2006 - Experimental Drawing Studio (3)
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2021 - Photography: Darkroom and Film (3)

### Electives (Lower Division)

Choose one:

- ART 2003 - Graphic Design I: Visual Symbolism (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2022 - Sculpture: Materials and Fabrication (3)
- ART 2023 - Printmaking I (3)
- ART 2026 - Photography: Digital (3)

Total: 27 Units

## Upper-Division Requirements

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)

- ART 3021 - Photography: Alternative Processes (3)
- ART 3026 - Photography II: Contemporary Images (3)
- ART 3090 - Advanced Studio Practice (3)
- ART 4020 - Contemporary Studio Seminar (3)
- ART 4066 - Senior Studio Exhibition or Research Preparation (3)
- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4072 - Exhibition or Research Project (3)
- **Complete one additional upper-division Art course (2-3 units)**

Total: 27-28 Units

## Sculpture and Installation Concentration

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- ART 2001 - History of Art II (GE) (3) \*
- ART 2006 - Experimental Drawing Studio (3)
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2022 - Sculpture: Materials and Fabrication (3)

### Electives (Lower-Division)

Choose one:

- ART 2003 - Graphic Design I: Visual Symbolism (3)
- ART 2010 - Painting: Color and Technique (3)
- ART 2026 - Photography: Digital (3)
- ART 2021 - Photography: Darkroom and Film (3)
- ART 2023 - Printmaking I (3)
- TRE 2070 - Acting (3)

Total: 27 Units

### Upper-Division Requirements

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
- ART 3022 - Sculpture II: Objects and Installation (3)
- ART 3090 - Advanced Studio Practice (3)
- ART 4020 - Contemporary Studio Seminar (3)
- ART 4066 - Senior Studio Exhibition or Research Preparation (3)

- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4072 - Exhibition or Research Project (3)

#### Electives (Upper-Division)

- **Choose five to six units from any upper-division Art, Design, or Art History courses offered by the Department of Art and Design or choose from the following:**
- COM 3000 - Narrative and Documentary Film (3)
- TRE 3054 - Movement (3) **OR**

Total: 27-28 Units

### Video, Performance, and Interactive Media Concentration

#### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3) **OR**
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
- ART 1015 - Drawing I (3)
- ART 2000 - History of Art I (GE) (3) \*
- ART 2001 - History of Art II (GE) (3) \*
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2026 - Photography: Digital (3)
- COM 2043 - Introduction to TV and Film Production (3)
- COM 2075 - Audio Production (2)

Note(s):

*\*Fulfills general education requirement*

Total: 23 Units

#### Upper-Division Requirements

- ART 3005 - Contemporary Art History (3)
- ART 3015 - Introduction to Interactive Web Design (3)
- ART 3090 - Advanced Studio Practice (3)
- ART 4050 - Interactive Web Design (3)
- COM 3000 - Narrative and Documentary Film (3)
- COM 4042 - Field Television Production (3)
- COM 4043 - Studio Television Production (3)

#### Capstone Courses

- ART 4020 - Contemporary Studio Seminar (3)
- ART 4066 - Senior Studio Exhibition or Research Preparation (3)

- ART 4070 - Internship (1-3) - **1 unit required**
- ART 4072 - Exhibition or Research Project (3)

Total: 31 Units

Recommended Electives\*

- TRE 2070 - Acting (3)
- TRE 3054 - Movement (3)

Note(s):

*\*Also recommended in Sculpture and Installation Concentration*

Note(s):

*\*Meets the general education requirement in the Fine Arts*

Accepting Associate Degree for Transfer (ADT)

## **Minor**

### **Art & Design Minor**

#### **Required**

#### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3) *OR*
- ART 1004 - Three-Dimensional Design: Composition and Space (3)
  
- ART 1015 - Drawing I (3)

Total: 6 Units Lower Division

#### Upper-Division Requirements

- Choose one of the following Art History Courses:**
- ART 3004 - Modern Art History (3)
  - ART 3005 - Contemporary Art History (3)
  - ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)

Total: 3 Units

Electives: 9 Units

**Choose nine upper-division units from Studio and Graphic Design courses listed in the Catalog.**

Total: 12 Units Upper Division

Minor Total: 18 Units

Note(s):

*It is highly recommended that Art minors take either ART 2000 or ART 2001 to fulfill the general education requirement in the Fine Arts.*

## **Art History Minor**

### **Program Learning Outcomes**

*Students who complete the program in Art History will be able to:*

1. Recognize a wide range of artists, visual art forms, and cultures from the history of Western and Non-Western art.
2. Create original, contemporary artworks in studio and/or design that illustrate current skills and techniques in selected art media and technologies.
3. Use the elements of art and principles of design to critically analyze and interpret historical and contemporary art forms.

### **Lower-Division Requirements**

- ART 2000 - History of Art I (GE) **(3)** \*
- ART 2001 - History of Art II (GE) **(3)** \*

Total: 6 Units

### **Upper-Division Requirements**

- ART 3004 - Modern Art History **(3)**
- ART 3005 - Contemporary Art History **(3)**
- ART 3025 - Non-Western Art History **(3)**
- ART 3035 - Design History: Industrial Revolution to Contemporary Design **(3)**

Total: 12 Units

Minor Total: 18 Units

Note(s):

**\*Meets the general education requirement in the Fine Arts.**

# **Department of Communication Studies**

## **Mission Statement**

As communicators, all humans are part of an ongoing conversation. Communication is inevitable, irreversible, and continuous. The messages we send and receive shape our attitudes, build our relationships, and impact the environment in which we live. The mission of the Department of Communication Studies is to empower students with a meaningful Christian voice in the ongoing conversation of the world in which we live. We strive to meet this mission through learning, growing, and serving.

## **Learning Informed by our Faith in Christ**

- Students will learn basic theory about the discipline of communication, organizational communication, and media communication.

## **Growing in a Christ Centered Community**

- As students understand the process of communication, they will be challenged to use communication competently in a variety of complex environmental and social contexts.

## **Serving in a Context of Christian Faith**

- Students will participate in the disciplines of Communication Studies in the collective community around them.

The Department of Communication Studies is committed to helping each student learn, grow, and serve so that they may contribute meaningfully to the ongoing conversation of all humans and seek to make a positive impact in the world through their communication abilities. The power to communicate is the power to transform our world one conversation at a time.

## **Purposes**

- To instruct students in the philosophy, content, methodology, skills, and responsibilities of communication;
- To provide specialized training for those entering communication-centered professions including: management, sales, public relations, training; broadcasting and electronic media; and theatre and the performing arts;
- To provide background courses for those desiring to enter communication related fields including ministry, law, education, government, social services, journalism, and graduate studies;
- To help students develop skills through involvement in a nationally competitive forensics program, internships in major corporations, law firms, radio and television stations, and professional theatre companies.

## **Tradition of Excellence**

The Department of Communication Studies is a comprehensive and dynamic department that prepares students for leadership in a variety of communication-intensive careers. Classroom instruction is enhanced by the smaller class sizes and individual attention from faculty who are committed to the academic and personal success of each student. There are three programs of study to choose from: Communication Studies, Media Communication, and Organizational Communication.

## Career Opportunities

The Department of Communication Studies believes in the benefits to be gained from hands-on developmental experiences. These experiences not only teach real world skills, but some also provide scholarships or payment for performance or participation. Students are encouraged to participate in such developmental opportunities as:

- Theatre - The Theatre program has been the home for more than 150 stage productions in the last 40+ years, including *Hamlet*, *Romeo and Juliet*, *My Fair Lady*, *The Sound of Music*, *Waiting for Godot*, *You Can't Take It With You*, and *The Caucasian Chalk Circle*.
- Media - The department supervises an on-campus television studio, Point TV, and a radio station, Point Radio. Both stations are student-managed, creating original productions for on-campus audiences. The stations are based in well-equipped facilities which include a multi-camera HD studio, digital audio and video editing, HD field production cameras and radio broadcast booths. Students also have opportunities to work in PLNU publications such as the student newspaper, yearbook, and literary magazine.
- Speech and Debate - The forensics team has won many national championships in the major national debate organizations. This includes being named number one debate program in the nation by the National Parliamentary Debate Association at least 5 times in the last 20 years. Considering nearly 25 years of NPDA statistics, which include other fine debate programs like UCLA, Berkeley, Rice University, and Wheaton, PLNU's cumulative points earned each year place Point Loma in first place in the nation by a very wide margin.
- Conference Presentations - Students seeking further academic opportunities have presented original research at professional conferences and gained successful admission into graduate schools.
- Internships - Most students in the department complete an internship, as this is the most effective way for students to network and explore career paths. It is common for students to be offered a paid position as a result of their internship work upon graduation.

A degree in Communication Studies can prepare a student for a career in media communication and business, public relations, theatre and performing arts and other related careers in politics and government, social and human services, journalism, and ministry.

## Faculty

Bob Brower, Ph.D.  
*University of Kansas*

Jeffrey Birdsell, Ph.D.  
*The University of Texas at Austin*

Alan Hueth, Ph.D.  
*University of Dayton*

Melissa Newman, Ph.D.  
*Regent University*

Lisa Raser, Ph.D.  
*Southern Illinois University*

Skip Rutledge, Ph.D., Chair  
*Regent University*

Walter Williams, Ph.D.  
*Regent University*

## Major

# **Communication Studies, B.A.**

## **Program Learning Outcomes**

**Students who complete the program in Communication Studies will be able to:**

1. Learn basic theory and application or performance skills about and within the discipline of communication.
2. Use communication competently in a variety of complex environmental and social contexts.
3. Participate in the disciplines of communication in the collective community around them.

## **Lower-Division Core Requirements**

- COM 1090 - Interpersonal Communication (3)
- COM 2020 - Small Group Communication (3)
- COM 2031 - Argumentation and Debate (GE) (3)
- COM 2050 - Intercultural Communication (3)
- COM 2065 - Introduction to Research in Communication (3)

Total: 15 Units

## **Upper-Division Core Requirements**

- COM 4022 - Portfolio Construction (1)
- COM 4060 - Rhetorical Theories and Models (3)
- COM 4085 - Communication, Values, and Society (2)
- COM 3010 - Nonverbal Communication (3)
- COM 3030 - Persuasion (3)

Total: 12 Units

## **Lower-Division Electives**

Choose 3 units from:

- COM 2010 - Communication Practicum I (1-2)
- JRN 2050 - Introduction to Journalism (3)
- TRE 2070 - Acting (3)

Total: 3 Units

## **Upper-Division Electives**

Choose 18 units from:

- COM 3012 - Gender and Communication (WS) (3)

- COM 3015 - Oral Interpretation (3)
- COM 3060 - Professional Speaking for Career Settings (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 3095 - Media Literacy (3)
- COM 4020 - Communication Practicum II (1-2)
- COM 4021 - Internship in Communication (3)
- COM 4065 - Communication Theories and Research (3)
- COM 4090 - Special Studies in Communication (1-3) (3) **Units required**
- PSY 3020 - Social Psychology (3)
- WRI 3065 - Writing for Professional Careers (3)

Total: 18 Units

Major Total: 48 Units

## **Media Communication, B.A.**

### Program Learning Outcomes

**Students who complete the program in Media Communication will be able to:**

1. Demonstrate skills in the theoretical and/or historical critique of media. This includes the integration of a Christian worldview and ethical framework for viewing, interpreting, and critiquing media messages.
2. Demonstrate scriptwriting skills for radio, TV, film, internet, church media, and/or corporate media industries.
3. Demonstrate production and/or performance skills in radio, TV, film, internet, church media, and/or corporate media industries.
4. Demonstrate professional socialization skills in a radio, TV, film, internet, church media, and/or corporate media internship.

### Lower-Division Core Requirements

- COM 1050 - Introduction to Media Communication (3)
- COM 1075 - Scriptwriting for Television and Film (3)
- COM 2043 - Introduction to TV and Film Production (3)
- COM 2065 - Introduction to Research in Communication (3)
- COM 2075 - Audio Production (2)
- JRN 2015 - Newspaper Workshop (1) **OR**
- JRN 2017 - Yearbook Workshop (1) **OR**
- JRN 2018 - Multimedia Workshop (1) *OR*
- WRI 2016 - Literary Magazine Workshop (1)

Total: 15 Units

### Upper-Division Core Requirements

- COM 3095 - Media Literacy (3)
- COM 4021 - Internship in Communication (3)  
*(Not required for the Film Studies concentration)*
- COM 4022 - Portfolio Construction (1)
- COM 4085 - Communication, Values, and Society (2)

Total: 9 Units

## Upper-Division Electives

Choose nine (9) units from:

- COM 3000 - Narrative and Documentary Film (3)
- COM 3040 - Organizational Communication (3)
- COM 3050 - Electronic Media in Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 4065 - Communication Theories and Research (3)
- COM 4090 - Special Studies in Communication (1-3)
- JRN 3040 - Media Law and Ethics (3) \*

Students with a Film Studies concentration may also select the following two courses:

- COM 4042 - Field Television Production (3)
- COM 4043 - Studio Television Production (3)

Total: 9 Units

## Writing Electives

Choose one (1) course from:

- WRI 2020 - Introduction to Creative Writing (3)
- JRN 2050 - Introduction to Journalism (3)
- WRI 3022 - Creative Writing: Fiction (3)
- WRI 3023 - Creative Writing: Creative Nonfiction (3)

Total: 3 Units

## Concentrations

**Choose one track and select electives among the choices.** To complete the major, there must be a minimum of 24 upper division units between the core and concentration.

## Multimedia

Requirements: 12 units

- ART 1003 - Two-Dimensional Design (3)
- ART 2002 - Introduction to Computer Graphics (3)
- ART 3015 - Introduction to Interactive Web Design (3)
- ART 4050 - Interactive Web Design (3)

Total: 12 Units

## Screen Performance

Take a total of 8 units from:

- COM 3013 - Television News Production (3)
- COM 4020 - Communication Practicum II (1-2) **1 Unit required**
- COM 4025 - Advanced Television Workshop (1)
- COM 4035 - Advanced Audio Production (1)
- TRE 2050 - Voice and Diction (2)
- TRE 2070 - Acting (3)

Total: 8 Units

## Production

Take a total of 8 units from:

- COM 3013 - Television News Production (3)
- COM 4020 - Communication Practicum II (1-2)
- COM 4025 - Advanced Television Workshop (1)
- COM 4035 - Advanced Audio Production (1)
- COM 4042 - Field Television Production (3)
- COM 4043 - Studio Television Production (3)

Total: 8 Units

## Film Studies

*NOTE: Student must be accepted into the LAFSC program in order to complete this concentration.*

- COM 4070 - Hollywood Production Workshop (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (4)
- COM 4071 - Faith and Artistic Development in Film (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)
- COM 4072 - Internship: Inside Hollywood (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (6) **6 Units required**

Choose one of the following:

- COM 3071 - Professional Acting for the Camera (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)
- COM 4073 - Narrative Storytelling (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)
- COM 4074 - Professional Screenwriting (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)
- COM 4080 - Independent Study (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (3)

Total: 16 Units (taken at LAFSC)

## **Organizational Communication, B.A.**

### Program Learning Outcomes

**Students who complete the program in Organizational Communication will be able to:**

1. Develop a sophisticated understanding of communication as the negotiation of meaning.
2. Display communication competence both verbally and nonverbally in interpersonal, small group, organizational, and intercultural contexts.
3. Formulate a thesis, organize a complex idea, and support it with appropriate evidence using proper grammar and punctuation.
4. Demonstrate an ability to present themselves in a professional manner including resume, interview skills, and presentations.
5. Demonstrate an understanding and ability to work collaboratively in a group.
6. Analyze and conduct original communication research (quantitative and qualitative) using scholarly journals, data bases, and collecting and analyzing empirical data.
7. Demonstrate an understanding of basic theoretical concepts relative to organizational behavior including scientific management, systems theory, and organizational culture.
8. Integrate a Christian perspective of values and ethics in their communication in interpersonal, small group organizational and intercultural contexts.
9. Develop an awareness of multiple approaches to leadership and develop a personal leadership philosophy.

### Lower-Division Core Requirements

- COM 1090 - Interpersonal Communication (3)
- COM 2020 - Small Group Communication (3)
- COM 2065 - Introduction to Research in Communication (3)
- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- ECO 1000 - Survey of Economics (GE) (3) \*\*  
OR
- ECO 1001 - Principles of Macroeconomics (GE) (3) \*\*  
OR
- ECO 1002 - Principles of Microeconomics (GE) (3) \*\*

Lower-Division Units: 15 Units

Note(s):

*\*\*Meets a general education requirement.*

*All majors take COM 1000 (3) or COM 2031 (3) as an additional general education requirement.*

## Upper-Division Core Requirements

- COM 3030 - Persuasion (3)
- COM 3040 - Organizational Communication (3)
- COM 3045 - Leadership Communication (3)
- COM 4021 - Internship in Communication (3)
- COM 4022 - Portfolio Construction (1)
- COM 4065 - Communication Theories and Research (3)
- COM 4085 - Communication, Values, and Society (2)

Total: 18 Units

Take one (1) course from the following:

- COM 3060 - Professional Speaking for Career Settings (3)
- WRI 3065 - Writing for Professional Careers (3)

Take one (1) course from the following:

- COM 3090 - Introduction to Public Relations (3)
- COM 4050 - Communication Training and Development (2)

Take six (6) units selected from upper-division courses with the following prefixes: ACC, BUS, COM, ECO, FIN, HON, MGT, MKT at the 3000 or 4000 level (selections must include at least 2 different courses AND 6 units total).

Upper-Division Units: 29-30

Total Units Required for Major: 44-45\*

*\*Depending on specific courses selected and not including units counted toward general education requirements.*

*+The BA in Organizational Communication is an approved program under PLNU's WASC Regional Accreditation. Since it is not a business major, it is not an Accreditation Council for Business Schools and Programs (ACBSP) approved program.*

## Minor

### Cinema Studies Minor - Communication Studies

This is an interdisciplinary minor in cinema which draws from historical, religious, philosophical, theoretical, and aesthetic perspectives. Students are encouraged to select courses which are based on students' intellectual and

professional interests. Students interested in film criticism and/or writing and teaching may take electives in film theory and criticism, while students interested in scriptwriting and production may take courses in those areas. The minor is structured as interdisciplinary in its electives so that students will truly be studying in the liberal arts tradition. All students must take the required courses, and then must select from the elective courses to complete the minor.

## Program Learning Outcomes

1. Identify and articulate the relationships among film styles, genres, and techniques.
2. Demonstrate knowledge of the relationship between films and the historical moments from which they emerge.
3. Analyze and interpret the film images and narratives using film theory and terminology.
4. Evaluate films, including from a faith based perspective, by using higher and lower order thinking and writing skills.
5. Construct film scripts and create films by using film production techniques.

## Core Courses

- LIT 2000 - Literature and Culture (GE) **(2)** \*
- COM 2043 - Introduction to TV and Film Production **(3)**
- COM 3000 - Narrative and Documentary Film **(3)**

Total: 8 Units

## Notes:

\*LIT 2000 Literature and Culture course subtitle must be "Film Adaptation".

COM 1075 is recommended, but cannot be substituted for required or elective course for this minor.

Elective Courses: Nine (9) elective units taken from three (3) separate disciplines

## Communication

- COM 4020 - Communication Practicum II **(1-2)**
- COM 4042 - Field Television Production **(3)**
- COM 4043 - Studio Television Production **(3)**
- COM 4090 - Special Studies in Communication **(1-3)**

## History

- HIS 3068 - Modern China Through Film **(4)**
- HIS 4090 - Special Studies in History **(1-4)**

## Literature, Journalism, Writing, and Languages

- LIT 3051 - World Cinema (GE) **(3)**

- LIT 4090 - Special Studies in Literature (1-3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 4090 - Special Studies in Spanish (1-3)

### Theology and Christian Ministry

- PHL 3080 - Alienation, Transformation, and Reconciliation in Film (3)

Total for Minor: 17-20 Units

## **Communication Minor**

### Lower-Division Requirements

Choose two (2) courses from the following:

- COM 1090 - Interpersonal Communication (3)
- COM 2020 - Small Group Communication (3)
- COM 2031 - Argumentation and Debate (GE) (3)

Total: 6 Units

### Upper-Division Requirements

Choose any four (4) courses from the following:

- COM 3010 - Nonverbal Communication (3)
- COM 3012 - Gender and Communication (WS) (3)
- COM 3015 - Oral Interpretation (3)
- COM 3040 - Organizational Communication (3)
- COM 3045 - Leadership Communication (3)
- COM 3060 - Professional Speaking for Career Settings (3)

Total: 12 Units

Minor Total: 18 Units

## **Media Communication Minor**

### Core Requirements

- COM 1050 - Introduction to Media Communication (3)
- COM 1075 - Scriptwriting for Television and Film (3)
- COM 2043 - Introduction to TV and Film Production (3)

- COM 2075 - Audio Production (2)

Total: 11 Units

## Upper-Division Requirements

Choose twelve (12) units from the following courses:

- COM 3000 - Narrative and Documentary Film (3)
- COM 3050 - Electronic Media in Communication (3)
- COM 4020 - Communication Practicum II (1-2)
- COM 4025 - Advanced Television Workshop (1)
- COM 4035 - Advanced Audio Production (1)
- COM 4042 - Field Television Production (3)
- COM 4043 - Studio Television Production (3)
- COM 4090 - Special Studies in Communication (1-3) (3) **Units required**

Total: 12 Units

Minor Total: 23 Units

## Public Relations Minor

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, Writing, and Languages, and the Department of Communication Studies.

### Requirements

- COM 3030 - Persuasion (3)
- COM 3040 - Organizational Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 4005 - Public Relations Cases and Campaigns (3)
- JRN 2050 - Introduction to Journalism (3)
- JRN 3055 - Public Relations Writing (3)
- MKT 3032 - Principles of Marketing (3)

Minor Total: 21 Units

## Theatre Minor

### Core Requirements

- TRE 2070 - Acting (3)
- TRE 3054 - Movement (3)
- TRE 3071 - Playwriting (3)

- TRE 3085 - Directing (2)

Total: 11 Units

## Elective Courses

Choose 6 units from the following courses:

- TRE 2010 - Theatre Practicum I (1-2) (up to 3 units toward minor)
- TRE 3050 - Musical Theatre (3)
- TRE 4020 - Theatre Practicum II (1-2) (up to 3 units toward minor)
- TRE 4052 - Improvisation and Devising (3)

Minor Total: 17 Units

## Department of History and Political Science

### Purposes

- To emphasize rigorous analysis of political structures, historical changes and continuities, and human relationships;
- To train students in the craft of communicating their ideas orally and in writing with precision and formal organization;
- To help students attain career-enhancing experiences outside the classroom;
- To equip students for immediate entry into either graduate/law school or a chosen career.

### Tradition of Excellence

The Department of History and Political Science has a strong tradition of encouraging scholarship for service. The faculty not only have doctorates from renowned universities and personal scholarly pursuits, they also have abiding commitments to helping students learn about the people, events, and political structures that have created, and are creating, the world in which we live. The classroom goal of understanding is coupled with Wesleyan emphasis on human responsibility and creativity: To whom much is given, much is expected. Each of the three majors offers distinct avenues of study and career options; however, the students and faculty are joined in the belief that intelligent and wise Christians can be a force for good in the world. Small classes, student clubs, student-faculty dinners, shared travel opportunities, internship experiences, visiting lectures, and tight-knit departmental friendships provide the possibility of a fulfilling scholarly life in Colt Hall. Housed also in Colt Hall and overseen by department faculty are the Margaret Stevenson Center for Women's Studies, and the Institute of Politics and Public Service.

### Career Opportunities

Most graduates pursue careers in law, social service, government, teaching, public policy, non-profit organizations, international relations, business, public affairs, urban planning, public administration, and ministry. The department helps students find internships that fit career targets. Over the last decade a strong track record has been established for placing students, often with excellent scholarships and fellowships, in high-quality graduate schools, including UC Berkeley, Harvard, Yale, Cornell, UCSD, and UCLA. Our hope is that these who are beginning their post-graduate careers will follow in the footsteps of established alumni who include college professors, librarians, directors of relief

agencies, judges, public policy experts, school administrators, diplomats, leaders within religious denominations, and a university president. Students are encouraged and empowered in the department to be creative with their lives in the service of church, community, nation, and world.

## **Faculty**

Linda Beail, Ph.D.

*University of Iowa*

Rick Kennedy, Ph.D.

*University of California, Santa Barbara*

Jaeyoon Kim, Ph.D.

*University of Oregon*

Lindsey Lupo, Ph.D., Co-Chair

*University of California, Irvine*

Kelli McCoy, Ph.D., Co-Chair

*University of California, San Diego*

Rosco Williamson, Ph.D.

*University of California, San Diego*

William Wood, Ph.D.

*Indiana University*

## **Major**

### **History, B.A.**

#### **Program Learning Outcomes**

**Students who complete the program in History will be able to:**

1. Complete a substantial historical project autonomously.
2. Demonstrate the relationship between primary and secondary materials by assessing a historian's work and recognizing the evidence used to construct that historical argument.
3. Present and analyze, in written or oral presentation, different perspectives on an event from the past.
4. Find appropriate materials online, in a library, or in the community and know how to cite them.

#### **Lower-Division Requirements**

- HIS 1010 - World Civilizations I (GE) (3)
- HIS 1011 - World Civilizations II (GE) (3)
- HIS 2070 - Doing History (4)

**Total Lower Division Units: 10 (4 Non-GE Units)**

#### **Upper-Division Requirements**

- HIS 4060 - Internship in History **(1-4) 2 units required**
- HIS 4070 - Senior Seminar in History **(4)**

## Global Electives

Select 8 units from the following

- HIS 3008 - Early Modern Europe **(4)**
- HIS 3011 - European Intellectual History **(4)**
- HIS 3040 - Russia to 1900 **(4)**
- HIS 3042 - Twentieth-Century Russia and the Soviet Union **(4)**
- HIS 3050 - Islamic Civilization **(4)**
- HIS 3055 - Modern Middle East **(4)**
- HIS 3056 - Early East Asia **(4)**
- HIS 3060 - Modern South Asia **(4)**
- HIS 3065 - Modern Japan and Korea **(4)**
- HIS 3068 - Modern China Through Film **(4)**
- HIS 3069 - China in Revolution **(4)**
- HIS 4013 - Nineteenth-Century Europe **(4)**
- HIS 4014 - Twentieth-Century Europe **(4)**
- HIS 4015 - Europe and the World **(4)**

## U.S. Electives

Select 8 units from the following

- HIS 3016 - Colonial and Revolutionary America **(4)**
- HIS 3020 - United States History, 1815-1914 **(4)**
- HIS 3070 - California History **(4)**
- HIS 3080 - America in the 1960's **(4)**
- HIS 4025 - United States Since 1914 **(4)**
- HIS 4035 - Asian-American History: 1800 to the Present **(4)**
- HIS 4036 - America in East Asia: 1800 to the Present **(4)**
- HIS 4077 - Gender and Law in the U.S. (WS) **(4)**
- HIS 4080 - San Diego Urban History **(4)**

## 18 Additional Upper-Division History Units

*Choose from any of the courses listed above, below, or from an approved study abroad program.*

- HIS 3072 - Two Years Before the Mast and the History of Coastal California **(2)**
- HIS 3075 - African Cultures and Histories **(3)**
- HIS 4060 - Internship in History **(1-4) \***
- HIS 4075 - Topics in Women's History (WS) **(4)**
- HIS 4084 - Ancient and Medieval Christianity **(3)**
- HIS 4086 - Modern Christianity **(3)**
- HIS 4087 - The Ancient Historians **(4)**

- HIS 4090 - Special Studies in History (1-4)

**\* HIS 4060 may be completed for a total of 4 units. Students are required to complete 2 units to fulfill the Upper Division Requirements. Therefore, students may complete 2 units maximum in the Additional Upper Division History Units requirement.**

Total Upper Division Units: 40

Total Non-GE Units for Major: 44

Note(s):

Accepting Associate Degree for Transfer (ADT)

### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

### Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3) \*
- EDU 3006 - Principles of Language Acquisition (3) \*

- EDU 4004 - Foundations of Special Education (3) \*
- EDU 4009 - Classroom Assessment and Research Practices (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)
- EDU 4020 - Literacy Instruction for Secondary Teachers (3) \*
- EDU 4021 - General Methods for Secondary Teachers (3) \*
- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)
- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **International Studies, B.A.**

### **Program Learning Outcomes**

*Students who graduate with a degree in International Studies will be able to:*

1. Evaluate, design, and apply social science research with respect to global phenomena.
2. Understand and critically assess the processes, theories, and outcomes of global institutions and systems.
3. Demonstrate social scientific information literacy.
4. Develop and express ideas in written communication in an effective and scholarly manner.
5. Demonstrate oral communication abilities, particularly to convey complex ideas, recognize diverse viewpoints, and offer empirical evidence of an argument.
6. Construct and evaluate analytical, comprehensive arguments.

### **Concentrations**

- |                                      |                 |
|--------------------------------------|-----------------|
| • Peace Studies                      | • Asia          |
| • Europe                             | • Latin America |
| • Middle East                        | • Africa        |
| • Russia and the Former Soviet Union |                 |

## Lower-Division Requirements

- POL 2030 - Introduction to International Relations (4)
- POL 2070 - Scope and Methods of Political Science (4)
- POL 2090 - World Regional Geography (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3) \*

Total: 14 Units

## Upper-Division Core Requirements

- POL 3070 - Comparative Politics (4)
- POL 4015 - Women and Politics (WS) (4)
- POL 4035 - Global Governance (4)
- POL 4050 - Issues of Global Human Rights (2)
- POL 4060 - Internship in Political Science (2-4) (3) **Units required**
- HIS 4015 - Europe and the World (4)
- POL 4073 - Senior Seminar in Political Science and International Studies (3)

Note(s):

*\*Requirement in general education*

## Off-Campus Cooperative Program (OCP)

Students must enroll in a minimum of 3 units of an approved Off-Campus Cooperative Program. Acceptable programs must involve a significant period of study outside of the United States. The International Studies advisor in the Department of History and Political Science makes the final determination on acceptable programs and the major requirement that they fulfill.

**Electives: Minimum 6 units from the following (not counted toward concentration)**

**Other Upper Division units pertaining to International Studies may be substituted upon approval by the academic advisor.**

- POL 3001 - Transitions to Democracy (4)
- POL 3051 - War and Peace Studies (4)
- POL 4020 - United States Foreign Policy (4)
- POL 4038 - International Law (4)
- POL 4042 - Contemporary Issues in World Politics (4)
- POL 4044 - Contemporary Political Ideologies (4)
- POL 4055 - Protest and Social Movements in World Politics (4)
- HIS 3040 - Russia to 1900 (4)
- HIS 3042 - Twentieth-Century Russia and the Soviet Union (4)
- HIS 3050 - Islamic Civilization (4)
- HIS 3055 - Modern Middle East (4)

- HIS 3056 - Early East Asia (4)
- HIS 3060 - Modern South Asia (4)
- HIS 3065 - Modern Japan and Korea (4)
- HIS 3069 - China in Revolution (4)
- HIS 3075 - African Cultures and Histories (3)
- HIS 4014 - Twentieth-Century Europe (4)
- ECO 3015 - Theories of Economic Development (3)
- ECO 4010 - International Economics (3) \*
- SWF 3015 - Health and Well-Being (GE) (2)
- SOC 3050 - Urban Sociology (3) \*
- SOC 4020 - Social Change (3) \*

Note(s):

*\*These courses have prerequisites and may increase the total number of units needed for the major.*

## Concentrations: 8 Units

Students must declare a concentration in either Peace Studies or a Geographic Region. Students may also complete an individualized concentration consisting of 8 units of relevant coursework and an approved Off-campus Cooperative Program (OCP). Many OCPs have relevant coursework that will meet the concentration requirements with the advisor's approval. Individualized concentrations must be approved by the Department of History and Political Science.

### Peace Studies

- POL 3051 - War and Peace Studies (4)
- POL 4055 - Protest and Social Movements in World Politics (4)

### Europe

- HIS 4013 - Nineteenth-Century Europe (4)
- HIS 4014 - Twentieth-Century Europe (4)

### Middle East

- HIS 3050 - Islamic Civilization (4)
- HIS 3055 - Modern Middle East (4)

### Russia and the Former Soviet Union

- HIS 3040 - Russia to 1900 (4)
- HIS 3042 - Twentieth-Century Russia and the Soviet Union (4)

### Asia

Eight units from:

- HIS 3060 - Modern South Asia (4)
- HIS 3065 - Modern Japan and Korea (4)
- HIS 3069 - China in Revolution (4)

## Latin America

Coursework for concentration available through Off-campus Cooperative Programs.

## Africa

Coursework for concentration available through Off-campus Cooperative Programs.

Total: 52 Units

## Political Science, B.A.

### Program Learning Outcomes

Students who complete the program in Political Science will be able to:

1. Develop an appreciation of the field of politics.
2. Evaluate, design, and apply social science research with respect to political phenomena.
3. Understand and critically assess the processes, theories, and outcomes of political institutions and political behavior.
4. Demonstrate social scientific information literacy.
5. Develop and express ideas in written communication in an effective and scholarly manner.
6. Demonstrate oral communication abilities, particularly to convey complex ideas, recognize diverse viewpoints, and offer empirical evidence of an argument.
7. Construct and evaluate analytical, comprehensive arguments.

### Lower-Division Requirements

- POL 1001 - Introduction to Political Science (GE) (3) \*
- POL 1065 - American Government (4)
- POL 2030 - Introduction to International Relations (4)
- POL 2070 - Scope and Methods of Political Science (4)

Total: 15 Units

Note(s):

*\*Meets a requirement in general education*

### Upper-Division Requirements

American Government

Four units from:

- POL 3041 - Campaigns and Elections (4)
- POL 3080 - Congress and the Presidency (4)
- POL 4041 - Issues in Public Policy (4)

## Global Politics

Four units from:

- POL 4020 - United States Foreign Policy (4)
- POL 4035 - Global Governance (4)

## Comparative Government

- POL 3070 - Comparative Politics (4)

## Political Theory

- POL 3021 - Western Political Thought (4)

## Senior Seminar

- POL 4073 - Senior Seminar in Political Science and International Studies (3)

## Off-Campus Political Studies Program

- POL 3091 - Off-Campus Political Studies Program (3-12) \* 6 Units Required

## Internships

- POL 4060 - Internship in Political Science (2-4) \* 4 Units required

## Electives

Eight additional units from:

- POL 3001 - Transitions to Democracy (4)
- POL 3020 - U.S. Constitution and Civil Liberties Law (4)
- POL 3025 - American Political Thought (4)
- POL 3030 - The Development of Feminist Thought (WS) (4)
- POL 3041 - Campaigns and Elections (4)
- POL 3051 - War and Peace Studies (4)
- POL 3060 - Urban Politics (4)
- POL 3080 - Congress and the Presidency (4)

- POL 4015 - Women and Politics (WS) (4)
- POL 4020 - United States Foreign Policy (4)
- POL 4035 - Global Governance (4)
- POL 4037 - International Economics (4) \*
- POL 4038 - International Law (4)
- POL 4041 - Issues in Public Policy (4)
- POL 4042 - Contemporary Issues in World Politics (4)
- POL 4044 - Contemporary Political Ideologies (4)
- POL 4050 - Issues of Global Human Rights (2)
- POL 4055 - Protest and Social Movements in World Politics (4)
- POL 4090 - Special Studies in Political Science (1-4)

Total: 52 Units

Note(s):

*\*Required prerequisite for this course increases the number of units in the major.*

Accepting Associate Degree for Transfer (ADT)

## Minor

### History Minor

A History minor, consisting of 18 units, is available for those in other majors who nevertheless desire to learn some of the skills and content available to History majors. The requirements are:

#### Requirements

- HIS 1010 - World Civilizations I (GE) (3)
- HIS 1011 - World Civilizations II (GE) (3)
- Upper-Division Global Elective (4)
- Upper-Division U.S. Elective (4)
- Additional Upper-Division History Electives (4)

Total: 18 Units

### Women's Studies Minor

The minor in Women's Studies affirms the equality and value of women in the university community and curriculum. Significant women in the Wesleyan/holiness movement have consistently contributed to Christian feminism as a central principle of academic and church life. Point Loma has developed a sequence of courses of interest to both women and men that examines important gender issues across a wide variety of academic fields, in light of the university's commitment to the Christian faith.

The minor in Women's Studies is for students who wish to complement study in another area with an interdisciplinary study of women's status and contribution to the world. The program consists of an introductory course, a capstone course, and a selection of applied topics courses at the upper-division level.

Graduation with a minor in Women's Studies requires the following lower-division and upper-division courses:

## Women's Studies Minor

### Lower-Division Requirements

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)

### Upper-Division Requirements

- POL 3030 - The Development of Feminist Thought (WS) (4)

A minimum of nine units from:

- CHU 3040 - Women in the Christian Tradition (GE) (3)
- COM 3012 - Gender and Communication (WS) (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- HIS 4077 - Gender and Law in the U.S. (WS) (4)
- LIT 3053 - Women Writers (GE) (3)
- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)
- POL 4015 - Women and Politics (WS) (4)
- PSY 3060 - Human Sexuality (3)

Total: 17 Units

## Department of Literature, Journalism, Writing, and Languages

### Mission Statement

Embodying the core values of a Christian liberal arts education in the Wesleyan theological tradition, and focusing on the power of language and story to shape us and our world, the LJWL department and programs will provide students with knowledge, skills, and experiences to equip them to understand, interpret, analyze, evaluate, and create texts as artistic and/or linguistic expressions of diverse human experiences. We value reading, writing, researching, speaking, and discussing as profound means of participating in the redemptive story God is telling through all of creation.

### Purposes

To enable students to

- critically read and interpret texts through close reading and literary analysis.
- thoughtfully engage with diverse cultures through reading and discussing texts.
- understand the nature, structure, and history of language.

- conduct effective research and produce effective written and oral communication in various genres and media.
- deepen their redemptive social and spiritual engagement with the world through studying languages, texts, and media.

## Tradition of Excellence

The Department of Literature, Journalism, Writing, and Languages invites students to enter into the "republic of letters," to become students of the basic component of human interaction: language and story. The department is committed to helping students learn how to communicate their ideas effectively through the analysis and study of the written word as used in a breadth of literature -- classical and modern, British and American, European, and a wide variety of other western and non-western literatures. The faculty offer different approaches to the subject matter due to their different educational backgrounds. Professors of the department have distinguished themselves by having work published in *Great Lives, Great Events -- The Seventeenth Century, Great Lives -- The Eighteenth Century, Nineteenth Century Literature Criticism, Brontë Studies, The Ben Jonson Journal, The Literary Encyclopedia, English Today: The International Review of the English Language, Religion and Literature, Literature and Belief, Christianity and Literature, Profession, Journal on African Literature: Tydskrif vir Ieterkunde, Contemporary French and Francophone Studies, Nineteenth Century French Studies, La Corónica, The Princeton University Library Chronicle, The New York Times, Christianity Today, Relevant Magazine, Sojourners, The Journal of Mass Media Ethics, Christian Feminism Today, Modern Chinese Literature and Culture, and the Encyclopedia of Christian Literature*. Faculty members have also published books and poetry collections. They have given lectures and submitted papers at such places as the University of London, the University of Hull, the University of Leeds, Charles University, Prague, UCLA, Princeton University, Columbia University, The Chinese University of Hong Kong, The International Shakespeare Conference, Stratford, and the American Association of Teachers of Spanish and Portuguese in Madrid, Spain. Department faculty have also received major national grants including several from the National Endowment for the Humanities, the Fulbright Fellowship Grant, the Templeton Foundation, and the Del Amo Foundation.

## Career Opportunities

Graduates from the Department of Literature, Journalism, Writing, and Languages are accepted into some of the finest graduate schools in the country. In addition to careers in law, education, journalism, publishing, law enforcement and public relations, graduates from our department are active in a variety of business fields, in theological study and church ministry, in work with NGOs and the National Park Service, and in overseas teaching. Internship programs with local news organizations create contacts and experience for our students to gain employment in technical writing, business writing, copy writing and editing, and news reporting.

## Faculty

Scott Bennett, Ph.D.  
*University of California, Santa Barbara*

Paula Cronovich, Ph.D.  
*University of California, Los Angeles*

Stephen Goforth, M.A.  
*The American University*

Breeann Kyte Kirby, M.F.A.  
*San Diego State University*

Alain Lescart, Ph.D.  
*University of Connecticut*

Robbie Maakestad, M.F.A.  
*George Mason University*

Katie Manning, Ph.D.  
*University of Louisiana, Lafayette*

Karl Martin, Ph.D.  
*University of Minnesota*

David Michael McKinney, Ph.D.  
*University of Southern California*

Jacqueline Mitchell, M.A.  
*University of California, Los Angeles*

Dean Nelson, Ph.D.  
*Ohio University*

Charlene Pate, M.A.  
*California State University, San Marcos and San Diego State University*

Bettina Tate Pedersen, Ph.D.  
*University of Illinois, Urbana-Champaign*

Margarita Pintado, Ph.D.  
*Emory University*

James Wicks, Ph.D., Chair  
*University of California, San Diego*

## **Major**

### **Environmental Studies, B.A.**

What kind of environmental ethic would you have if you lived with compassion for other humans? This is the question that Point Loma Nazarene University equips students to answer in its Environmental Studies program. Jesus tells us that the two commandments which encompass all others are love God and love your neighbor (Matthew 22:37-39). Yet we often miss the connection that loving God and neighbor has with the natural world. Cultural geographer Carolyn Finney claims it is necessary for humans to "understand how our unhealthy relationships with the natural environment are intimately linked to our unhealthy relationships with each other." PLNU's Environmental Studies program makes that link by providing cultural context along with foundational scientific knowledge. Our goal is that students leave the program with compassion for all of creation and other humans, created by listening to and understanding the context of the human story across cultures; with foundational knowledge of ecosystems and the human relationship to them; with communication skills in writing, media, and verbal avenues; and with the agency to use these traits to serve in the world.

Students with an Environmental Studies BA find careers in diverse fields that address human relationships with the natural world. From public relations and fundraising to design and engineering, Environmental Studies majors find jobs that rely on compassion, knowledge, and the ability to communicate well. Situated as a truly interdisciplinary major at PLNU with contributions across diverse disciplines, the focus of the program is to provide the cultural context, scientific foundation, and communication skills as they relate to humans and the environment. Different from many environmental sciences and other environmental studies programs, PLNU's Environmental Studies program prepares students for multiple career paths by offering foundational courses in biology, the social and political sciences, and the

arts and humanities, along with focused concentrations of study, ranging from creative writing or literature to media arts or public policy, which provide depth of expertise as well as breadth of perspective.

Environmental Studies at PLNU: we put the human element into the environment.

## Program Learning Outcomes

Students who complete the program in Environmental Studies will be able to:

1. Integrate scientific and humanistic environmental studies with ongoing reflection and community engagement.
2. Employ strong research and analytical skills with diverse sources of information, demonstrating critical thinking and quantitative reasoning appropriately.
3. Identify and articulate sociocultural dynamics as they relate to the natural world.
4. Present analyses to formal audiences, demonstrating appropriate strategies for audience engagement and oral communication of written work.

## Required Concentration

*Choose one of the following concentrations:*

- Biology
- Cultural Studies
- Design
- Social Impact
- Writing and Communication

## Lower-Division Core Requirements

- BIO 1002 - Environment and People (GE) (4)
- CHE 1001 - Chemistry and Society (GE) (4)
- ESI 2050 - Introduction to Environmental Studies (3)
- LIT 2000 - Literature and Culture (GE) (2) **Select the course section for "Nature Writing"**
- PHL 2011 - Ethics (GE) (3)

Choose One from Each Group:

### **BIOLOGY:**

- BIO 1005 - Ecology and Conservation (GE) (3) **and**
- BIO 1005L - Ecology and Conservation Laboratory (GE) (1)
- OR**
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3) **and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)

### **SOCIAL IMPACT:**

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 2001 - Cultural Anthropology (GE) (3)
- SWF 1000 - Living Justly in Contemporary Society (GE) (3)

Total Lower Division Units: 23-24

## Upper-Division Core Requirements

- BUS 4075 - Sustainability in Action (3)
- ESI 4020 - Advanced Environmental Studies (3)
- ESI 4070 - Internship in Environmental Studies (2)
- POL 4035 - Global Governance (4)
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)

Choose One from Each Group:

### **SOCIAL JUSTICE:**

- SOC 4044 - Globalization and Culture (3)
- SOC 4090 - Special Topics in Sociology (1-4)
- THE 4090 - Special Studies in Theology (1-3)

### **WRITING:**

- WRI 3015 - Advanced English Composition (3)
- WRI 3065 - Writing for Professional Careers (3)
- WRI 3021 - Creative Writing: Poetry (3)
- WRI 3022 - Creative Writing: Fiction (3)
- WRI 3023 - Creative Writing: Creative Nonfiction (3)

### **CULTURAL STUDIES:**

- LIT 4046 - Romantic Literature (3)
- LIT 4048 - Postcolonial Classics and Theory (3)
- HIS 4090 - Special Studies in History (1-4)

### **LANGUAGE:**

- FRE 2050 - Intermediate French I (3)
- FRE 2051 - Intermediate French II (3)
- FRE 3003 - French Conversation (3)
- SPA 2050 - Intermediate Spanish Conversation I (3)
- SPA 2051 - Intermediate Spanish Conversation II (3)
- SPA 3000 - Civic Engagement: Conversation, Culture and Community (3)
- Approved immersion experience in another language

Total Upper Division Units: 21-23

## Concentrations

### BIOLOGY

A strong background in the biology and chemistry of environmental systems empowers environmental justice with the ability to evaluate and use scientific data. With a concentration in biology, an Environmental Studies major can bring her biological expertise to educate and inform environmental social action. Careers include: sustainability officer, lab management, science writer.

## Lower-Division Requirements

- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3) and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**

## Upper-Division Requirements

- BIO 3063 - Conservation Ecology **(3) and**
- BIO 3063L - Conservation Ecology Laboratory **(1)**

Choose 9 units of approved electives from the following:

- Courses and their corresponding lab (if applicable) must be taken concurrently.*
- BIO 3012 - Applied Plant Biology **(2)**
  - BIO 3023 - Introduction to Oceanography **(3) and**
  - BIO 3023L - Introduction to Oceanography Laboratory **(1)**
  - BIO 3033 - Marine Biology **(3) and**
  - BIO 3033L - Marine Biology Laboratory **(1)**
  - BIO 3040 - Field Biology: Neotropical Ecology **(2) and Costa Rica field trip**
  - BIO 4010 - Vertebrate Biology **(3) and**
  - BIO 4010L - Vertebrate Biology Laboratory **(1)**
  - BIO 4030 - Animal Behavior **(3) and**
  - BIO 4030L - Animal Behavior Laboratory **(1)**
  - BIO 4073 - Experimental Marine Ecology **(3) and**
  - BIO 4073L - Experimental Marine Ecology Laboratory **(1)**
  - BIO 4083 - Introduction to Geographic Information Systems (GIS) **(3)**

### **Choose one:**

- ACC 2000 - Principles of Accounting for Non-Business Majors **(3)**
- MTH 2003 - Introduction to Statistics **(3)**
- MTH 3063 - Calculus Based Statistics With R **(3)**

## CULTURAL STUDIES

Understanding where our current ideas about environmental and social justice come from is vital to having agency for positive change. Environmental Studies majors with a cultural studies concentration will be able to identify, critique, challenge, or champion cultural stories and themes about humanity's relationship with the environment. Careers include: teaching, nonprofit management, public relations.

## Upper-Division Requirements

- HIS 3070 - California History **(4)**
- HIS 4090 - Special Studies in History **(1-4)**
- LIT 3000 - Literary Analysis **(3)**
- LIT 4046 - Romantic Literature **(3)**

Choose Two (if choose a 305x then must choose three):

- HIS 3011 - European Intellectual History (4)
- HIS 3068 - Modern China Through Film (4)
- HIS 3072 - Two Years Before the Mast and the History of Coastal California (2)
- HIS 4013 - Nineteenth-Century Europe (4)
- HIS 4014 - Twentieth-Century Europe (4)
- HIS 4015 - Europe and the World (4)
- HIS 4025 - United States Since 1914 (4)
- HIS 4035 - Asian-American History: 1800 to the Present (4)
- HIS 4036 - America in East Asia: 1800 to the Present (4)
- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 3050 - World Literature (GE) (3)
- LIT 3051 - World Cinema (GE) (3)
- LIT 3052 - Diverse Voices in American Literature (GE) (3)
- LIT 3053 - Women Writers (GE) (3)
- LIT 4000 - American Literature to 1900 (3)
- LIT 4045 - 17th Century English Literature (3)
- LIT 4061 - Shakespeare (3)
- SPA 3010 - Latin American Culture and Civilization (3)
- SPA 3020 - Mexican American Literature and Culture (3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)

## DESIGN

Good design can capture the imagination and bring about powerful change. With a concentration in design, Environmental Studies majors gain valuable skills in presenting information and arguments in a visually pleasing format to reach a wide audience for environmental change. Careers include: graphic design, science illustration, biodesign, branding.

### Lower-Division Requirements

- ART 1003 - Two-Dimensional Design (3)
- ART 2003 - Graphic Design I: Visual Symbolism (3)

### Upper-Division Requirements

- ART 3015 - Introduction to Interactive Web Design (3)

Choose 6 units of approved electives from the following:

- ART 1015 - Drawing I (3)
- ART 2002 - Introduction to Computer Graphics (3)
- ART 2026 - Photography: Digital (3)
- ART 3003 - Graphic Design II: Typography (3)
- ART 3030 - Illustration I (3)
- ART 3031 - Illustration II (3)
- ART 3033 - Graphic Design III: Branding and Identity Programs (3)
- ART 4050 - Interactive Web Design (3)

## SOCIAL IMPACT

Social service impacts the way the world works. With a social impact concentration, Environmental Studies majors will understand the structures and policies that govern our culture and find avenues of service that will let them be a powerful force for environmental change in the world. Careers include: law, urban planning, social work, public administration.

### Lower-Division Requirements

- COM 2031 - Argumentation and Debate (GE) (3)
- SOC 2001 - Cultural Anthropology (GE) (3)
- SWF 1000 - Living Justly in Contemporary Society (GE) (3)

### Upper-Division Requirements

- SOC 4090 - Special Topics in Sociology (1-4)
- THE 4090 - Special Studies in Theology (1-3)

Choose 6 units of approved electives from the following:

- COM 3030 - Persuasion (3)
- COM 3040 - Organizational Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 3095 - Media Literacy (3)
- COM 4005 - Public Relations Cases and Campaigns (3)
- COM 4060 - Rhetorical Theories and Models (3)
- COM 4090 - Special Studies in Communication (1-3)
- ECO 3015 - Theories of Economic Development (3)
- JRN 4030 - Multimedia Journalism (3)
- POL 2090 - World Regional Geography (3)
- POL 3060 - Urban Politics (4)
- POL 4038 - International Law (4)
- POL 4050 - Issues of Global Human Rights (2)
- POL 4055 - Protest and Social Movements in World Politics (4)
- SOC 3005 - Social Stratification (3)
- SOC 3050 - Urban Sociology (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4020 - Social Change (3)
- SOC 4070 - Medical Sociology (3)
- SOC 4080 - Restorative Justice (3)

## WRITING AND COMMUNICATION

A clearly communicated idea has the most impact. With a writing and communication concentration, Environmental Studies majors will develop the skills to share their ideas and stories both in writing and verbally. Clear communicators can take the complexity of many environmental issues and present them so that a wide audience can understand. Careers include: editing, writing, screenwriting, journalism, branding.

## Lower-Division Requirements

- JRN 2050 - Introduction to Journalism (3)
- WRI 2020 - Introduction to Creative Writing (3)

## Upper-Division Requirements

- WRI 3015 - Advanced English Composition (3)
- WRI 3065 - Writing for Professional Careers (3)

Choose 6 units of approved electives from the following:

- COM 2031 - Argumentation and Debate (GE) (3)
- COM 3000 - Narrative and Documentary Film (3)
- COM 3030 - Persuasion (3)
- COM 3050 - Electronic Media in Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 3095 - Media Literacy (3)
- COM 4005 - Public Relations Cases and Campaigns (3)
- COM 4090 - Special Studies in Communication (1-3)
- JRN 3010 - Advanced Reporting (3)
- JRN 3012 - Television News Writing (3)
- JRN 3013 - Television News Production (3)
- JRN 3014 - Computer-Assisted Reporting (3)
- JRN 3040 - Media Law and Ethics (3)
- JRN 3045 - Editing (3)
- JRN 3050 - Special Topics in Journalism (3)
- JRN 3055 - Public Relations Writing (3)
- JRN 4013 - Advanced Television News Production (3)
- JRN 4030 - Multimedia Journalism (3)
- JRN 4040 - Magazine Editing and Concepts (3)
- WRI 3021 - Creative Writing: Poetry (3)
- WRI 3022 - Creative Writing: Fiction (3)
- WRI 3023 - Creative Writing: Creative Nonfiction (3)
- WRI 4020 - Advanced Writing Workshop (3)

Total: 107-111 Units

## POSSIBLE MINORS

- Biology: Environmental Biology Minor
- French Minor
- History Minor
- International Development Minor
- Literature Minor
- Media Communication Minor

- Multimedia Journalism Minor
- Nonprofit Organization Management Minor
- Public Relations Minor
- Spanish Minor
- Sustainability Studies Minor
- Writing Minor

## POSSIBLE DOUBLE MAJORS

- International Studies, B.A.
- Literature, B.A.
- Multimedia Journalism, B.A.
- Writing, B.A.

## French, B.A.

### Program Learning Outcomes

**Students who complete the program in French will be able to:**

1. Write essays without significant errors of grammar, spelling, or vocabulary usage that would impede comprehension by a native speaker.
2. Comprehend the main idea and most details of connected oral discourse by a native speaker on a variety of topics.
3. Converse in a participatory fashion with a native speaker using a variety of language strategies to convey meaning.
4. Analyze and interpret target language texts and data sets according to their cultural, literary, and/or linguistic content.
5. Display knowledge of the nature and structure of language.
6. Discuss the influence of their own perspective on cultural interconnections through engagement with local, national, or international communities.

### Lower-Division Requirements

- FRE 1001 - Elementary French I (GE) **(4)**
- FRE 1002 - Elementary French II (GE) **(4)**
- FRE 2050 - Intermediate French I **(3)**
- FRE 2051 - Intermediate French II **(3)**

Total: 14 Units

### Upper-Division Requirement

*In addition to the courses listed below, two courses must be taken abroad in France or a Francophone country (6 units) or 9 units of which 3 could be equivalent to one PLNU courses. Subject to Department approval. 6-9 Units.*

- FRE 3003 - French Conversation **(3)**
- FRE 3015 - French Culture and Civilization **(3)**

- FRE 3020 - Survey of French Literature (3)
- FRE 3025 - Francophone Literature (3)
- FRE 4020 - Studies in French Literature (3)
- FRE 4095 - Literary Theory Capstone (3)

Total: 24-27 Units

Total Major: 38-41 Units

## 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3) \*
- EDU 3006 - Principles of Language Acquisition (3) \*
- EDU 4004 - Foundations of Special Education (3) \*
- EDU 4009 - Classroom Assessment and Research Practices (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)
- EDU 4020 - Literacy Instruction for Secondary Teachers (3) \*

- EDU 4021 - General Methods for Secondary Teachers (3) \*
- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)
- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## Literature, B.A.

### Concentrations

- Literature
- English Education

### Program Learning Outcomes

**Students who complete the program in Literature - Concentrations in Literature and English Education will be able to:**

1. Integrate their literature studies with ongoing reflection and hospitable engagement with a diverse world.
2. Identify and articulate characteristics and trends of diverse literatures and historical periods: dates, styles, authors, and canon formation.
3. Develop and support close readings of texts using literary theory and terminology.
4. Employ strong research, rhetorical, linguistics, literary, and analytical skills in their writing.
5. Present literary analysis to formal audiences, demonstrating strategies for audience engagement and oral communication of written work.

### Concentrations

#### Literature

## Lower-Division Requirements

- LIT 2052 - World Literatures: Ancient and Medieval Literatures **(3)**
- LIT 2054 - British Writers I **(3)**
- LIT 2055 - British Writers II **(3)**
- LIT 2056 - American Writers I **(3)**
- LIT 2057 - American Writers II **(3)**

Total Lower Division Units: 15

## Upper-Division Requirements

- LIT 3000 - Literary Analysis **(3)**
- LIT 4000 - American Literature to 1900 **(3)**
- LIT 4048 - Postcolonial Classics and Theory **(3)**
- LIT 4050 - The Novel **(3)**
- LIT 4061 - Shakespeare **(3)**
- LIT 4095 - Literary Theory and Scholarship **(3)**

One course from the following:

- LIN 3012 - Introduction to Linguistics **(3)**
- LIN 3065 - English Grammar and Usage **(3)**

One course from the following:

- LIT 3050 - World Literature (GE) **(3)**
- LIT 3051 - World Cinema (GE) **(3)**

One course from the following:

- LIT 3052 - Diverse Voices in American Literature (GE) **(3)**
- LIT 3053 - Women Writers (GE) **(3)**

One course from the following:

- LIT 4020 - American Literature Since 1900 **(3)**
- SPA 3020 - Mexican American Literature and Culture **(3)**

Three courses from the following:

- LIT 4044 - Medieval Literature **(3)**
- LIT 4045 - 17th Century English Literature **(3)**
- LIT 4046 - Romantic Literature **(3)**
- LIT 4047 - Victorian Literature **(3)**

Total Upper Division Units: 39

Total Major: 54 Units

## English Education

### Lower-Division Requirements

- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 2054 - British Writers I (3)
- LIT 2055 - British Writers II (3)
- LIT 2056 - American Writers I (3)
- LIT 2057 - American Writers II (3)

**Choose one course from:**

- WRI 2020 - Introduction to Creative Writing (3)
- JRN 2050 - Introduction to Journalism (3)

Total Lower Division Units: 18

### Upper-Division Requirements

- LIT 3000 - Literary Analysis (3)
- LIN 3012 - Introduction to Linguistics (3)
- LIN 3065 - English Grammar and Usage (3)
- LIT 4048 - Postcolonial Classics and Theory (3)
- LIT 4050 - The Novel (3)
- LIT 4061 - Shakespeare (3)
- LIT 4095 - Literary Theory and Scholarship (3)
- WRI 3015 - Advanced English Composition (3)
- WRI 3070 - Writing Theory and Pedagogy (2)

One course from the following:

- LIT 4000 - American Literature to 1900 (3)
- LIT 4020 - American Literature Since 1900 (3)
- SPA 3020 - Mexican American Literature and Culture (3)

One course from the following:

- LIT 4044 - Medieval Literature (3)
- LIT 4045 - 17th Century English Literature (3)

One course from the following:

- LIT 4046 - Romantic Literature (3)
- LIT 4047 - Victorian Literature (3)

Total Upper Division Units: 35

Total Major: 53 Units

### Teacher Preparation

To complete requirements for a preliminary Single Subject (Secondary) California teaching credential, students who pursue the concentration in English Education must pass the CSET Examination in English (including Composition and Rhetoric, Literature, and Linguistics) to demonstrate Subject Matter Competency and complete the Professional Preparation coursework and other items as required by the commission on Teacher Credentialing (CTC).

### Note(s):

Accepting Associate Degree for Transfer (ADT)

## **Multimedia Journalism, B.A.**

### Program Learning Outcomes

**Students who complete the program in Multimedia Journalism will be able to:**

1. Exhibit effective research and reporting practices including the creation and editing of a news story based on accepted industry standards and values.
2. Display strong interpretive, analytic, and critical thinking skills by writing news copy clearly and accurately, demonstrating quantitative and qualitative reasoning in forms appropriate to the purpose, medium, and audience.
3. Identify and apply appropriate ethical and legal standards in their service to their communities and cultures.
4. Employ delivery skills appropriate to various news performance situations.
5. Describe how technologies shape the way people perceive and interact with the world and apply these digital tools and technologies appropriately for the communications professions in which they work.

### Lower-Division Requirements

- JRN 2015 - Newspaper Workshop (1) \*
- JRN 2050 - Introduction to Journalism (3)
- COM 1050 - Introduction to Media Communication (3)
- COM 2043 - Introduction to TV and Film Production (3)

One course from the following:

- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 2054 - British Writers I (3)
- LIT 2055 - British Writers II (3)
- LIT 2056 - American Writers I (3)
- LIT 2057 - American Writers II (3)

Total: 15 Units

Note(s):

*\* Three units of Newspaper Workshop. WRI 2016 , JRN 2017 , JRN 2018 , or COM 2075 may substitute for two of those units.*

## Upper-Division Requirements

- JRN 3014 - Computer-Assisted Reporting (3)
- JRN 3040 - Media Law and Ethics (3)
- JRN 3050 - Special Topics in Journalism (3)
- JRN 4030 - Multimedia Journalism (3)
- JRN 4070 - Internship in Journalism (2)
- JRN 4095 - Senior Seminar in Multimedia Journalism (3)
- **One additional upper-division literature course beyond GE from the courses listed under Literature, Spanish, or French.**

Total: 20 Units

Choose One Concentration:

### Concentration in Writing

- JRN 3010 - Advanced Reporting (3)
  - JRN 3045 - Editing (3)
  - JRN 4040 - Magazine Editing and Concepts (3)
- Choose one course from the following:**
- WRI 3015 - Advanced English Composition (3)
  - WRI 3021 - Creative Writing: Poetry (3)
  - WRI 3022 - Creative Writing: Fiction (3)
  - WRI 3023 - Creative Writing: Creative Nonfiction (3)

Total: 12 Units

### Concentration in Visual Storytelling

- JRN 3012 - Television News Writing (3)
- JRN 3013 - Television News Production (3)
- JRN 4013 - Advanced Television News Production (3)
- JRN 4014 - Long-Form Broadcast News (3)
- JRN 4025 - Advanced Television Workshop (1)

Total: 13 Units

Major Total: 47-48 Units

## Multimedia Journalism Major with a Minor in Spanish

The Department offers a Multimedia Journalism major with a Spanish Minor. This extremely marketable and desirable combination is recommended for Multimedia Journalism majors who desire to work in American border cities or in Latin American countries, as well as for students seeking a Single-Subject Teaching Credential. The student completes an internship at a bilingual newspaper, magazine, radio, or television station. A maximum of two of the required upper-division literature courses in the Multimedia Journalism major may be in Spanish or Latin American literature.

### Note(s):

Accepting Associate Degree for Transfer (ADT)

## Spanish, B.A.

### Program Learning Outcomes

**Students who complete the program in Spanish will be able to:**

1. Write essays without significant errors of grammar, spelling, or vocabulary usage that would impede comprehension by a native speaker.
2. Comprehend the main idea and most details of connected oral discourse by a native speaker on a variety of topics.
3. Converse in a participatory fashion with a native speaker using a variety of language strategies to convey meaning.
4. Analyze and interpret target language texts and data sets according to their cultural, literary, and/or linguistic content.
5. Display knowledge of the nature and structure of language.
6. Discuss the influence of their own perspective on cultural interconnections through engagement with local, national, or international communities.

### Lower-Division Requirements

- SPA 1001 - Elementary Spanish I (GE) (4)
- SPA 1002 - Elementary Spanish II (GE) (4)
  
- SPA 2050 - Intermediate Spanish Conversation I (3)
- SPA 2051 - Intermediate Spanish Conversation II (3)

Total: 14 Units

### Upper-Division Requirements

- SPA 3000 - Civic Engagement: Conversation, Culture and Community (3)
- SPA 3002 - Advanced Grammar and Reading (3)
- SPA 3010 - Latin American Culture and Civilization (3)
- SPA 3015 - Culture and Civilization of Spain (3)
- SPA 3020 - Mexican American Literature and Culture (3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)

- SPA 3090 - Current Spanish Linguistics (3)
- SPA 4085 - Senior Seminar in Spanish (3)

One of the following:

- SPA 4000 - Peninsular Literature Before 1800 (3)
- SPA 4002 - Peninsular Literature Since 1800 (3)

One of the following:

- SPA 4037 - Latin American Literature Before 1910 (3)
- SPA 4039 - Latin American Literature Since 1910 (3)

Note(s):

Take six upper-division study-abroad units approved by the Department and Dean of the College of Arts and Humanities. Study abroad courses can substitute for or complement courses required in the major.

Total: 30 Units

Total Major: 44 Units

#### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the

undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3) \*
- EDU 3006 - Principles of Language Acquisition (3) \*
- EDU 4004 - Foundations of Special Education (3) \*
- EDU 4009 - Classroom Assessment and Research Practices (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)
- EDU 4020 - Literacy Instruction for Secondary Teachers (3) \*
- EDU 4021 - General Methods for Secondary Teachers (3) \*
- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)
- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## Writing, B.A.

### Program Learning Outcomes

**Students will be able to:**

1. Apply artistry and advanced skills in various forms and genres of writing.
2. Demonstrate knowledge of the conventions and terminology of various forms and genres of writing.
3. Engage in writing and editorial processes in a professional environment.

4. Present written work to live audiences, demonstrating strategies for audience engagement and oral communication.

## Lower-Division Requirements

- WRI 2020 - Introduction to Creative Writing (3)
- JRN 2050 - Introduction to Journalism (3)

One course from the following:

- LIT 2054 - British Writers I (3)
- LIT 2055 - British Writers II (3)
- LIT 2056 - American Writers I (3)
- LIT 2057 - American Writers II (3)

Four units from the following:

- JRN 2015 - Newspaper Workshop (1) \*\*
- WRI 2016 - Literary Magazine Workshop (1) \*\*
- JRN 2017 - Yearbook Workshop (1) \*\*

Note(s):

*\*\*Each may be taken more than once (may substitute JRN 3014 for two units of JRN 2015/WRI 2016/JRN 2017).*

Total: 13 Units

## Creative Writing Courses

Six (6) units from the following list:

**WRI 3021, WRI 3022, and WRI 3023 may be repeated once for credit with instructor's consent.**

- WRI 3021 - Creative Writing: Poetry (3)
- WRI 3022 - Creative Writing: Fiction (3)
- WRI 3023 - Creative Writing: Creative Nonfiction (3)

Total: 6 Units

## Upper-Division Requirements

- WRI 3015 - Advanced English Composition (3)
- JRN 3045 - Editing (3) **OR**
- JRN 4040 - Magazine Editing and Concepts (3)

- WRI 4020 - Advanced Writing Workshop (3)
- WRI 3065 - Writing for Professional Careers (3)
- WRI 4070 - Internship in Writing (2)
- LIT 3000 - Literary Analysis (3)

One course from the following:

- LIN 3012 - Introduction to Linguistics (3)
- LIN 3065 - English Grammar and Usage (3)

One course from the following not already taken:

- WRI 3070 - Writing Theory and Pedagogy (2)
- JRN 4030 - Multimedia Journalism (3)
- JRN 4040 - Magazine Editing and Concepts (3)

Upper Division Literature course

One additional upper division literature course beyond GE from courses listed under Literature, Spanish or French. (3)

Total: 22-23 Units

Total Major: 44-45 Units

**Minor**

### **Cinema Studies Minor - Literature, Journalism, Writing, and Languages**

This is an interdisciplinary minor in cinema which draws from historical, religious, philosophical, theoretical, and aesthetic perspectives. Students are encouraged to select courses which are based on students' intellectual and professional interests. Students interested in film criticism and/or writing and teaching may take electives in film theory and criticism, while students interested in scriptwriting and production may take courses in those areas. The minor is structured as interdisciplinary in its electives so that students will truly be studying in the liberal arts tradition. All students must take the required courses, and then must select from the elective courses to complete the minor.

### **Program Learning Outcomes**

1. Identify and articulate the relationships among film styles, genres, and techniques.
2. Demonstrate knowledge of the relationship between films and the historical moments from which they emerge.
3. Analyze and interpret the film images and narratives using film theory and terminology.
4. Evaluate films, including from a faith based perspective, by using higher and lower order thinking and writing skills.
5. Construct film scripts and create films by using film production techniques.

## **Core Courses**

- LIT 2000 - Literature and Culture (GE) (2) \*
- COM 2043 - Introduction to TV and Film Production (3)
- COM 3000 - Narrative and Documentary Film (3)

**Total: 8 Units**

## **Notes:**

\*LIT 2000 Literature and Culture course subtitle must be "Film Adaptation".

COM 1075 is recommended, but cannot be substituted for required or elective course for this minor.

**Elective Courses: Nine (9) elective units taken from three (3) separate disciplines**

## **Communication**

- COM 4020 - Communication Practicum II (1-2)
- COM 4042 - Field Television Production (3)
- COM 4043 - Studio Television Production (3)
- COM 4090 - Special Studies in Communication (1-3)

## **History**

- HIS 3068 - Modern China Through Film (4)
- HIS 4090 - Special Studies in History (1-4)

## **Literature, Journalism, Writing, and Languages**

- LIT 3051 - World Cinema (GE) (3)
- LIT 4090 - Special Studies in Literature (1-3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 4090 - Special Studies in Spanish (1-3)

## **Theology and Christian Ministry**

- PHL 3080 - Alienation, Transformation, and Reconciliation in Film (3)

**Total for Minor: 17-20 Units**

## **French Minor**

A minor in French is offered to those who wish to complement study in another discipline. Course work can only approximate a bilingual setting and does not necessarily guarantee appropriate language proficiency. Therefore, students are encouraged to immerse themselves in the target language and to complete more than the minimum amount of language classes.

## Requirements

- Undergo a complete summative evaluation of language skills by way of an exit interview.
- Successfully complete at least 9 upper-division units in residence.
- Successfully complete the following courses:

### Lower-Division Requirements

- FRE 1001 - Elementary French I (GE) (4)
  - FRE 1002 - Elementary French II (GE) (4)
  - FRE 2050 - Intermediate French I (3)
  - FRE 2051 - Intermediate French II (3)
- OR** Equivalent

Total: 14 Units

### Upper-Division Requirements

- FRE 3003 - French Conversation (3)
- FRE 3015 - French Culture and Civilization (3)
- FRE 3020 - Survey of French Literature (3)
- FRE 3025 - Francophone Literature (3)

Total: 12 Units

Total for Minor: 26 Units

## Literature Minor

### Lower Division Requirements

- LIT 2000 - Literature and Culture (GE) (2)
- LIT 3000 - Literary Analysis (3)

Total Lower Division Units: 5

### Upper Division Requirements

- LIT 4061 - Shakespeare (3)

**One Course From:**

- LIT 3050 - World Literature (GE) (3)
- LIT 3051 - World Cinema (GE) (3)
- LIT 3052 - Diverse Voices in American Literature (GE) (3)
- LIT 3053 - Women Writers (GE) (3)
  
- *Two Additional Non-GE Upper Division LIT courses (6 units)*

Total Upper Division Units: 12

Total Units: 17

## **Multimedia Journalism Minor**

The multimedia journalism minor allows students to major in other fields such as the sciences, psychology, music, art, literature, theology, etc., while adding a marketable dimension to their studies. That dimension is the training to communicate ideas from those other fields in a manner that is clear and concise, for a specific kind of audience. With this minor, students will learn how to gather information from reliable sources, organize information in a skillful manner, and communicate that information in a compelling way that uses several media platforms.

## **Program Learning Outcomes**

Students who complete the minor program will be able to:

1. Exhibit effective research and reporting practices.
2. Display strong interpretive, analytic, quantitative reasoning, and critical thinking skills in their assignments.
3. Communicate ideas clearly and accurately in forms appropriate to the purpose, medium, and audience.

## **Required Courses**

- COM 2043 - Introduction to TV and Film Production (3)
- JRN 2015 - Newspaper Workshop (1)
- JRN 2050 - Introduction to Journalism (3)
- JRN 3040 - Media Law and Ethics (3)

Select 1 from the following:

- JRN 3014 - Computer-Assisted Reporting (3)
- JRN 3050 - Special Topics in Journalism (3)
- JRN 4030 - Multimedia Journalism (3)

Select 1 from the following:

- JRN 3010 - Advanced Reporting (3)
  - JRN 3045 - Editing (3)
  - JRN 4040 - Magazine Editing and Concepts (3)
- OR**

Select 1 from the following:

- JRN 3012 - Television News Writing (3)
- JRN 3013 - Television News Production (3)

Total Units in Minor: 16

## **Public Relations Minor**

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, Writing, and Languages, and the Department of Communication Studies.

### **Requirements**

- COM 3030 - Persuasion (3)
- COM 3040 - Organizational Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 4005 - Public Relations Cases and Campaigns (3)
- JRN 2050 - Introduction to Journalism (3)
- JRN 3055 - Public Relations Writing (3)
- MKT 3032 - Principles of Marketing (3)

Minor Total: 21 Units

## **Spanish Minor**

A minor in Spanish is offered to those who wish to complement study in another discipline. Course work can only approximate a bilingual setting and does not necessarily guarantee appropriate language proficiency. Therefore, students are encouraged to immerse themselves in the target language and to complete more than the minimum amount of language classes.

### **Lower Division Requirements:**

- SPA 1001 - Elementary Spanish I (GE) (4)
- SPA 1002 - Elementary Spanish II (GE) (4)
- SPA 2050 - Intermediate Spanish Conversation I (3)
- SPA 2051 - Intermediate Spanish Conversation II (3)

### **Upper Division Requirements:**

- SPA 3000 - Civic Engagement: Conversation, Culture and Community (3)
- SPA 3002 - Advanced Grammar and Reading (3)

Complete a total of two courses from two different categories below:

## Literature

- SPA 3020 - Mexican American Literature and Culture (3)
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film (3)
- SPA 4000 - Peninsular Literature Before 1800 (3)
- SPA 4002 - Peninsular Literature Since 1800 (3)
- SPA 4037 - Latin American Literature Before 1910 (3)
- SPA 4039 - Latin American Literature Since 1910 (3)

## Culture

- SPA 3010 - Latin American Culture and Civilization (3)
- SPA 3015 - Culture and Civilization of Spain (3)

## Linguistics

- SPA 3090 - Current Spanish Linguistics (3)

Total: 26 Units

## Notes:

- Student will undergo a complete summative evaluation of language skills by way of an exit interview.
- Student will successfully complete at least 9 upper-division units in residency.

## **Women's Studies Minor**

The minor in Women's Studies affirms the equality and value of women in the university community and curriculum. Significant women in the Wesleyan/holiness movement have consistently contributed to Christian feminism as a central principle of academic and church life. Point Loma has developed a sequence of courses of interest to both women and men that examines important gender issues across a wide variety of academic fields, in light of the university's commitment to the Christian faith.

The minor in Women's Studies is for students who wish to complement study in another area with an interdisciplinary study of women's status and contribution to the world. The program consists of an introductory course, a capstone course, and a selection of applied topics courses at the upper-division level.

Graduation with a minor in Women's Studies requires the following lower-division and upper-division courses:

## Women's Studies Minor

### Lower-Division Requirements

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)

### Upper-Division Requirements

- POL 3030 - The Development of Feminist Thought (WS) (4)

A minimum of nine units from:

- CHU 3040 - Women in the Christian Tradition (GE) (3)
- COM 3012 - Gender and Communication (WS) (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- HIS 4077 - Gender and Law in the U.S. (WS) (4)
- LIT 3053 - Women Writers (GE) (3)
- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)
- POL 4015 - Women and Politics (WS) (4)
- PSY 3060 - Human Sexuality (3)

Total: 17 Units

## Writing Minor

A minor in Writing is offered to those who wish to complement study in another discipline. The ability to write effectively and interpret written material skillfully makes Writing a marketable minor in all fields.

## Lower-Division Requirements

Select one course from the following:

- WRI 2020 - Introduction to Creative Writing (3)
- JRN 2050 - Introduction to Journalism (3)
- COM 1075 - Scriptwriting for Television and Film (3)

## Upper-Division Requirements

- WRI 3065 - Writing for Professional Careers (3)

Select three courses from the following:

- JRN 3012 - Television News Writing (3) \*
- JRN 3014 - Computer-Assisted Reporting (3) \*
- WRI 3015 - Advanced English Composition (3)
- WRI 3021 - Creative Writing: Poetry (3)
- WRI 3022 - Creative Writing: Fiction (3)
- WRI 3023 - Creative Writing: Creative Nonfiction (3)
- JRN 3045 - Editing (3) \*
- JRN 3055 - Public Relations Writing (3) \*
- WRI 3070 - Writing Theory and Pedagogy (2) \*
- WRI 4020 - Advanced Writing Workshop (3) \*
- JRN 4040 - Magazine Editing and Concepts (3) \*
- WRI 4090 - Special Studies in Writing/Journalism (1-3) \*

- LIN 3012 - Introduction to Linguistics (3)
- LIN 3065 - English Grammar and Usage (3)
- COM 4014 - Long-Form Broadcast News (3) \*
- TRE 4090 - Special Studies in Theatre (1-3) (with playwriting content)

Note(s):

*\*Course carries a pre-requisite.*

Select two units from the following:

- JRN 2015 - Newspaper Workshop (1) \*\*
- WRI 2016 - Literary Magazine Workshop (1) \*\*
- JRN 2017 - Yearbook Workshop (1) \*\*

Note(s):

\*\*Each may be taken more than once (may substitute WRI 4070 - Internship in Writing for two units of JRN 2015/WRI 2016/JRN 2017).

Total: 16-17 Units

## Certificate

### French Language Certificate

A French Language Certificate is for students interested in improving their conversational skills but who cannot complete the minor.

#### Certificate Requirements

*FRE 1001 and FRE 1002 are pre-requisites to FRE 2050.*

- FRE 2050 - Intermediate French I (3)
- FRE 2051 - Intermediate French II (3)
- FRE 3003 - French Conversation (3)

Total Units for the Certificate: 9

### Spanish Language Certificate

A Spanish Language Certificate is for students interested in improving their conversational skills but who cannot complete the minor.

#### Certificate Requirements

*SPA 1001 and SPA 1002 are pre-requisites to SPA 2050.*

- SPA 2050 - Intermediate Spanish Conversation I (3)
- SPA 2051 - Intermediate Spanish Conversation II (3)
- SPA 3000 - Civic Engagement: Conversation, Culture and Community (3)

**Total Units for the Certificate: 9**

## **Department of Music**

### **Purposes**

The mission of the Department of Music is to pursue musical excellence within a community of grace. The department seeks to develop 1) leaders in education, composition, performance, and worship, 2) life-long participants in music who are critical thinkers, discerning listeners, creative composers, skilled performers, and worshipful servants of Jesus Christ, and 3) an atmosphere that fosters individual and corporate growth, high performance standards, community service, the spirit of Christ, and worship and praise.

### **Tradition of Excellence**

For many years, the Department of Music has been recognized for the quality of its programs. Point Loma Nazarene University is accredited by the National Association of Schools of Music (NASM) to offer its programs in Music. Faculty members are performing artists who frequently give recitals, serve as guest conductors, clinicians, or adjudicators and compose or arrange for publication. As a result of the faculty's professional guidance, students are encouraged on toward successful careers.

### **Career Opportunities**

At PLNU, every student is assured of many performance opportunities through the university's performing ensembles. Point Loma music ensembles travel all over the world in addition to performing in churches throughout California, Arizona, Nevada, and New Mexico. Students are actively involved in church music programs in the San Diego area as directors, soloists, worship leaders, and instrumentalists. Point Loma graduates are sought after by schools, churches, and businesses because of the university's academic reputation. A number of graduates go directly into teaching positions and many are involved in church music as full-time music ministers. During the past two decades, students have been accepted into graduate schools such as USC, Indiana University, University of Missouri, University of Illinois, Arizona State University, San Diego State University, and many others. Several graduates have been successful in writing music for television and films, and in music publishing and music editing.

### **Eligibility for all Music Majors**

All students, both entering freshmen and transfer students, are accepted provisionally to the music majors pending final approval by the music faculty and demonstration of all competencies.

### **Scholarships**

Generous scholarships in music are available to students. These are given on the basis of auditions and are renewable. Applications may be secured through the department office at 619-849-2445.

## Performing Ensembles

PLNU offers a full range of performing ensembles, including Choral Union, Concert Choir, Point Loma Singers, Chorale, Vocal Jazz Ensemble, Concert Band, Jazz Band, and Chamber Orchestra. Each music major participates in at least one of these groups. Many students from other departments also participate.

## Private Instruction

Course numbers for each of the applied performance areas are generated by adding 1000 for each year of study in the manner of the example below. Generally, students are admitted to study at the 1000 level and advance to the next level by approval of the music faculty at the applied lesson jury. Transfer students may apply to be advanced to a higher level of study at the time of their jury. A "C" after the course number indicates that the instruction has an emphasis in pop/commercial style rather than classical. Therefore, MUA 1055 is private instruction in voice emphasizing classical technique and MUA1055C is private instruction in voice emphasizing pop and commercial technique.

1st Year	2nd Year	3rd Year	4th Year
<b>Private Voice</b>			
MUA 1055	MUA 2055	MUA 3055	MUA 4055

## Faculty

Charles Celaya, M.M.  
*University of Miami*

William Clemmons, Ph.D.  
*City University of New York*

John Dally, Jr. , D.M.A.  
*Boston University*

Daniel Jackson, D.W.S., Chair  
*Institute for Worship Studies*

Victor Labenske, D.M.A.  
*University of Southern California*

Keith Pedersen, D.M.A.  
*University of Illinois*

Philip Tyler, D.Mus.  
*Florida State University*

## Major

### Commercial Music, B.A.

## Program Learning Outcomes

**Students who complete the program in Commercial Music will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Through the medium of a live concert, demonstrate the development of a public persona whose musical style reflects the musical interests that play to the artists' strengths and personality.
6. Produce a demo showcasing at least five original works that demonstrate the artist's ability to effectively collaborate with other artists, working from an initial concept to a finished product.

## Core Curriculum

*(Required of all Music majors)*

### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Concentrations

In addition to the Music Core Requirements above, students in the Commercial Music Program must choose from one of two concentrations.

- **Performance Concentration**
- **Composition Concentration**

## Performance Concentration Requirements

### Applied Music and Ensembles

- **MUA3000-MUA4000 (4)** - Applied lessons in commercial music performing area - 4 semesters
- MUP 3040 - Commercial Music Ensembles **(1/2)** - 4 semesters

### Commercial Music

- MCM 3024 - Songwriting **(2)**
- MCM 3025 - Style and Improvisation **(2)** - 2 semesters (4 units total)
- MCM 4076 - Senior Project **(1)**

### Music History

- MUH 3035 - History of Popular Music **(3)**

### Music Technology

- MTC 3027 - Digital Audio I **(2)**
- MTC 3028 - Digital Audio II **(2)**
- MTC 3033 - Studio Recording **(2)**
- MTC 4095 - Production Techniques **(2)**

### Entrepreneurship

- MGT 3081 - Creativity and Innovation **(3)**

Total Required: 27 Units

## Composition Concentration Requirements

### Applied Music and Ensembles

- **MUC3000-MUC4000 (4)** - Applied commercial composition lessons - 4 semesters
- MUP 3040 - Commercial Music Ensembles **(1/2)** - 4 semesters

### Commercial Music

- MCM 3024 - Songwriting **(2)**
- MCM 3035 - Arranging I **(2)**
- MCM 4035 - Arranging II **(2)**

- MCM 4076 - Senior Project (1)

## Music History

- MUH 3035 - History of Popular Music (3)

## Music Technology

- MTC 3027 - Digital Audio I (2)
- MTC 3028 - Digital Audio II (2)
- MTC 3033 - Studio Recording (2)
- MTC 4095 - Production Techniques (2)

## Entrepreneurship

- MGT 3081 - Creativity and Innovation (3)

Total Required: 27 Units

Total: 58 Units

### Note(s):

**Transfer students and PLNU students changing their major to Music in the BA degree must complete one ensemble and one unit of applied music each semester.**

A minor from the following list is recommended:

*Theatre, Media Communication, Graphic Design, Business Administration, Marketing or Accounting*

## Composition, Bachelor of Music

### Program Learning Outcomes

*Students who complete the program in Composition will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate mastery of advanced tonal, timbral and formal concepts.
6. Synthesize applications of diverse genres and media in the composition of original works using small and large ensembles, atonal materials, and electronic media.
7. Produce a substantial body of original compositions using a variety of tonal languages, performance forces and expressive content.

## Core Curriculum

*(Required of all Music majors)*

### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Requirements

*For the Bachelor in Music with a concentration in Composition, the following courses are required in addition to the Core Curriculum indicated above:*

- MUC 2052 - Private Composition **(1-2) (2) Units required**
- MUC 3052 - Private Composition **(1-2) (4) Units required**
- MUC 4052 - Private Composition **(1-2) (4) Units required**
- MUC 4077 - Senior Recital in Composition **(0)**
- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
  
- MUA 3013 - Instrumental Conducting **(2) OR**
- MUA 3012 - Choral Conducting and Literature **(2)**
  
- MUH 3033 - Music History and Literature III **(2)**
- *Upper-division music theory* **(12)**
- *Voice (class or private)* **(2)**
- *One-unit Ensembles* **(4)**
- *Music Electives* **(15)**

### **Total additional requirements: 47 units**

Note(s): Transfer students and PLNU students changing their major to Music in the BMUS degree must complete one ensemble and two units of applied music each semester.

## **Special Requirements**

1. A solo Junior Recital of at least 30 minutes given during the junior or senior year is required of Music majors selecting majors in Performance and Music Education. The student must achieve the 3000-level of proficiency before scheduling the Junior Recital. The student must also enroll for the appropriate level of applied study during the semester of the recital performance.
2. Students accepted into performance degree programs must achieve the 3000-level of proficiency in their performing area and give a Junior Recital during their junior year. They must also achieve the 4000-level of proficiency and give a solo Senior Recital, one hour in length, during their senior year. The performance degree programs are reserved for students of marked talent and proficiency.
3. For graduation, Bachelor of Music and Music Education majors must earn credit in a one-unit ensemble for a minimum of eight semesters. Bachelor of Arts majors must earn credit in a one-unit ensemble for a minimum of four semesters. Wind, string, and percussion students meet this requirement by performing in the Concert Band or Chamber Orchestra. Vocalists meet this requirement by performing in Chorale, Concert Choir or Point Loma Singers. Keyboard students may choose either choral or instrumental ensembles.
4. Music majors are required to perform in Monday afternoon student recitals at least once per semester until applied study requirements are completed.

## **Instrumental Performance, Bachelor of Music**

### **Program Learning Outcomes**

*Students who complete the program in Instrumental Performance will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

### **Core Curriculum**

*(Required of all Music majors)*

### **Applied Music and Ensembles:**

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

## Music History:

- MUH 1001 - Introduction to Listening (GE) (2)
- MUH 3031 - Music History and Literature I (2)
- MUH 3032 - Music History and Literature II (2)
- MUH 3034 - World Music (2)
- MUH 4031 - Faith, Life, and Music (2)

## Music Theory:

- MUT 1020 - Music Theory I (4)
- MUT 1021 - Music Theory II (4)
- MUT 2020 - Music Theory III (3)

Total: 31 Units

## Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 1001 - Recital Attendance - 4 semesters (0)
- MUA 3013 - Instrumental Conducting (2)
- MUA 3076 - Junior Recital (0)
- MUA 4076 - Senior Recital (0)
- *Applied Music in major performance area (12)*
- MUE 4051 - Internship in Music (2)
- MUH 3033 - Music History and Literature III (2)
- MUP 3039 - Small Ensemble (1/2) **4 Units required**
- *One-unit Ensembles (4)*
- *Upper-division Theory (6)*
- *Music Electives (11)*

Total: 47 Units

Note(s): Transfer students and PLNU students changing their major to Music in the BMUS degree must complete one ensemble and two units of applied music each semester.

## Music Education, B.A.

### Program Learning Outcomes

**Students who complete the program in Music Education will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.

3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Develop a broad conceptual understanding of music learning in elementary and secondary school settings and pedagogical methods appropriate to each level.
6. Develop more advance applied music skills in a principal performance area.

## Core Curriculum

*(Required of all Music majors)*

### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Requirements

**The following courses are required in addition to the Core Curriculum indicated above:**

- MUE 2001 - Woodwind Instruments **(1)**
- MUE 2002 - Brass Instruments **(1)**
- MUE 2003 - Percussion Instruments **(1)**
- MUE 2004 - String Instruments **(1)**
- MUE 3003 - Choral and Vocal Techniques **(2)**
- MUE 4041 - Elementary School Music Methods **(3)**
- MUE 4054 - Secondary School Music Methods **(3)**

- MUH 3033 - Music History and Literature III (2)
- MUA 1001 - Recital Attendance - 4 semesters (0)
- MUA 3012 - Choral Conducting and Literature (2)
- MUA 3013 - Instrumental Conducting (2)
- MUA 3076 - Junior Recital (0)
- *Applied Music in major performing area* (4)
- *Voice (class or private)* (2)
- *One-unit Ensembles* (4)
- Upper Division MUT (3)
- Music Electives (2)

**Total: 33 Units**

**Note(s):**

Transfer students and PLNU students changing their major to Music in the BA degree must complete one ensemble and one unit of applied music each semester.

Additional requirements for the California Teaching Credential are listed in the School of Education under the Single-Subject credential. The Teaching Credential requires an extra year after the B.A. degree is earned.

## 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3) \*
- EDU 3006 - Principles of Language Acquisition (3) \*
- EDU 4004 - Foundations of Special Education (3) \*
- EDU 4009 - Classroom Assessment and Research Practices (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)
- EDU 4020 - Literacy Instruction for Secondary Teachers (3) \*
- EDU 4021 - General Methods for Secondary Teachers (3) \*
- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)
- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Music with a Concentration in Music and Ministry, B.A.**

### Program Learning Outcomes

**Students who complete the program in Music with a Concentration in Music and Ministry will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.

5. Demonstrate substantial knowledge of the traditions, techniques and materials used in worship music.
6. Complete a semester-long internship where students are placed in church music ministry settings and given leadership responsibilities with the support of a professional music staff member.

## Core Curriculum

*(Required of all Music majors)*

### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Requirements

**The following courses are required in addition to the Core Curriculum indicated above:**

- CMU 2001 - Instruments in Worship **(2)**
- CMU 2002 - Multi-Media for Worship Ministry **(2)**
- CMU 3014 - Music and Worship **(3)**
- CMU 3015 - Church Music Administration and Materials **(2)**
- CMU 4033 - Hymnology **(3)**
- CMU 4051 - Internship in Church Music **(2)**
- MUA 3012 - Choral Conducting and Literature **(2)**
- MUH 3033 - Music History and Literature III **(2)**

Total: 16 Units

## Note(s):

Transfer students and PLNU students changing their major to Music in the BA degree must complete one ensemble and one unit of applied music each semester.

**A minor from the following list is recommended:**

Youth Ministry, Theatre, Communication, or Media Communication

## Music, B.A.

### Program Learning Outcomes

*Students who complete the program in Music will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.

### Core Curriculum

*(Required of all Music majors)*

#### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

#### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

#### Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Requirements

**In addition to the Core Curriculum Requirements Above:**

- **Choose 2 units of upper division MUH chosen from: MUH 3009, MUH 3011, or MUH 3033**
- **Choose 2 units from upper division MUE OR any two from MUE 2001, MUE 2002, MUE 2003 and MUE 2004**
- **AND an additional 13 units of which 7 must be Upper Division**

Total: 17 Units

## Note(s):

Transfer students and PLNU students changing their major to Music in the BA degree must complete one ensemble and one unit of applied music each semester.

*A minor from the following list is recommended:*

Theatre, Media Communication, or Business Administration

Accepting Associate Degree for Transfer (ADT)

## **Piano Performance, Bachelor of Music**

### Program Learning Outcomes

**Students who complete the program in Piano Performance will be able to:**

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

### Core Curriculum

*(Required of all Music majors)*

### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters

- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

### Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

### Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 1001 - Recital Attendance - 4 semesters **(0)**
- MUA 2056 Piano **(4)**
- MUA 3056 Piano **(4)**
- MUA 4056 Piano **(4)**
- MUA 3013 - Instrumental Conducting **(2)** *OR*
- MUA 3012 - Choral Conducting and Literature **(2)**
- MUA 3076 - Junior Recital **(0)**
- MUA 4076 - Senior Recital **(0)**
- Voice (class or private) **(2)**
- MUE 3011 - Piano Pedagogy I **(2)**
- MUH 3011 - Piano Literature **(3)**
- MUH 3033 - Music History and Literature III **(2)**
- MUP 3039 - Small Ensemble **(1/2) 2 Units required**
- *One-unit Ensembles* **(4)**
- Upper-division Theory **(6)**
- Music Electives **(10)**

Total: 47 Units

Note(s): Transfer students and PLNU students changing their major to Music in the BMUS degree must complete one ensemble and two units of applied music each semester.

## Vocal Performance, Bachelor of Music

### Program Learning Outcomes

*Students who complete the program in Vocal Performance will be able to:*

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, and keyboard musicianship.
2. Develop applied music skills in one primary performance area in both solo and ensemble settings.
3. Become conversant with the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Develop and articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of the music discipline.
5. Demonstrate essential knowledge of the literature and pedagogy of the principal performing area.
6. Develop substantially more advanced applied music skills in a principal performance area.

### Core Curriculum

*(Required of all Music majors)*

#### Applied Music and Ensembles:

- MUA 1001 - Recital Attendance - 4 semesters **(0)** - 4 semesters
- MUA 2001 - Piano Proficiency Exam **(0)**
- MUA 2012 - Beginning Conducting **(2)**
- *Applied Music in major performing area* **(4)**
- *One-unit Ensembles* **(4)**

#### Music History:

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3031 - Music History and Literature I **(2)**
- MUH 3032 - Music History and Literature II **(2)**
- MUH 3034 - World Music **(2)**
- MUH 4031 - Faith, Life, and Music **(2)**

#### Music Theory:

- MUT 1020 - Music Theory I **(4)**
- MUT 1021 - Music Theory II **(4)**
- MUT 2020 - Music Theory III **(3)**

Total: 31 Units

## Requirements

*The following courses are required in addition to the Core Curriculum indicated above:*

- MUA 1001 - Recital Attendance - 4 semesters **(0)**
- MUA 2050 - Diction for Singers I **(1)**
- MUA 2051 - Diction for Singers II **(1)**
- MUA 2055 - Private Voice **(1-2) (4 units required)**
- MUA 3055 - Private Voice **(1-2) (4 units required)**
- MUA 4055 - Private Voice **(1-2) (4 units required)**
- MUA 3012 - Choral Conducting and Literature **(2)**
- MUA 3076 - Junior Recital **(0)**
- MUA 4076 - Senior Recital **(0)**
- MUE 3010 - Vocal Pedagogy **(2)**
- MUE 4051 - Internship in Music **(2)**
- MUH 3009 - Vocal Literature I **(2)**
- MUH 3033 - Music History and Literature III **(2)**
- *Upper-division Theory (6)*
- *One-unit Ensembles (4)*
- *Music Electives (8)*

Three units from:

- MUA 3031 - Acting for Singers **(1)**
- MUA 3032 - Musical Theatre Production **(1-2)**

Total: Units 47

Note(s):

Vocal Performance majors must complete their General Education language requirement in French or German. Approved transfer courses in Italian will also fulfill this requirement.

Transfer students and PLNU students changing their major to Music in the BMUS degree must complete one ensemble and two units of applied music each semester.

## Minor

### Music Minor

## Requirements

- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUT 1020 - Music Theory I **(4)**
- *Applied study in instrument or voice (2)*
- *One-unit Ensembles (2)*
- *Additional upper-division units in Music (8)*

- MUH 3033 - Music History and Literature III (2)  
OR
- MUH 3034 - World Music (2)

Total: 20 Units

## College of Natural and Social Sciences

### Administration

Dean of the Colleges: James Daichendt, Ed.D.  
Office: Bond Academic Center, Deans' Suite  
Telephone: (619) 849-2706  
Fax: (619) 849-7018  
Email: [gdaichen@pointloma.edu](mailto:gdaichen@pointloma.edu)  
Administrative Assistant: Kami Leone

### General Information

The College of Natural and Social Sciences centers on areas of study at Point Loma Nazarene University that focus on preparation in the natural and social sciences. Programs in the natural and social sciences are offered through eight academic departments. Course offerings in the natural and social sciences are designed to help students explore a wide range of people-related, theoretical, and practical knowledge and skills. The college's highly qualified faculty members are professionally active and committed to engaging students in the learning experience. By emphasizing the university's mission to engage and challenge minds, to form and model character, and to see service as an expression of faith, the faculty challenge students to become life-long learners, to value the process of personal and intellectual development, and to give their lives in meaningful service to others.

### Credential and Internship Programs

Commission on Teacher Credentialing (CTC-approved) teaching credentials in Preliminary Level I: Multiple Subject, Single Subject, Educational Specialist: Mild/Moderate, Moderate/Severe, Clear Teaching Credential programs; Preliminary and Clear Administrative Services Credential; Pupil Personnel Services Credential; Internship programs. CLAD and Reading certificate programs.

### Centers

Point Loma Nazarene University maintains several centers within the organization of the College of Natural and Social Sciences, including:

- The Center for Justice and Reconciliation
- The Early Childhood Learning Center
- The Margaret Stevenson Center for Women's Studies

### Accreditations and Affiliations

Point Loma Nazarene University is accredited by the WASC Senior College and University Commission, the Association of Collegiate Business Schools and Programs (ACBSP), the Commission on Accreditation of Athletic

Training Education (CAATE), the American Dietetic Association (ADA), the California Commission on Teacher Credentialing (CCTC), and the Commission on Collegiate Nursing Education (CCNE). **WASC may be contacted at 985 Atlantic Avenue, Suite 100, Alameda, CA 94501, or by telephone at 510-748-9001.**

## Academic Organization

The College of Natural and Social Sciences, under the direction of the dean of the College, functions with the supervision of academic departments, schools, and centers. The following is a list of chairs, directors, and deans in the college.

### Departments and Schools

**Department of Biology** - Dawne Page, chair

**Department of Chemistry** - Matthieu Rouffet, chair

**Department of Mathematics, Information, and Computer Sciences** - Maria Zack, chair

**Department of Kinesiology** - Brandon Sawyer, co-chair; Jeffrey Sullivan, co-chair

**Department of Physics and Engineering** - Maria Zack, chair

**Department of Psychology** - Kendra Oakes-Mueller, chair

**Department of Sociology, Social Work, and Family Sciences** - Susan DeCristofaro Rogers, co-chair; Kevin Modesto, co-chair

### Regional Centers

**Bakersfield** - Jill Hamilton-Bunch, associate dean

**Mission Valley** - Deb Erickson, director

### Centers and Institutes

**The Center for Justice and Reconciliation** - Kim Berry Jones, director

**The Early Childhood Learning Center** - Susan Rogers, academic director

**The Margaret Stevenson Center for Women's Studies** - Kelli McCoy, co-director; Kara Lyons-Pardue, co-director

## Curricula

Students should refer to the following pages in this Catalog for a complete listing of program characteristics, degree requirements, and descriptions of courses offered by academic areas within the College of Natural and Social Sciences.

## College of Natural and Social Sciences

### Department of Biology

#### Programs

- • Biology, B.A.
- • Biology, B.S.
- • Biology-Chemistry, B.S. (Biology)
- • Biology: Cell and Molecular Biology Minor
- • Biology: Environmental Biology Minor

- • Biology: Organismal Biology Minor
- • Computational Science Minor - Biology/Environmental Science (Biology)
- • Computational Science Minor - Biology/Genetics (Biology)
- • Environmental Science (Biology), B.S.
- • Science-Business Minor (Science Majors - Biology Department)
- • Science-Marketing Minor (Science Majors - Biology Department)

## Department of Chemistry

### Programs

- • Biology-Chemistry, B.S. (Chemistry)
- • Chemistry, B.S.
- • Computational Science Minor - Chemistry (Chemistry)
- • Environmental Science (Chemistry), B.S.
- • Science-Business Minor (Science Majors - Chemistry Department)
- • Science-Marketing Minor (Science Majors - Chemistry Department)

## Department of Kinesiology

### Programs

- • Applied Health Science, B.S.
- • Health and Human Performance, B.A.

## Department of Mathematical, Information, and Computer Sciences

### Programs

- • Computational Science Minor - Biology/Environmental Science (Mathematics and Computer Science)
- • Computational Science Minor - Biology/Genetics (Mathematics and Computer Science)
- • Computational Science Minor - Chemistry (Mathematics and Computer Science)
- • Computational Science Minor - Physics (Mathematics and Computer Science)
- • Computational Science Minor - Psychology (Mathematics and Computer Science)
- • Computer Science Minor
- • Computer Science: Cyber Security, B.S.
- • Computer Science: Software Engineering, B.A.
- • Computer Science: Software Engineering, B.S.
- • Computer Science: Technical Applications, B.S.
- • Computer Technology - Business Minor (Math and Computer Science Majors)
- • Computer Technology - Marketing Minor (Math and Computer Science Majors)
- • Data Science, B.S.
- • General Engineering: Computer Science Engineering, B.S.E. (Mathematics and Computer Science)
- • Information Systems (Mathematical, Information, and Computer Science), B.S.
- • Mathematics Minor
- • Mathematics, B.A.

- • Mathematics, B.A. for Associate Degree for Transfer (ADT) Students
- • Mathematics, B.S.
- • Software Engineering Certificate
- • Software Engineering Minor

## **Department of Physics and Engineering**

### **Programs**

- • Computational Science Minor - Physics (Physics and Engineering)
- • General Engineering: Computer Science Engineering, B.S.E. (Physics and Engineering)
- • General Engineering: Electrical Engineering, B.S.E.
- • General Engineering: Mechanical Engineering Physics, B.S.E.
- • Physics Minor
- • Physics, B.A.
- • Physics, B.A. for Associate Degree Transfer (ADT) Students
- • Physics, B.S.

## **Department of Psychology**

### **Programs**

- • Computational Science Minor - Psychology (Psychology)
- • Pre-Therapeutic Psychology Minor
- • Psychology, B.A.

## **Department of Sociology, Social Work, and Family Sciences**

### **Programs**

- • Child and Adolescent Development, B.A.
- • Child Development Minor
- • Criminal Justice Minor
- • Dietetics, B.S.
- • Nutrition Minor
- • Nutrition, B.A.
- • Social Work, B.A.
- • Sociology Minor
- • Sociology, B.A.

## **Department of Biology**

### **Purposes**

The objectives of the Biology department coincide with the Point Loma Nazarene University mission summarized in the phrase: *To Teach, To Shape, To Send*.

**To Teach:** The department's commitment is to provide students the opportunity to build a broad foundation in the major disciplines of Biology, in the process of science skills, and in the critical thinking/quantitative skills that are required to apply their education to real world settings.

**To Shape:** In addition to the formal academic interactions, each student has opportunities to enter into mentoring relationships with department faculty through advising, lab assisting, research experiences, and departmental social functions. In these contexts, students can expect to dialogue about issues relating to their own personal and professional goals, the interface between the field of biology and society, and the relationship between faith and science.

**To Send:** The graduates of the Biology department will be able to apply both their faith and education in biology-related professions such as medicine, allied health fields, education, or industry. They will feel confident that they have been well prepared to contribute in a positive way in these fields, and society in general.

## **Tradition of Excellence**

The Department of Biology is dedicated to the success of the students, and offers a wealth of opportunities for students who are interested in pursuing work in science related fields. For students whose interests and academic needs lie in both biology and chemistry, an interdepartmental major in Biology-Chemistry has been designed to prepare students for biochemistry, immunology, molecular biology, pharmacology, physiology, medicine, and dentistry. Biology students have the opportunity to work side-by-side with professors doing faculty-assisted research projects, and may become co-authors on scholarly papers in national and international scientific journals. Many students present research at various science conferences. Students also have access to sophisticated instrumentation and computational resources for use in science courses and research labs.

All of these opportunities have been given to students through the help of numerous grants from governmental agencies such as the National Institutes of Health and the National Science Foundation, various private organizations including the Howard Hughes Medical Institute, cooperation from university administration, and strong financial backing by Biology and Chemistry alumni. Since 1977, alumni of the Department of Biology have contributed an average of more than \$12,000 per year in support of science instruction and research programs. Students who graduate with a degree from the Department of Biology leave PLNU prepared for graduate schools or careers in industry. Over the last 25 years, approximately 80 percent of PLNU's applicants have gained acceptance to medical schools (roughly twice the national average); the acceptance rate for Biology and Chemistry students applying to graduate (M.A., M.S., and Ph.D.) and dental school programs is over 95 percent.

## **Au Sable Environmental Field Studies Program**

Summer field courses in environmental biology are offered by the Au Sable Institute of Environmental Studies, a Christian organization providing field-based classes that emphasize Christian environmental stewardship for 51 participating Christian colleges and universities. Courses are offered during a 3-week May term and two 5-week summer sessions from June to early August. May term students take one course (4 units) at the Great Lakes, Costa Rica, or India campus; Summer Session students take 2 courses (8 units) at the Great Lakes or Pacific Rim campus. All courses transfer in as upper-division electives for ENV5 B.S. or Biology B.S./B.A. majors, or ENVB or SUSM minors. Students may apply for competitive merit-based financial aid such as the Au Sable Fellowship to help offset the program tuition and fees. Interested students should contact the Au Sable Institute representative in the Biology department, Dr. Mike Mooring. For further information, see the Au Sable website at [www.ausable.org](http://www.ausable.org).

## **Faculty**

Dianne Anderson, Ph.D.  
*University of California, San Diego and San Diego State University*

Walter Cho, Ph.D.  
*Massachusetts Institute of Technology and Woods Hole Oceanographic Institution*

David Cummings, Ph.D.  
*University of Idaho*

Michael Dorrell, Ph.D.  
*The Scripps Research Institute, La Jolla, California*

Rebecca Flietstra, Ph.D.  
*University of Kansas Medical Center*

Kristopher Koudelka, Ph.D.  
*The Scripps Research Institute, La Jolla, California*

Jennifer Lineback, Ph.D.  
*University of California, San Diego and San Diego State University*

April Maskiewicz Cordero, Ph.D.  
*University of California, San Diego and San Diego State University*

Michael Mooring, Ph.D.  
*University of California, Davis*

Dawne Page, Ph.D., Chair  
*University of California, San Francisco*

Brandon Sawyer, Ph.D.  
*Arizona State University*

Heidi Woelbern, Ph.D.  
*University of California, Los Angeles*

## **Major**

### **Biology, B.A.**

#### **Program Learning Outcomes**

##### **Students who complete the B.A. program in Biology will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).
2. Participate in the life of the Biology Department by involvement in one or more of the following areas: research, biology clubs, and/or various positions of responsibility serving as graders, tutors, and/or teaching assistants.
3. Develop a rationally defensible integration of science and faith.
4. Be prepared for post-graduate studies or science-related careers.

#### **Lower-Division Requirements**

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3) \*\***
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3) \*\***
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- BIO 2012 - Organismal Biology **(3)**
- BIO 2012L - Organismal Biology Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4) \*\***
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- MTH 1044 - Calculus With Applications (GE) **(4) \*\***

Total: 29 Units

### Upper-Division Requirements

- BIO 3045 - Genetics **(3)**
- BIO 3045L - Genetics Laboratory **(1)**
- BIO 3052 - Research Methodology **(3)**
- BIO 3063 - Conservation Ecology **(3)**
- BIO 3063L - Conservation Ecology Laboratory **(1)**
- BIO 4097 - Biology Seminar **(1)**
- MTH 3063 - Calculus Based Statistics With R **(3)**

Upper Division Total: 15 Units

Take a minimum of 12 units of electives from the following options:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology **(2)**
- BIO 3015 - Microbiology **(3)**
- BIO 3015L - Microbiology Laboratory **(1)**
- BIO 3023 - Introduction to Oceanography **(3)**
- BIO 3023L - Introduction to Oceanography Laboratory **(1)**
- BIO 3033 - Marine Biology **(3)**
- BIO 3033L - Marine Biology Laboratory **(1)**
- BIO 3040 - Field Biology: Neotropical Ecology **(2)**
- BIO 3050 - Advanced Cell Biology **(3)**
- BIO 3050L - Advanced Cell Biology Laboratory **(1)**
- BIO 3080 - Molecular Biology **(3)**
- BIO 3080L - Molecular Biology Laboratory **(1)**
- BIO 3090 - Immunology **(3)**
- BIO 3090L - Immunology Laboratory **(1)**
- BIO 4000 - Developmental Biology **(3)**

- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4050 - Advanced Biochemistry (3)
- BIO 4050L - Advanced Biochemistry Lab (1)
- BIO 4063 - Methods of Teaching Secondary Science (3)
- BIO 4070 - Neuroscience (3)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)
- BIO 4083 - Introduction to Geographic Information Systems (GIS) (3)
  
- BIO 4090 - Internship in Biology (1-3)
- **OR**
- BIO 4099 - Research in Biology (1-3)

Upper Division Elective Total: 12 Units

Bachelor of Arts Total: 56 Units\*\*

\*\* 12 units meet general education requirements

#### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses

cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3) \*
- EDU 3006 - Principles of Language Acquisition (3) \*
- EDU 4004 - Foundations of Special Education (3) \*
- EDU 4009 - Classroom Assessment and Research Practices (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)
- EDU 4020 - Literacy Instruction for Secondary Teachers (3) \*
- EDU 4021 - General Methods for Secondary Teachers (3) \*
- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)
- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Biology, B.S.**

### Program Learning Outcomes

**Students who complete the B.S. program in Biology will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).

2. Participate in the life of the Biology Department by involvement in one or more of the following areas: research, biology clubs, and/or various positions of responsibility serving as graders, tutors, and/or teaching assistants.
3. Develop a rationally defensible integration of science and faith.
4. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)** \*\*
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)** \*\*
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- BIO 2012 - Organismal Biology **(3)**
- BIO 2012L - Organismal Biology Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4)** \*\*
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- MTH 1044 - Calculus With Applications (GE) **(4)** \*\*
- PHY 1044 - General Physics I (GE) **(3)** \*\*
- PHY 1044L - General Physics I Lab (GE) **(1)**
- PHY 1054 - General Physics II (GE) **(3)**
- PHY 1054L - General Physics II Lab (GE) **(1)**

Total: 37 Units

## Upper-Division Requirements

- BIO 3045 - Genetics **(3)**
- BIO 3045L - Genetics Laboratory **(1)**
- BIO 3052 - Research Methodology **(3)**
- BIO 3063 - Conservation Ecology **(3)**
- BIO 3063L - Conservation Ecology Laboratory **(1)**
- BIO 3080 - Molecular Biology **(3)**
- BIO 3080L - Molecular Biology Laboratory **(1)**
- BIO 4097 - Biology Seminar **(1)**
- MTH 3063 - Calculus Based Statistics With R **(3)**

Upper Division Total: 19 Units

Take a minimum of 11 units of electives from the following options:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology **(2)**

- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4050 - Advanced Biochemistry (3)
- BIO 4050L - Advanced Biochemistry Lab (1)
- BIO 4063 - Methods of Teaching Secondary Science (3)
- BIO 4070 - Neuroscience (3)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)
- BIO 4083 - Introduction to Geographic Information Systems (GIS) (3)
  
- BIO 4090 - Internship in Biology (1-3)
- OR**
- BIO 4099 - Research in Biology (1-3)
  
- **Approved Off-Campus (1-4)**

Upper Division Elective Total: 11 Units

Bachelor of Science Total: 67 Units \*\*

\*\* 12 units meet general education requirements.

### **Biology-Chemistry, B.S. (Biology)**

The interdepartmental major in Biology-Chemistry is designed for students whose academic needs and interests include both biology and chemistry. A large segment of contemporary scientific investigation lies at the intersection of these two fields. Areas open to students by this preparation include medicine, dentistry, and graduate disciplines such as biochemistry, physiology, and molecular biology.

### **Program Learning Outcomes**

**Students who complete the program in Biology-Chemistry will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.
2. Apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations.
4. Participate in the life of the Biology and/or Chemistry Department by involvement in one or more of the following areas: research, biology and/or chemistry clubs, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
5. Develop a rationally defensible integration of science and faith.
6. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- BIO 2012 - Organismal Biology **(3)**
- BIO 2012L - Organismal Biology Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4)**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2013 - Analytical Chemistry **(3)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- CHE 2096 - Organic Chemistry II **(3)**
- CHE 2096L - Organic Chemistry II Lab **(1)**
- MTH 1044 - Calculus With Applications (GE) **(4)**

## Choose one sequence: 8 Units

- PHY 1044 - General Physics I (GE) **(3)**
- PHY 1044L - General Physics I Lab (GE) **(1) AND**
  
- PHY 1054 - General Physics II (GE) **(3)**
- PHY 1054L - General Physics II Lab (GE) **(1)**
- OR**
- PHY 2044 - University Physics I (GE) **(3)**
- PHY 2044L - University Physics I Lab (GE) **(1) AND**
  
- PHY 2054 - University Physics II **(3)**
- PHY 2054L - University Physics II Lab **(1)**

Total: 43 Units

## Upper-Division Requirements

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 4097 - Biology Seminar (1)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
  
- BIO 4050 - Advanced Biochemistry (3) *and*
- BIO 4050L - Advanced Biochemistry Lab (1)
- **OR**
- CHE 4050 - Advanced Biochemistry (3) **and**
- CHE 4050L - Advanced Biochemistry Lab (1)

One course from:

- CHE 3026 - Physical Chemistry II (3)
- CHE 3051 - Organic Structure Elucidation (2)
- CHE 3070 - Instrumental Analysis (2)
- CHE 4053 - Advanced Organic Chemistry (2)
- CHE 4066 - Bioinorganic Chemistry (2)
- CHE 4068 - Advanced Inorganic Chemistry (3)

At least five units from:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3052 - Research Methodology (3)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)

- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4070 - Neuroscience (3)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)

Total: 24-25 Units

Bachelor of Science Total: 68-69 Units

## **Environmental Science (Biology), B.S.**

The interdepartmental major in Environmental Science is designed to prepare students to monitor the quality of the environment, interpret the impact of human actions on terrestrial and aquatic ecosystems, and develop strategies for ecosystem restoration. Career opportunities in this field include conservation biology, environmental analysis, wildlife biology, environmental education, ecological research, environmental planning, resource management, and environmental chemistry.

### **Program Learning Outcomes**

**Students who complete the program in Environmental Science will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological.
2. Apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.
5. Develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.
6. Be prepared for post-graduate studies or science-related careers.

### **Lower-Division Requirements**

- BIO 1002 - Environment and People (GE) (4) \*\*
- BIO 2010 - Cell Biology and Biochemistry (GE) (3) \*\*
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3) \*\*
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)
- CHE 1052 - General Chemistry I (GE) (4) \*\*
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)

- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- MTH 1044 - Calculus With Applications (GE) (4) \*\*

Choose one of three: 3 Units

- ECO 1001 - Principles of Macroeconomics (GE) (3) \*\*
- ECO 1002 - Principles of Microeconomics (GE) (3) \*\*
- SOC 2001 - Cultural Anthropology (GE) (3) \*\*

Total: 39 Units

### Upper-Division Requirements

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- BIO 4083 - Introduction to Geographic Information Systems (GIS) (3)
- BIO 4097 - Biology Seminar (1)
- CHE 3070 - Instrumental Analysis (2)
- MTH 3063 - Calculus Based Statistics With R (3)

Total: 17 Units

### Upper-Division Electives (12 units minimum)

*Of the 12 required upper division electives, a minimum of 8 units of upper-division electives are required from approved environmental off-campus programs. Both departmental chairs (Biology and Chemistry) or their designees are responsible for approving all off-campus courses. At least one-half of upper-division units in the major must be taken at PLNU.*

*The following courses can be used to transfer in these 8 units:*

- EVS 3096 - Advanced Biology (3)
- EVS 3097 - Advanced Ecology (3)
- EVS 3098 - Advanced Ecological Applications (3)
- EVS 3099 - Public Policy and Stewardship (3)

### Advanced Science Electives (8 units minimum)

*One or more approved off-campus environmental course(s) may fulfill part or all of this requirement. Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)
  
- BIO 4050 - Advanced Biochemistry (3)
- BIO 4050L - Advanced Biochemistry Lab (1)
- OR**
- CHE 4050 - Advanced Biochemistry (3)
- CHE 4050L - Advanced Biochemistry Lab (1)
  
- CHE 2096 - Organic Chemistry II (3)
- CHE 2096L - Organic Chemistry II Lab (1)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CHE 3051 - Organic Structure Elucidation (2)
- CHE 4066 - Bioinorganic Chemistry (2)
- CHE 4068 - Advanced Inorganic Chemistry (3)

### Other Related Electives (4 units minimum)

*Students can customize their degree by taking one course from each of the two categories below. One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

#### Methodology:

- BIO 3052 - Research Methodology (3)
- BIO 4090 - Internship in Biology (1-3)
- BIO 4099 - Research in Biology (1-3)
- CHE 4090 - Internship in Chemistry (1-3)
- CHE 4099 - Research in Chemistry (1-2)

#### Public Policy and Stewardship:

- BUS 4075 - Sustainability in Action (3)
- PHL 3060 - Philosophy and the Sciences (3)

- POL 2090 - World Regional Geography (3)
- POL 4035 - Global Governance (4)
- POL 4041 - Issues in Public Policy (4)

Upper-Division Total: 29 Units

Bachelor of Science Total: 68 Units \*\*

*\*\*15 units meet general education requirements.*

## **Minor**

### **Biology: Cell and Molecular Biology Minor**

#### Required

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)

Eight units from the following electives:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3052 - Research Methodology (3)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)

Total: 25 Units

### **Biology: Environmental Biology Minor**

## Required

- BIO 1002 - Environment and People (GE) (4)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
  
- CHE 1001 - Chemistry and Society (GE) (4)  
OR
- CHE 1052 - General Chemistry I (GE) (4) and
- CHE 1052L - General Chemistry I Lab (GE) (1)

Lower Division Total: 12-13 Units

## Upper-Division Requirements

- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)

Choose 5 units of Approved Electives from the following:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)
- BIO 4083 - Introduction to Geographic Information Systems (GIS) (3)

## Off-Campus Requirement

- **One approved off-campus field-immersion course (4)**

Upper Division Total: 13 Units

Total for Minor: 25-26 Units

## **Biology: Organismal Biology Minor**

## Required

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)

## Eight units from the following electives:

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)

Total: 24 Units

## **Computational Science Minor - Biology/Environmental Science (Biology)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## **Courses for Biology/Environmental Science Emphasis**

### **Lower-Division Requirements**

- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)

- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)

## Upper-Division Requirements

- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- CSC 3002 - UNIX and Python Scripting for Computational Science (2)

### Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

### Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

## Biology Major - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 3063 - Calculus Based Statistics With R (3)

### Minor Total for Biology Majors: 26

## Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- 
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

### Minor Total for Computer Science Majors: 28

## **Mathematics Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

## **Minor Total for Mathematics Majors: 26**

## **Computational Science Minor - Biology/Genetics (Biology)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## **Core Courses for Biology/Genetics Emphasis**

### **Lower-Division Requirements**

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)

### **Upper-Division Requirements**

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CSC 3002 - UNIX and Python Scripting for Computational Science (2)

### **Choose one course from:**

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

### **Project (Choose at least 3 units):**

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)

- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

### **Biology Major - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 3063 - Calculus Based Statistics With R (3)

### **Minor Total for Biology Majors: 26**

### **Computer Science Majors - Required Courses**

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Minor Total for Computer Science Majors: 28**

### **Mathematics Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Minor Total for Mathematics Majors: 26**

### **Science-Business Minor (Science Majors - Biology Department)**

Science-Business Minor for Biology, Chemistry and Environmental (Science majors)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with business knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)

- MGT 2012 - Principles of Management (3)
- MKT 3032 - Principles of Marketing (3)
- MTH 1044 - Calculus With Applications (GE) (4)  
OR
- MTH 1064 - Calculus I (GE) (3)

Select one course from:

- BUS 4075 - Sustainability in Action (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4016 - Perspectives on Leadership (3)
- MGT 4070 - Nonprofit Organization Management (3)
- MGT 4084 - Operations Management (3)

28 total units

### **Science-Marketing Minor (Science Majors - Biology Department)**

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with marketing knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

### **Science-Marketing Minor for Biology, Chemistry, and Environmental Science Majors**

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- MKT 3032 - Principles of Marketing (3)

Choose one (1) Mathematics course:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)

Select two (2) courses from the following Marketing courses:

- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)

Total Minor: 24 units

*\*The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.*

## Department of Chemistry

### Purposes

- To prepare students for entrance into graduate school and eventually for professional work in chemistry or related fields;
- To prepare students, who don't wish to attend graduate school, to enter the field of industrial chemistry immediately after graduation;
- To prepare students to teach chemistry or physical science at the secondary education level;
- To provide students with the opportunity to participate as partners with their professors in nationally reported research projects;
- To provide students with a general knowledge of chemistry and its relation to society.

### Tradition of Excellence

The strength and reputation of the Chemistry program has been well established over the past five decades. Quality classroom instruction coupled with personal contact with caring faculty lays the foundation for students' success. Small classes and deliberate faculty mentoring provide students the knowledge and confidence to pursue their career goals. At PLNU, the faculty understand that chemistry is a laboratory science, and therefore almost all courses in the major have a significant laboratory component. Students become very familiar with the instrumental tools of modern chemical investigation.

Undergraduate research has, and continues to be, the hallmark of the Chemistry department. Hundreds of students have had the opportunity to work side by side with university faculty in the summer research programs. Results of these studies are published in peer-reviewed professional journals with students included as co-authors. Over 150 such articles have been published since 1965 as part of the Chemistry department undergraduate research program. Most importantly, students learn to think like scientists as they partner with faculty mentors to tackle the various obstacles and triumphs that original research presents. Undergraduate research requires funding and the Chemistry faculty has been very successful in competing for public and private grants (the total exceeds \$2 million). As remarkable evidence of loyalty and support, Department alumni also contribute nearly \$40,000 annually to partially fund the kind of research from which they themselves benefited. Students, faculty, and alumni connect in significant ways to make chemistry education at PLNU a respected and vital experience.

### Career Opportunities

The professional success of graduates in the Department of Chemistry attests to the quality of the program. More than 90 percent of students who have applied to health profession schools (medical, dental, optometry, pharmacy, and veterinary) were accepted. Higher percentages are accepted into Ph.D. programs in Chemistry and related fields. PLNU alumni can be found on the faculty of numerous medical schools and universities. They are also making important contributions in the practice of medicine, in school classrooms and industrial labs. The same quality undergraduate education is available to all students, and the department is proud of each of our graduates.

### Faculty

Laurance Beauvais, Ph.D.  
*University of California, Berkeley*

Sara Choung, Ph.D.  
*University of California, Berkeley*

Ariane Jansma, Ph.D.  
*University of California, San Diego*

Katherine Maloney, Ph.D.  
*Cornell University*

Marc Perry, Ph.D.  
*New Mexico State University*

Matthieu Rouffet, Ph.D., Chair  
*School of Pharmacy, Reims, France*

Lane Votapka, Ph.D.  
*University of California, San Diego*

## Major

### Biology-Chemistry, B.S. (Chemistry)

The interdepartmental major in Biology-Chemistry is designed for students whose academic needs and interests include both biology and chemistry. A large segment of contemporary scientific investigation lies at the intersection of these two fields. Areas open to students by this preparation include medicine, dentistry, and graduate disciplines such as biochemistry, physiology, and molecular biology.

## Program Learning Outcomes

**Students who complete the program in Biology-Chemistry will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.
2. Apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations.
4. Participate in the life of the Biology and/or Chemistry Department by involvement in one or more of the following areas: research, biology and/or chemistry clubs, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
5. Develop a rationally defensible integration of science and faith.
6. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**

- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- CHE 2096 - Organic Chemistry II (3)
- CHE 2096L - Organic Chemistry II Lab (1)
- MTH 1044 - Calculus With Applications (GE) (4)

Choose one sequence: 8 Units

- PHY 1044 - General Physics I (GE) (3)
- PHY 1044L - General Physics I Lab (GE) (1) **AND**
- PHY 1054 - General Physics II (GE) (3)
- PHY 1054L - General Physics II Lab (GE) (1)
- OR**
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1) **AND**
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total: 43 Units

### Upper-Division Requirements

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 4097 - Biology Seminar (1)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- BIO 4050 - Advanced Biochemistry (3) *and*
- BIO 4050L - Advanced Biochemistry Lab (1)
- OR**
- CHE 4050 - Advanced Biochemistry (3) **and**
- CHE 4050L - Advanced Biochemistry Lab (1)

One course from:

- CHE 3026 - Physical Chemistry II (3)
- CHE 3051 - Organic Structure Elucidation (2)
- CHE 3070 - Instrumental Analysis (2)
- CHE 4053 - Advanced Organic Chemistry (2)
- CHE 4066 - Bioinorganic Chemistry (2)
- CHE 4068 - Advanced Inorganic Chemistry (3)

At least five units from:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3052 - Research Methodology (3)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4070 - Neuroscience (3)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)

Total: 24-25 Units

Bachelor of Science Total: 68-69 Units

## **Chemistry, B.S.**

### Program Learning Outcomes

**Students who complete the program in Chemistry will be able to:**

1. Apply key concepts and principles in analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry.
2. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterizations and analyses.
3. Participate in the life of the Chemistry Department by involvement in one or more of the following areas: research, chemistry club, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.
4. Be prepared for post graduate studies or a science-related career.

## Lower-Division Requirements

- CHE 1052 - General Chemistry I (GE) **(4)**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2013 - Analytical Chemistry **(3)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- CHE 2096 - Organic Chemistry II **(3)**
- CHE 2096L - Organic Chemistry II Lab **(1)**
  
- MTH 1044 - Calculus With Applications (GE) **(4)**  
**OR**
- MTH 1064 - Calculus I (GE) **(3)**
  
- MTH 1074 - Calculus II **(3)**
- PHY 2044 - University Physics I (GE) **(3)**
- PHY 2044L - University Physics I Lab (GE) **(1)**
- PHY 2054 - University Physics II **(3)**
- PHY 2054L - University Physics II Lab **(1)**

Total: 36 Units

## Upper-Division Requirements

- CHE 3025 - Physical Chemistry I **(3)**
- CHE 3025L - Physical Chemistry I Lab **(1)**
- CHE 3026 - Physical Chemistry II **(3)**
- CHE 3027 - Physical Chemistry II Laboratory **(1)**
- CHE 3051 - Organic Structure Elucidation **(2)**
- CHE 3070 - Instrumental Analysis **(2)**
- CHE 4050 - Advanced Biochemistry **(3)**
- CHE 4050L - Advanced Biochemistry Lab **(1)**
- CHE 4053 - Advanced Organic Chemistry **(2)**
- CHE 4054 - Advanced Organic Chemistry Laboratory **(1)**
- CHE 4066 - Bioinorganic Chemistry **(2)**
- CHE 4067 - Advanced Inorganic Chemistry Laboratory **(1)**
- CHE 4068 - Advanced Inorganic Chemistry **(3)**

- CHE 4095 - Chemistry Seminar (1)
- *Science and/or Math electives beyond those required for the degree must be approved by the department chair (Biology and Physics 3000-level or higher, Math 2000-level or higher). (3-4)*

Total: 30 Units

## Recommended

- CHE 4099 - Research in Chemistry (1-2)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)

Bachelor of Science Total: 66 Units

Note(s):

Accepting Associate Degree for Transfer (ADT)

## Environmental Science (Chemistry), B.S.

The interdepartmental major in Environmental Science is designed to prepare students to monitor the quality of the environment, interpret the impact of human actions on terrestrial and aquatic ecosystems, and develop strategies for ecosystem restoration. Career opportunities in this field include conservation biology, environmental analysis, wildlife biology, environmental education, ecological research, environmental planning, resource management, and environmental chemistry.

## Program Learning Outcomes

**Students who complete the program in Environmental Science will be able to:**

1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological.
2. Apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.
5. Develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.
6. Be prepared for post-graduate studies or science-related careers.

## Lower-Division Requirements

- BIO 1002 - Environment and People (GE) (4) \*\*
- BIO 2010 - Cell Biology and Biochemistry (GE) (3) \*\*
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3) \*\*
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)

- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)
- CHE 1052 - General Chemistry I (GE) (4) \*\*
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- MTH 1044 - Calculus With Applications (GE) (4) \*\*

Choose one of three: 3 Units

- ECO 1001 - Principles of Macroeconomics (GE) (3) \*\*
- ECO 1002 - Principles of Microeconomics (GE) (3) \*\*
- SOC 2001 - Cultural Anthropology (GE) (3) \*\*

Total: 39 Units

### Upper-Division Requirements

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- BIO 4083 - Introduction to Geographic Information Systems (GIS) (3)
- BIO 4097 - Biology Seminar (1)
- CHE 3070 - Instrumental Analysis (2)
- MTH 3063 - Calculus Based Statistics With R (3)

Total: 17 Units

### Upper-Division Electives (12 units minimum)

*Of the 12 required upper division electives, a minimum of 8 units of upper-division electives are required from approved environmental off-campus programs. Both departmental chairs (Biology and Chemistry) or their designees are responsible for approving all off-campus courses. At least one-half of upper-division units in the major must be taken at PLNU.*

*The following courses can be used to transfer in these 8 units:*

- EVS 3096 - Advanced Biology (3)
- EVS 3097 - Advanced Ecology (3)
- EVS 3098 - Advanced Ecological Applications (3)
- EVS 3099 - Public Policy and Stewardship (3)

## Advanced Science Electives (8 units minimum)

*One or more approved off-campus environmental course(s) may fulfill part or all of this requirement. Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)
- BIO 4073 - Experimental Marine Ecology (3)
- BIO 4073L - Experimental Marine Ecology Laboratory (1)
  
- BIO 4050 - Advanced Biochemistry (3)
- BIO 4050L - Advanced Biochemistry Lab (1)
- **OR**
- CHE 4050 - Advanced Biochemistry (3)
- CHE 4050L - Advanced Biochemistry Lab (1)
  
- CHE 2096 - Organic Chemistry II (3)
- CHE 2096L - Organic Chemistry II Lab (1)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CHE 3051 - Organic Structure Elucidation (2)
- CHE 4066 - Bioinorganic Chemistry (2)
- CHE 4068 - Advanced Inorganic Chemistry (3)

## Other Related Electives (4 units minimum)

*Students can customize their degree by taking one course from each of the two categories below. One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.*

### Methodology:

- BIO 3052 - Research Methodology (3)
- BIO 4090 - Internship in Biology (1-3)
- BIO 4099 - Research in Biology (1-3)
- CHE 4090 - Internship in Chemistry (1-3)
- CHE 4099 - Research in Chemistry (1-2)

## Public Policy and Stewardship:

- BUS 4075 - Sustainability in Action (3)
- PHL 3060 - Philosophy and the Sciences (3)
- POL 2090 - World Regional Geography (3)
- POL 4035 - Global Governance (4)
- POL 4041 - Issues in Public Policy (4)

Upper-Division Total: 29 Units

Bachelor of Science Total: 68 Units \*\*

*\*\* 15 units meet general education requirements.*

## Minor

### Computational Science Minor - Chemistry (Chemistry)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## Core Courses for Chemistry Emphasis

### Lower-Division Requirements

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)

### Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)

### Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

### **Project (Choose at least 3 units):**

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

### **Chemistry Major - Required Courses**

- CHE 2013 - Analytical Chemistry (3)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CSC 3022 - Data Management for Computational Science (2)
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Minor Total for Chemistry Majors: 34**

### **Computer Science Majors - Required Courses**

- ISS 4014 - Data Base Systems and Web Integration (4)
- 
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Minor Total for Computer Science Majors: 28**

### **Mathematics Majors - Required Courses**

- CHE 2013 - Analytical Chemistry (3)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CSC 3022 - Data Management for Computational Science (2)
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Minor Total for Mathematics Majors: 34**

### **Science-Business Minor (Science Majors - Chemistry Department)**

## Science-Business Minor for Biology, Chemistry and Environmental (Science majors)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with business knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- MGT 2012 - Principles of Management (3)
- MKT 3032 - Principles of Marketing (3)
- MTH 1044 - Calculus With Applications (GE) (4)
- OR
- MTH 1064 - Calculus I (GE) (3)

Select one course from:

- BUS 4075 - Sustainability in Action (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4016 - Perspectives on Leadership (3)
- MGT 4070 - Nonprofit Organization Management (3)
- MGT 4084 - Operations Management (3)

28 total units

## Science-Marketing Minor (Science Majors - Chemistry Department)

This joint minor between the Fermanian School of Business and the departments of Biology and Chemistry offers preparation with marketing knowledge to augment scientific backgrounds in Biology, Chemistry and Environmental Sciences.

## Science-Marketing Minor for Biology, Chemistry, and Environmental Science Majors

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)

- MKT 3032 - Principles of Marketing (3)

Choose one (1) Mathematics course:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)

Select two (2) courses from the following Marketing courses:

- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)

Total Minor: 24 units

*\*The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.*

## **Department of Kinesiology**

### **Purposes**

- To prepare students for careers in physical therapy, physician assistant, medicine, occupational therapy, athletic training, teaching, coaching, and fitness and wellness occupations.
- To provide students the opportunity to participate in a program designed to aid in the development of physical efficiency, healthful living, social cooperation and individual activity for the enjoyable and intelligent use of leisure time.
- To introduce students to the potential benefits of a stimulating systemic exercise program.

### **Tradition of Excellence**

The Department of Kinesiology offers students many unique opportunities. Students participate with experienced and nationally recognized professors in a dynamic, hands-on educational experience. The faculty gives the students a deep insight into the area of health, sports medicine, physical fitness, strength and conditioning, and teaching or coaching making the program perfect for a variety of interests. In addition, the Health and Human Performance major can lead students into our accelerated 3+2 athletic training dual degree program. Students complete a B.A. in Health and Human Performance and also earn their Master of Science in Athletic Training through our program. As part of the educational program, students participate in practical laboratory and internship programs guided by practicing clinicians, observation and participation in hospitals and physical therapy centers, observation of surgery and special lecture series with medical doctors and other medical experts. The kinesiology laboratories also serve as a hallmark of excellence with state of the art gross anatomy, biomechanics, exercise physiology, and sports science laboratories students will be trained by experts in each field using advanced equipment.

### **Career Opportunities**

Graduates of the Department of Kinesiology are prepared for a variety of opportunities that await them after leaving PLNU. Many students go on to graduate schools in physical therapy, athletic training, physician assistant, exercise physiology and medical school. Other students become teachers and/or coaches. Still others go on to work as program

directors at hospitals and sports clinics. With the experiences and education found at PLNU, the opportunities in fields related to Kinesiology become reality.

## **Faculty**

Arnel Aguinaldo, Ph.D.

*Concordia University Chicago*

Brent Alvar, Ph.D., Program Director MS in Kinesiology

*Arizona State University*

Ted Anderson, Ph.D.

*Texas A&M University*

Jerry Arvin, M.S.

*Butler University*

Nicole Cosby, Ph.D., Program Director MS in Athletic Training

*University of Virginia*

Ann Davis, M.Ed.

*National University*

Susan Ganz, Ph.D.

*University of New Mexico*

Jacob Goodin, Ph.D.

*Eastern Tennessee State University*

Richard Hills, M.A.

*San Diego State University*

Heidi Lynch, Ph.D.

*Arizona State University*

Jessica Matthews, D.B.H., Program Director MS in Kinesiology, Integrative Wellness

*Arizona State University*

Brandon Sawyer, Ph.D., Undergraduate Chair

*Arizona State University*

## **Major**

### **Applied Health Science, B.S.**

#### Department Learning Outcomes

**All majors within the department of Kinesiology will be able to:**

1. Speak and write effectively to a target audience on essential information in their discipline.
2. Critically evaluate and integrate new information into professional practice to solve relevant health and fitness problems.
3. Assess human movement to determine risk for injury and improve human performance.

4. Describe the mechanisms (i.e. metabolic, physiologic, biomechanical, and developmental) by which physical activity aids in health promotion, performance enhancement and disease prevention.
5. Serve others in clinical, educational, or athletic settings by pursuing their vocation and calling.

## Lower-Division Requirements

- BIO 1030 - Human Anatomy and Physiology I (GE) (3)
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) (1)
- BIO 1040 - Human Anatomy and Physiology II (3)
- BIO 1040L - Human Anatomy and Physiology II Laboratory (1)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2020 - Microbiology of Infectious Diseases (3)
- BIO 2020L - Microbiology of Infectious Diseases Laboratory (1)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- KIN 1001 - Orientation to Kinesiology (1)
- KIN 2080 - Care and Prevention of Athletic Injuries (2)
- MTH 2003 - Introduction to Statistics (3)
  
- KIN 2030 - Lifestyle as Medicine (GE) (2)
- OR**
- PED 2000 - Optimal Health (GE) (2)
  
- PSY 1003 - General Psychology (GE) (3)
- *Certification in CPR. Certification must be current through the date of the Commencement ceremony in which the student is eligible to participate or the date of completion of the student's graduation requirements, whichever occurs first.*

Total: 36 Units

## Upper-Division Requirements

- ATR 3085 - Pathology of Injury and Illness (3)
- KIN 3012 - Motor Learning and Motor Development (3)
- KIN 3025 - Structural Kinesiology (2)
- KIN 3027 - Applied Biomechanics (2)
- KIN 3040 - Physiology of Exercise (3)
- KIN 4095 - Kinesiology Capstone (1)
- PSY 3021 - Abnormal Psychology (3)

## Major Electives

**Complete a minimum of (12) units with at least (7) units being upper division from the following:**

- ATR 3087 - Assessment of Lower Extremity Pathology (3)

- ATR 3088 - Assessment of Head, Spinal, and Upper Extremity Pathology (3)
- ATR 4010 - Therapeutic Exercise (3)
- ATR 4020 - Pharmacology (1)
- ATR 5000 - Seminar in Athletic Training (1)
- ATR 5005 - Research Methods and Statistical Techniques for Clinical Decision Making in Sports Medicine (3)
- ATR 5087 - Evidence-Based Orthopedic Assessment of Lower Extremity (3)
- ATR 5087L - Evidence-Based Orthopedic Assessment of Lower Extremity Laboratory (1)
- ATR 5088 - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity (3)
- ATR 5088L - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity Laboratory (1)
- ATR 5090 - Clinical Internship I (3)
- ATR 5091 - Clinical Internship II (3)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 4070 - Neuroscience (3)
  
- BIO 4050 - Advanced Biochemistry (3) **and**
- BIO 4050L - Advanced Biochemistry Lab (1)
- OR**
- CHE 4050 - Advanced Biochemistry (3) **and**
- CHE 4050L - Advanced Biochemistry Lab (1)
  
- CHE 2094 - Organic Chemistry I (3) **and**
- CHE 2094L - Organic Chemistry I Lab (1)
- CHE 2096 - Organic Chemistry II (3) **and**
- CHE 2096L - Organic Chemistry II Lab (1)
- CHD 1050 - Human Development (3)
- EXS 3001 - Fitness Assessment and Exercise Prescription (3)
- EXS 3001L - Fitness Assessment and Exercise Prescription Lab (1)
- EXS 3030 - Nutrition for Exercise and Sport Performance (3)
- EXS 3070 - Praxis of Strength Training and Conditioning (3)
- KIN 3027L - Biomechanics Laboratory (1)
- KIN 3040L - Physiology of Exercise Lab (1)
- KIN 3075 - Movement Interventions and Corrective Exercise (2)
- KIN 4030 - Clinical Exercise Physiology (3)
- KIN 4075 - Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities (3)
- KIN 4088 - Internship in Kinesiology (1-3) **3 Units Required**
- KIN 5010 - Evidence-Based Practice and Decision Making in Kinesiology (3)
- PHY 1044 - General Physics I (GE) (3)
- PHY 1044L - General Physics I Lab (GE) (1)
- PHY 1054 - General Physics II (GE) (3)
- PHY 1054L - General Physics II Lab (GE) (1)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)

Total: 29 Units Minimum

Total Units for Applied Health Science: 65\*

*\*11 units meet general education requirements*

## **Health and Human Performance, B.A.**

### Department Learning Outcomes

**All majors within the department of Kinesiology will be able to:**

1. Speak and write effectively to a target audience on essential information in their discipline.
2. Critically evaluate and integrate new information into professional practice to solve relevant health and fitness problems.
3. Assess human movement to determine risk for injury and improve human performance.
4. Describe the mechanisms (i.e. metabolic, physiologic, biomechanical, and developmental) by which physical activity aids in health promotion, performance enhancement and disease prevention.
5. Serve others in clinical, educational, or athletic settings by pursuing their vocation and calling.

### Lower-Division Requirements

- BIO 1030 - Human Anatomy and Physiology I (GE) **(3) and**
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) **(1)**
- BIO 1040 - Human Anatomy and Physiology II **(3) and**
- BIO 1040L - Human Anatomy and Physiology II Laboratory **(1)**
  
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) **(4) and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**  
**OR**
- CHE 1052 - General Chemistry I (GE) **(4) and**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
  
- KIN 1001 - Orientation to Kinesiology **(1)**
- KIN 1002 - Emergency Medical Technician - Basic **(4)**  
**OR** Certification in CPR or EMT\*
- KIN 2080 - Care and Prevention of Athletic Injuries **(2) and**
- KIN 2080L - Care and Prevention of Athletic Injuries Lab **(1)**
  
- KIN 2030 - Lifestyle as Medicine (GE) **(2)**  
**OR**
- PED 2000 - Optimal Health (GE) **(2)**  
*\*Student must provide proof of certification to the records office. Certification must be current through the date of the Commencement ceremony in which the student is eligible to participate or the date of completion of the student's graduation requirements, whichever occurs first.*

### Lower-Division Elective

## Exercise and Sport Science

Choose one course from the following (2-3 units):

- EXS 2001 - Fundamentals of Fitness Assessment and Development **(2)**
- NUT 2025 - Fundamentals of Nutrition **(3)**
- PED 2020 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 2025 - Individual and Dual Sports Fundamentals and Strategies (GE) **(2)**

## Pre-Allied Health

Choose one course from the following (2-4 units):

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3) and**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2020 - Microbiology of Infectious Diseases **(3) and**
- BIO 2020L - Microbiology of Infectious Diseases Laboratory **(1)**
- CHD 1050 - Human Development **(3)**
- EXS 2001 - Fundamentals of Fitness Assessment and Development **(2)**
- PHY 1044 - General Physics I (GE) **(3) and**
- PHY 1044L - General Physics I Lab (GE) **(1)**
- PHY 1054 - General Physics II (GE) **(3) and**
- PHY 1054L - General Physics II Lab (GE) **(1)**
- PSY 1003 - General Psychology (GE) **(3)**

Lower-Division Total: 21-24 Units

## Upper-Division Requirements

- EXS 3030 - Nutrition for Exercise and Sport Performance **(3)**
- EXS 3001 - Fitness Assessment and Exercise Prescription **(3)**
- EXS 3001L - Fitness Assessment and Exercise Prescription Lab **(1)**
- EXS 3070 - Praxis of Strength Training and Conditioning **(3)**
- KIN 3012 - Motor Learning and Motor Development **(3)**
- KIN 3025 - Structural Kinesiology **(2)**
- KIN 3027 - Applied Biomechanics **(2)**
- KIN 3040 - Physiology of Exercise **(3)**
- KIN 3040L - Physiology of Exercise Lab **(1)**
- KIN 4095 - Kinesiology Capstone **(1)**
  
- KIN 4040 - Measurement, Statistics, and Evaluation of Human Performance **(3)**
- **OR**
- MTH 2003 - Introduction to Statistics **(3)**

Required Concentration

*Students must select a minimum of 11 additional units below that are not counting in the major requirements above.*

## Exercise and Sport Science

### **Required:**

- EXS 4080 - Leadership in the Fitness Professions (3)

### **Choose 8-9 units from the following:**

- ATR 3085 - Pathology of Injury and Illness (3)
- ATR 4010 - Therapeutic Exercise (3)
- BUS 3013 - Administrative Communication (3)
- EDU 3002 - Foundations of Education and Learning Theory (3)
- KIN 1002 - Emergency Medical Technician - Basic (4)
- KIN 1003 - Emergency Medical Technician Laboratory - Basic (4)
- KIN 3027L - Biomechanics Laboratory (1)
- KIN 3075 - Movement Interventions and Corrective Exercise (2)
- KIN 4030 - Clinical Exercise Physiology (3)
- KIN 4084 - Practicum in Kinesiology (1-3)
- KIN 4088 - Internship in Kinesiology (1-3)
- KIN 4090 - Special Studies in Kinesiology (1-3)
- PED 3008 - Methods of Teaching Physical Education (3)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)

## Pre-Allied Health

### **Required:**

- KIN 3027L - Biomechanics Laboratory (1)
- KIN 3075 - Movement Interventions and Corrective Exercise (2)

### **Choose 8-9 units from the following:**

- ATR 3085 - Pathology of Injury and Illness (3)
- ATR 3087 - Assessment of Lower Extremity Pathology (3)
- ATR 3088 - Assessment of Head, Spinal, and Upper Extremity Pathology (3)
- ATR 4010 - Therapeutic Exercise (3)
- ATR 5000 - Seminar in Athletic Training (1)
- ATR 5005 - Research Methods and Statistical Techniques for Clinical Decision Making in Sports Medicine (3)
- ATR 5087 - Evidence-Based Orthopedic Assessment of Lower Extremity (3)
- ATR 5087L - Evidence-Based Orthopedic Assessment of Lower Extremity Laboratory (1)
- ATR 5088 - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity (3)
- ATR 5088L - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity Laboratory (1)
- ATR 5090 - Clinical Internship I (3)
- ATR 5091 - Clinical Internship II (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2020 - Microbiology of Infectious Diseases (3)
- BIO 2020L - Microbiology of Infectious Diseases Laboratory (1)
- BUS 3013 - Administrative Communication (3)

- CHD 1050 - Human Development (3)
- KIN 1002 - Emergency Medical Technician - Basic (4)
- KIN 1003 - Emergency Medical Technician Laboratory - Basic (4)
- KIN 4075 - Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities (3)
- KIN 4088 - Internship in Kinesiology (1-3)
- KIN 5010 - Evidence-Based Practice and Decision Making in Kinesiology (3)
- PED 3008 - Methods of Teaching Physical Education (3)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)
- PHY 1044 - General Physics I (GE) (3)
- PHY 1044L - General Physics I Lab (GE) (1)
- PHY 1054 - General Physics II (GE) (3)
- PHY 1054L - General Physics II Lab (GE) (1)
- PSY 3021 - Abnormal Psychology (3)

Upper-Division Total: 36-37 Units

Major Total: 57-61 Units

#### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory (3) \*
- EDU 3006 - Principles of Language Acquisition (3) \*
- EDU 4004 - Foundations of Special Education (3) \*
- EDU 4009 - Classroom Assessment and Research Practices (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)
- EDU 4020 - Literacy Instruction for Secondary Teachers (3) \*
- EDU 4021 - General Methods for Secondary Teachers (3) \*
- EDU 4050 - Secondary Clinical Practice I (4)
- EDU 4055 - Secondary Clinical Practice II (4)
- EDU 40CP3 - Secondary Clinical Practice Seminar I (1)
- EDU 40CP4 - Secondary Clinical Practice Seminar II (1)

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics (3) (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science (3) \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science (3) (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language (3) (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts (3) (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education (3) (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers (3) \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## Department of Mathematical, Information, and Computer Sciences

### Mission Statement

The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

### Purposes

1. To prepare students for:
  - careers that use mathematics, computer science, and information systems in business, industry, government and the non-profit sector.
  - graduate study in fields related to mathematics, computer science, and information systems.
  - teaching mathematics and computer science at the secondary level.

2. To prepare students to apply their knowledge and utilize appropriate technology to solve problems.
3. To educate students to speak and write about their work with precision, clarity, and organization.
4. To help students gain an understanding of, and appreciation for, the historical development, contemporary progress, and societal role of mathematics, information systems, and computer science.
5. To integrate the study of mathematics, information systems, and computer science with the Christian liberal arts.

## **Tradition of Excellence**

The Department of Mathematical, Information, and Computer Sciences features a highly skilled team of professors who share their wealth of knowledge with students both in and out of the classroom. The personal attention of the faculty and innovative learning environment help students to comprehend concepts in mathematics, information systems, and computer science. The accomplished faculty also conducts research with current students. Recently, topics have included random number generation, music and graph theory, statistics, stereo vision using genetic algorithms, artificial intelligence, biomathematics, and computer architecture. These types of research opportunities provide experience with modern technology and current real-world applications.

## **Career Opportunities**

Students who graduate with a degree from the Department of Mathematical, Information, and Computer Sciences are prepared to succeed. Students have chosen careers in actuarial science, industrial engineering, information science, applied mathematics, statistics, espionage, teaching, software engineering, project management, and systems analysis.

## **Faculty**

Ryan Botts, Ph.D.

*Ohio University, Athens*

Lorinda Carter, Ph.D.

*University of California, San Diego*

Catherine Crockett, Ph.D.

*University of California, Riverside*

Gregory Crow, Ph.D.

*University of Notre Dame*

Jesús Jiménez, Ph.D.

*University of Utah*

Michael Leih, Ph.D.

*Claremont Graduate University*

Benjamin Mood, Ph.D.

*University of Florida, Gainesville*

Maria Zack, Ph.D., Chair

*University of California, San Diego*

## **Major**

### **Computer Science: Cyber Security, B.S.**

## Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

## Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)
- MTH 1064 - Calculus I (GE) (3) \*
- MTH 1074 - Calculus II (3)
- MTH 2003 - Introduction to Statistics (3) \*\*

Total Lower-Division Units: 22 (18 units other than GE)

*\*MTH 1044 may substitute for MTH 1064.*

*\*\*MTH 3063 or MTH 3083 may substitute for MTH 2003.*

## Upper-Division Requirements

- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- CSC 4081 - Senior Seminar in Computer Science (1)
- ISS 3073 - Networking and Security (3)
- ISS 3092 - Topics in Cyber Security (2)
- ISS 4003 - Information and Computer Security (3)
- ISS 4012 - Topics in Information Security (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 4102 - Independent Research in Computer Science I (2) **and**
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- ISS 4072 - Internship in Information Systems (2) \*\*\*

Total Upper-Division Units: 37-38

5-6 Additional Units Chosen From:

\*\*\*Six (6) units if ISS 4072 chosen for sequence above.

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4091 - Independent Studies in Computer Science (1-4)
- CSC 4093 - Software Project (3)
- CSC 4102 - Independent Research in Computer Science I (2)
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- EGR 2024 - Electronics and Circuit Analysis (3)
- EGR 2024L - Electronics and Circuit Analysis Lab (1)
- EGR 3053 - Analog Electronics (2)
- EGR 3053L - Analog Electronics Lab (1)
- EGR 3093 - Digital Electronics (2)
- EGR 3093L - Digital Electronics Lab (1)
- EGR 4042 - Embedded Systems and Robotics (1)
- EGR 4042L - Embedded Systems and Robotics Lab (1)
- EGR 4103 - Electrical Signals and Systems (3)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 4072 - Internship in Information Systems (2)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)

Total Elective Units: 5-6

Total Units for the Degree: 59 (plus 4 units of GE)

**Computer Science: Software Engineering, B.A.**

## Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

## Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)
- MTH 1064 - Calculus I (GE) (3) \*
- MTH 2003 - Introduction to Statistics (3) \*\*

Total Lower-Division Units: 18 (14 non-GE units)

*\*MTH 1044 may substitute for MTH 1064.*

*\*\*MTH 3063 or MTH 3083 may substitute for MTH 2003.*

## Upper-Division Requirements

- BUS 3013 - Administrative Communication (3)
- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- CSC 4081 - Senior Seminar in Computer Science (1)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 4102 - Independent Research in Computer Science I (2) **and**
- CSC 4121 - Independent Research in Computer Science II (1)

- CSC 4133 - Service Learning in Computer Science (3)
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- ISS 4072 - Internship in Information Systems (2) \*\*\*

Total Upper Division Units: 30-31

4-5 Additional Units Chosen From:

\*\*\* Five (5) units required if ISS 4072 chosen from sequence above.

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4091 - Independent Studies in Computer Science (1-4)
- CSC 4093 - Software Project (3)
- CSC 4102 - Independent Research in Computer Science I (2)
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- ISS 3073 - Networking and Security (3)
- ISS 3092 - Topics in Cyber Security (2)
- ISS 4003 - Information and Computer Security (3)
- ISS 4012 - Topics in Information Security (2)
- ISS 4072 - Internship in Information Systems (2)
- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)
- MTH 3073 - Mathematical Modeling (3)

Total Units: 49 Units Without GE

## **Computer Science: Software Engineering, B.S.**

### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.

7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

## Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)
- MTH 1064 - Calculus I (GE) (3) \*
- MTH 1074 - Calculus II (3)
- MTH 2003 - Introduction to Statistics (3) \*\*

Total Lower-Division Units: 22 (18 units other than GE)

*\*MTH 1044 may substitute for MTH 1064.*

*\*\* MTH 3063 or MTH 3083 may substitute for MTH 2003.*

## Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- CSC 4081 - Senior Seminar in Computer Science (1)
- CSC 4093 - Software Project (3)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 4102 - Independent Research in Computer Science I (2) **and**
- CSC 4121 - Independent Research in Computer Science II (1)
  
- CSC 4133 - Service Learning in Computer Science (3)
  
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
  
- ISS 4072 - Internship in Information Systems (2) \*\*\*

Total Upper-Division Units: 33-34

6-7 Additional Units Chosen From:

\*\*\*Seven (7) units required if ISS 4072 chosen from the sequence above.

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4091 - Independent Studies in Computer Science (1-4)
- CSC 4102 - Independent Research in Computer Science I (2)
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- ISS 3073 - Networking and Security (3)
- ISS 3092 - Topics in Cyber Security (2)
- ISS 4003 - Information and Computer Security (3)
- ISS 4012 - Topics in Information Security (2)
- ISS 4072 - Internship in Information Systems (2)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)

Total Elective Units: 6-7

Total: 59 Units Without GE

## **Computer Science: Technical Applications, B.S.**

### Program Learning Outcomes

1. Students will be able to write correct and robust software.
2. Students will use the theory of algorithms and computation to solve problems.
3. Students will analyze the interaction between hardware and software.
4. Students will be able to apply their technical knowledge and critical thinking to solve problems.
5. Students will be able to speak about their work with precision, clarity and organization.
6. Students will be able to write about their work with precision, clarity and organization.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will collaborate effectively in teams.
9. Students will be able to understand and create arguments supported by quantitative evidence.
10. Graduates will be prepared for careers that use computer science in business, industry, government and the non-profit sector; and graduate study in fields related to computer science.

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1074 - Calculus II (3)
- MTH 2003 - Introduction to Statistics (3) \*
- MTH 2033 - Linear Algebra (3)

Total Lower-Division Units: 25 (21 units other than GE)

*\*MTH 3063 or MTH 3083 may substitute for MTH 2003.*

### Upper-Division Requirements

- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- CSC 4081 - Senior Seminar in Computer Science (1)
- CSC 4093 - Software Project (3)
- ISS 3073 - Networking and Security (3)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Choose one sequence from:

- CSC 4102 - Independent Research in Computer Science I (2) **and**
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- ISS 4072 - Internship in Information Systems (2) \*\*

Total Upper-Division Units: 31-32

5-6 Additional Units Chosen From:

**\*\*Six (6) units required if ISS 4072 chosen from sequence above.**

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)

- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4091 - Independent Studies in Computer Science (1-4)
- CSC 4102 - Independent Research in Computer Science I (2)
- CSC 4121 - Independent Research in Computer Science II (1)
- CSC 4133 - Service Learning in Computer Science (3)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 3092 - Topics in Cyber Security (2)
- ISS 4003 - Information and Computer Security (3)
- ISS 4012 - Topics in Information Security (2)
- ISS 4072 - Internship in Information Systems (2)
- MTH 2074 - Calculus III (4)
- MTH 3073 - Mathematical Modeling (3)

Total Elective\*\*\* Units: 5-6

\*\*\*An elective course may not count as both an upper-division requirement and a required "additional elective."

## Data Science, B.S.

### Program Learning Outcomes

- Students will be able to demonstrate facility with analytical concepts.
- Students will be able to write proofs.
- Students will be able to demonstrate facility with algebraic structures.
- Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
- Students will be able to speak about their work with precision, clarity, and organization.
- Students will be able to write about their work with precision, clarity, and organization.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Students will collaborate effectively in teams.
- Students will be able to understand and create arguments supported by quantitative evidence.
- Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)

- MTH 1064 - Calculus I (GE) (3)
- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)
- MTH 2092 - Applied Project for Data Science (2)

Total Lower-Division Units: 28 (24 non-GE units)

## Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3012 - Number Theory with Proofs (2)
- MTH 3033 - Differential Equations (3)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 3083 - Mathematical Probability and Statistics (3)
- MTH 4053 - Advanced Applied Statistics (3)
- MTH 4081 - Senior Seminar in Mathematics (1)

**Choose one course from:**

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

**Choose one course from:**

- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)

**Choose one course from:**

- MTH 4062 - Research in Data Science (2)
- MTH 4072 - Internship in Data Science (2)

## Biology Track

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

**Choose one of the following:**

- BIO 2011 - Ecological and Evolutionary Systems (GE) (3) **and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)

**OR**

- BIO 3045 - Genetics (3) **and**
- BIO 3045L - Genetics Laboratory (1)

*Recommended: Take both BIO 2011/BIO 2011L and BIO 3045/BIO 3045L if there is space in your schedule.*

## Finance Track

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- FIN 3035 - Business Finance (3)

**Choose one of the following:**

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

*If you are planning on becoming an Actuary, the Society of Actuaries requires BOTH ECO 1001 and ECO 1002. The Society of Actuaries also requires FIN 3035 and FIN 3085. If you complete these two sequences with a B or better, you will receive credit for two of the 10 requirements for becoming an actuary.*

Total Upper-Division Units: 33-35

Note(s):

*An elective course may not count as both an upper-division requirement and a required "additional elective."*

Total Non-GE Units for Degree: 59

## **General Engineering: Computer Science Engineering, B.S.E. (Mathematics and Computer Science)**

### Program Learning Outcomes

- Develop an understanding of the fundamental principles of physics and of engineering.
- Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
- Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
- Effectively communicate complicated technical information in writing.
- Effectively communicate complicated technical information orally.
- Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Effectively collaborate in teams.

### Lower Division Requirements

- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)
- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- EGR 1023 - Introduction to Engineering II (2)
- EGR 1023L - Introduction to Engineering II Lab (1)
- EGR 1043 - Introduction to Computer Programming (2)
- EGR 1043L - Introduction to Computer Programming Lab (1)
- EGR 1054 - Objects and Elementary Data Structures (3)

- EGR 1054L - Objects and Elementary Data Structures Lab (1)
- EGR 2024 - Electronics and Circuit Analysis (3)
- EGR 2024L - Electronics and Circuit Analysis Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 1074L - Calculus II Lab (1)
- MTH 2074 - Calculus III (4)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total Lower-Division Units: 40

### Upper Division Requirements

- EGR 3014 - Operating Systems (4)
  - EGR 3023 - Software Engineering (3)
  - EGR 3053 - Analog Electronics (2)
  - EGR 3053L - Analog Electronics Lab (1)
  - EGR 3073 - Networking and Security (3)
  - EGR 3093 - Digital Electronics (2)
  - EGR 3093L - Digital Electronics Lab (1)
  - EGR 4003 - Information and Computer Security (3)
  - EGR 4054 - Computer Architecture and Assembly Language (4)
  - EGR 4072 - Senior Project I (2)
  - EGR 4082 - Senior Project II (2)
  - EGR 4092 - Internship in Engineering (2)
  - EGR 4103 - Electrical Signals and Systems (3)
  - MTH 3033 - Differential Equations (3)
- Choose one of the following:**
- MTH 3063 - Calculus Based Statistics With R (3)
  - MTH 3083 - Mathematical Probability and Statistics (3)

Total Upper-Division Units: 38

Total: 78 Units (70 without GE)

### Recommended:

- MTH 3043 Discrete Mathematics
- EGR 4042 Embedded Systems and Robotics and EGR 4042L Embedded Systems and Robotics Lab

# Information Systems (Mathematical, Information, and Computer Science), B.S.

## Program Learning Outcomes

Students who complete the program in Information Systems will be able to:

1. Demonstrate general knowledge of theories and practices in the core areas of business.
2. Critically analyze and apply business knowledge to solve complex business situations.
3. Demonstrate effective business communication through both written and verbal means.
  - a. *Students will be able to speak about their work with precision, clarity and organization*
  - b. *Students will be able to write about their work with precision, clarity and organization*
  - c. *Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.*
4. Formulate decisions informed by ethical attitudes and values.
5. Collaborate effectively in teams.
6. Write correct and robust software.
7. Analyze the interaction between hardware and software.
8. Apply their technical knowledge and critical thinking to solve problems.
9. Understand and create arguments supported by quantitative evidence.
10. Demonstrate knowledge of information systems and be prepared for careers that use information systems, and graduate study in fields related to information systems.

## Lower Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)
- ECO 1000 - Survey of Economics (GE) (3)
- MGT 2012 - Principles of Management (3)
- MTH 1073 - Business Calculus (GE) (3)
- MTH 2003 - Introduction to Statistics (3)

Total: 34 Units

## Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- CSC 3014 - Operating Systems (4)
- ISS 3042 - Project Management and Quality Assurance (2)

- ISS 3073 - Networking and Security (3)
- ISS 4003 - Information and Computer Security (3)
- ISS 4014 - Data Base Systems and Web Integration (4)
- ISS 4072 - Internship in Information Systems (2)
- ISS 4081 - Senior Seminar in Information Systems (1)
- FIN 3035 - Business Finance (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Total: 34 Units

Major Total: 68 Units

Recommended:

- Cross-cultural experience
- ISS 3092 - Topics in Cyber Security (2)
- PHL 2011 (GE) (3)
- CSC 3023 Software Engineering (3)

Notes:

- MTH 1044 or MTH 1064 may substitute for MTH 1073.
- MTH 1044, MTH 1064 or MTH 1073 fulfills the General Education Problem Solving requirement.
- ECO 1001 and ECO 1002 may substitute for ECO 1000.
- ECO 1000, ECO 1001 or ECO 1002 fulfills the General Education Social World requirement.
- PHL 2011 fulfills the General Education Philosophy requirement.

## **Mathematics, B.A.**

### Program Learning Outcomes

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to write proofs.
3. Students will be able to demonstrate facility with algebraic structures.
4. Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
5. Students will be able to use technology to solve problems.
6. Students will be able to speak about their work with precision, clarity, and organization.
7. Students will be able to write about their work with precision, clarity, and organization.
8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
9. Students will collaborate effectively in teams.
10. Students will be able to understand and create arguments supported by quantitative evidence.
11. Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

## Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)

Total Lower-Division Units: 24 (20 non-GE units)

## Upper-Division Requirements

- MTH 3012 - Number Theory with Proofs (2)
- MTH 3052 - History of Mathematics (2)
- MTH 3083 - Mathematical Probability and Statistics (3)
- MTH 4081 - Senior Seminar in Mathematics (1)

Choose one course from:

- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)

Choose one course from:

- MTH 3033 - Differential Equations (3)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 4013 - Complex Analysis (3)

Choose one sequence from:

- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
  
- MTH 4102 - Independent Research in Mathematics I (2) **and**
- MTH 4121 - Independent Research in Mathematics II (1)
  
- MTH 4133 - Service Learning in Mathematics (3)

Total Upper-Division Units: 18

8 Additional Elective Units\* From:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- MTH 3033 - Differential Equations (3)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 4002 - Topics in Geometry (2)
- MTH 4013 - Complex Analysis (3)
- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)
- MTH 4053 - Advanced Applied Statistics (3)
- MTH 4062 - Research in Data Science (2)
- MTH 4071 - History of Mathematics Study Tour (1)
- MTH 4072 - Internship in Data Science (2)
- MTH 4091 - Independent Study in Mathematics (1-4)
- MTH 4092 - Special Topics in Mathematics (2)
- MTH 4102 - Independent Research in Mathematics I (2)
- MTH 4121 - Independent Research in Mathematics II (1)
- MTH 4133 - Service Learning in Mathematics (3)

Total Elective Units: 8

*\*An elective course may not count as both an upper-division requirement and a required "additional elective."*

Total Non-GE Units for Degree: 44

## **Mathematics, B.A. for Associate Degree for Transfer (ADT) Students**

Note that all lower division mathematics courses will be transferred in from the community college. Students will bring in 18 units of mathematics (4 units are GE).

### **Program Learning Outcomes**

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to write proofs.
3. Students will be able to demonstrate facility with algebraic structures.
4. Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
5. Students will be able to use technology to solve problems.
6. Students will be able to speak about their work with precision, clarity, and organization.
7. Students will be able to write about their work with precision, clarity, and organization.
8. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
9. Students will collaborate effectively in teams.
10. Students will be able to understand and create arguments supported by quantitative evidence.

11. Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

## Upper Division Requirements

- MTH 3012 - Number Theory with Proofs **(2)**
- MTH 3052 - History of Mathematics **(2)**
- MTH 3083 - Mathematical Probability and Statistics **(3)**
- MTH 4081 - Senior Seminar in Mathematics **(1)**

Choose one course from:

- MTH 4024 - Real Analysis **(4)**
- MTH 4044 - Abstract Algebra **(4)**

Choose one course from:

- MTH 3033 - Differential Equations **(3)**
- MTH 3043 - Discrete Mathematics **(3)**
- MTH 3073 - Mathematical Modeling **(3)**
- MTH 4013 - Complex Analysis **(3)**

Choose one sequence from:

- HON 4098 - Honors Project I **(2) and**
- HON 4099 - Honors Project II **(1)**
  
- MTH 4102 - Independent Research in Mathematics I **(2) and**
- MTH 4121 - Independent Research in Mathematics II **(1)**
  
- MTH 4133 - Service Learning in Mathematics **(3)**

Total Upper-Division Units: 18

12 Additional Elective Units from:

- CSC 1043 - Introduction to Computer Programming **(2)**
- CSC 1043L - Introduction to Computer Programming Lab **(1)**
- CSC 1054 - Objects and Elementary Data Structures **(3)**
- CSC 1054L - Objects and Elementary Data Structures Lab **(1)**
- CSC 3011 - Machine Learning and Multivariate Modeling in R **(1)**
- CSC 3021 - Computational Tools **(1)**
- CSC 3031 - Data Visualization and Communication with R **(1)**
- HON 4098 - Honors Project I **(2)**
- HON 4099 - Honors Project II **(1)**
- MTH 3033 - Differential Equations **(3)**
- MTH 3043 - Discrete Mathematics **(3)**

- MTH 3073 - Mathematical Modeling (3)
- MTH 4002 - Topics in Geometry (2)
- MTH 4013 - Complex Analysis (3)
- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)
- MTH 4071 - History of Mathematics Study Tour (1)
- MTH 4091 - Independent Study in Mathematics (1-4)
- MTH 4092 - Special Topics in Mathematics (2)
- MTH 4102 - Independent Research in Mathematics I (2)
- MTH 4121 - Independent Research in Mathematics II (1)
- MTH 4133 - Service Learning in Mathematics (3)

Total Elective Units: 12

Total Units for Degree: 48 (44 non-GE units)

Note(s):

**Associate Degree for Transfer (ADT) students only.**

## **Mathematics, B.S.**

### Program Learning Outcomes

- Students will be able to demonstrate facility with analytical concepts.
- Students will be able to write proofs.
- Students will be able to demonstrate facility with algebraic structures.
- Students will be able to apply their mathematical knowledge and critical thinking to solve problems.
- Students will be able to use technology to solve problems.
- Students will be able to speak about their work with precision, clarity, and organization.
- Students will be able to write about their work with precision, clarity, and organization.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Students will collaborate effectively in teams.
- Students will be able to understand and create arguments supported by quantitative evidence.
- Graduates will be prepared for careers that use mathematics in business, industry, government and the non-profit sector; graduate study in fields related to mathematics; and teaching mathematics and computer science at the secondary level.

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)
- MTH 1064 - Calculus I (GE) (3)

- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)
- MTH 2074 - Calculus III (4)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)

Total Lower-Division Units: 30 (22 non-GE units)

## Upper-Division Requirements

- MTH 3012 - Number Theory with Proofs (2)
- MTH 3033 - Differential Equations (3)
- MTH 3052 - History of Mathematics (2)
- MTH 3083 - Mathematical Probability and Statistics (3)
- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)
- MTH 4081 - Senior Seminar in Mathematics (1)
- MTH 4092 - Special Topics in Mathematics (2)

Choose two courses from:

- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 4013 - Complex Analysis (3)

Choose one sequence from:

- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- MTH 4102 - Independent Research in Mathematics I (2) **and**
- MTH 4121 - Independent Research in Mathematics II (1)
- MTH 4133 - Service Learning in Mathematics (3)

Five (5) additional elective units\* from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3021 - Computational Tools (1)
- CSC 3031 - Data Visualization and Communication with R (1)
- HON 4098 - Honors Project I (2)
- HON 4099 - Honors Project II (1)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3073 - Mathematical Modeling (3)
- MTH 4002 - Topics in Geometry (2)
- MTH 4013 - Complex Analysis (3)
- MTH 4053 - Advanced Applied Statistics (3)
- MTH 4062 - Research in Data Science (2)
- MTH 4071 - History of Mathematics Study Tour (1)

- MTH 4072 - Internship in Data Science (2)
- MTH 4091 - Independent Study in Mathematics (1-4)
- MTH 4092 - Special Topics in Mathematics (2)
- MTH 4102 - Independent Research in Mathematics I (2)
- MTH 4121 - Independent Research in Mathematics II (1)
- MTH 4133 - Service Learning in Mathematics (3)

Total Upper-Division Units: 36

*\*An elective course may not count as both an upper-division requirement and a required "additional elective."*

Total Non-GE Units for Degree: 58

### Recommended Electives for Mathematics Tracks:

**Graduate School:** One semester of independent study continuing Abstract Algebra or Real Analysis, Complex Analysis, Honors Project or Independent Research in Mathematics.

**Industry:** Complex Analysis, Mathematical Probability, and Mathematical Modeling. Additional knowledge of computer programming and software tools such as Matlab and R can be helpful in this field.

**Actuary:** MTH 3083 Mathematical Probability and Statistics, MTH 3043 Discrete Mathematics, MTH 3073 Mathematical Modeling will help you prepare for actuarial exams. We recommend that you take the first exam as soon as you finish MTH 3083 . The Society of Actuaries has also approved ECO 1001 Macroeconomics, ECO 1002 Microeconomics to meet their economics requirement (you must get at least a B in each). The Society of Actuaries has also approved the sequence: ACC 2000 ( ACC 2001 Principles of Financial Accounting I can be substituted), FIN 3035 Business Finance and FIN 3085 Intermediate Finance to meet their finance requirement. So with some work you can meet 3 of the 10 items required for becoming a Fellow of the Society of Actuaries before you graduate from college. It is also worth noting that by adding a few classes to this list, you can earn a minor in Finance.

If you are planning on becoming an actuary, we recommend that you earn a BS in Data Science rather than a BS in Mathematics.

*Teaching:* PLNU has a waiver on the CSET: Mathematics exams, if a student takes a specific set of mathematics classes as part of the BS program. These include MTH 4002 Topics in Geometry, MTH 3043 Discrete Mathematics, MTH 4013 Complex Analysis and EDU 3002 Foundations of Education and Learning Theory and EDU 4004 Foundations of Special Education. Please see your advisor for further details. PLNU does offer the option of earning a BS in Mathematics and a teaching credential in four years and the details of that can be found in the description of the Blending Single Subject Teaching Credential below.

### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)

- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3)** \*
- EDU 3006 - Principles of Language Acquisition **(3)** \*
- EDU 4004 - Foundations of Special Education **(3)** \*
- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**
- EDU 4020 - Literacy Instruction for Secondary Teachers **(3)** \*
- EDU 4021 - General Methods for Secondary Teachers **(3)** \*
- EDU 4050 - Secondary Clinical Practice I **(4)**
- EDU 4055 - Secondary Clinical Practice II **(4)**
- EDU 40CP3 - Secondary Clinical Practice Seminar I **(1)**
- EDU 40CP4 - Secondary Clinical Practice Seminar II **(1)**

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics **(3)** (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science **(3)** \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science **(3)** (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language **(3)** (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts **(3)** (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education **(3)** (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers **(3)** \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Minor**

### **Computational Science Minor - Biology/Environmental Science (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

#### **Courses for Biology/Environmental Science Emphasis**

##### **Lower-Division Requirements**

- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3)**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**
- CSC 1043 - Introduction to Computer Programming **(2)**
- CSC 1043L - Introduction to Computer Programming Lab **(1)**

##### **Upper-Division Requirements**

- BIO 3063 - Conservation Ecology **(3)**
- BIO 3063L - Conservation Ecology Laboratory **(1)**
- CSC 3002 - UNIX and Python Scripting for Computational Science **(2)**

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R **(1)**
- CSC 3031 - Data Visualization and Communication with R **(1)**

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science **(3)**  
**OR**
- HON 4098 - Honors Project I **(2)** **and**
- HON 4099 - Honors Project II **(1)**  
**OR**
- MTH 4133 - Service Learning in Mathematics **(3)**

##### **Biology Major - Required Courses**

- CSC 3022 - Data Management for Computational Science **(2)**
- MTH 1044 - Calculus With Applications (GE) **(4)**
- MTH 3063 - Calculus Based Statistics With R **(3)**

Minor Total for Biology Majors: 26

### Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
  
- MTH 3063 - Calculus Based Statistics With R (3)
- OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 26

## **Computational Science Minor - Biology/Genetics (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### Core Courses for Biology/Genetics Emphasis

#### Lower-Division Requirements

- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)

#### Upper-Division Requirements

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- CSC 3002 - UNIX and Python Scripting for Computational Science (2)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)
- OR**
- HON 4098 - Honors Project I (2) **and**
  - HON 4099 - Honors Project II (1)
- OR**
- MTH 4133 - Service Learning in Mathematics (3)

### Biology Major - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 3063 - Calculus Based Statistics With R (3)

Minor Total for Biology Majors: 26

### Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 26

## **Computational Science Minor - Chemistry (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### Core Courses for Chemistry Emphasis

## Lower-Division Requirements

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)

## Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)  
**OR**
- MTH 4133 - Service Learning in Mathematics (3)

## Chemistry Major - Required Courses

- CHE 2013 - Analytical Chemistry (3)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CSC 3022 - Data Management for Computational Science (2)
- MTH 3063 - Calculus Based Statistics With R (3)  
**OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Chemistry Majors: 34

## Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3063 - Calculus Based Statistics With R (3)  
**OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CHE 2013 - Analytical Chemistry (3)
- CHE 3025 - Physical Chemistry I (3)
- CHE 3025L - Physical Chemistry I Lab (1)
- CSC 3022 - Data Management for Computational Science (2)
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 34

### Computational Science Minor - Physics (Mathematics and Computer Science)

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### Core Courses for Physics Emphasis

#### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

#### Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

### Physics or Engineering-Physics Major - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)  
**OR**
- MTH 4133 - Service Learning in Mathematics (3)

Minor Total for PHY & PHY/EGR Majors: 31

### Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)  
**OR**
- MTH 4133 - Service Learning in Mathematics (3)

Minor Total for Computer Science Majors: 28

### Mathematics Majors - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

- CSC 4133 - Service Learning in Computer Science (3)  
**OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)

**OR**

- MTH 4133 - Service Learning in Mathematics (3)

Minor Total for Mathematics Majors: 32

## **Computational Science Minor - Psychology (Mathematics and Computer Science)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics, or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross-disciplinary teams to solve challenging research problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

### Core Courses for Psychology Emphasis

#### Lower Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- PSY 1003 - General Psychology (GE) (3)

#### Upper Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
  - PSY 3020 - Social Psychology (3)
  
  - PSY 3001 - Physiological and Neuropsychology (4)
- OR**
- PSY 4009 - Psychology of Cognition and Learning (4)

Choose one course from:

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

Project (Choose at least 3 units):

Any project must have a computational science emphasis.

- CSC 4133 - Service Learning in Computer Science (3)
- OR**
- HON 4098 - Honors Project I (2) **and**
  - HON 4099 - Honors Project II (1)
- OR**
- MTH 4133 - Service Learning in Mathematics (3)

### Psychology Majors - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 3063 - Calculus Based Statistics With R (3)

Minor Total for Psychology Majors: 28

### Computer Science Majors - Required Courses

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3063 - Calculus Based Statistics With R (3)
- OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Computer Science Majors: 30

### Mathematics Majors - Required Courses

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

Minor Total for Mathematics Majors: 28

### Computer Science Minor

A minor in Computer Science is offered to those who wish to complement study in another discipline. This minor is not available to students who earn a major in Information Systems.

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)

Total: 11 Units

### Upper-Division Requirements

Choose 10 units from:

- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- CSC 3094 - Programming Languages (4)
- CSC 4012 - Topics in Computer Science (2)
- CSC 4054 - Computer Architecture and Assembly Language (4)
- ISS 3073 - Networking and Security (3)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 3043 - Discrete Mathematics (3)

Total: 10 Units

Minor Total: 21 Units

## **Computer Technology - Business Minor (Math and Computer Science Majors)**

The Computer Technology - Business minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for math and computer science students who desire to enter the technology or computer science careers with a greater knowledge of business.

### Lower-Division Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors (3) \*
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- MGT 2012 - Principles of Management (3)

Choose one course from the following:

- CSC 2052 - Data Structures in C++ (1) **and**
- CSC 2052L - Data Structures in C++ Lab (1)
- OR**
- CSC 2054 - Data Structures and Algorithms (3) **and**
- CSC 2054L - Data Structures and Algorithms Lab (1)

Total: 15-17 Units

Note(s):

\* The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

### Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- ISS 3042 - Project Management and Quality Assurance (2)

- ISS 4014 - Data Base Systems and Web Integration (4)
- MKT 3032 - Principles of Marketing (3)

Choose one course from the following:

- BUS 4075 - Sustainability in Action (3)
- BUS 4080 - International Business (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4016 - Perspectives on Leadership (3)
- MGT 4070 - Nonprofit Organization Management (3)
- MGT 4084 - Operations Management (3)

Total: 14 Units

Minor Total: 29-31 Units

## **Computer Technology - Marketing Minor (Math and Computer Science Majors)**

The Computer Technology - Marketing minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for math and computer science students who desire to enter technology or computer science careers with a greater knowledge of marketing.

### Lower-Division Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors (3) \*
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)

Choose one course from the following:

- CSC 2052 - Data Structures in C++ (1) **and**
- CSC 2052L - Data Structures in C++ Lab (1)
- OR**
- CSC 2054 - Data Structures and Algorithms (3) **and**
- CSC 2054L - Data Structures and Algorithms Lab (1)

Total Lower-Division: 12-14 Units

*\*The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.*

### Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- ISS 4014 - Data Base Systems and Web Integration (4)
- MKT 3032 - Principles of Marketing (3)

Choose two courses from the following:

- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)
- MKT 4032 - Marketing Research and Analytics (3)

Total Upper-Division: 15 Units

Minor Total: 27-29 Units

## **Mathematics Minor**

### Required Courses

- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 2033 - Linear Algebra (3)

Choose 12 additional units from:

- MTH 3012 - Number Theory with Proofs (2)
- MTH 2074 - Calculus III (4)
- MTH 3033 - Differential Equations (3)
- MTH 3043 - Discrete Mathematics (3)
- MTH 3052 - History of Mathematics (2)
- MTH 3063 - Calculus Based Statistics With R (3) \*
- MTH 3073 - Mathematical Modeling (3)
- MTH 3083 - Mathematical Probability and Statistics (3) \*
- MTH 4002 - Topics in Geometry (2)
- MTH 4013 - Complex Analysis (3)
- MTH 4024 - Real Analysis (4)
- MTH 4044 - Abstract Algebra (4)
- MTH 4071 - History of Mathematics Study Tour (1)
- MTH 4092 - Special Topics in Mathematics (2)

Minor Total: 23 Units

Note(s):

\*Only one of these may be taken

## **Software Engineering Minor**

### Lower-Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)

### Upper Division Requirements

- CSC 3014 - Operating Systems (4)
- CSC 3023 - Software Engineering (3)
- MTH 3043 - Discrete Mathematics (3)

### Choose One Course From:

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3022 - Data Management for Computational Science (2)

Total Units: 23

## **Certificate**

### **Software Engineering Certificate**

#### Lower Division Requirements

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2054 - Data Structures and Algorithms (3)
- CSC 2054L - Data Structures and Algorithms Lab (1)

#### Upper Division Requirements

- CSC 3012 - Operating Systems for Software Engineering Certificate (2)
- CSC 3023 - Software Engineering (3)

Total units for the certificate: 16

## **Department of Physics and Engineering**

## **Mission Statement**

The Physics and Engineering Department at PLNU provides strong programs of study in the fields of Physics and Engineering. Our students are well prepared for graduate studies and careers in scientific and engineering fields. We emphasize a collaborative learning environment which allows students to thrive academically, build personal confidence, and develop interpersonal skills. We provide a Christian environment for students to learn values and judgment and pursue integration of modern scientific knowledge and Christian faith.

## **Purposes**

- To prepare students for graduate studies in physics or engineering;
- To prepare students for a career in research or teaching;
- To prepare students for employment in various fields of applied physics and engineering;
- To satisfy pre-professional requirements for students choosing to attend engineering or architectural schools.

## **Tradition of Excellence**

The Department of Physics and Engineering offers an excellent education in a vibrant Christian setting. Caring and knowledgeable faculty engage students with one-on-one instruction and in smaller-sized classes. A number of our students gain practical work experience at Space and Naval Warfare Systems Command (SPAWAR) and engineering firms in the area. During the summer, our students participate in research on campus as well as at other undergraduate research programs around the country.

## **Career Opportunities**

Most Physics majors continue their education in graduate school and eventually become research scientists or teachers. The Engineering Physics majors focus on either electrical or mechanical systems. Computer Science Engineering students focus on computer hardware and software. Graduates with this major have the option to attend graduate school or enter the job market in industry or government immediately after graduation. Point Loma offers both a Bachelor of Science and a Bachelor of Arts in Physics as well as a Bachelor of Science in Engineering Physics.

## **Faculty**

Michelle Chen, Ph.D.  
*University of Pennsylvania*

Paul Schmelzenbach, Ph.D.  
*Oregon State University*

Maria Zack, Ph.D., Chair  
*University of California, San Diego*

## **Major**

### **General Engineering: Computer Science Engineering, B.S.E. (Physics and Engineering)**

#### **Program Learning Outcomes**

- Develop an understanding of the fundamental principles of physics and of engineering.
- Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
- Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
- Effectively communicate complicated technical information in writing.
- Effectively communicate complicated technical information orally.
- Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Effectively collaborate in teams.

## Lower Division Requirements

- CSC 2054 - Data Structures and Algorithms **(3)**
- CSC 2054L - Data Structures and Algorithms Lab **(1)**
- EGR 1012 - Introduction to Engineering I **(1)**
- EGR 1012L - Introduction to Engineering I Lab **(1)**
- EGR 1023 - Introduction to Engineering II **(2)**
- EGR 1023L - Introduction to Engineering II Lab **(1)**
- EGR 1043 - Introduction to Computer Programming **(2)**
- EGR 1043L - Introduction to Computer Programming Lab **(1)**
- EGR 1054 - Objects and Elementary Data Structures **(3)**
- EGR 1054L - Objects and Elementary Data Structures Lab **(1)**
- EGR 2024 - Electronics and Circuit Analysis **(3)**
- EGR 2024L - Electronics and Circuit Analysis Lab **(1)**
- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 1074 - Calculus II **(3)**
- MTH 1074L - Calculus II Lab **(1)**
- MTH 2074 - Calculus III **(4)**
- PHY 2044 - University Physics I (GE) **(3)**
- PHY 2044L - University Physics I Lab (GE) **(1)**
- PHY 2054 - University Physics II **(3)**
- PHY 2054L - University Physics II Lab **(1)**

Total Lower-Division Units: 40

## Upper Division Requirements

- EGR 3014 - Operating Systems **(4)**
- EGR 3023 - Software Engineering **(3)**
- EGR 3053 - Analog Electronics **(2)**
- EGR 3053L - Analog Electronics Lab **(1)**
- EGR 3073 - Networking and Security **(3)**
- EGR 3093 - Digital Electronics **(2)**
- EGR 3093L - Digital Electronics Lab **(1)**
- EGR 4003 - Information and Computer Security **(3)**
- EGR 4054 - Computer Architecture and Assembly Language **(4)**
- EGR 4072 - Senior Project I **(2)**
- EGR 4082 - Senior Project II **(2)**
- EGR 4092 - Internship in Engineering **(2)**
- EGR 4103 - Electrical Signals and Systems **(3)**

- MTH 3033 - Differential Equations (3)

**Choose one of the following:**

- MTH 3063 - Calculus Based Statistics With R (3)
- MTH 3083 - Mathematical Probability and Statistics (3)

Total Upper-Division Units: 38

Total: 78 Units (70 without GE)

**Recommended:**

- MTH 3043 Discrete Mathematics
- EGR 4042 Embedded Systems and Robotics and EGR 4042L Embedded Systems and Robotics Lab

**General Engineering: Electrical Engineering, B.S.E.**

**Program Learning Outcomes**

*Students who complete the Engineering program will:*

- Develop an understanding of the fundamental principles of physics and engineering.
- Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
- Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
- Effectively communicate complicated technical information in writing.
- Effectively communicate complicated technical information orally.
- Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Effectively collaborate in teams.

**Lower-Division Requirements**

- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- EGR 1023 - Introduction to Engineering II (2)
- EGR 1023L - Introduction to Engineering II Lab (1)
- EGR 1043 - Introduction to Computer Programming (2)
- EGR 1043L - Introduction to Computer Programming Lab (1)
- EGR 1054 - Objects and Elementary Data Structures (3)
- EGR 1054L - Objects and Elementary Data Structures Lab (1)
- EGR 2014 - Engineering Mechanics: Statics (3)
- EGR 2014L - Engineering Mechanics: Statics Lab (1)
- EGR 2024 - Electronics and Circuit Analysis (3)
- EGR 2024L - Electronics and Circuit Analysis Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 1074L - Calculus II Lab (1)
- MTH 2074 - Calculus III (4)

- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total Lower-Division Units: 40

## Upper-Division Requirements

- EGR 3013 - Nuclear Physics (2)
- EGR 3013L - Nuclear Physics Lab (1)
- EGR 3053 - Analog Electronics (2)
- EGR 3053L - Analog Electronics Lab (1)
- EGR 3063 - Electricity, Magnetism, and Waves I (3)
- EGR 3083 - Electricity, Magnetism, and Waves II (3)
- EGR 3093 - Digital Electronics (2)
- EGR 3093L - Digital Electronics Lab (1)
- EGR 4042 - Embedded Systems and Robotics (1)
- EGR 4042L - Embedded Systems and Robotics Lab (1)
- EGR 4013 - Thermodynamics (3)
- EGR 4063 - Solid State Physics (3)
- EGR 4072 - Senior Project I (2)
- EGR 4082 - Senior Project II (2)
- EGR 4092 - Internship in Engineering (2)
- EGR 4103 - Electrical Signals and Systems (3)
- MTH 3033 - Differential Equations (3)

Choose one from the following:

- MTH 3063 - Calculus Based Statistics With R (3)
- MTH 3083 - Mathematical Probability and Statistics (3)

Total Upper-Division Units: 38

Total Units for Degree: 78 (70 without GE)

## **General Engineering: Mechanical Engineering Physics, B.S.E.**

### Program Learning Outcomes

**Students who complete the Engineering program will:**

- Develop an understanding of the fundamental principles of physics and of engineering.
- Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
- Design and conduct experiments or complete an engineering design project as well as analyze and interpret data.
- Effectively communicate complicated technical information in writing.
- Effectively communicate complicated technical information orally.
- Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.

- Effectively collaborate in teams.

## Lower-Division Requirements

- EGR 1012 - Introduction to Engineering I **(1)**
- EGR 1012L - Introduction to Engineering I Lab **(1)**
- EGR 1023 - Introduction to Engineering II **(2)**
- EGR 1023L - Introduction to Engineering II Lab **(1)**
- EGR 1043 - Introduction to Computer Programming **(2)**
- EGR 1043L - Introduction to Computer Programming Lab **(1)**
- EGR 1054 - Objects and Elementary Data Structures **(3)**
- EGR 1054L - Objects and Elementary Data Structures Lab **(1)**
- EGR 2014 - Engineering Mechanics: Statics **(3)**
- EGR 2014L - Engineering Mechanics: Statics Lab **(1)**
- EGR 2024 - Electronics and Circuit Analysis **(3)**
- EGR 2024L - Electronics and Circuit Analysis Lab **(1)**
- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 1074 - Calculus II **(3)**
- MTH 1074L - Calculus II Lab **(1)**
- MTH 2074 - Calculus III **(4)**
- PHY 2044 - University Physics I (GE) **(3)**
- PHY 2044L - University Physics I Lab (GE) **(1)**
- PHY 2054 - University Physics II **(3)**
- PHY 2054L - University Physics II Lab **(1)**

Total Lower-Division Units: 40

## Upper-Division Requirements

- EGR 3013 - Nuclear Physics **(2)**
- EGR 3013L - Nuclear Physics Lab **(1)**
- EGR 3034 - Mechanics of Materials **(3)**
- EGR 3034L - Mechanics of Materials Lab **(1)**
- EGR 3043 - Analytical Mechanics: Dynamics **(3)**
- EGR 3063 - Electricity, Magnetism, and Waves I **(3)**
- EGR 3083 - Electricity, Magnetism, and Waves II **(3)**
- EGR 4013 - Thermodynamics **(3)**
- EGR 4063 - Solid State Physics **(3)**
- EGR 4072 - Senior Project I **(2)**
- EGR 4082 - Senior Project II **(2)**
- EGR 4092 - Internship in Engineering **(2)**
- MTH 3033 - Differential Equations **(3)**
- PHY 3004 - Modern Physics **(3)**
- PHY 3004L - Modern Physics Lab **(1)**

Choose one from the following:

- MTH 3063 - Calculus Based Statistics With R **(3)**

- MTH 3083 - Mathematical Probability and Statistics (3)

Total Upper-Division Units: 38

Total Units for Degree: 78 (70 without GE)

**Recommended:**

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- MTH 2033 - Linear Algebra (3)

## **Physics, B.A.**

### Program Learning Outcomes

**Students who complete the Physics B.A. program will:**

- Develop an understanding of the fundamental principles of physics.
- Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
- Design and conduct experiments as well as analyze and interpret data.
- Effectively communicate complicated technical information in writing.
- Effectively communicate complicated technical information orally.
- Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Effectively collaborate in teams.

### Lower-Division Requirements

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- EGR 1023 - Introduction to Engineering II (2)
- EGR 1023L - Introduction to Engineering II Lab (1)
- EGR 1043 - Introduction to Computer Programming (2)
- EGR 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 1074L - Calculus II Lab (1)
- MTH 2074 - Calculus III (4)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total Lower-Division Units: 33

## Upper-Division Requirements

- MTH 3033 - Differential Equations (3)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)
- PHY 3043 - Analytical Mechanics: Dynamics (3)
- PHY 3063 - Electricity, Magnetism, and Waves I (3)
- PHY 4013 - Thermodynamics (3)
- PHY 4053 - Quantum Mechanics (3)
- PHY 4072 - Senior Project (2)

Total Upper-Division Units: 21

## Electives

**One of the following courses:**

- PHY 3013 - Nuclear Physics (2) **and**
- PHY 3013L - Nuclear Physics Lab (1)
- PHY 3083 - Electricity, Magnetism, and Waves II (3)
- PHY 4063 - Solid State Physics (3)

Total Elective Units: 3

Total Units for Degree: 57

**Recommended:**

- CHE 1053 - General Chemistry II (3) **and**
- CHE 1053L - General Chemistry II Lab (1)
- EGR 1054 - Objects and Elementary Data Structures (3) **and**
- EGR 1054L - Objects and Elementary Data Structures Lab (1)
- MTH 2033 - Linear Algebra (3)

## **Physics, B.A. for Associate Degree Transfer (ADT) Students**

Note that all lower division physics and mathematics courses will be transferred in from the community college. Students will bring in 24 units of mathematics (8 units are GE).

## Core Curriculum

- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)
- PHY 3043 - Analytical Mechanics: Dynamics (3)
- PHY 3063 - Electricity, Magnetism, and Waves I (3)
- PHY 4013 - Thermodynamics (3)
- PHY 4053 - Quantum Mechanics (3)

- PHY 4072 - Senior Project (2)
- MTH 3033 - Differential Equations (3)

Total: 22 Units

Take a minimum of 11 units of electives from the following options:

- PHY 3013 - Nuclear Physics (2)
- PHY 3013L - Nuclear Physics Lab (1)
- PHY 3083 - Electricity, Magnetism, and Waves II (3)
- PHY 4063 - Solid State Physics (3)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- EGR 1043 - Introduction to Computer Programming (2)
- EGR 1043L - Introduction to Computer Programming Lab (1)

Total: 11 Units

Total Units for the Degree: 57 (49 without GE)

Note(s):

Associate Degree for Transfer (ADT) students only.

## **Physics, B.S.**

### Program Learning Outcomes

**Students who complete the Physics B.S. program will:**

- Develop an understanding of the fundamental principles of physics.
- Apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems.
- Design and conduct experiments as well as analyze and interpret data.
- Effectively communicate complicated technical information in writing.
- Effectively communicate complicated technical information orally.
- Be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Effectively collaborate in teams.

### Lower-Division Requirements

- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- EGR 1023 - Introduction to Engineering II (2)
- EGR 1023L - Introduction to Engineering II Lab (1)
- EGR 1043 - Introduction to Computer Programming (2)

- EGR 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 1074 - Calculus II (3)
- MTH 1074L - Calculus II Lab (1)
- MTH 2074 - Calculus III (4)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

Total Lower-Division Units: 33

### Upper-Division Requirements

- MTH 3033 - Differential Equations (3)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)
- PHY 3013 - Nuclear Physics (2)
- PHY 3013L - Nuclear Physics Lab (1)
- PHY 3043 - Analytical Mechanics: Dynamics (3)
- PHY 3063 - Electricity, Magnetism, and Waves I (3)
- PHY 3083 - Electricity, Magnetism, and Waves II (3)
- PHY 4013 - Thermodynamics (3)
- PHY 4053 - Quantum Mechanics (3)
- PHY 4063 - Solid State Physics (3)
- PHY 4072 - Senior Project (2)

Total Upper-Division Units: 30

### Electives

**Complete one of the following courses and the associated lab:**

- EGR 2014 - Engineering Mechanics: Statics (3) **and**
- EGR 2014L - Engineering Mechanics: Statics Lab (1)
- EGR 2024 - Electronics and Circuit Analysis (3) **and**
- EGR 2024L - Electronics and Circuit Analysis Lab (1)
- EGR 3034 - Mechanics of Materials (3) **and**
- EGR 3034L - Mechanics of Materials Lab (1)

Total Elective Units: 4

Total Units for Degree: 67

### Recommended:

- CHE 1053 - General Chemistry II (3) **and**

- CHE 1053L - General Chemistry II Lab (1)
- CHE 2094 - Organic Chemistry I (3) and
- CHE 2094L - Organic Chemistry I Lab (1)
- EGR 1054 - Objects and Elementary Data Structures (3) and
- EGR 1054L - Objects and Elementary Data Structures Lab (1)
- MTH 2033 - Linear Algebra (3)

## **Minor**

### **Computational Science Minor - Physics (Physics and Engineering)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross disciplinary teams to solve challenging scientific problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## **Core Courses for Physics Emphasis**

### **Lower-Division Requirements**

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)

### **Upper-Division Requirements**

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- 
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

### **Physics or Engineering-Physics Major - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- EGR 1012 - Introduction to Engineering I (1)
- EGR 1012L - Introduction to Engineering I Lab (1)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)

**Project (Choose at least 3 units):**

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

**Minor Total for PHY & PHY/EGR Majors: 31**

**Computer Science Majors - Required Courses**

- ISS 4014 - Data Base Systems and Web Integration (4)

**Choose one course from:**

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

**Project (Choose at least 3 units):**

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

**Minor Total for Computer Science Majors: 28**

**Mathematics Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)

**Choose one course from:**

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

**Project (Choose at least 3 units):**

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

## **Minor Total for Mathematics Majors: 32**

## **Physics Minor**

### Requirements

- PHY 2044 - University Physics I (GE) (3)
- PHY 2044L - University Physics I Lab (GE) (1)
- PHY 2054 - University Physics II (3)
- PHY 2054L - University Physics II Lab (1)
- PHY 3004 - Modern Physics (3)
- PHY 3004L - Modern Physics Lab (1)
- Eight additional upper-division units in Physics or Engineering.

Minor Total: 20 Units

## **Department of Psychology**

### **Purposes**

- To develop mature personalities in students, so they will be able to meet problems of adjustment with realism and intelligence;
- To integrate the religious faith of students with the study of psychology;
- To prepare students who plan to undertake graduate study in psychology for careers related to mental health, such as marriage and family counseling, clinical psychology, community psychology, and health psychology;
- To educate students preparing for careers in non-mental health/related fields, such as ministry, business, medicine, and law.

### **Tradition of Excellence**

The Department of Psychology at Point Loma Nazarene University emphasizes several features in striving for excellence in undergraduate education. The Department's fieldwork program allows juniors and seniors to obtain training in specific psychological skills through a community mental health or social service agency. Supervised by an agency representative and a psychology professor, this program is an effective way for Psychology majors to complement course work with real world experience. Point Loma also offers classes designed to deal with the integration of psychology and the Christian faith. Additionally, select students join with faculty to conduct research that may be presented at a national or regional psychology conference. The Department also maintains an active PsiChi organization (The International Honor Society in Psychology) that sponsors presentations in the field, preparatory workshops for those interested in graduate school, and special social events.

## **Career Opportunities**

It is the goal of the faculty that all students desiring to pursue graduate studies be prepared to do so and to present a strong graduate application. Such an application results from a Department that emphasizes areas foundational to entrance and success in graduate school. In addition to strong academic achievement, these areas include fieldwork experience, research experience, and sufficient contact with faculty that allows a student to earn a credible letter of recommendation. Recent alumni surveys indicate that over one-half of PLNU Psychology majors eventually receive a graduate degree of some kind, with one-third of those receiving a degree one to three years after graduating from PLNU. When these graduates were asked about their level of satisfaction with the preparation received at Point Loma, over ninety-five percent reported that they were very satisfied or satisfied. There is a strong tradition of excellence in the Department of Psychology at PLNU that attempts to prepare students for their next step into the future.

## **Faculty**

Max Butterfield, Ph.D.  
*Texas Christian University*

G. Michael Leffel, Ph.D.  
*University of Illinois, Champaign-Urbana*

Rosemond Lorona, Ph.D.  
*Baylor University*

Kendra Oakes Mueller, Ph.D.  
*Fuller Theological Seminary, Graduate School of Psychology*

Ross Oakes Mueller, Ph.D., Chair  
*Fuller Theological Seminary, Graduate School of Psychology*

Joel Sagawa, Ph.D.  
*Fuller Theological Seminary, Graduate School of Psychology*

Kim Schaeffer, Ph.D.  
*University of Oklahoma Health Sciences Center*

John Wu, Ed.D.  
*Harvard University, School of Education*

## **Major**

### **Psychology, B.A.**

#### **Program Learning Outcomes**

*Students who complete the program in Psychology will be able to:*

- Identify basic tenets of psychology.
- Summarize and apply facets of "The Good Life" as conceptualized in contemporary positive-moral psychology.
- Display an increase in personal growth and development (for the purpose of serving others).
- Demonstrate care for others.
- Understand careers in psychology.

## Required Concentrations

*Choose a concentration from the following:*

Concentration A: Character Morality and Culture

Concentration B: General Psychology

Concentration C: Therapeutic and Community Psychology

## Lower-Division Requirements

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) **(3)** *(required of all students who graduated from high school the year prior to enrollment at PLNU)*
- PSY 1003 - General Psychology (GE) **(3)**

Total: 6 Units

## Upper-Division Requirements

- PSY 3000 - Personality and Adult Development **(4)**
- PSY 3008 - Developmental Psychology - Birth Through Adolescence **(4)**
- PSY 3021 - Abnormal Psychology **(3)**
- PSY 3090 - Research Methods and Statistics I **(4)**
- PSY 3091 - Research Methods and Statistics II **(4)**
- PSY 4000 - History and Contemporary Issues in Psychology **(2)**
- PSY 4009 - Psychology of Cognition and Learning **(4)**
- PSY 4020 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) **(4)**

Total: 29 Units

Core Total: 35 Units

## Required Concentrations

Concentration A: Character, Morality, and Culture Psychology

## Upper-Division Requirements

- PSY 3015 - Positive Psychology **(3)**
- PSY 3030 - Moral Psychology and Cultural Values **(4)**

One course from the following:

- PSY 4010 - Issues in Psychotherapy-Theology Integration **(3)** \*
- PSY 4040 - Psychology of Religion **(4)**

• **Plus three (3) units of Psychology electives** *(may also substitute MTH 3063 or MTH 3083 for Psychology elective).*

Total: 13-14 Units

Note(s):

*Electives - According to individual goals*

*\*If course is selected, must also take PSY 3025 (4)*

Recommended

## Concentration B: General Psychology

Upper-Division Requirements

- **Fifteen units of Psychology electives** (*can also substitute either MTH 3063 or MTH 3083 for Psychology elective*).

Concentration Total: 15 Units

Note(s):

*Electives - According to individual goals*

## Concentration C: Therapeutic and Community Psychology

Upper-Division Requirements

- PSY 3001 - Physiological and Neuropsychology (4)
- PSY 3025 - Clinical and Community Interventions (4)
- PSY 3050 - Clinical and Research Assessment (3)
- PSY 3080 - Family Development and Family Therapies (3)
- PSY 4010 - Issues in Psychotherapy-Theology Integration (3)

Concentration Total: 17 Units

Recommended

- PSY 3015 - Positive Psychology (3)
- PSY 3041 - Group Counseling (1-3)
- PSY 3045 - Group Dynamics (3) (PSY341 is a pre-requisite)

**Minor**

## **Computational Science Minor - Psychology (Psychology)**

A minor in Computational Science is offered to those who wish to combine their knowledge of Biology, Chemistry, Physics, or Psychology with Mathematics and Computer Science. This minor allows students to have the skills to work in cross-disciplinary teams to solve challenging research problems. This minor is intended for students majoring in Biology, Chemistry, Computer Science, Mathematics, Physics or Psychology.

## **Core Courses for Psychology Emphasis**

### **Lower Division Requirements**

- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- PSY 1003 - General Psychology (GE) (3)

### **Upper Division Requirements**

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- PSY 3020 - Social Psychology (3)
- 
- PSY 3001 - Physiological and Neuropsychology (4)
- **OR**
- PSY 4009 - Psychology of Cognition and Learning (4)

### **Choose one course from:**

- CSC 3011 - Machine Learning and Multivariate Modeling in R (1)
- CSC 3031 - Data Visualization and Communication with R (1)

### **Project (Choose at least 3 units):**

Any project must have a computational science emphasis.

- CSC 4133 - Service Learning in Computer Science (3)
- **OR**
- HON 4098 - Honors Project I (2) **and**
- HON 4099 - Honors Project II (1)
- **OR**
- MTH 4133 - Service Learning in Mathematics (3)

## **Psychology Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 3063 - Calculus Based Statistics With R (3)

## **Minor Total for Psychology Majors: 28**

### **Computer Science Majors - Required Courses**

- ISS 4014 - Data Base Systems and Web Integration (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- 
- MTH 3063 - Calculus Based Statistics With R (3)
- **OR**
- MTH 3083 - Mathematical Probability and Statistics (3)

## **Minor Total for Computer Science Majors: 30**

### **Mathematics Majors - Required Courses**

- CSC 3022 - Data Management for Computational Science (2)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1064L - Calculus I Lab (GE) (1)
- MTH 3083 - Mathematical Probability and Statistics (3)

## **Minor Total for Mathematics Majors: 28**

### **Pre-Therapeutic Psychology Minor**

This minor is for non-Psychology majors who desire an introductory exposure to therapeutic psychology. It is especially suited for individuals who plan to enter careers in social services, i.e. ministry, nursing, medicine, or social work. Students minoring in this program complete the following courses.

#### **Requirements**

- PSY 3021 - Abnormal Psychology (3)

#### **One course from the following:**

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3)
- PSY 1003 - General Psychology (GE) (3)

#### **One course from the following:**

- PSY 3025 - Clinical and Community Interventions (4)
- PSY 3080 - Family Development and Family Therapies (3)

#### **One course from the following:**

- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)
- CHD 1050 - Human Development (3)

Three units from the following:

- PSY 3015 - Positive Psychology (3)
- PSY 3020 - Social Psychology (3)
- PSY 3041 - Group Counseling (1-3) (Must be taken for 3 units)
- PSY 3045 - Group Dynamics (3) (PSY341 is a pre-requisite)
- PSY 3049 - Intimate Couples (3) (Must take with fiance or spouse)
- PSY 3060 - Human Sexuality (3)

One course from the following:

- PSY 4010 - Issues in Psychotherapy-Theology Integration (3)
- PSY 4020 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) (4)

Minor Total: 18-21

## Department of Sociology, Social Work, and Family Sciences

### Mission Statement

As followers of Christ, our mission is to nurture servant scholars who critically and empirically evaluate social systems, cultural patterns, and basic human needs to constructively engage as agents of hope with individuals, families, and communities.

### Purposes

- To provide students with understanding of social environments and patterns of human behavior.
- To help students understand themselves and others in the context of local, national and global societies through the comparison of societies and cultures.
- To prepare students to work with many populations and issues in a variety of settings in the United States and elsewhere in the world.
- To provide students with the tools for study and analysis of the structure and functioning of social groups, social institutions, and societies.
- To provide students with an understanding of the multiple factors that influence the development and quality of life of individuals, families, and communities throughout the lifespan.
- To provide students with the ability to identify appropriate resources to use in application for problem solving.
- To provide students with the ability to analyze research data or original published works and use critical thinking skills for evaluating products, research, or theories.
- To provide students with the ability to examine the value of societal diversity and ethical treatment of others as a result of their Christian faith.
- To provide professional education for employment in the criminal justice systems and generalist social work practice, dietetics, nutrition, food, child development, adolescent development, and the foundation for post-graduate study.

### Tradition of Excellence

- A major in Child and Adolescent Development prepares the graduate with an optimal interactive environment to study and learn about the ways children grow and form relationships on a physical, emotional, social, and intellectual scale. Combining real-world coursework with professional preparedness enables the graduate to confidently step into a graduate program or a career serving children and families.
- A major in Dietetics prepares the graduate in understanding science, engaging in a healthy lifestyle, and interacting with people. Graduates will learn how to evaluate patients' nutritional and health needs, and hone the ability to prevent and treat many types of conditions and diseases. Guidance and resources will be given to successfully pursue becoming a registered dietitian.
- A major in Nutrition and Food prepares the graduate to serve people and gain in-depth knowledge to promote healthy lifestyle choices. The graduate will understand with global awareness how decisions around food directly affect health and well-being and be trained to master skills in food source analysis, food evaluation, food selection, and the relationship of food to nutrition and health.
- A concentration in Food Service Management builds upon the core Nutrition and Food curriculum and prepares the graduate in learning what it takes to manage a restaurant, oversee food service operations, comply with health codes, and interact with customers.
- A concentration in Nutrition and Health builds upon the core Nutrition and Food curriculum and prepares the graduate by studying the social impact of the food we eat, including how it affects our economy, psychology, and culture.
- A major in Sociology is foundational for the understanding of human society and social behavior. The graduate in Sociology is equipped for many ministry, corporate, and human service positions, in addition to being prepared for post-graduate study in Sociology, which can lead to positions in higher education, research, business, government, and law.
- A concentration in Criminal Justice builds upon the core Sociology curriculum and prepares the graduate for positions in all components of the criminal justice system, including law enforcement, courts, and corrections. The graduate is prepared for postgraduate study in Criminal Justice, Sociology, law, and other fields.
- A major in Social Work prepares the graduate for entry into professional social work in a generalist practice. The Social Work graduate is prepared for post-graduate work in the profession.
- A minor in Child Development as a complement to other disciplines.
- A minor in Criminal Justice as a complement to other disciplines.
- A minor in Nutrition as a complement to other disciplines.
- A minor in Sociology as a complement to other disciplines.

## **Career Opportunities**

The Department of Sociology, Social Work and Family Sciences prepares students to be effective leaders in the work force.

Students are prepared for careers in business, industry, public and private agencies, schools, institutions that provide goods, services, education, and information to individuals, families, and communities.

A number of students were hired while still in internships, and many graduates have secured professional employment during or shortly after completion of their undergraduate study. Popular careers students enter include research design,

public relations, human services, probation and criminal justice, social work, social welfare, counseling, health care administration, teachers, school administrators, social service agents, family/adult educators, dietitians, community service agents, nutrition educators, and healthcare specialists and many other rewarding fields.

Many graduates continue their education at the post-graduate level in Sociology, Social Work, Child Life, Child Development, Family Studies, Public Health, Nutrition Education, Dietetics, Psychology, Education, and law. Students have entered schools such as the University of California-Berkeley, University of Chicago, University of Colorado, Duke University, University of Southern California, San Diego State University, Loma Linda University, and the California Western School of Law.

## **Faculty**

Kellye Carroll, A.B.D.  
*Grand Canyon University*

Susan DeCristofaro Rogers, M.A., Co-Chair  
*Point Loma Nazarene University*  
Academic Director-Early Childhood Learning Center

James Gates, Ph.D.  
*University of Florida*

Brittany Johnson, Ph.D., R.D.N.  
*Concordia University, Chicago*

Patricia Leslie, Ph.D., Director of Social Work  
*Loma Linda University*

Kevin Modesto, Ph.D., Co-Chair  
*University of North Carolina, Chapel Hill*

Cindy Swann, M.S., R.D.  
*San Diego State University*  
Director of Dietetics

Jimiliz Valiente-Neighbours, Ph.D.  
*University of California, Santa Cruz*

## **Major**

### **Child and Adolescent Development, B.A.**

#### **Program Learning Outcomes**

**Students who complete the program in Child and Adolescent Development will be able to:**

- Identify and describe normative similarities and differences of cognitive, emotional, social and physical theories at each developmental stage from prenatal through adulthood.
- Illustrate how children's play facilitates integration of cognitive, social, physical, and emotional development.
- Evaluate the effects of family systems on the development of children and adolescents.
- Identify and discuss scientific research in understanding different philosophical views of growth and development, both historical and current.

- Analyze what are developmentally appropriate concepts, activities, materials, and resources as related to infant through adolescent development.
- Assess research of theoretical and appropriate practical elements of parenting to facilitate decisions for a healthy environment for children and adolescents.
- Describe the adult-child dynamics and processes essential for building strengths of character and competence in children and adolescents.
- Examine hereditary, cultural, and environmental factors inherent in ways children and adolescents develop physically, cognitively, morally, socially, and emotionally.
- Evaluate the effects of society and culture upon the family microsystems, family types, and the subsequent macro systems with which they co-exist.
- Identify career paths within the child and adolescent professions.

## Lower-Division Requirements

- CHD 1020 - Child and Adolescent Development (4)
- CHD 1050 - Human Development (3)
- NUT 1001 - Introduction to Nutrition (2)
- SWF 1000 - Living Justly in Contemporary Society (GE) (3)

Total: 12 Units

## Upper-Division Requirements

- CHD 3003 - Infant and Toddler Development (3)
  - CHD 3010 - Early Childhood Education (4)
  - CHD 3013 - Adolescent Development in the Family Context (2)
  - CHD 3055 - Development of Special Needs Children (3)
  - CHD 3085 - Parent Education and Family Development (2)
  - CHD 4020 - Child Development in the Family and Community (4)
  - CHD 4025 - Child and Adolescent Nutrition and Health (3)
  
  - CHD 4070 - Practicum in Child Development (3)
- OR**
- CHD 4075 - Internship in Child Development (2 or 4)
  - CHD 4097 - Senior Seminar (2)
  
  - LIT 3025 - Children's Literature (3)
  - PSY 3021 - Abnormal Psychology (3)
  - SWF 3006 - Research Basics (3)
  - SWF 3015 - Health and Well-Being (GE) (2)

Select 6 units from:

- ART 3019 - Visual Arts in the Classroom I (3)
- CHD 4060 - Administration and Supervision in Early Childhood Education (4)
- CHD 4075 - Internship in Child Development (2 or 4)
- EDU 3002 - Foundations of Education and Learning Theory (3)
- EDU 3006 - Principles of Language Acquisition (3)
- EDU 4004 - Foundations of Special Education (3)

- MUE 3041 - Music Skills for the Elementary Classroom Teacher (3)
- PED 3008 - Methods of Teaching Physical Education (3)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)
- PSY 3025 - Clinical and Community Interventions (4)
- SOC 3060 - Race and Ethnicity (3)
- SWK 3040 - Child Welfare (3)

Total: 42-43 Units

Major Total: 54 Units

Note(s):

**Students must be fingerprinted through community care licensing to obtain Child Abuse Central Index Clearance.**

**Students graduating with a Child Development major may qualify for the "Child and Adolescent Development Site Supervisor" permit with the California Commission on Teacher Credentialing.**

Accepting Associate Degree for Transfer (ADT)

## **Dietetics, B.S.**

### Program Learning Outcomes

**Students who complete the program in Dietetics will be able to:**

- Demonstrate content knowledge of nutrient needs of growth and development on nutrient needs during the lifecycle stages of prenatal through elderly.
- Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
- Apply content knowledge to disease prevention and treatment, and develop skills in teaching/counseling nutrition knowledge to individuals or groups.
- Understand the food and food systems foundation through techniques of food preparation and application to the development, modification, and evaluation of recipes, menus and food products acceptable to diverse groups.
- Apply knowledge of the physical and biological science foundation as it relates to physiology of the body, nutrient sources, and nutrient function.
- Utilize principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation necessary for the implementation of food and nutrition services in professional settings.
- Analyze, interpret, and evaluate current evidence-based research related to nutrition topics.
- Develop skills at writing science-based papers using analyzed research data as references.
- Examine cultural differences in food choices and ethics when working with peoples of diverse ethnic, religious, and financial backgrounds.
- Evaluate the effects of societal, cultural, and financial dynamics upon diet trends, dietary choices, and food preparation methods among families and societies.
- Identify career paths and access appropriate career plans for identifying professional area of service in dietetics.

### Lower-Division Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors **(3)**
- BIO 1030 - Human Anatomy and Physiology I (GE) **(3)**
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) **(1)**
- BIO 1040 - Human Anatomy and Physiology II **(3)**
- BIO 1040L - Human Anatomy and Physiology II Laboratory **(1)**
- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2020 - Microbiology of Infectious Diseases **(3)**
- BIO 2020L - Microbiology of Infectious Diseases Laboratory **(1)**
- CHE 1052 - General Chemistry I (GE) **(4)**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**
- CHE 1053 - General Chemistry II **(3)**
- CHE 1053L - General Chemistry II Lab **(1)**
- CHE 2094 - Organic Chemistry I **(3)**
- CHE 2094L - Organic Chemistry I Lab **(1)**
- CHD 1050 - Human Development **(3)**
- MGT 2012 - Principles of Management **(3)**
- NUT 1010 - Fundamentals of Food **(2)**
- NUT 2025 - Fundamentals of Nutrition **(3)**
- PHL 2011 - Ethics (GE) **(3)**
- SOC 2001 - Cultural Anthropology (GE) **(3)**
- SWF 1000 - Living Justly in Contemporary Society (GE) **(3)**

Total: 51 Units

## Upper-Division Requirements

- FCS 3000 - Quantity Food Production **(3)**
- NUT 3003 - Cultural Foods **(2)**
- NUT 3020 - Nutrition Assessment **(2)**
- NUT 3030 - Community Nutrition **(3)**
- NUT 3031 - Community Nutrition Practicum **(1)**
- NUT 3035 - Nutrition Research Through the Life Cycle **(2)**
- NUT 3065 - Advanced Nutrition **(3)**
- NUT 4014 - Practices in Nutrition Education and Dietary Counseling **(2)**
- NUT 4015 - Medical Nutrition Therapy **(3)**
- NUT 4017 - Medical Nutrition Therapy Practicum **(1)**
- NUT 4035 - Food Service Management **(2)**
- NUT 4055 - Food Science **(3)**
- NUT 4097 - Senior Seminar **(2)**
- SWF 3006 - Research Basics **(3)**
- SWF 3015 - Health and Well-Being (GE) **(2)**

Total: 35 Units

Major Total: 86 Units

## Recommended Courses

- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)
- MKT 3032 - Principles of Marketing (3)
- KIN 3040 - Physiology of Exercise (3)

## Additional Information

The major in Dietetics requires 132 units to graduate, four (4) more than the minimum 128 units required for most majors at PLNU. Students are encouraged to take one or two courses in the summer to lighten their course loads during the regular semester.

Students interested in becoming a Registered Dietitian should consult the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2190, Chicago IL 60606-6995, 312-899-5400.

Graduates in the Dietetics major will require further training by applying to an AND-accredited internship program in order to complete AND requirements to be a registered dietitian (R.D.). (The Commission on Dietetic Registration will require a minimum of a master's degree to take the credentialing exam for registered dietitians beginning on January 1, 2024.)

## Majoring in Dietetics

Graduates in the Dietetics major from PLNU earn a Verification Statement that will allow them to apply to an AND-accredited dietetic internship program, the second step to becoming a Registered Dietitian (R.D.)

### **To be verified at PLNU, the student must:**

- Earn a "C" or better in all courses for the Dietetics major required for the DPD
- Maintain a GPA of 2.800 or higher
- Earn a B.S. degree (official transcripts, including the one that shows an earned bachelor's degree, must be in the DPD file)
- Participate in community service learning activities during the program, as evidenced in the senior portfolio or in a project
- Demonstrate ethical principles and follow AND's Code of Ethics

## Students with a Bachelor's Degree from Another University Seeking a Verification Statement

If a student has earned a bachelor's degree from another university, and is seeking a Verification Statement for the Dietetics program, the student may choose one of the two following paths:

- Apply to PLNU for a Verification Statement in the Dietetics program, with no degree attached (no second bachelor's degree). This pathway requires:
  - A bachelor's degree from a college/university in another major
  - Official transcripts reviewed by the Director of Dietetics and the undergraduate Director of Admissions
  - A minimum 24 units of upper-division Dietetics courses and prerequisites taken at PLNU. (Courses required will be based on previous coursework transferred, and the date that courses were taken)
- Acceptance to PLNU

OR

- Apply to PLNU for a second Bachelor of Science degree in Dietetics. This pathway requires:
- Official transcripts reviewed by the Director of Dietetics and the undergraduate Director of Admissions
- Coursework and prerequisites required for the Dietetics major
- Coursework to meet all general education requirements at PLNU
- Acceptance to PLNU

## International Students Seeking a Verification Statement

If a student is an International Student seeking a Verification Statement in Dietetics from PLNU, the student must apply to the University and submit the following:

- All documents including high school and college transcripts translated into English and evaluated by an approved credential evaluation service before being sent to the Admissions Office. The student may contact any credential evaluator approved by the National Association of Credential Evaluators (NACES), such as World Education Services, Inc. (WES), Academic Credentials Evaluation Institute, Inc. (ACEI), and Educational Credential Evaluators, Inc. (ECE).
- English proficiency: A 550 paper based TOEFL or 216 computer based TOEFL.
- An original notarized copy of an Affidavit of Support (financial statement) submitted by a sponsor or bank, indicating sufficient funds for the educational expenses for one academic year at PLNU. (Point Loma Nazarene is a private university; therefore, tuition is the same for U.S. residents and international students.)
- Acceptance to PLNU
- A minimum 24 units of upper-division Dietetics courses and prerequisites at PLNU. (Courses required will be based on previous coursework transferred, and the date that courses were taken.)

**To be verified at PLNU, the student must:**

- Earn a “C” or better in all core curriculum DPD classes
- Maintain a GPA of 2.800 or higher
- Take at least 24 units of upper-division DPD classes at PLNU
- Demonstrate ethical principles and follow AND’s Code of Ethics

## Nutrition, B.A.

### Program Learning Outcomes

**Students who complete the program in Nutrition will be able to:**

- Demonstrate critical thinking skills and analytical abilities to identify and solve problems in nutritional science.
- Critically evaluate and interpret research for various life-cycle stages and develop practical approaches to address specific nutrition-related conditions and diseases within the life-span.
- Plan and implement advanced educational principles for nutrition behavior change and communicate effectively with diverse populations.
- Evaluate the effects of societal, cultural, ethical and financial dynamics upon diet trends, dietary choices, and food preparation methods among individuals, families and societies.
- Develop and articulate a professional philosophy and personal code of ethics aimed at improving professional career.

## Lower-Division Requirements

- BIO 1030 - Human Anatomy and Physiology I (GE) **(3)**
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) **(1)**
- BIO 1040 - Human Anatomy and Physiology II **(3)**
- BIO 1040L - Human Anatomy and Physiology II Laboratory **(1)**
- BIO 2010 - Cell Biology and Biochemistry (GE) **(3)**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) **(4)**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**
- NUT 1010 - Fundamentals of Food **(2)**
- NUT 2025 - Fundamentals of Nutrition **(3)**
- PHL 2011 - Ethics (GE) **(3)**
- SWF 1000 - Living Justly in Contemporary Society (GE) **(3)**

Total: 28 Units

## Upper-Division Requirements

- NUT 3030 - Community Nutrition **(3)**
- NUT 3031 - Community Nutrition Practicum **(1)**
- NUT 3035 - Nutrition Research Through the Life Cycle **(2)**
- NUT 3065 - Advanced Nutrition **(3)**
- NUT 4014 - Practices in Nutrition Education and Dietary Counseling **(2)**
- NUT 4080 - Internship in Nutrition **(2 or 4)**
- NUT 4097 - Senior Seminar **(2)**
- SWF 3006 - Research Basics **(3)**
- SWF 3015 - Health and Well-Being (GE) **(2)**

Total: 19-21 Units

Core Total: 47-49 Units

## Concentrations

**Choose one required concentration from:**

- **Counseling**
- **Food**
- **Sports and Fitness**

## Counseling

### Upper Division Requirements

- PSY 3020 - Social Psychology **(3)**
- PSY 3021 - Abnormal Psychology **(3)**
- PSY 3025 - Clinical and Community Interventions **(4)**

- PSY 3041 - Group Counseling **(1-3)**
- PSY 3080 - Family Development and Family Therapies **(3)**

Total: 14-16 Units

Major Total: 63-65 Units

Recommended Courses for Counseling Concentration:

- NUT 3040 - Nutrition in Women's Wellbeing (WS) **(2)**
- NUT 4090 - Special Studies in Nutrition **(1-4)**
- PSY 3045 - Group Dynamics **(3)**

## Food

Upper Division Requirements

- FCS 3000 - Quantity Food Production **(3)**
- MKT 3032 - Principles of Marketing **(3)**
- MKT 3033 - Consumer and Organizational Buying Behavior **(3)**
- NUT 3003 - Cultural Foods **(2)**
- NUT 4035 - Food Service Management **(2)**
- NUT 4055 - Food Science **(3)**

Total: 16 Units

Major Total: 65 Units

Recommended Courses for Food Concentration:

- NUT 3040 - Nutrition in Women's Wellbeing (WS) **(2)**
- NUT 4090 - Special Studies in Nutrition **(1-4)**
- PSY 3025 - Clinical and Community Interventions **(4)**
- PSY 3045 - Group Dynamics **(3)**

## Sports and Fitness

Lower Division Requirements

- EXS 2001 - Fundamentals of Fitness Assessment and Development **(2)**

Total: 2 Units

Upper Division Requirements

- EXS 3030 - Nutrition for Exercise and Sport Performance **(3)**
- EXS 3001 - Fitness Assessment and Exercise Prescription **(3)**

- EXS 3001L - Fitness Assessment and Exercise Prescription Lab (1)
- KIN 3040 - Physiology of Exercise (3)
- KIN 3040L - Physiology of Exercise Lab (1)
- PSY 3021 - Abnormal Psychology (3)

Total: 14 Units

Major Total: 65 Units

Recommended Course for Sports and Fitness Concentration:

- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)
- NUT 4090 - Special Studies in Nutrition (1-4)
- PSY 3025 - Clinical and Community Interventions (4)
- PSY 3045 - Group Dynamics (3)

## **Social Work, B.A.**

The Social Work program prepares students to be leaders in service to the community through generalist practice. A career in Social Work offers a wide range of opportunities, including direct practice in social work with families, individuals or community-based organizations, as well as jobs in research, public relations, human services, probation and criminal justice, social welfare, counseling, or health care administration.

## **Program Learning Outcomes**

**Students who complete the program in Social Work will be able to:**

- Demonstrate understanding of integrated body of knowledge required of a general practitioner as defined by the Council on Social Work Education.
- Demonstrate a command of the professional values and ethics required of a general practitioner.
- Demonstrate competence in the concrete practice of professional skills, especially those skills required by the Council on Social Work Education of a general practitioner.
- Demonstrate an awareness of the influence of Christian and Wesleyan perspectives on social work practice.
- Demonstrate preparation to transition to careers and/or graduate education in social work.

## **Lower-Division Requirements**

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- ECO 1000 - Survey of Economics (GE) (3) **or**
- ECO 1002 - Principles of Microeconomics (GE) (3)
- PSY 1003 - General Psychology (GE) (3)
- SOC 2050 - Sociology of the Family (3)
- SWF 1000 - Living Justly in Contemporary Society (GE) (3)

Total: 16 Units

## Upper-Division Requirements

- SWF 3006 - Research Basics (3)
- SWF 3015 - Health and Well-Being (GE) (2)
- SWK 3003 - Introduction to Social Work (3)
- SWK 3030 - Social Welfare Policy (3)
  
- SWK 3040 - Child Welfare (3) **OR**
- SOC 3016 - Sociology of Aging (3)
  
- SOC 3060 - Race and Ethnicity (3)
- SWK 3065 - Human Behavior in the Social Environment (3)
- SWK 3070 - Social Work Practice I (3)
- SWK 3071 - Social Work Practice II (3)
- SWK 4070 - Social Work Practicum (2-5)
- SWK 4071 - Social Work Practicum (2-5)
- SWK 4072 - Seminar in Social Work I (2)
- SWK 4073 - Seminar in Social Work II (2)

Total: 38 Units

## Recommended Electives

- SOC 3005 - Social Stratification (3)
- SOC 3030 - The Development of Feminist Thought (WS) (4)
- CHD 1050 - Human Development (3)
- PSY 3021 - Abnormal Psychology (3)
- PSY 3000 - Personality and Adult Development (4)

Total: 54 Units

Note(s):

Accepting Associate Degree for Transfer (ADT)

## **Sociology, B.A.**

### Concentrations

General Sociology  
Criminal Justice

### Program Learning Outcomes

**Students who complete the program in Sociology will be able to:**

- Understand society and social behavior in groups and society.
- Develop competency in social research and social analysis.

- Demonstrate preparation for post-graduate education.
- Demonstrate preparation for employment.

**Students who complete the program in Criminal Justice will be able to:**

- Demonstrate comprehension of the theoretical and legal foundations of criminal justice.
- Demonstrate knowledge of each of the components of the criminal justice system: the historical background, structure, function, and purpose.
- Demonstrate understanding and appreciation of the social realities, discrimination, and conflicts in the criminal justice system resulting from racial, socio-economic, and cultural inequities.
- Demonstrate ethical and professional behavior, and apply critical thinking and problem-solving skills, in an approved internship setting.

## Lower-Division Core Requirements

- SWF 1000 - Living Justly in Contemporary Society (GE) (3)
- SOC 1001 - Introduction to Sociology (GE) (3)

Total: 6 Units

## Upper-Division Core Requirements

- SWF 3006 - Research Basics (3)
- SWF 3015 - Health and Well-Being (GE) (2)
- SOC 4015 - Social Theory (3)
- SOC 4060 - Applied Research Methods and Design (3)
- SOC 4076 - Senior Seminar in Sociology (3)

Total: 14 Units

## Concentrations

### General Sociology

#### General Sociology Core

- SOC 4044 - Globalization and Culture (3)
- SOC 4071 - Internship in Sociology (2-4) (4 Units Required)

Select 6 units from the following:

**(Diversity) Select one of the following courses:**

- SOC 3005 - Social Stratification (3)
- SOC 3060 - Race and Ethnicity (3)

**(Institutions) Select one of the following courses:**

- SOC 2050 - Sociology of the Family (3)
- SOC 4030 - Sociology of Religion (3)
- SOC 4075 - Sociology of Education (3)

Select 12 units from the following:

- SOC 3005 - Social Stratification (3)
- SOC 3010 - Criminology (3) \*
- SOC 3014 - Juvenile Delinquency (3) \*
- SOC 3016 - Sociology of Aging (3)
- SOC 3020 - Social Psychology (3)
- SOC 3021 - Justice, Politics, and the Social World (3)
- SOC 3030 - The Development of Feminist Thought (WS) (4)
- SOC 3050 - Urban Sociology (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4020 - Social Change (3)
- SOC 4030 - Sociology of Religion (3)
- SOC 4070 - Medical Sociology (3)
- SOC 4075 - Sociology of Education (3)
- SOC 4090 - Special Topics in Sociology (1-4)
- SOC 4091 - Independent Studies in Sociology (1-4)

\* Student may take SOC 3010 **or** SOC 3014 but not both to fulfill the requirement.

Total: 25 Units

Total Major: 45 Units

Criminal Justice

Criminal Justice Lower-Division Requirements

- SOC 2009 - Introduction to Criminal Justice (3)
- POL 1065 - American Government (4)

Total: 7 Units

Criminal Justice Upper-Division Requirements

- SOC 3010 - Criminology (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4009 - Criminal Law (3)
- SOC 4010 - Constitutional Foundations of Criminal Justice (3)
- SOC 4072 - Internship in Criminal Justice (2-4) **4 Units required**
- SOC 4080 - Restorative Justice (3)
- PSY 3021 - Abnormal Psychology (3)

Total: 22 Units

Total Major Units: 49

Note(s):

Accepting Associate Degree for Transfer (ADT)

## **Minor**

### **Child Development Minor**

This minor is for students who desire an introductory exposure to the study of child development. It will also meet the requirements for the Associate Teacher Permit needed for teachers in Early Childhood.

A minimum of 19-21 units are required for this minor, including the following lower and upper-division courses.

#### **Requirements**

- CHD 1020 - Child and Adolescent Development (4)
- CHD 3010 - Early Childhood Education (4)
- CHD 3055 - Development of Special Needs Children (3) \*
- CHD 3085 - Parent Education and Family Development (2)
- CHD 4020 - Child Development in the Family and Community (4)

Total: 17 Units

Take one (1) additional course from the following:

- CHD 3003 - Infant and Toddler Development (3)
- CHD 3013 - Adolescent Development in the Family Context (2)
- CHD 4060 - Administration and Supervision in Early Childhood Education (4)
- SWF 3015 - Health and Well-Being (GE) (2)

Total: 2-4 Units

Minor Total: 19-21 Units

Note(s):

\* EDU 4004 is an accepted substitute for students who plan to pursue a credential.

## **Criminal Justice Minor**

The minor in Criminal Justice consists of five required courses and one additional course.

### **Program Learning Outcomes**

Students who complete the program in Criminal Justice will be able to:

- Demonstrate comprehension of the theoretical and legal foundations of criminal justice
- Demonstrate knowledge of each of the components of the criminal justice system: the historical background, structure, function, and purpose.
- Demonstrate understanding and appreciation of the social realities, discriminations, and conflicts in the criminal justice system resulting from racial, socio-economic, and cultural inequities.
- Demonstrate ethical and professional behavior and apply critical thinking and problem-solving skills in an approved internship setting.

## Lower-Division Requirements

- SOC 1001 - Introduction to Sociology (GE) (3)
- SOC 2009 - Introduction to Criminal Justice (3)

## Upper-Division Requirements

- SOC 3010 - Criminology (3) **OR**
- SOC 3014 - Juvenile Delinquency (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4009 - Criminal Law (3) **OR**
- SOC 4010 - Constitutional Foundations of Criminal Justice (3)

One of the following courses (3-4 units):

- SOC 3005 - Social Stratification (3)
- SOC 3020 - Social Psychology (3)
- SOC 3050 - Urban Sociology (3)
- SOC 4072 - Internship in Criminal Justice (2-4) **4 Units required**
- PSY 3021 - Abnormal Psychology (3)

Total: 18-19 Units

## Nutrition Minor

The minor in Nutrition is for students interested in the field of nutrition and well-being. The program consists of a foundation in food, nutrition and disease prevention as it relates to one's health.

Twenty-one to twenty-two (21-22) units are required for this minor, including the following:

## Lower-Division Requirements

- NUT 1010 - Fundamentals of Food (2)
- CHD 1050 - Human Development (3)
- NUT 2025 - Fundamentals of Nutrition (3)

Total: 8 Units

## Upper-Division Requirements

- NUT 3000 - Quantity Food Production (3)
- NUT 3003 - Cultural Foods (2)
- NUT 3030 - Community Nutrition (3)
- NUT 3040 - Nutrition in Women's Wellbeing (WS) (2)

Take one (1) additional course from the following:

- SWF 3015 - Health and Well-Being (GE) (2)
- NUT 4014 - Practices in Nutrition Education and Dietary Counseling (2)
- CHD 4025 - Child and Adolescent Nutrition and Health (3)

Total: 13-14 Units

Minor Total: 21-22 Units

## Sociology Minor

The Sociology minor consists of a minimum of six courses from the list below (three from the required core and three electives). The student must select a minimum of 12 units of upper-division credits in Sociology and may include no more than three units of SOC 4090 - Special Topics in Sociology.

## Lower-Division Requirements

- SOC 1001 - Introduction to Sociology (GE) (3)

## Upper-Division Requirements

- SOC 4015 - Social Theory (3)
- SWF 3006 - Research Basics (3) \* **OR**
- SOC 4060 - Applied Research Methods and Design (3) \*

Note(s):

\*Students who have completed a research methods course for their major--HIS 2070, NSG 3099, POL 2070, PSY 3090 and PSY 3091--may substitute for SWF 3006 or SOC 4060.

Select at least 9 units from the following:

- SOC 3003 - Urban Issues (3)
- SOC 3005 - Social Stratification (3)
- SOC 3010 - Criminology (3) **OR**
- SOC 3014 - Juvenile Delinquency (3)

- SOC 3016 - Sociology of Aging (3)
- SOC 3020 - Social Psychology (3)
- SOC 3030 - The Development of Feminist Thought (WS) (4)
- SOC 3050 - Urban Sociology (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4020 - Social Change (3)
- SOC 4030 - Sociology of Religion (3)
- SOC 4044 - Globalization and Culture (3)
- SOC 4070 - Medical Sociology (3)
- SOC 4075 - Sociology of Education (3)
- SOC 4090 - Special Topics in Sociology (1-4) \*\*

Note(s):

\*\*No more than three units of SOC 4090 may count toward the 12 units of upper-division course work required for the minor.

**Total: 18-19 Units**

### Recommended Courses

- SOC 2001 - Cultural Anthropology (GE) (3)
- SOC 2050 - Sociology of the Family (3)

## Fermanian School of Business

As members of a vital Christian community, we strive:

### Mission

To provide high quality business programs that equip students to make a positive impact in their workplace and community by connecting purpose to practice.

### Vision

To enable students to fully discover their purpose so that they can transform society, organizations, and people.

### Values

- CHARACTER: We value practicing humility, serving others and living with integrity.
- PROFESSIONALISM: We value respect for self and others, preparedness, timeliness, and follow-through.
- EXCELLENCE: We value academic rigor, quality work, critical thinking, and continuous improvement.
- RELATIONSHIPS: We value each other, diverse perspectives, and collegiality.
- COMMITMENT: We value dedication, perseverance, engagement, and loyalty.
- INNOVATION: We value creativity, adaptability, and an entrepreneurial mindset.

### Tradition of Excellence

The Fermanian School of Business educates students broadly in preparation for multiple careers and a wide variety of jobs. Christian values and ethical conduct are emphasized throughout the program, which also provides balance between theory and practice, emphasizes the global dimensions of business and encourages cross-cultural experiences. Small classes provide students with individualized attention from faculty who are dedicated to the academic success of each student.

## Career Opportunities

The Fermanian School of Business, in partnership with the PLNU Offices of Strengths and Vocation, facilitates interaction between students and business professionals through internships, networking and other opportunities. Highly respected organizations, such as Qualcomm, Booz Allen Hamilton, Intuit, Patagonia, Goldman Sachs, General Dynamics, Bank of America, Hurley, ViaSat, Under Armour, Ernst and Young, Deloitte & Touche, and KPMG, have actively recruited and hired graduates of the Fermanian School of Business. In addition, PLNU business students have been successful pursuing graduate degrees in top academic programs.

## Accreditation

Point Loma Nazarene University, through its Fermanian School of Business, is accredited by the Accreditation Council for Business Schools and Programs (ACBSP) to offer the following business degrees:

- Accounting, B.S. Business Administration
- Business Administration, B.A.
- Finance, B.S. Business Administration
- Information Systems (Fermanian School of Business), B.S.
- International Development, B.S. Business Administration
- Management, B.S. Business Administration
- Marketing, B.S. Business Administration

## Faculty

Daniel Bothe, M.B.A., Dean  
*University of Southern California*

Matt Boyne, Ed.D.  
*Pepperdine University*

Steven Cosentino, CPA, M.B.A.  
*San Diego State University*

Robert Gailey, Ph.D.  
*University of San Diego*

Carl Hammond III, CPA, M.B.A.  
*San Diego State University*

Rebecca Havens, Ph.D.  
*University of California, San Diego*

Carsten Hennings, D.B.A.  
*Anderson University*

Kimberly Hogelucht, Ph.D.  
*University of San Diego*

Liz Holbrook, CPA, M.S.A.  
*Liberty University*

Christina Kalberg, M.B.A.  
*Point Loma Nazarene University*

Diane Law, M.B.A.  
*University of Phoenix*

Frank Marshall, D.B.A.  
*George Fox University*

Jamie McIlwaine, D.B.A.  
*Nova Southeastern University*

Mandy Morrell, M.B.A.  
*Wright State University*

Randal Schober, Ed.D.  
*West Virginia University*

Randy Waynick, Ph.D.  
*Capella University*

Michael Wiese, Ph.D.  
*Loyola University of Chicago*

## **Computer Requirement**

All majors must own a personal notebook computer for their program of study. The notebook computer is required upon entry into ACC 2001 - Principles of Financial Accounting. ACC 2001 is normally taken in the fall semester of the sophomore year.

## **Students Who Transfer or Change to a Business Program**

Students who transfer or change to a business program as juniors or seniors (57 or more units), or students of any class standing who transfer in the lower division economics, accounting, and management course requirements (5 courses) will be required to take 3 units of upper division ACC/BUS/ECO/FIN/MGT/MKT in lieu of the BUS 1000 course requirement, excluding courses numbered 4089 and 4091.

## **Major**

### **Accounting, B.S. Business Administration**

#### **Program Learning Outcomes**

Students who complete the program in Accounting will be able to:

- Exhibit general knowledge of theories and practices in the core areas of business.
- Critically analyze and apply business knowledge to solve complex business situations.
- Demonstrate effective business communication through both written and verbal means.
- Formulate decisions informed by ethical values.

- Collaborate effectively in teams.
- Exhibit detailed knowledge of accounting and federal tax regulations.
- Analyze financial statements using accounting knowledge.
- Evaluate tax positions and planning opportunities based on federal tax knowledge.

## Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MGT 2012 - Principles of Management (3)
  
- MTH 1053 - Mathematical Analysis for Business and Economics (3)
- OR**
- MTH 1073 - Business Calculus (GE) (3)
  
- MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

## Upper Division Requirements

- ACC 3070 - Intermediate Accounting I (3)
- ACC 3071 - Intermediate Accounting II (3)
- ACC 3075 - Managerial Cost Accounting (3)
- ACC 4010 - Federal Tax Accounting I (3)
- ACC 4011 - Federal Tax Accounting II (3)
- ACC 4021 - Advanced Accounting (3)
- ACC 4025 - Financial Statement Analysis and Valuation (3)
- ACC 4060 - Auditing (3)
- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 units required (3)**  
Accounting majors may substitute ACC 4089 Internship in Accounting for BUS 4089 Internship in Business in the core (3 total units required).
- FIN 3035 - Business Finance (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Total: 42 Units

Major Total: 70 Units

Recommended

- Cross-cultural experience
- MTH 1073 - Business Calculus (GE) (3)
- ACC 3050 - Ethics in Accounting (3)
- PHL 2011 - Ethics (GE) (3)

### Note(s):

- ECO 1001 or ECO 1002 fulfills general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills general education Philosophy Requirement.

## **Business Administration, B.A.**

### Program Learning Outcomes

Students who complete the program in Business Administration will be able to:

- Exhibit general knowledge of theories and practices in the core areas of business.
- Critically analyze and apply business knowledge to solve complex business situations.
- Demonstrate effective business communication through both written and verbal means.
- Formulate decisions informed by ethical values.
- Collaborate effectively in teams.

### Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MTH 1053 - Mathematical Analysis for Business and Economics (3) **Or**
- MTH 1073 - Business Calculus (GE) (3)
- MTH 2003 - Introduction to Statistics (3)
- MGT 2012 - Principles of Management (3)

Total: 28 Units

### Upper-Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 Units required**
- FIN 3035 - Business Finance (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

## Upper-Division Electives

- Choose 3 units of upper-division elective in Accounting, Business, Finance, Management, or Marketing other than any upper division requirements listed above. (ACC/BUS/FIN/MGT/MKT 3000-4090) (3)
- Choose an additional 3 units of upper-division elective specifically from the Economics group (ECO3000-4090) (3)

Total: 24 Units

Major Total: 52 Units

## Recommended

- Cross-cultural experience
- PHL 2011 - Ethics (GE) (3)

## Note(s):

- ECO 1001 or ECO 1002 fulfills the general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills the general education Philosophy Requirement.

## Finance, B.S. Business Administration

### Program Learning Outcomes

Students who complete the program in Finance will be able to :

- Exhibit general knowledge of theories and practices in the core areas of business.
- Critically analyze and apply business knowledge to solve complex business situations.
- Demonstrate effective business communication through both written and verbal means.
- Formulate decisions informed by ethical values.
- Collaborate effectively in teams.
- Exhibit an in-depth knowledge of financial management, investment and international finance theories.
- Prepare a business valuation using finance tools and theories.

### Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MGT 2012 - Principles of Management (3)
  
- MTH 1053 - Mathematical Analysis for Business and Economics (3)

**OR**

- MTH 1073 - Business Calculus (GE) (3)
- MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

## Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) 3 units required (3)
- FIN 3035 - Business Finance (3)
- FIN 3085 - Intermediate Finance (3)
- FIN 4015 - Investments (3)
- FIN 4025 - Financial Statement Analysis and Valuation (3)
- FIN 4035 - International Finance (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Choose One Elective From the Following Upper Division BUS/ECO Courses:

- BUS 3040 - Real Estate Principles and Practices (3)
- ECO 3080 - Money and Banking (3)

Choose One Elective From the Following Upper Division ACC Courses:

- ACC 3070 - Intermediate Accounting I (3)
- ACC 3075 - Managerial Cost Accounting (3)
- ACC 4010 - Federal Tax Accounting I (3)

Total: 36 Units

Major Total: 64 Units

## Recommended

Cross-cultural experience

- PHL 2011 - Ethics (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

## Note(s):

- ECO 1001 or ECO 1002 fulfills general education Social World Requirement.
- PHL 2011 fulfills general education Philosophy Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.

# Information Systems (Fermanian School of Business), B.S.

## Program Learning Outcomes

Students who complete the program in Information Systems will be able to:

- Demonstrate general knowledge of theories and practices in the core areas of business.
- Critically analyze and apply business knowledge to solve complex business situations.
- Demonstrate effective business communication through both written and verbal means.
- *Students will be able to speak about their work with precision, clarity and organization*
- *Students will be able to write about their work with precision, clarity and organization*
- *Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.*
- Formulate decisions informed by ethical attitudes and values.
- Collaborate effectively in teams.
- Write correct and robust software.
- Analyze the interaction between hardware and software.
- Apply critical thinking, technical and information systems knowledge to solve problems.
- Understand and create arguments supported by quantitative evidence.
- Demonstrate knowledge of information systems and be prepared for careers that use information systems, and graduate study in fields related to information systems.

## Lower Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)
- ECO 1000 - Survey of Economics (GE) (3)
- MGT 2012 - Principles of Management (3)
- MTH 1073 - Business Calculus (GE) (3)
- MTH 2003 - Introduction to Statistics (3)

Total: 34 Units

## Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- CSC 3014 - Operating Systems (4)
- ISS 3042 - Project Management and Quality Assurance (2)
- ISS 3073 - Networking and Security (3)
- ISS 4003 - Information and Computer Security (3)

- ISS 4014 - Data Base Systems and Web Integration (4)
- ISS 4072 - Internship in Information Systems (2)
- ISS 4081 - Senior Seminar in Information Systems (1)
- FIN 3035 - Business Finance (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Total: 34 Units

Major Total: 68 Units

Recommended:

- Cross-cultural experience.
- PHL 2011 Ethics (GE) (3)

Notes:

- MTH 1044 or MTH 1064 may substitute for MTH 1073. MTH 1044, MTH 1064 or MTH 1073 fulfills the General Education Problem Solving requirement.
- ECO 1001 and ECO 1002 may substitute for ECO 1000. ECO 1000, ECO 1001 or ECO 1002 fulfills the General Education Social World requirement.
- PHL 2011 fulfills the General Education Philosophy requirement.

## **International Development, B.S. Business Administration**

### **Program Learning Outcomes**

Students who complete the program in International Development will be able to :

- Exhibit general knowledge of theories and practices in the core areas of business.
- Critically analyze and apply business knowledge to solve complex business situations.
- Demonstrate effective business communication through both written and verbal means.
- Formulate decisions informed by ethical values.
- Collaborate effectively in teams.
- Exhibit an in-depth knowledge of International Development theories and concepts.
- Compare approaches to decision making in for-profit and non-profit environments based on International Development concepts.
- Evaluate the similarities and differences of the economic conditions between developed and developing countries based on International Development knowledge.

### **Lower-Division Requirements**

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)

- BUS 2001 - Legal Environment of Business (3)
  - ECO 1001 - Principles of Macroeconomics (GE) (3)
  - ECO 1002 - Principles of Microeconomics (GE) (3)
  - MGT 2012 - Principles of Management (3)
  - MTH 1053 - Mathematical Analysis for Business and Economics (3)
- OR**
- MTH 1073 - Business Calculus (GE) (3)
  - MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

## Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4075 - Sustainability in Action (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) 3 units required
- ECO 3015 - Theories of Economic Development (3)
- ECO 4050 - History of Economic Thought (3)
- FIN 3035 - Business Finance (3)
- MGT 4070 - Nonprofit Organization Management (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Choose Two Courses From the Following:

- ECO 4010 - International Economics (3) \*
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3) \*
- ECO 4090 - Special Studies in Economics (3) \*  
\* Recommended for students interested in studying graduate level Economics or pursuing careers involving the application of Economics in an International Development context.
- MGT 3081 - Creativity and Innovation (3) \*\*
- MGT 3082 - Applied Entrepreneurship (3) \*\*  
\*\* Recommended for students interested in pursuing careers involving the application of Entrepreneurship or Social Entrepreneurship in an International Development context.
- FRE 2050 - Intermediate French I (3) \*\*\* **and**
- FRE 2051 - Intermediate French II (3) \*\*\* **or**
- GER 2050 - Intermediate German I (3) \*\*\* **and**
- GER 2051 - Intermediate German II (3) \*\*\* **or**
- SPA 2050 - Intermediate Spanish Conversation I (3) \*\*\* **and**
- SPA 2051 - Intermediate Spanish Conversation II (3)  
\*\*\* Recommended for students interested in careers of appropriate regional studies in a developing country where applicable language skills are required.
- SOC 3060 - Race and Ethnicity (3) \*\*\*\*
- SOC 4044 - Globalization and Culture (3) \*\*\*\*  
\*\*\*\* Recommended for students interested in sociological perspective of the field of International Development.

Total: 36 Units

## Required Off Campus Program

- A Fermanian School of Business approved semester or summer study abroad in a developing country or an approved three (3) unit internship in a developing country is required.
- In addition, a comparative analysis paper associated with the study abroad or internship must be completed during the student's final semester prior to graduation, and must meet the minimum standards of quality as determined by the Dean or his/her designee.

Major Total: 64 Units

## Recommended

- PHL 2011 - Ethics (GE) (3)

## Note(s):

- ECO 1001 or ECO 1002 fulfills the general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills the general education Philosophy Requirement.

## Management, B.S. Business Administration

This major is diversified with the required choice of a concentration in Entrepreneurship or Global Business as specified below.

## Program Learning Outcomes

Students who complete the program in Management will be able to :

- Exhibit general knowledge of theories and practices in the core areas of business.
- Critically analyze and apply business knowledge to solve complex business situations.
- Demonstrate effective business communication through both written and verbal means.
- Formulate decisions informed by ethical values.
- Collaborate effectively in teams.
- Exhibit an in-depth knowledge of management theory.
- Assess the competitive advantage of a business based on management concepts.

Students who complete the concentration in Entrepreneurship will be able to:

- Analyze a startup pitch based on entrepreneurship knowledge and concepts.

Students who complete the concentration in Global Business will be able to:

- Analyze essential elements of conducting business globally.

## Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)

- BUS 2001 - Legal Environment of Business (3)
  - ECO 1001 - Principles of Macroeconomics (GE) (3)
  - ECO 1002 - Principles of Microeconomics (GE) (3)
  - MGT 2012 - Principles of Management (3)
  
  - MTH 1053 - Mathematical Analysis for Business and Economics (3)
- OR**
- MTH 1073 - Business Calculus (GE) (3)
  
  - MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

### Upper-Division Requirement

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 units required**
- FIN 3035 - Business Finance (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 4084 - Operations Management (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)
- MKT 3032 - Principles of Marketing (3)

Choose one (1) course:

- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4016 - Perspectives on Leadership (3)

### Choose a Required Concentration

#### Entrepreneurship

- MGT 3081 - Creativity and Innovation (3)
- MGT 3082 - Applied Entrepreneurship (3)

#### Global Business

- ECO 4010 - International Economics (3)

Choose one (1) course from the following:

- FIN 4035 - International Finance (3)
- POL 3070 - Comparative Politics (4)
- POL 4035 - Global Governance (4)
- SOC 4044 - Globalization and Culture (3)

## Off-Campus Program

Required: approved semester study abroad

Total: 36-37 Units

Major Total: 64-65 Units

## Recommended

- PHL 2011 - Ethics (GE) (3)

## Note(s):

- ECO 1001 or ECO 1002 fulfills the general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills the general education Philosophy Requirement.

## Marketing, B.S. Business Administration

### Program Learning Outcomes

Students who complete the program in Marketing will be able to :

- Exhibit general knowledge of theories and practices in the core areas of business.
- Critically analyze and apply business knowledge to solve complex business situations.
- Demonstrate effective business communication through both written and verbal means.
- Formulate decisions informed by ethical values.
- Collaborate effectively in teams.
- Exhibit an in-depth knowledge of marketing theory and concepts.
- Evaluate a marketing strategy based on marketing knowledge and concepts.

### Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)
- BUS 1000 - Introduction to Business and Systems (3)
- BUS 2001 - Legal Environment of Business (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)
- MGT 2012 - Principles of Management (3)
  
- MTH 1053 - Mathematical Analysis for Business and Economics (3)
- OR**
- MTH 1073 - Business Calculus (GE) (3)
  
- MTH 2003 - Introduction to Statistics (3)

Total Lower-Division: 28 Units

## Upper Division Requirements

- BUS 3013 - Administrative Communication (3)
- BUS 4080 - International Business (3)
- BUS 4089 - Internship in Business (1-3) **3 units required**
- FIN 3035 - Business Finance (3)
- MKT 3032 - Principles of Marketing (3)
- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)
- MKT 4032 - Marketing Research and Analytics (3)
- MKT 4050 - Digital Marketing Content (3)
- MKT 4060 - Marketing Strategy (3)
- MGT 4088 - Strategic Management (3)
- MGT 4088L - Strategic Management Lab (0)

Total Upper-Division: 36 Units

Major Total: 64 Units

## Recommended

- Cross-cultural Experience
- PHL 2011 - Ethics (GE) (3)

## Note(s):

- ECO 1001 or ECO 1002 fulfills the general education Social World Requirement.
- MTH 1073 fulfills general education Problem Solving Requirement, but MTH 1053 does not.
- PHL 2011 fulfills the general education Philosophy Requirement.

## Minor

### Accounting Minor

A minor in Accounting is for students who are interested in an understanding of accounting principles and techniques, but who do not want to pursue a major in Accounting.

## Lower-Division Requirements

- ACC 2001 - Principles of Financial Accounting (4)
- ACC 2002 - Principles of Managerial Accounting (3)

Total: 7 Units

## Upper-Division Requirements

- ACC 3070 - Intermediate Accounting I (3)
- ACC 3071 - Intermediate Accounting II (3)

Two (2) of the following:

- ACC 3075 - Managerial Cost Accounting (3)
- ACC 4010 - Federal Tax Accounting I (3)
- ACC 4021 - Advanced Accounting (3)
- ACC 4025 - Financial Statement Analysis and Valuation (3)
- ACC 4060 - Auditing (3)

Total: 12 Units

Minor Total: 19 Units

## **Business Administration Minor**

A minor in Business Administration is for those who wish to complement study in another area with a basic background in business. The minor consists of introductory courses in Economics, Accounting, and upper-division courses designed to acquaint the student with disciplines essential to business success.

## Lower-Division Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)  
\* ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.
- MGT 2012 - Principles of Management (3)

One (1) of the following:

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

Total: 9 Units

## Upper-Division Requirements

- MKT 3032 - Principles of Marketing (3)
- Nine units selected from any upper-division course in Business, Accounting, Marketing, Management, Finance or Economics (9)

Total: 12 Units

Minor Total: 21 Units

## **Computer Technology - Business Minor (Business Majors)**

The Computer Technology - Business minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for business students who desire to enter business or accounting careers with a greater knowledge of information and computer technology.

### **Lower-Division Requirements**

- ACC 2001 - Principles of Financial Accounting (4)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)
- MGT 2012 - Principles of Management (3)

Total: 16 Units

### **Upper-Division Requirements**

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3022 - Data Management for Computational Science (2)
- ISS 3042 - Project Management and Quality Assurance (2)
- MKT 3032 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 3000-4099 for three (3) units.**

Total: 12 Units

Minor Total: 28 Units

## **Computer Technology - Marketing Minor (Business Majors)**

The Computer Technology - Marketing minor, a joint minor between the Fermanian School of Business and the Department of Mathematical, Information, and Computer Sciences, is for marketing students who desire to enter marketing or business careers with a greater knowledge of information and computer technology.

### **Lower-Division Requirements**

- ACC 2001 - Principles of Financial Accounting (4)
- CSC 1043 - Introduction to Computer Programming (2)
- CSC 1043L - Introduction to Computer Programming Lab (1)
- CSC 1054 - Objects and Elementary Data Structures (3)
- CSC 1054L - Objects and Elementary Data Structures Lab (1)
- CSC 2052 - Data Structures in C++ (1)
- CSC 2052L - Data Structures in C++ Lab (1)

Total: 13 Units

### Upper-Division Requirements

- CSC 3002 - UNIX and Python Scripting for Computational Science (2)
- CSC 3022 - Data Management for Computational Science (2)
- MKT 3032 - Principles of Marketing (3)
- **Choose two additional courses from MKT 3000-4059 for six (6) units.**

Total: 13 Units

Minor Total: 26 Units

### Economics Minor

A minor in economics is for students who are interested in critical analysis of resource use and evidence-based analysis of broad social issues and their economic consequences.

### Lower Division Requirements

- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

Total: 6 Units

### Upper Division Requirements

Choose four (4) of the following:

- ECO 3015 - Theories of Economic Development (3)
- ECO 3080 - Money and Banking (3)
- ECO 4010 - International Economics (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- ECO 4050 - History of Economic Thought (3)

Total: 12 Units

Minor Total: 18 Units

### Finance Minor

A minor in Finance is for students who are interested in an understanding of finance concepts and applications, but who do not want to pursue a major in Finance.

### Lower-Division Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors **(3)**  
\*ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

One (1) of the following:

- ECO 1000 - Survey of Economics (GE) **(3)**
- ECO 1001 - Principles of Macroeconomics (GE) **(3)**
- ECO 1002 - Principles of Microeconomics (GE) **(3)**

Total: 6 Units

## Upper-Division Requirements

- FIN 3035 - Business Finance **(3)**

Three (3) of the following:

- FIN 3085 - Intermediate Finance **(3)**
- FIN 4015 - Investments **(3)**
- FIN 4025 - Financial Statement Analysis and Valuation **(3)**
- FIN 4035 - International Finance **(3)**

Total: 12 Units

Total Minor: 18 Units

## International Development Minor

A minor in International Development is for students who wish to complement study in another area with a basic background in economic development. Study in this discipline seeks to equip students in other majors to address the issues of material welfare that have an impact on their study of the issues facing disadvantaged populations.

## Lower-Division Requirements

- SOC 2001 - Cultural Anthropology (GE) **(3)** \*

Choose one (1) of the following:

- ECO 1000 - Survey of Economics (GE) **(3)**
- ECO 1001 - Principles of Macroeconomics (GE) **(3)**
- ECO 1002 - Principles of Microeconomics (GE) **(3)**

Total: 6 Units

Note(s):

*\*Fulfills the general education Social World requirement .*

## Upper-Division Requirements

- BUS 4075 - Sustainability in Action (3)
- ECO 3015 - Theories of Economic Development (3)
- MGT 4070 - Nonprofit Organization Management (3)

Choose one (1) of the following:

- ECO 3080 - Money and Banking (3)
- ECO 4010 - International Economics (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- ECO 4050 - History of Economic Thought (3)
- ECO 4090 - Special Studies in Economics (3)
- SWF 3015 - Health and Well-Being (GE) (2)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4012 - Leadership Theory and Practice (3)
- POL 3001 - Transitions to Democracy (4)
- POL 3070 - Comparative Politics (4)
- POL 4020 - United States Foreign Policy (4)
- POL 4035 - Global Governance (4)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4044 - Globalization and Culture (3)

Total: 12-13 Units

Minor Total: 18-19 Units

## Marketing Minor

A minor in Marketing is for students who are interested in an understanding of marketing concepts and applications, but who do not want to pursue a major in marketing.

## Lower-Division Requirements

Choose two (2) of the following:

- ACC 2000 - Principles of Accounting for Non-Business Majors (3) \*\*
- ECO 1000 - Survey of Economics (GE) (3) \*  
**OR**
- ECO 1001 - Principles of Macroeconomics (GE) (3) \*  
**OR**
- ECO 1002 - Principles of Microeconomics (GE) (3) \*
- MGT 2012 - Principles of Management (3)

Total Lower-Division: 6 Units

*\* Fulfills the general education Social World Requirement.*

*\*\* ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.*

Upper Division Requirements:

- MKT 3032 - Principles of Marketing (3)

Choose three (3) of the following:

- MKT 3033 - Consumer and Organizational Buying Behavior (3)
- MKT 3036 - Integrated Marketing and Sales Communications (3)
- MKT 3050 - Digital Marketing Essentials (3)
- MKT 4032 - Marketing Research and Analytics (3)
- MKT 4050 - Digital Marketing Content (3)

Total Upper-Division: 12 Units

Total Minor: 18 units

## **Nonprofit Organization Management Minor**

A minor in Nonprofit Organization Management is for students who wish to complement study in another area with a basic background in managing nonprofit organizations. The program is designed to acquaint the student with a few essentials of nonprofit organization management.

Lower-Division Requirements

Choose two (2) of the following:

- ACC 2000 - Principles of Accounting for Non-Business Majors (3) \*\*
- ECO 1000 - Survey of Economics (GE) (3) \*
  - or ECO 1001 (3) Principles of Macroeconomics (GE)\*
  - or ECO 1002 (3) Principles of Microeconomics (GE)\*
- MGT 2012 - Principles of Management (3)

Total: 6 Units

Note(s):

*\* Fulfills the general education Social World requirement.*

*\*\* ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.*

Upper-Division Requirements

- BUS 4075 - Sustainability in Action (3)
- MGT 4012 - Leadership Theory and Practice (3)
- MGT 4070 - Nonprofit Organization Management (3)

Choose one (1) of the following:

- ECO 3015 - Theories of Economic Development (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- MGT 3020 - Organizational Behavior (3)
- MGT 3074 - Human Resource Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- SOC 3060 - Race and Ethnicity (3)
- SOC 4044 - Globalization and Culture (3)

Total: 12 Units

Minor Total: 18 Units

## **Public Relations Minor**

The minor in Public Relations is interdepartmental with the Fermanian School of Business, the Department of Literature, Journalism, Writing, and Languages, and the Department of Communication Studies.

### **Requirements**

- COM 3030 - Persuasion (3)
- COM 3040 - Organizational Communication (3)
- COM 3090 - Introduction to Public Relations (3)
- COM 4005 - Public Relations Cases and Campaigns (3)
- JRN 2050 - Introduction to Journalism (3)
- JRN 3055 - Public Relations Writing (3)
- MKT 3032 - Principles of Marketing (3)

Minor Total: 21 Units

## **Science Business Minor -Ecology Emphasis**

## **Science Business Minor-Chemistry Emphasis**

## **Science-Business Minor with Chemistry Emphasis**

### **Lower Division Requirements:**

- ACC 2001 - Principles of Financial Accounting (4)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)

- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- MGT 2012 - Principles of Management (3)

**Choose one (1) course from the following:**

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

**Choose one (1) course from the following:**

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 29-31 units**

**Upper Division Requirements:**

- MKT 3032 - Principles of Marketing (3)
- **Choose three (3) additional courses from BUS or MGT3000-4099 for nine (9) units.**

**Total: 12 units**

Total Minor: 41-43 units

## Science-Business Minor (Business Majors)

The Science-Business minors, joint minors between the Fermanian School of Business and the Biology and Chemistry Departments, are for business students who are interested in pursuing business careers in innovative science-related industries such as biotechnology, medical device, and pharmaceutical. Three emphases are available:

- Molecular Emphasis
- Ecology Emphasis
- Chemistry Emphasis

## Science-Business Minor with Molecular Emphasis

**Lower Division Requirements:**

- ACC 2001 - Principles of Financial Accounting (4)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)
- MGT 2012 - Principles of Management (3)

**Choose one (1) course from the following:**

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4) **and**
- CHE 1052L - General Chemistry I Lab (GE) (1)

**Choose one (1) course from the following:**

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 22-24 Units**

**Upper Division Requirements:**

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3052 - Research Methodology (3)
- MKT 3032 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 300-499 for three (3) units**

**Choose one (1) course from the following:**

- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4050 - Advanced Biochemistry (3) **and**
- BIO 4050L - Advanced Biochemistry Lab (1)

**Total: 17 Units**

Total Units: 39-41

## Science-Business Minor with Ecology Emphasis

**Lower Division Requirements:**

- ACC 2001 - Principles of Financial Accounting (4)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)  
(BIO 1005 and BIO 1005L may be substituted with the permission of the Biology Department.)

- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)
- MGT 2012 - Principles of Management (3)

**Choose one (1) course from the following:**

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4) **and**
- CHE 1052L - General Chemistry I Lab (GE) (1)

**Choose one (1) course from the following:**

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 22-24 units**

**Upper Division Requirements:**

- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- MKT 3032 - Principles of Marketing (3)
- **Choose one additional course from BUS or MGT 3000-4099 for three (3) units.**

**Choose 3-4 units from the following:**

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4023 - Advanced Human Physiology (3)
- BIO 4023L - Advanced Human Physiology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)

*The following Environmental Science/Biology courses could be taken at Au Sable or Costa Rica with our sister school (prior permission is required for any substitutions). The following courses can be used to transfer in these units:*

- EVS 3096 - Advanced Biology (3)
- EVS 3097 - Advanced Ecology (3)
- EVS 3098 - Advanced Ecological Applications (3)

**TOTAL: 13-14 units**

Total Units: 35-38

## Science-Business Minor with Chemistry Emphasis

### Lower Division Requirements:

- ACC 2001 - Principles of Financial Accounting (4)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)
- MGT 2012 - Principles of Management (3)

### Choose one (1) course from the following:

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

### Choose one (1) course from the following:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 29-31 units**

### Upper Division Requirements:

- MKT 3032 - Principles of Marketing (3)
- **Choose three (3) additional courses from BUS or MGT3000-4099 for nine (9) units.**

**Total: 12 units**

Total Minor: 41-43 units

## Science-Business Minor Molecular Emphasis

### Science-Marketing Minor (Business Majors)

The Science-Marketing minors, joint minors between the Fermanian School of Business and the Biology and Chemistry Departments, are for business students who are interested in pursuing marketing careers in innovative science-related industries such as biotechnology, medical device, and pharmaceutical. Three emphases are available:

- Molecular Emphasis
- Ecology Emphasis

- Chemistry Emphasis

## Science-Marketing Minor with Molecular Emphasis

### Lower Division Requirements:

- ACC 2001 - Principles of Financial Accounting (4)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)

### Choose one (1) of the following courses:

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) **and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4) **and**
- CHE 1052L - General Chemistry I Lab (GE) (1)

### Choose one (1) of the following courses:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 19-21 units**

### Upper Division Requirements:

- BIO 3045 - Genetics (3)
- BIO 3045L - Genetics Laboratory (1)
- BIO 3052 - Research Methodology (3)
- MKT 3032 - Principles of Marketing (3)
- **Choose two (2) additional courses from MKT3000-4059 for six (6) units**

### Choose one (1) of the following courses:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3050 - Advanced Cell Biology (3)
- BIO 3050L - Advanced Cell Biology Laboratory (1)
- BIO 3080 - Molecular Biology (3)
- BIO 3080L - Molecular Biology Laboratory (1)
- BIO 3090 - Immunology (3)
- BIO 3090L - Immunology Laboratory (1)
- BIO 4000 - Developmental Biology (3)
- BIO 4000L - Developmental Biology Laboratory (1)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4050 - Advanced Biochemistry (3) **and**
- BIO 4050L - Advanced Biochemistry Lab (1)

**Total: 20 units**

Total Minor: 39-41 units

## Science-Marketing Minor with Ecology Emphasis

### Lower Division Requirements:

- ACC 2001 - Principles of Financial Accounting (4)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) (1)  
(BIO 1005 and BIO 1005L may be substituted with the permission of the Biology Department.)
- BIO 2012 - Organismal Biology (3)
- BIO 2012L - Organismal Biology Laboratory (1)

### Choose one (1) of the following courses:

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) and
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4) and
- CHE 1052L - General Chemistry I Lab (GE) (1)

### Choose one (1) of the following courses:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 19-21 units**

### Upper Division Requirements:

- BIO 3063 - Conservation Ecology (3)
- BIO 3063L - Conservation Ecology Laboratory (1)
- MKT 3032 - Principles of Marketing (3)
- **Choose two (2) additional courses from MKT 3000-4059 for six (6) units.**

### Choose 3-4 units of the following courses:

*Courses and their corresponding lab (if applicable) must be taken concurrently.*

- BIO 3012 - Applied Plant Biology (2)
- BIO 3015 - Microbiology (3)
- BIO 3015L - Microbiology Laboratory (1)
- BIO 3023 - Introduction to Oceanography (3)
- BIO 3023L - Introduction to Oceanography Laboratory (1)
- BIO 3033 - Marine Biology (3)
- BIO 3033L - Marine Biology Laboratory (1)
- BIO 3040 - Field Biology: Neotropical Ecology (2)
- BIO 4010 - Vertebrate Biology (3)
- BIO 4010L - Vertebrate Biology Laboratory (1)
- BIO 4030 - Animal Behavior (3)
- BIO 4030L - Animal Behavior Laboratory (1)

*The following Environmental Science/Biology courses could be taken at Au Sable or in Costa Rica with our sister school (prior permission is required for any substitutions). The following courses can be used to transfer in these units:*

- EVS 3096 - Advanced Biology (3)

- EVS 3097 - Advanced Ecology (3)
- EVS 3098 - Advanced Ecological Applications (3)

**Total: 16-17 units**

Total Minor: 35-38 units

## Science-Marketing Minor with Chemistry Emphasis

### Lower Division Requirements:

- ACC 2001 - Principles of Financial Accounting (4)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)
- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)

### Choose one (1) from the following courses:

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

### Choose one (1) from the following courses:

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 26-28 units**

### Upper Division Requirements:

- MKT 3032 - Principles of Marketing (3)
- Choose three (3) additional courses from MKT3000-4059 for nine (9) units.

**Total: 12 units**

Total Minor: 38-40 units

## Science-Marketing Minor Chemistry Emphasis

## Science-Marketing Minor with Chemistry Emphasis

### Lower Division Requirements:

- ACC 2001 - Principles of Financial Accounting (4)
- CHE 1052 - General Chemistry I (GE) (4)
- CHE 1052L - General Chemistry I Lab (GE) (1)

- CHE 1053 - General Chemistry II (3)
- CHE 1053L - General Chemistry II Lab (1)
- CHE 2013 - Analytical Chemistry (3)
- CHE 2094 - Organic Chemistry I (3)
- CHE 2094L - Organic Chemistry I Lab (1)

**Choose one (1) from the following courses:**

- BIO 1001 - Human Biology and Bioethics (GE) (3)
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) (1)

**Choose one (1) from the following courses:**

- MTH 1044 - Calculus With Applications (GE) (4)
- MTH 1064 - Calculus I (GE) (3)
- MTH 1073 - Business Calculus (GE) (3)

**Total: 26-28 units**

**Upper Division Requirements:**

- MKT 3032 - Principles of Marketing (3)
- **Choose three (3) additional courses from MKT3000-4059 for nine (9) units.**

**Total: 12 units**

Total Minor: 38-40 units

## Sustainability Studies Minor

This Sustainability Studies minor is an interdisciplinary program designed to help students develop a broad perspective on the issues and challenges of creation care and to acquire skills and tools for personally addressing those challenges. The minor consists of introductory courses in Biology, Sociology and/or Personal and Consumer Financial Management, and upper-division courses drawn from Sociology, Theology, Political Science, International Development, and Business, and a Sustainability practicum or internship experience. All of the courses in the minor will significantly address sustainability issues from the perspective of their respective disciplines.

### Requirements

Select one (1) course from the following:

- BIO 1002 - Environment and People (GE) (4)
- BIO 1005 - Ecology and Conservation (GE) (3) **and**
- BIO 1005L - Ecology and Conservation Laboratory (GE) (1)

Select one (1) course from the following:

- FCS 2030 - Personal and Consumer Financial Management (2)

- SOC 2001 - Cultural Anthropology (GE) (3)

Lower Division: 6-7 Units

Each of the following:

- BUS 4075 - Sustainability in Action (3) *and*
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3) **OR**
- THE 3060 - Christian Life as Vocation (GE) (3)

Select Two 2 Course from the following:

- ECO 3015 - Theories of Economic Development (3)
- MGT 4070 - Nonprofit Organization Management (3)
- POL 3060 - Urban Politics (4)
- POL 4035 - Global Governance (4)
- POL 4041 - Issues in Public Policy (4)
- SOC 4044 - Globalization and Culture (3)

Upper Division: 12-14 Units

Internship, Practicum or Research Project

(Minimum of 40 hours work requirement; may be taken for credit)

- An Internship, Practicum or Research Project addressing sustainability (0-4) \*

Minor Total: 18-21 Units

Note(s):

\*The project must be approved by the Sustainability Studies minor advisor. It may consist of an experience (no formal course credit) with a local NGO or business on a sustainability project, or may be a for-credit course drawn from any major's internship, research project or practicum courses.

## Certificate

### Business Certificate

A certificate in Business is for students who are interested in an understanding of basic business (accounting, economics, management, and marketing) concepts and applications, but who do not want to pursue a minor or major in Business Administration.

### Certificate Requirements

- ACC 2000 - Principles of Accounting for Non-Business Majors (3) \*
- \* ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

- MGT 2012 - Principles of Management (3)
- MKT 3032 - Principles of Marketing (3)

Select one (1) of the following:

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)
- ECO 1002 - Principles of Microeconomics (GE) (3)

Total:12 Units

## **School of Education**

### **Purposes**

Point Loma Nazarene University's undergraduate School of Education offers two Bachelor's degree of academic rigor in an environment of vital Christianity in the Wesleyan tradition: 1) Cross Disciplinary Studies: Teacher Education and 2) Cross Disciplinary Studies: Integrated Education. Our commitment is to prepare thoughtful, culturally sensitive, scholarly professional educators for a variety of teaching/learning environments who utilize the latest research and exemplary methods to ensure learning and achievement. The faculty is committed to equip candidates to become influential moral and ethical leaders in a highly competitive, diverse, and ever-changing society.

### **Tradition of Excellence**

The undergraduate degree in teacher education includes credential courses approved by the California Commission on Teacher Credentialing leading to the following credentials: Multiple Subject, Single Subject, Education Specialist Mild to Moderate and Education Specialist Moderate to Severe. The teacher education credential programs are offered in San Diego (Point Loma and Mission Valley) and Bakersfield. Because undergraduates may take courses toward the teaching credential, the program described in this section refers only to that aspect of the program. Details of the broader education programs are found in the Catalog for graduate studies. Faculty in the School of Education are practitioners and specialists in teaching pedagogy, counseling and leadership. The School of Education articulates with all other academic departments and schools in the university regarding subject-matter preparation of Single Subject and Multiple Subjects teacher candidates. While the primary focus of the School of Education is to prepare teachers, the degrees are also of value to those who are interested in professions such as workplace instructors, social work, family advocacy, curriculum developers, religious studies, and early childhood education.

### **Career Opportunities**

The Cross Disciplinary Studies: Teacher Education coursework prepares candidates for success in a K-12 teaching career. Career options for the Cross-Disciplinary Studies: Integrated Education major are training, instructional design, people management, and workplace instructors outside of the K-12 setting. Throughout the program, methodologies based on current practice and research are modeled and reinforced. The practice and application components of the methods courses are easily facilitated because the School of Education is field-based. Candidates are required to be in classrooms or other professional teaching venues for approximately 100 hours of documented and evaluated observation and participation prior to student teaching.

Admission to the third Education course in the major may be considered Level I admission to the School of Education, requiring passage of prior coursework and the CBEST test of basic skills. However, this neither implies nor guarantees approval for student teaching (Level 2 admission). If, in the opinion of the School of Education, a candidate fails to meet acceptable professional and personal standards, the candidate may be disqualified from attempting to complete

preparation for a career in education. Candidates desiring to fulfill the requirements of a credential for public school service must declare their intentions. For the Multiple Subjects Credential candidate, this decision is made during the candidate's sophomore enrollment at the university. The Single Subject Credential candidate is also encouraged to decide during their sophomore year. Transfer candidates should consult with the appropriate departmental/school advisor immediately upon matriculation.

All prospective teachers should plan their major requirements and those set forth by the School of Education to establish the proper sequence of courses and the fulfillment of all professional requirements. The Credentialing and Educational Placement Office provides a variety of services: transcript evaluation, credential applications, and career services for the candidate. The credential analyst acts as a liaison between the candidate and the California Commission on Teacher Credentialing.

## **Faculty**

Micki Abercrombie-Donahue, Ed.D.  
*Montana State University*

Kimberly Athans, Ed.D.  
*Sam Houston State University*

Heather Bertrand, M.A.  
*Point Loma Nazarene University*

Michael Corke, Ph.D.  
*Claremont Graduate University*

Deborah Erickson, Ed.D., Dean  
*University of the Pacific*

Grace Fantaroni, Ed.D.  
*Alliant International University*

Jill Hamilton-Bunch, Ph.D., Associate Dean-Bakersfield Regional Center  
*University of California, Santa Barbara*

Jennifer Kritsch, Ph.D.  
*Capella University*

Jennifer Lineback, Ph.D., Program Chair for Cross-Disciplinary Studies  
*University of California, San Diego and San Diego State University*

Enedina Martinez, Ed.D.  
*Northern Arizona University*

Patricia Maruca, Ed.D.  
*Northern Arizona University*

Yazmin Pineda Zapata, Ed.D.  
*San Diego State University*

Ray Posey, Ph.D.  
*Vanderbilt University*

Elsie Solis-Chang, Ph.D.  
*Azusa Pacific University*

Dione Brooks Taylor, Ed.D.  
*Northern Arizona University*

Rachel Wong, Ed.D.  
*Concordia University*

## **Major**

### **Cross Disciplinary Studies: Integrated Education B.A.**

#### **Program Learning Outcomes**

Cross-Disciplinary Studies: Integrated Education offers a broad interdisciplinary education, grounded in educational theory and practice, utilizing courses from the sciences, the humanities and the professional schools. This degree prepares candidates for a variety of post-graduate professional and academic experiences in workplace training, instructional design, people management and leadership.

Candidates who complete the program in Cross Disciplinary Studies: Integrated Education will be able to do the following:

- Demonstrate effective presentation skills, one-on-one and with groups.
- Produce effective written communication.
- Employ critical thinking and logic to solve problems in a variety of professional environments.
- Demonstrate information literacy by acquiring and utilizing specific content from a variety of sources to plan teaching and learning events.
- Apply an interdisciplinary understanding of content regarding diverse and cross-cultural communities.
- Apply faith-based influences and beliefs within professional/educational settings.
- Reflect on and engage in spiritual growth opportunities in personal and professional settings.
- Serve effectively within their communities.

#### **Required Concentrations**

The candidate majoring in Cross-Disciplinary Studies: Integrated Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 8 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

Reading, Language and Literature  
Visual and Performing Arts  
Physical Education/Health  
Human Development  
Science  
Math  
History and Social Science  
Pre-Business  
Media Communication

#### **Lower Division Requirements:**

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)

- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- COM 1000 - Principles of Human Communication (GE) (3)
- EXS 2001 - Fundamentals of Fitness Assessment and Development (2)
- HIS 1010 - World Civilizations I (GE) (3)
- HIS 1020 - United States History from Early America to the Twentieth Century (3)
- LIT 2000 - Literature and Culture (GE) (2)
- MTH 1013 - College Algebra (3)
- MTH 2013 - Fundamentals of Elementary Mathematics I (3)
- MTH 2023 - Fundamentals of Elementary Mathematics II (3)
- PSC 1014 - Physical Science for Teachers (GE) (4)
- PSC 1023 - Earth and Space Science for Teachers (3)
- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3)
- OR
- PSY 1003 - General Psychology (GE) (3)
- TRE 1001 - Introduction to Theatre (GE) (2)
- WRI 1010 - College Composition: Writing and Research - First Year Experience (GE) (4)
- OR
- WRI 1016 - College Composition: Research - First Year Experience (GE) (2) \*

*\* WRI 1016 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

Choose one course from the following three:

- SWF 3015 - Health and Well-Being (GE) (2)
- PED 1000 - Fitness Through Movement (GE) (2)
- PED 2000 - Optimal Health (GE) (2)

Choose one course from the following two:

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 2001 - Cultural Anthropology (GE) (3)

Choose one course from the following five:

- ART 1000 - Introduction to Art (GE) (2)
- ART 1002 - Fundamentals of Art (GE) (3)
- ART 2000 - History of Art I (GE) (3)
- ART 2001 - History of Art II (GE) (3)
- MUH 1000 - Introduction to Music (GE) (2)

Choose one course from the following two:

- PHL 2001 - Introduction to Philosophy (GE) (3)
- PHL 2011 - Ethics (GE) (3)

Choose one course from the following four:

- LIT 3050 - World Literature (GE) **(3)**
- LIT 3051 - World Cinema (GE) **(3)**
- LIT 3052 - Diverse Voices in American Literature (GE) **(3)**
- LIT 3053 - Women Writers (GE) **(3)**

Choose one of the following sequences:

- SPA 1001 - Elementary Spanish I (GE) **(4)** AND
- SPA 1002 - Elementary Spanish II (GE) **(4)**
- OR
- FRE 1001 - Elementary French I (GE) **(4)** AND
- FRE 1002 - Elementary French II (GE) **(4)**
- OR
- GER 1001 - Elementary German I (GE) **(4)** AND
- GER 1002 - Elementary German II (GE) **(4)**

## Upper Division Requirements

- COM 2050 - Intercultural Communication **(3)**
- HIS 3070 - California History **(4)**
- LIT 3025 - Children's Literature **(3)**
- SOC 3060 - Race and Ethnicity **(3)**
- MGT 3082 - Applied Entrepreneurship **(3)**
- ECO\*\*\*\* (3) Consult with EDU department for course options.

Choose one course from the following two:

- ART 3025 - Non-Western Art History **(3)**
- MUH 3034 - World Music **(2)**

Choose one course from the following five:

- CHU 3040 - Women in the Christian Tradition (GE) **(3)**
- CHU 3095 - The Christian Tradition (GE) **(3)**
- THE 3005 - Christian Faith and the Natural Sciences (GE) **(3)**
- THE 3060 - Christian Life as Vocation (GE) **(3)**
- THE 3070 - Global Christianity (GE) **(3)**

Choose one course from the following two:

*LIT 3051 cannot count in both the major and GE requirement. Choose LIT 4048 or complete LIT 3051 plus an additional upper division LIT GE option.*

- LIT 3051 - World Cinema (GE) **(3)**
- LIT 4048 - Postcolonial Classics and Theory **(3)**

Choose one course from the following three:

- MTH 1044 - Calculus With Applications (GE) **(4)**

- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 3003 - Problem Solving (GE) **(3)**

Choose one course from the following two:

- PSY 3008 - Developmental Psychology - Birth Through Adolescence **(4)**
- CHD 1020 - Child and Adolescent Development **(4)**

Total: 29 Units

## Integrated Education Upper Division Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3)**
- EDU 4004 - Foundations of Special Education **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**

Total: 8 Units

## Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Integrated Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 9 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

## Reading, Language and Literature

### English Emphasis

- LIT 3000 - Literary Analysis **(3)**

Choose ONE of the following Linguistics and Writing courses:

- LIN 3012 - Introduction to Linguistics **(3)**
- LIN 3065 - English Grammar and Usage **(3)**
- WRI 3015 - Advanced English Composition **(3)**

Choose ONE of the following Lower-Division Literature courses:

- LIT 2052 - World Literatures: Ancient and Medieval Literatures **(3)**
- LIT 2054 - British Writers I **(3)**
- LIT 2055 - British Writers II **(3)**
- LIT 2056 - American Writers I **(3)**
- LIT 2057 - American Writers II **(3)**

Choose ONE Upper-Division Literature course (NOT to include LIT 3025) - 1 course (3 units)

### French Emphasis

- FRE 2050 - Intermediate French I **(3)**
- FRE 2051 - Intermediate French II **(3)**

- FRE 3003 - French Conversation **(3)**
- OR**
- FRE 3015 - French Culture and Civilization **(3)**
- FRE 3020 - Survey of French Literature **(3)**
- OR**
- FRE 3025 - Francophone Literature **(3)**

### Spanish Emphasis

- SPA 2051 - Intermediate Spanish Conversation II **(3)**
- SPA 3002 - Advanced Grammar and Reading **(3)**
- SPA 3000 - Civic Engagement: Conversation, Culture and Community **(3)**
- Choose one:
- SPA 3010 - Latin American Culture and Civilization **(3)**
- SPA 3015 - Culture and Civilization of Spain **(3)**
- SPA 3020 - Mexican American Literature and Culture **(3)**
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film **(3)**

### Visual and Performing Arts

#### Art Emphasis

- ART 3019 - Visual Arts in the Classroom I **(3)**
- TRE 3054 - Movement **(3)**
- Choose one:
- ART 1004 - Three-Dimensional Design: Composition and Space **(3)**
- ART 1015 - Drawing I **(3)**
- Choose one:
- ART 3004 - Modern Art History **(3)**
- ART 3005 - Contemporary Art History **(3)**
- ART 3025 - Non-Western Art History **(3)**
- ART 3035 - Design History: Industrial Revolution to Contemporary Design **(3)**

#### Music Emphasis

- MUA 2012 - Beginning Conducting **(2)** (*Requires that candidate knows how to read music*)
- MUE 3041 - Music Skills for the Elementary Classroom Teacher **(3)**
- TRE 3054 - Movement **(3)**
- Private Lessons or Instrumental Band **(2 units)**
- Choose one of the following 3 courses:
- MUH 1000 - Introduction to Music (GE) **(2)**
- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3034 - World Music **(2)**

#### Theatre Emphasis

- TRE 2070 - Acting **(3)**

- TRE 3054 - Movement **(3)**
- ART 3019 - Visual Arts in the Classroom I **(3)**
- TRE 3050 - Musical Theatre **(3)**

## Physical Education/Health

- KIN 3012 - Motor Learning and Motor Development **(3)**
- PED 2020 - Team Sports Fundamentals and Strategies (GE) **(2)**
- PED 2000 - Optimal Health (GE) **(2)**
- 2-3 units of an approved Education, Kinesiology or Physical Education course **(2-3 units)**.

Choose one:

- SWF 3015 - Health and Well-Being (GE) **(2)**
- PSY 3060 - Human Sexuality **(3)**

## Human Development

- PSY 3008 - Developmental Psychology - Birth Through Adolescence **(4)**

Choose one:

- CHD 1020 - Child and Adolescent Development **(4)**
- CHD 1050 - Human Development **(3)**

Choose one:

- PSY 3020 - Social Psychology **(3)**
- SOC 2050 - Sociology of the Family **(3)**

Choose one:

- CHD 4020 - Child Development in the Family and Community **(4)**
- PSY 3080 - Family Development and Family Therapies **(3)**

## Science

**NOTE: Students who select the Science Concentration are not required to take BIO 1003 and BIO 1003L.**

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3) and**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3) and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**

Choose one:

- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) **(4) and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**

**OR**

- CHE 1052 - General Chemistry I (GE) **(4) and**
- CHE 1052L - General Chemistry I Lab (GE) **(1)**

## Math

Individualized programs will be designed with a Math advisor beginning with the sophomore year.

## History and Social Science

### American Studies Emphasis

Required:

- HIS 3070 - California History (4)

Choose two:

- HIS 3016 - Colonial and Revolutionary America (4)
- HIS 3020 - United States History, 1815-1914 (4)
- HIS 4025 - United States Since 1914 (4)
- HIS 4035 - Asian-American History: 1800 to the Present (4)
- HIS 4077 - Gender and Law in the U.S. (WS) (4)
- POL 1065 - American Government (4)
- POL 3041 - Campaigns and Elections (4)
- POL 3060 - Urban Politics (4)
- POL 3080 - Congress and the Presidency (4)
- POL 4041 - Issues in Public Policy (4)

### International Studies Emphasis

Choose one (if 4 units) or two courses:

Choose one (if 4 units) or 2 courses:

- POL 2030 - Introduction to International Relations (4)
- POL 2090 - World Regional Geography (3)
- SOC 2001 - Cultural Anthropology (GE) (3)

Choose two:

- HIS 3055 - Modern Middle East (4)
- HIS 3065 - Modern Japan and Korea (4)
- HIS 4015 - Europe and the World (4)
- HIS 4036 - America in East Asia: 1800 to the Present (4)
- POL 4035 - Global Governance (4)
- POL 4055 - Protest and Social Movements in World Politics (4)

### Business Emphasis

- ACC 2000 - Principles of Accounting for Non-Business Majors (3)
- MGT 2012 - Principles of Management (3)
- MKT 3032 - Principles of Marketing (3)

Choose one from the following:

- ECO 1000 - Survey of Economics (GE) (3)
- ECO 1001 - Principles of Macroeconomics (GE) (3)

- ECO 1002 - Principles of Microeconomics (GE) (3)

## Media Communication

- COM 1075 - Scriptwriting for Television and Film (3)
- COM 3095 - Media Literacy (3)
- COM 2043 - Introduction to TV and Film Production (3)
- COM 2050 - Intercultural Communication (3)

## Cross Disciplinary Studies: Teacher Education, B.A.

Each course in this section requires 20 hours in a field placement in order to meet the required field hours toward the California Preliminary Teaching Credential.

## Program Learning Outcomes

Cross-Disciplinary Studies: Teacher Education prepares candidates for a successful K-12 teaching career. Within the degree are credential courses approved by the California Commission on Teacher Credentialing.

Candidates who complete the program in Cross-Disciplinary Studies: Teacher Education will be able to do the following:

- Demonstrate effective presentation skills, one-on-one and with groups.
- Produce effective written communication.
- Employ critical thinking and logic to solve problems in a variety of environments, to include the K-6 classroom.
- Demonstrate information literacy by acquiring and utilizing specific content information from a variety of sources for classroom instructional planning.
- Apply an interdisciplinary understanding of content regarding diverse and cross-cultural communities.
- Apply faith-based influences and beliefs within professional/educational settings.
- Reflect on and engage in spiritual and professional growth opportunities in personal and professional and educational settings.
- Serve effectively within their communities and in educational settings.

## Concentrations

- Reading, Language and Literature
- Visual and Performing Arts
- Physical Education/Health
- Human Development
- Science
- Math
- History and Social Science

## Lower-Division Requirements

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)
- BIO 1003 - Introduction to Biology (GE) (3)
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)

- COM 1000 - Principles of Human Communication (GE) (3)
- HIS 1010 - World Civilizations I (GE) (3)
- HIS 1020 - United States History from Early America to the Twentieth Century (3)
- LIT 2000 - Literature and Culture (GE) (2)
- MTH 1013 - College Algebra (3) (or passing placement exam scores)
- MTH 2013 - Fundamentals of Elementary Mathematics I (3)
- MTH 2023 - Fundamentals of Elementary Mathematics II (3)
- PSC 1014 - Physical Science for Teachers (GE) (4)
- PSC 1023 - Earth and Space Science for Teachers (3)
  
- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3) **OR**
- PSY 1003 - General Psychology (GE) (3)
  
- TRE 1001 - Introduction to Theatre (GE) (2)
  
- WRI 1010 - College Composition: Writing and Research - First Year Experience (GE) (4)  
**OR**
- WRI 1016 - College Composition: Research - First Year Experience (GE) (2) \*

*\* WRI 1016 is for students who have transferred the first half of the GE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2 unit research course, which fulfills the second half of the GE writing requirement.*

Choose one course from the following 3 courses:

- SWF 3015 - Health and Well-Being (GE) (2)
- PED 1000 - Fitness Through Movement (GE) (2)
- PED 2000 - Optimal Health (GE) (2)

Choose one course from the following 2 courses:

- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)
- SOC 2001 - Cultural Anthropology (GE) (3)

Choose one course from the following 5 courses:

- ART 1000 - Introduction to Art (GE) (2)
- ART 1002 - Fundamentals of Art (GE) (3)
- ART 2000 - History of Art I (GE) (3)
- ART 2001 - History of Art II (GE) (3)
- MUH 1000 - Introduction to Music (GE) (2)

Choose one course from the following 2 courses:

- PHL 2001 - Introduction to Philosophy (GE) (3)
- PHL 2011 - Ethics (GE) (3)

Choose one of the following sequences:

- SPA 1001 - Elementary Spanish I (GE) **(4) AND**
- SPA 1002 - Elementary Spanish II (GE) **(4)**
  
- FRE 1001 - Elementary French I (GE) **(4) AND**
- FRE 1002 - Elementary French II (GE) **(4)**
  
- GER 1001 - Elementary German I (GE) **(4) AND**
- GER 1002 - Elementary German II (GE) **(4)**

Total: 65-69 Units

## Upper-Division Requirements

- ART 3019 - Visual Arts in the Classroom I **(3)**
- HIS 3070 - California History **(4)**
- LIT 3025 - Children's Literature **(3)**
- MUE 3041 - Music Skills for the Elementary Classroom Teacher **(3)**
- PED 3008 - Methods of Teaching Physical Education **(3)**

Choose one course from the following 5 courses:

- CHU 3040 - Women in the Christian Tradition (GE) **(3)**
- CHU 3095 - The Christian Tradition (GE) **(3)**
- THE 3005 - Christian Faith and the Natural Sciences (GE) **(3)**
- THE 3060 - Christian Life as Vocation (GE) **(3)**
- THE 3070 - Global Christianity (GE) **(3)**

Choose one course from the following 3 courses:

- MTH 1044 - Calculus With Applications (GE) **(4)**
- MTH 1064 - Calculus I (GE) **(3)**
- MTH 1064L - Calculus I Lab (GE) **(1)**
- MTH 3003 - Problem Solving (GE) **(3)**

Choose one course from the following 2 courses:

- CHD 1020 - Child and Adolescent Development **(4)**
- PSY 3008 - Developmental Psychology - Birth Through Adolescence **(4)**

Choose one course from the following 4 courses:

- LIT 3050 - World Literature (GE) **(3)**
- LIT 3051 - World Cinema (GE) **(3)**
- LIT 3052 - Diverse Voices in American Literature (GE) **(3)**
- LIT 3053 - Women Writers (GE) **(3)**

Total 29-30 Units

## Upper Division Requirements in Education

Each course in this section has prerequisites and requires 20 hours in a field placement in order to meet the required field hours toward the California Preliminary Teaching Credential. See Notes \*\*

- EDU 3002 - Foundations of Education and Learning Theory (3)
- EDU 3006 - Principles of Language Acquisition (3)
- EDU 3024 - Differentiated Mathematics Instruction for All Learners (3)
- EDU 4004 - Foundations of Special Education (3)
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education (2)

Total: 14 Units

## Teacher Credential Candidates

Teacher Education candidates who complete the above fourteen (14) units of Education coursework required for their bachelor's degree may complete the remainder of the teaching credential within the Master of Arts in Teaching degree, specially choosing to also add the Reading and Literacy Added Authorization eight (8) units and six (6) elective units.

Candidates who take additional education courses would apply as a graduate student to finish their credential coursework and then seek a Master of Arts in Education degree in their concentration of choice.

## Required Concentrations

The candidate majoring in Cross-Disciplinary Studies: Teacher Education chooses one 12-unit concentration from the following list of content areas available at PLNU. At least 8 of the 12 units must be distinct from the major requirements, with the embedded general education requirements, that may have been satisfied.

## Reading, Language, and Literature

### English Emphasis

- LIT 3000 - Literary Analysis (3)

#### **Choose ONE of the following Linguistics and Writing courses (3 units)**

- LIN 3012 - Introduction to Linguistics (3)
- LIN 3065 - English Grammar and Usage (3)
- WRI 3015 - Advanced English Composition (3)

#### **Choose ONE of the following Lower Division Literature courses (3 units)**

- LIT 2052 - World Literatures: Ancient and Medieval Literatures (3)
- LIT 2054 - British Writers I (3)
- LIT 2055 - British Writers II (3)
- LIT 2056 - American Writers I (3)
- LIT 2057 - American Writers II (3)

#### **Choose ONE Upper Division Literature course [NOT to include LIT 3025] (3 units)**

### French Emphasis

- FRE 2050 - Intermediate French I **(3)**
- FRE 2051 - Intermediate French II **(3)**
  
- FRE 3003 - French Conversation **(3)**
- OR**
- FRE 3015 - French Culture and Civilization **(3)**
  
- FRE 3020 - Survey of French Literature **(3)**
- OR**
- FRE 3025 - Francophone Literature **(3)**

### Spanish Emphasis

- SPA 2051 - Intermediate Spanish Conversation II **(3)**
- SPA 3002 - Advanced Grammar and Reading **(3)**
- SPA 3000 - Civic Engagement: Conversation, Culture and Community **(3)**

Choose one:

- SPA 3010 - Latin American Culture and Civilization **(3)**
- SPA 3015 - Culture and Civilization of Spain **(3)**
- SPA 3020 - Mexican American Literature and Culture **(3)**
- SPA 3080 - Genre/period Studies in Hispanic Literature or Film **(3)**

### Visual and Performing Arts

#### Music Emphasis

- MUA 2012 - Beginning Conducting **(2)**
- MUE 3041 - Music Skills for the Elementary Classroom Teacher **(3)**
- TRE 3054 - Movement **(3)**
- Private Lessons or Instrumental Band **(2 units)**

Choose one:

- MUH 1000 - Introduction to Music (GE) **(2)**
- MUH 1001 - Introduction to Listening (GE) **(2)**
- MUH 3034 - World Music **(2)**

#### Art Emphasis

- ART 3019 - Visual Arts in the Classroom I **(3)**
- TRE 3054 - Movement **(3)**

Choose one:

- ART 1004 - Three-Dimensional Design: Composition and Space **(3)**
- ART 1015 - Drawing I **(3)**

Choose one:

- ART 3004 - Modern Art History (3)
- ART 3005 - Contemporary Art History (3)
- ART 3025 - Non-Western Art History (3)
- ART 3035 - Design History: Industrial Revolution to Contemporary Design (3)

### Theatre Emphasis

- TRE 2070 - Acting (3)
- TRE 3054 - Movement (3)
- ART 3019 - Visual Arts in the Classroom I (3)
- TRE 3050 - Musical Theatre (3)

### Physical Education/Health

- KIN 3012 - Motor Learning and Motor Development (3)
- PED 2000 - Optimal Health (GE) (2)
- PED 2020 - Team Sports Fundamentals and Strategies (GE) (2)  
2-3 units of an approved Education, Kinesiology or Physical Education course.

Choose one:

- SWF 3015 - Health and Well-Being (GE) (2)
- PSY 3060 - Human Sexuality (3)

### Human Development

- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)

Choose one:

- CHD 1020 - Child and Adolescent Development (4)
- CHD 1050 - Human Development (3)

Choose one:

- PSY 3020 - Social Psychology (3)
- SOC 2050 - Sociology of the Family (3)

Choose one:

- CHD 4020 - Child Development in the Family and Community (4)
- PSY 3080 - Family Development and Family Therapies (3)

### Science

**NOTE: Students who select the Science Concentration are not required to take BIO 1003 and BIO 1003L.**

- BIO 2010 - Cell Biology and Biochemistry (GE) **(3) and**
- BIO 2010L - Cell Biology and Biochemistry Laboratory (GE) **(1)**
  
- BIO 2011 - Ecological and Evolutionary Systems (GE) **(3) and**
- BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE) **(1)**

Choose one:

- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) **(4) and**
  - CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) **(1)**
- OR**
- CHE 1052 - General Chemistry I (GE) **(4) and**
  - CHE 1052L - General Chemistry I Lab (GE) **(1)**

## Math

Individualized programs will be designed with a Math advisor beginning with the sophomore year.

## History and Social Science

### American Studies Emphasis

Required:

- HIS 3070 - California History **(4)**

Choose two:

- HIS 3016 - Colonial and Revolutionary America **(4)**
- HIS 3020 - United States History, 1815-1914 **(4)**
- HIS 4025 - United States Since 1914 **(4)**
- HIS 4035 - Asian-American History: 1800 to the Present **(4)**
- HIS 4077 - Gender and Law in the U.S. (WS) **(4)**
- POL 1065 - American Government **(4)**
- POL 3041 - Campaigns and Elections **(4)**
- POL 3060 - Urban Politics **(4)**
- POL 3080 - Congress and the Presidency **(4)**
- POL 4041 - Issues in Public Policy **(4)**

### International Studies Emphasis

Choose one (if 4 units) or 2 courses:

- POL 2030 - Introduction to International Relations **(4)**
- POL 2090 - World Regional Geography **(3)**
- SOC 2001 - Cultural Anthropology (GE) **(3)**

Choose two:

- HIS 3055 - Modern Middle East (4)
- HIS 3065 - Modern Japan and Korea (4)
- HIS 4015 - Europe and the World (4)
- HIS 4036 - America in East Asia: 1800 to the Present (4)
- POL 4035 - Global Governance (4)
- POL 4055 - Protest and Social Movements in World Politics (4)

**\*\* Note(s):**

Completion of this program partially fulfills requirements for a Teaching Credential in the State of California. Refer to the School of Education website for further information.

Teacher Education majors must earn a grade of C- or higher in all courses required by the major and in all 4000-level elective courses to get credit towards the major.

Teacher Education majors must earn a grade of C or higher in all Education (EDU) courses, to get credit for credential courses (as per the California Commission for Teacher Credentialing guidelines).

All candidates are required to obtain a Certificate of Clearance, a clear TB test, personal liability insurance, and purchase of a Task stream account prior to registration in any Education course.

Passage of the California Basic Skills Test (CBEST) is required prior to registration in EDU 3006.

Failure to complete the fieldwork requirement in an Education (EDU) course will result in a non-passing grade for that course.

Candidates who entered the Cross-Disciplinary Studies major in the 2016-17 academic year and beyond, and who fulfill all major requirements, are covered by the Elementary Subject Matter Waiver and waived from the CSET exam toward the Multiple Subjects Teaching Credential. Candidates who fulfill major requirement listed in catalogs prior to 2016-17 must pass the Multiple Subjects CSET exam upon complete of 12 Education units.

## Teacher Credential Candidates

Teacher Education candidates who complete the above fourteen (14) units of Education coursework required for their bachelor's degree may complete the remainder of the teaching credential within the Master of Arts in Teaching degree, specially choosing to also add the Reading and Literacy Added Authorization eight (8) units and six (6) elective units.

Candidates who take additional education courses would apply as a graduate student to finish their credential coursework and then seek a Master of Arts in Education degree in their concentration of choice.

## Other Programs

### **4-Year Credential Track: Single Subject Teaching Credential**

#### 4-Year Credential Track: Single Subject Teaching Credential

Majors in the Bachelor of Arts and Bachelor of Science degrees complete a minimum of 128 units to graduate. The following majors have the option of choosing the 4-year credential track by fulfilling additional units within the undergraduate degree in fulfillment of the Single Subject California Teaching Credential.

- Art Education, B.A. (Single Subject Art California Teaching Credential)
- Biology, B.A. (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (Single Subject Physical Education California Teaching Credential)
- French, B.A. (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (Single Subject Social Sciences Teaching Credential)
- Mathematics, B.S. (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (Single Subject Music California Teaching Credential)
- Spanish, B.A. (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 4000-level credential courses are strategically added to the undergraduate degree course plan. These courses represent the required courses for the California SB2042 Single Subject Teaching Credential. Students desiring to enroll in the 4-year credential track would need to make application to the Teacher Education program before entry in the 3<sup>rd</sup> credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching. Candidates remain Kinesiology majors and are co-advised by both departments throughout their undergraduate program.

Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). Any 4000-level courses cross listed with the 6000-level credential courses cannot be repeated between the undergraduate and graduate programs. At the point that the requirements for the undergraduate degree are fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

The following courses may be used for the credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

## Requirements

- EDU 3002 - Foundations of Education and Learning Theory **(3)** \*
- EDU 3006 - Principles of Language Acquisition **(3)** \*
- EDU 4004 - Foundations of Special Education **(3)** \*
- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education **(2)**
- EDU 4020 - Literacy Instruction for Secondary Teachers **(3)** \*
- EDU 4021 - General Methods for Secondary Teachers **(3)** \*
- EDU 4050 - Secondary Clinical Practice I **(4)**
- EDU 4055 - Secondary Clinical Practice II **(4)**
- EDU 40CP3 - Secondary Clinical Practice Seminar I **(1)**
- EDU 40CP4 - Secondary Clinical Practice Seminar II **(1)**

One course from the following based on the major:

- EDU 4033 - Methods for Teaching Secondary Mathematics **(3)** (Mathematics Majors)
- EDU 4034 - Methods of Teaching Secondary Science **(3)** \*\* (Biology Majors)
- EDU 4035 - Methods of Teaching Secondary Social Science **(3)** (History Majors)
- EDU 4036 - Methods for Teaching Secondary Foreign Language **(3)** (French/Spanish Majors)
- EDU 4037 - Methods for Teaching Secondary Visual Arts **(3)** (Art Education Majors)
- EDU 4038 - Methods for Teaching Secondary Physical Education **(3)** (Exercise and Sports Science Majors)
- EDU 4039 - Content-Specific Pedagogy for Secondary Teachers **(3)** \*\*\* (Music Education Majors)

Note(s):

*\*Requires 20 hours of supervised field experience working with students in a classroom setting.*

*\*\*BIO 4063 also satisfies this credential requirement.*

*\*\*\*MUE 4054 also satisfies this credential requirement.*

## **Post-Baccalaureate Multiple Subjects Teaching Credentials**

### **Multiple Subjects Teaching Credential**

Cross Disciplinary Studies: Teacher Education, B.A. majors complete a 130-unit undergraduate degree program which includes five required Education courses in partial fulfillment toward the Multiple Subjects Teaching Credential. Teacher Education majors have the option of adding 19 additional units to the undergraduate degree in fulfillment of the Multiple Subjects Teaching Credential. Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching Credential(s). The following 4000-level credential courses are cross listed with the 6000-level credential courses, and cross listed courses cannot be repeated between the undergraduate and graduate programs. These courses represent the required courses for the California SB2042 Multiple Subjects Teaching Credential. At the point that the 130-unit undergraduate degree is fulfilled, the candidate would apply to the Graduate School of Education and complete the remaining courses required for the credential post-baccalaureate.

Students desiring to enroll in the Multiple Subjects credential course listed below would need to make application to the Teacher Education program, meeting all program, university and state requirements for classroom observation and tests required prior to student teaching. Students would be interviewed by a faculty committee prior to being placed in student teaching.

The following courses may be used for credentialing purposes in the State of California. When taken prior to the posting of a baccalaureate degree, unit values may not be applied toward master's degree courses. Other appropriate master's degree-level courses must be substituted for unit values.

Prerequisites: passage of prior Education coursework and the CBEST test of basic skills

### **Requirements**

- EDU 4009 - Classroom Assessment and Research Practices **(3)**
- EDU 4010 - Methods of Teaching Reading and Writing **(3)** (with fieldwork) \*
- EDU 4022 - Interdisciplinary Approaches to Teaching in the Content Areas **(3)**
- EDU 4040 - Elementary Clinical Practice I **(4)**
- EDU 4060 - Elementary Clinical Practice II **(4)**
- EDU 40CP1 - Elementary Clinical Practice Seminar I **(1)**
- EDU 40CP2 - Elementary Clinical Practice Seminar II **(1)**

Note(s):

*\* Requires 20 hours of supervised field experience working with students in a classroom setting.*

### **Special Education Teaching Credentials**

Cross Disciplinary Studies: Teacher Education, B.A. majors have the option of adding additional units to the undergraduate degree in fulfillment of a Special Education Teaching Credential. Candidates may also apply to the School of Education Graduate Program to fulfill the remaining requirements toward the California Teaching

Credential(s). The following 4000-level credential courses are cross listed with the 6000-level credential courses, and cross listed courses cannot be repeated between the undergraduate and graduate programs. These courses represent the required course for the California SB2042 Multiple Subjects Teaching Credential. At the point that the 130-unit undergraduate degree is fulfilled, the candidate would apply to the Graduate School of education and complete the remaining courses required for the credential post-baccalaureate.

## Requirements

- EDU 4053 - Organization and Management for Success in the Moderate/Severe Classroom (3)
- EDU 4054 - Methods of Teaching Candidates with Moderate/Severe Disabilities (3)
- EDU 4092 - Assessment and Services for Students with Disabilities (3)
- EDU 4093 - Curricular and Instructional Adaptations for Students with Mild/Moderate Disabilities (3)
- EDU 4094 - Collaboration and Consultation for IEP Implementation, Evaluation, and Program Improvement (3)
- EDU 4096 - Principles of Language Acquisition for Students with Moderate/Severe Disabilities (3)
- EDU 4070M - Special Education Mild/Moderate Clinical Practice I (4)
- EDU 4074M - Special Education Mild/Moderate Clinical Practice II (4)
- EDU 4070S - Special Education Moderate/Severe Clinical Practice I
- EDU 4074S - Special Education Moderate/Severe Clinical Practice II
- EDU 40CP1 - Elementary Clinical Practice Seminar I (1)
- EDU 40CP2 - Elementary Clinical Practice Seminar II (1)

## School of Nursing

### Mission Statement

The School of Nursing at Point Loma Nazarene University exists to support the university Wesleyan mission and to provide an interdisciplinary learning program of excellence. Graduates of the School of Nursing are distinctly identified by grace, truth, and holiness, serving others after the example of Christ, as they are sent to fulfill their calling as professional nurses.

*So He got up from the meal, took off His outer clothing, and wrapped a towel around his waist. After that, He poured water into a basin and began to wash His disciple's feet, drying them with a towel that was wrapped around Him.*

John 13:4-5 NIV

*Now that I, your Lord and Teacher, have washed your feet, you also should wash one another's feet. I have set you an example that you should do as I have done for you.*

John 13:14-15 NIV

### Vision Statement

The School of Nursing at Point Loma Nazarene University embraces, as a covenant, the commitment to excellence within a dynamic Christian environment in which each one will engage in the sacred work of nursing. This sacred work involves symbolically removing one's shoes in service of others.

*Take off your sandals for the place you are standing is holy ground.*

Exodus 3:5 NIV

### Purposes

- To prepare competent, responsible practitioners who are committed to service and leadership as professional nurses;

- To equip graduates with the skills to function at an entry level of professional practice in a wide variety of health care settings;
- To expose students to the dynamic changes occurring in health care today to better prepare them for the changing careers of the future.

## **Tradition of Excellence**

The nursing program at Point Loma Nazarene University (PLNU) is highly respected in the San Diego community and around the world. Classes provide for individualized attention by caring faculty who are dedicated to the academic and clinical success of each student. The Nursing program is rigorous and as such there is a grade requirement of at least "C" for all pre-requisite, co-requisite and Nursing course requirements (excluding NSG1050 which requires a minimum grade of "B"). The faculty who are professionally qualified focus on effective teaching, and seriously take their call to be Christian role models and mentors. The School of Nursing (SON) is approved by the California Board of Registered Nursing and nationally accredited by the Commission on Collegiate Nursing Education. Graduates are thus eligible to take the NCLEX-RN licensure exam and apply for public health nursing certification upon graduation. This accredited program provides preparation for graduate study.

## **Career Opportunities**

The program is designed around five program values: caring faithfully, leading faithfully, communicating faithfully, following faithfully and inquiring faithfully. Nursing majors complete a rigorous program of clinical and theory courses that prepare them for the role of the registered nurse. The compassionate attitudes and excellent preparation of PLNU nurses make them highly sought after by San Diego County health care agencies.

## **Admission Requirements**

Students are admitted as freshman to pre-nursing status and must successfully complete the required prerequisite courses to be considered for the nursing major. Transfer students must have all prerequisite courses and Microbiology completed at the time of application to the B.S.N. program. Students are selected for admission to the sophomore class annually for the fall semester. Selection is based on GPA at PLNU, cumulative GPA, strength of application, letter of recommendation, completion of pre-requisite classes, as well as additional criteria. A minimum overall 3.000 college/university GPA is required on a four-point grade scale. LVNs licensed in the State of California are accepted into the program with advanced standing based upon completion of special LVN admission criteria, on a space available basis. Being a PLNU student and meeting the eligibility requirements does not guarantee admission into the nursing program as admission is competitive and space in nursing courses are limited. If a student is not selected, a 5th year may be required. Space is not guaranteed and re-application may be necessary.

Throughout the curriculum (whether pre-nursing or nursing) students may repeat one pre-requisite or nursing course. With the need for a second repeat of any pre-requisite or nursing course the student will be dismissed from the nursing program. If there are two repeats of pre-requisite courses in pre-nursing, the student will not be eligible for application to the nursing major.

Students who have a previous bachelor's degree in a major other than Nursing may be considered for admission into sophomore Nursing class, however, a full three years will be required to complete Nursing coursework. The course load may be lighter depending on the number of general education classes already completed. PLNU does not offer an accelerated nursing program.

For further information:

- [www.pointloma.edu/nursing](http://www.pointloma.edu/nursing)
- Sarah Frerking, Program Coordinator and Selection Committee Chairperson; (Office) 619-849-2425 or (email) [sfrerkin@pointloma.edu](mailto:sfrerkin@pointloma.edu)

## Eligibility Requirements

Students are eligible to be considered for the Point Loma Nazarene University Nursing Program when the following minimum requirements are met:

- Acceptance to PLNU as a Pre-Nursing Major.
- Submission of an application for the nursing program. (Application forms available in December at the School of Nursing website) Deadline is February 1.
- Cumulative Grade Point Average (GPA) of 3.000 or better on a four-point scale.
- Completion of NSG 1050 with a minimum grade of "B."
- Caring Faithfully; Intro to Nursing (2 semester units - PLNU pre-nursing students only); transfer students will take concurrent with NSG 2050 /NSG 2051
- Completion of the following prerequisites (or equivalents) with a minimum grade of "C" (2.000) in each:
  - Inorganic and Organic/Biology Chemistry (4 semester units - with labs);
  - Human Anatomy and Physiology (8 semester units - with labs);
  - General Psychology or Personal Identity (3 or 4 semester units);
  - Math equivalent determined by PLNU math placement test or achievement on SAT;
  - Human Development (3 semester units) strongly recommended prior to NSG 2050 ;
  - Nutrition (3 semester units); strongly recommended prior to NSG 2050 ;
- A student may be considered with a repeat of one pre-requisite course (to achieve the minimum grade);
- Transfer students must have all Pre-Requisite courses AND Microbiology completed at the time of application to the BSN program.
- For PLNU first-time freshmen pre-nursing majors, BIO 1030 , BIO 1040 and CHE 1003 are required to be taken at PLNU and will not be accepted in transfer except for elective credit. Priority consideration for admission to the nursing major is given to PLNU pre-nursing students who have completed prerequisite sciences at PLNU.
- Successful completion of a drug screen test.

## Selection Process

The School of Nursing is not a direct-entry program. Eligible students are selected for admission to the nursing program by the School of Nursing Selection Committee. Selection is made on the basis of several criteria that may include, but is not limited to cumulative GPA, quality of entire application, letter of recommendation, units at PLNU, as well as additional criteria. Being a PLNU student and meeting the eligibility requirements does not guarantee admission into the nursing program as admission is competitive and space in nursing courses is limited. Students who are not selected for admission may consider taking a 5th year to improve their likelihood of admission. Space is not guaranteed and re-application may be necessary. Admission to the major is dependent on meeting the above criteria and upon the recommendation of the Selection Committee.

- The Selection Committee will meet to finalize the selection process after all spring grades are received. Students will be notified about selection decisions by mid-June.
- The Selection Committee may require an interview.

## Health Status

Once accepted into BSN program:

- Students must provide evidence that they are physically and emotionally able to perform the duties required.
- A physical examination documented by a health care provider is required for matriculation in the SON. The examination includes current immunizations and tests as required by the San Diego Nursing Education Consortium.
- Tuberculin testing is required annually during the program.
- An annual influenza vaccine is required.

- American Heart Association (AHA) Basic Life Support (BLS) certification/renewal is required every 2 years.

## **Background Check**

Per agreement with the San Diego Nursing Service Education Consortium and affiliated hospitals, a background check and drug screen will be required prior to your first clinical experience and at other times throughout the program. If a flag occurs from either your background check or drug screening, this may result in immediate dismissal from the Point Loma Nazarene University BSN program.

## **Other Provisions**

- Clinical facilities have a wide geographical distribution. Students are responsible for providing their own transportation to fulfill clinical requirements. This also requires a valid driver's license and proof of auto insurance.
- A program fee will be assessed yearly to Sophomore, Junior, and Senior Nursing students.
- Students are required to purchase uniforms, watch with second hand, skills lab kit, and other equipment as necessary.
- Students should be aware that the B.S.N. program is a full three years in length upon completion of prerequisite courses. Those with transfer credits will still need three years of Nursing courses to complete the degree.
- Upon acceptance to the nursing program, a current American Heart Association (AHA) Basic Life Support (BLS) certification is mandatory for all Nursing majors in order to participate in clinical coursework. Cards from any agency other than AHA (e.g. American Red Cross or BART) are NOT acceptable.

## **Faculty**

Mary Adams, PhD, RN  
*Loyola University Chicago*

Angelica Almonte, PhD, RN  
*University of San Diego*

Rachel Hyden, MSN, RN, FNP, CNS  
*San Diego State University*

Son Kim, PhD, RN  
*University of San Diego*

Kristen Lambert, PhD, RN  
*University of San Diego*

Jen King, DNP, RN, CNS  
*Point Loma Nazarene University*

Anna Montejano, DNP, RN  
*California State University Northern California*

Carlota Quiban, PhD, RN  
*University of Phoenix*

Larry Rankin, PhD, RN, CNE, Associate Dean-Graduate Programs  
*University of Michigan*

Michelle Riingen, DNP, RN, CNS-BC, Associate Dean-RN-BSN Program  
*Case Western Reserve University*

Monique Sawyer, DNP, RN, PMHNP-BC  
*Arizona State University*

Christine Sloan, PhD, RN, CNS, CPN, Associate Dean-Traditional Undergraduate Program  
*University of San Diego*

Sharon Smith, PhD, RN, FNP  
*University of California San Francisco*

Barbara Taylor, PhD, RN, Dean  
*University of San Diego*

Gary Wyer, MSN, MBA, RN  
*Grand Canyon University*

## **Major**

### **Nursing, B.S.N.**

#### **Program Learning Outcomes**

**INQUIRING FAITHFULLY:** The student will demonstrate knowledge, skill and behavior of the evidence-based practice of nursing which integrates growth in reasoning, analysis, decision-making and the application of theory with the goal of advocating for others and/or self. This includes holistic nursing skills and the nursing process.

**LEADING FAITHFULLY:** The student will incorporate a foundational relationship with Christ and others and embrace a willingness to serve others in the midst of life circumstances (e.g., illness, injustice, poverty). The student will role-model the need for "Sabbath Rest" as a means of personal renewal, and true care of the self, so that service to others is optimally achieved. The student will incorporate the characteristics of a servant leader including: humility, courage, forgiveness, discernment.

**COMMUNICATING FAITHFULLY:** The student will actively engage in the dynamic interactive process that is intrapersonal and interpersonal with the goal of advocating for others and/or self. This includes effective, culturally appropriate communication which conveys information, thoughts, actions and feelings through the use of verbal and nonverbal skills.

**FOLLOWING FAITHFULLY** As defined as claiming the challenge from Florence Nightingale that nursing is a "divine imposed duty of ordinary work." The nursing student will integrate the ordinary work by complying with and adhering to regulatory and professional standards (e.g. ANA Code of Ethics, the California Board of Registered Nursing, Scope of Nursing Practice, SON Handbook). This includes taking responsibility, being accountable for all actions and treating others with respect and dignity.

**CARING FAITHFULLY:** The student will embrace a calling to the ministry of compassionate care for all people in response to God's grace, which aims to foster optimal health and bring comfort in suffering and death.

#### **Lower-Division Requirements**

- NSG 1050 - Caring Faithfully: An Introduction to Nursing (2) \*
- NSG 2050 - Nursing of Individuals: Adult Health I (3)
- NSG 2051 - Nursing of Individuals: Clinical Practicum I (3)
- NSG 2055 - Changing Minds, Changing Lives (1)
- NSG 2060 - Nursing of Individuals: Adult Health II (4)

- NSG 2061 - Nursing of Individuals: Clinical Practicum II (3)
- NSG 2070 - Pharmacology in Nursing (2)
- BIO 1030 - Human Anatomy and Physiology I (GE) (3) \*
- BIO 1030L - Human Anatomy and Physiology I Laboratory (GE) (1)
- BIO 1040 - Human Anatomy and Physiology II (3) \*
- BIO 1040L - Human Anatomy and Physiology II Laboratory (1)
- BIO 2020 - Microbiology of Infectious Diseases (3) †
- BIO 2020L - Microbiology of Infectious Diseases Laboratory (1)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4) \*
- CHD 1050 - Human Development (3) ††
- NUT 2025 - Fundamentals of Nutrition (3) ††
- MTH 2003 - Introduction to Statistics (3)
- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) (3) \*

Select 3-4 General Education units from The Social World

Total: 52 Units

Note(s):

*\*Prerequisite to Nursing program, i.e., admission to NSG 2050 and NSG 2051.*

*†May be allowed to complete concurrent with first Nursing course.*

*††Must be completed by the end of the sophomore year.*

*A grade of at least "B" in NSG 1050 and a cumulative GPA of 3.000 are required for consideration for admission to the Nursing Major.*

*A grade of at least "C" is required in WRI 1010, MTH 2003, BIO 2020, and BIO 2020L.*

## Upper-Division Requirements

- NSG 3010 - Nursing of Families: Child/Adolescent Focus (2)
- NSG 3011 - Nursing of Families: Child/Adolescent Clinical Practicum (3)
- NSG 3030 - Nursing of Families: The Childbearing Process (2)
- NSG 3031 - Nursing of Families: The Childbearing Process Clinical Practicum (3)
- NSG 3040 - Nursing of Families: Adult Health III (2)
- NSG 3041 - Nursing of Families: Adult Health III Clinical Practicum (3)
- NSG 3099 - Nursing Research (2)
- NSG 4050 - Nursing of Communities: Mental Health Focus (3)
- NSG 4051 - Nursing of Communities: Mental Health Clinical Practicum (3)
- NSG 4060 - Nursing of Communities: Community Health Focus (3)
- NSG 4061 - Nursing of Communities: Community Health Focus Clinical Practicum (1)
- NSG 4070 - Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice (3)
- NSG 4080 - Nursing Capstone (1)
- NSG 4081 - Nursing Capstone Practicum (3)
- PSY 3021 - Abnormal Psychology (3)
- SOC 3060 - Race and Ethnicity (3)

Total: 40 Units

## School of Theology and Christian Ministry

### Purposes

- To help students appreciate and understand Christian history, theology, and spirituality from the perspective of the biblical, historical Christian faith;
- To create opportunities for students to apply and integrate classroom knowledge and principles to in-service training experiences in local churches, cross-cultural settings, and missions;
- To prepare students to pursue the study of philosophy, theology, or religion in a graduate school or seminary;
- To educate students to be "practical thinkers" and "thinking practitioners."

### Tradition of Excellence

The School of Theology and Christian Ministry faculty is committed to Christian service and the Wesleyan heritage. It offers personal attention and programs geared toward preparing women and men for ministry in a variety of forms as well as for other professions. With approximately fifty denominations represented at Point Loma, students have the opportunity to learn the similarities and differences between the major denominations and traditions within the Christian faith. The faculty of the School of Theology and Christian Ministry is diverse in educational background, with degrees from leading seminaries and universities across the country. Faculty members have published commentaries, dictionary articles, Christian life pieces, books, articles in national scholarly journals, and Christian education booklets. All professors are members in academic societies in fields of study. Outside the classroom, the faculty are committed members of local congregations and often spend weekends preaching, teaching Sunday school, or speaking at camps and retreats.

### Career Opportunities

Many of our students go directly into Christian ministry or other professions; others go on to graduate school. The School is proud of the acceptance rate of its alumni into a variety of graduate programs and law schools across the United States. To assist those entering Christian ministry of all sorts, "hands-on" internships in local churches are available. Also, six semester units can be earned through the summer ministries program by working in a local church, urban mission, or summer camp.

### Faculty

Brad Kelle, Ph.D.  
*Emory University*

Rebecca Laird, D. Min.  
*Drew University*

Michael Lodahl, Ph.D.  
*Emory University*

Kara Lyons-Pardue, Ph.D.  
*Princeton Theological Seminary*

Mark Maddix, Ph.D., Dean  
*Trinity Evangelical Divinity School*

Mark Mann, Ph.D.  
*Boston University*

Stephanie Matthews, Ph.D.  
*Vanderbilt University*

Samuel Powell, Ph.D.  
*Claremont Graduate School*

Heather Ross, M.A.  
*De Paul University*

Robert Thompson, Ph.D.  
*University of Oklahoma*

Montague Williams, Ph.D.  
*Boston University*

## **Major**

### **Christian Studies, B.A.**

#### **Program Learning Outcomes**

**Students who complete the program in Christian Studies Majors will be able to:**

- Interpret scripture evidencing biblical literacy.
- Articulate clear theological doctrines relevant to Christian life and ministry.
- Engage the perennial questions of the human condition using resources from philosophy.
- Apply principles of Christian formation for the practice of ministry.

#### **Concentrations**

• General  
Concentration

• Biblical Studies  
Concentration

• Leadership Concentration

• Philosophy  
Concentration

• Theology  
Concentration

• Youth and Family Concentration

#### **Christian Studies Core Course Requirements**

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)
- BIB 2040 - Reading Scripture Faithfully (3)
- CMI 1055 - Christian Formation and Ministry (3)
- PHL 2050 - God and Philosophy (3)

- THE 2050 - Introduction to Christian Theology (3)
- PHL 2001 - Introduction to Philosophy (GE) (3)
- **OR**
- PHL 2011 - Ethics (GE) (3)
- HEB 2005 - Biblical Hebrew I (GE) (4) **and**
- HEB 2006 - Biblical Hebrew II (GE) (4)
- **OR**
- GRK 2007 - Biblical Greek I (GE) (4) **and**
- GRK 2008 - Biblical Greek II (GE) (4)
- CHU 3095 - The Christian Tradition (GE) (3)
- THE 4095 - Justice in the Church: Gender, Households, and Unity in the Body of Christ (3)

Total: 34 Units

## Students Must Also Complete a Required Concentration

### General Concentration

- Choose four (4) upper division courses choosing one course in each of these areas: CMI, BIB, THE and PHL (12 units)\*\*
- Choose four (4) upper division courses from the elective choices below (12 units)\*\*

Total: 24 units

Major Total: 58 units

### Biblical Studies Concentration

- Choose three (3) upper division courses choosing one course in each of these areas: CMI, THE and PHL (9 units)\*\*
- Choose five (5) upper division courses from the BIB elective choices below (15 units)\*\*

Total: 24 units

Major Total: 58 units

### Leadership Concentration

- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMI 3050 - Church as a Witness to the World (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 4010 - Leading in Ministry (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- CMI 4050 - Internship (1-3)

- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, THE and PHL (9 units)\*\***

- **Choose three (3) interdisciplinary units from the following:**

- MGT 2012 - Principles of Management (3)
- MGT 3082 - Applied Entrepreneurship (3)
- MGT 4070 - Nonprofit Organization Management (3)

Total: 31-33 units

Major Total: 65-67 units

### Philosophy Concentration

- Choose three (3) upper division courses choosing one course in each of these areas: BIB, CMI and THE (9 units)\*\*
- Choose five (5) upper division courses from the PHL elective choices below (15 units)\*\*

Total: 24 units

Major Total: 58 units

### Theology Concentration

- Choose three (3) upper division courses choosing one course in each of these areas: BIB, CMI and PHL (9 units)\*\*
- Choose five (5) upper division courses from the THE elective choices below (15 units)\*\*

Total: 24 units

Major Total: 58 units

### Youth and Family Concentration

- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMI 3040 - Foundations for the Practice of Youth Ministry (3)
- CMI 3050 - Church as a Witness to the World (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 4025 - Youth and Family Ministry (3)
- CMI 4050 - Internship (1-3)

- **Choose three (3) upper division courses choosing one course in each of these areas: BIB, THE and PHL (9 units)\*\***

- **Choose two to four (2-4) interdisciplinary units from the following:**

- CHD 3010 - Early Childhood Education (4)
- CHD 3013 - Adolescent Development in the Family Context (2)
- PSY 3008 - Developmental Psychology - Birth Through Adolescence (4)
- PSY 3021 - Abnormal Psychology (3)

- SOC 2050 - Sociology of the Family (3)

Total: 30-34 units

Major Total: 64-68 units

### **\*\* Christian Studies Elective Options:**

- BIB 3035 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse (3)
- BIB 3078 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- BIB 4001 - Jesus and the Gospels: Four Portraits of One Christ (3)
- BIB 4002 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference (3)
- BIB 4010 - Biblical Theology (3)
- BIB 4013 - Old Testament Torah and Israel's History: God's Story and God's People (3)
- BIB 4014 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics (3)
- BIB 4090 - Special Studies in Bible (1-3)
- BIB 4095 - Seminar in Biblical Literature (3)
- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMI 3040 - Foundations for the Practice of Youth Ministry (3)
- CMI 3045 - Enacting Worship (3)
- CMI 3050 - Church as a Witness to the World (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 4010 - Leading in Ministry (3)
- CMI 4015 - The Church of the Nazarene: History and Polity (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- CMI 4025 - Youth and Family Ministry (3)
- CMI 4090 - Special Studies in Christian Ministry (1-3)
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)
- THE 3015 - Christian and Religious Themes in Literature (3)
- THE 3020 - The World's Faith Traditions (3)
- THE 3025 - The Human Person and Theology and Psychology (3)
- THE 3030 - Christ and the Church (3)
- THE 3035 - Christian Ethics (3)
- THE 4010 - The Ministry and Sermons of John Wesley (3)
- THE 4015 - Three Traditions of Protestant Theology (3)
- PHL 2077 - Logic (3)
- PHL 3001 - Plato and Aristotle (3)
- PHL 3002 - Descartes through Hegel (3)
- PHL 3021 - Justice, Politics, and the Social World (3)
- PHL 3031 - Existential Philosophy and Literature (3)
- PHL 3041 - Philosophy and Art (3)
- PHL 3060 - Philosophy and the Sciences (3)
- PHL 3071 - Education and the Ethical Life (3)
- PHL 3080 - Alienation, Transformation, and Reconciliation in Film (3)
- PHL 3081 - Ethics, Responsibility, and Love (3)

### **Philosophy, B.A.**

The discipline of philosophy, the critical inquiry into the structure of reality, knowledge, and values, seeks to clarify and explicate the presuppositions and implications of various interpretations of human experience. The purposes of the Philosophy major are:

- To develop critical and creative thinking, soundness of argument, clarity of thought, and precision in expression;
- To cultivate a critical appreciation of the enduring questions constituting the philosophical heritage;
- To explore the relation between philosophical and religious thought; and
- To prepare students for graduate study.

## Program Learning Outcomes

*Students who complete the program in Philosophy will be able to:*

- Engage in the disciplined practice of asking questions about God, the world, and themselves, including questions for which there may be no easy answers.
- Differentiate among interrelated movements or figures in the history of philosophy.
- Evaluate the strengths and weaknesses of human reasoning or experience to provide an adequate account of the human condition, the world, ethics and Christian life.

## Lower-Division Requirements

- PHL 2001 - Introduction to Philosophy (GE) (3)  
**OR**
- PHL 2011 - Ethics (GE) (3)
- PHL 2077 - Logic (3)

Total: 6 Units

## Upper-Division Requirements

- PHL 3001 - Plato and Aristotle (3)
- PHL 3002 - Descartes through Hegel (3)
- PHL 4001 - Contemporary Voices in Philosophy, Theology, and Ethics (3)  
**OR**
- PHL 4011 - The Search for Meaning: Goodness, Being, and Truth (3)
- PHL 4090 - Special Studies in Philosophy (1-3)
- **Eighteen (18) additional SOTCM upper-division major elective units, 15 of which will need to be upper-division PHL courses.**

Total: 28 Units

Major Total: 34 Units

## Recommended

*Greek, German, or French should be used to fulfill the general education foreign language requirement.*

Note(s):

Accepting Associate Degree for Transfer (ADT)

## **Minor**

### **Biblical Studies Minor**

#### Lower Division Requirements

- BIB 1001 - Old Testament History and Religion (GE) (2)
- BIB 1002 - New Testament History and Religion (GE) (3)
- BIB 2040 - Reading Scripture Faithfully (3)

Total: 8 units

#### Upper Divisions Requirements

- **Choose four (4) upper division BIB courses with at least one focusing on the Old Testament and at least one focusing on the New Testament.**

Total: 12 units

Minor Total: 20 units

### **Christian Mission & Intercultural Ministry Minor**

#### Lower Division Requirements

- CMI 1055 - Christian Formation and Ministry (3)
- SOC 2001 - Cultural Anthropology (GE) (3)

Total: 6 units

#### Upper Division Requirements

- CMI 3050 - Church as a Witness to the World (3)
- CMI 4010 - Leading in Ministry (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- THE 3020 - The World's Faith Traditions (3)

Total: 12 units

Minor Total: 18 units

## Christian Studies Minor

### Lower Division Requirements

- BIB 2040 - Reading Scripture Faithfully (3)
- CMI 1055 - Christian Formation and Ministry (3)
- PHL 2050 - God and Philosophy (3)
- THE 2050 - Introduction to Christian Theology (3)

Total: 12 units

### Upper Division Requirements

- **Choose four (4) upper division courses from the following electives\*\***

#### \*\* Christian Studies Elective Options:

- BIB 3035 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse (3)
- BIB 3078 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- BIB 4001 - Jesus and the Gospels: Four Portraits of One Christ (3)
- BIB 4002 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference (3)
- BIB 4010 - Biblical Theology (3)
- BIB 4013 - Old Testament Torah and Israel's History: God's Story and God's People (3)
- BIB 4014 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics (3)
- BIB 4090 - Special Studies in Bible (1-3)
- BIB 4095 - Seminar in Biblical Literature (3)
- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMI 3040 - Foundations for the Practice of Youth Ministry (3)
- CMI 3045 - Enacting Worship (3)
- CMI 3050 - Church as a Witness to the World (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)
- CMI 4010 - Leading in Ministry (3)
- CMI 4015 - The Church of the Nazarene: History and Polity (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- CMI 4025 - Youth and Family Ministry (3)
- CMI 4090 - Special Studies in Christian Ministry (1-3)
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)
- THE 3015 - Christian and Religious Themes in Literature (3)
- THE 3020 - The World's Faith Traditions (3)
- THE 3025 - The Human Person and Theology and Psychology (3)
- THE 3030 - Christ and the Church (3)
- THE 3035 - Christian Ethics (3)
- THE 4010 - The Ministry and Sermons of John Wesley (3)
- THE 4015 - Three Traditions of Protestant Theology (3)
- PHL 2077 - Logic (3)
- PHL 3001 - Plato and Aristotle (3)

- PHL 3002 - Descartes through Hegel (3)
- PHL 3021 - Justice, Politics, and the Social World (3)
- PHL 3031 - Existential Philosophy and Literature (3)
- PHL 3041 - Philosophy and Art (3)
- PHL 3060 - Philosophy and the Sciences (3)
- PHL 3071 - Education and the Ethical Life (3)
- PHL 3080 - Alienation, Transformation, and Reconciliation in Film (3)
- PHL 3081 - Ethics, Responsibility, and Love (3)

Total: 12 units

Minor Total: 24 units

## **Philosophy Minor**

### Lower-Division Requirements

- PHL 2001 - Introduction to Philosophy (GE) (3)

Total: 3 Units

### Upper-Division Requirements

- PHL 3001 - Plato and Aristotle (3)
- PHL 3002 - Descartes through Hegel (3)
- **Nine (9) additional units in PHL of which six (6) units must be upper division**

Total: 15 Units

Minor Total: 18 Units

## **Science and Christian Faith Minor**

### Lower Division Requirements

- THE 2050 - Introduction to Christian Theology (3)

Total: 3 units

### Upper Division Requirements

- CHU 3095 - The Christian Tradition (GE) (3)
- THE 3005 - Christian Faith and the Natural Sciences (GE) (3)
- THE 3025 - The Human Person and Theology and Psychology (3)
- PHL 3060 - Philosophy and the Sciences (3)

- Choose three (3) additional upper division units from any THE, BIB, or CMI course.

Total: 15 units

Minor Total: 18 units

## **Vocational Ministry Minor**

### Lower-Division Requirements

- BIB 2040 - Reading Scripture Faithfully (3)
- CMI 1055 - Christian Formation and Ministry (3)
- THE 2050 - Introduction to Christian Theology (3)

Total: 9 units

### Upper-Division Requirements

- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)

**Choose one of the following:**

- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3050 - Church as a Witness to the World (3)
- THE 3030 - Christ and the Church (3)

**Choose one of the following:**

- BIB 4001 - Jesus and the Gospels: Four Portraits of One Christ (3)
- BIB 4002 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference (3)
- BIB 4010 - Biblical Theology (3)
- BIB 4013 - Old Testament Torah and Israel's History: God's Story and God's People (3)
- BIB 4014 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics (3)

- CMI 4010 - Leading in Ministry (3)

**OR**

- CMI 4020 - Compassionate Ministry in Local Context (3)
- CMI 4050 - Internship (1-3) - students take three 1-unit internship annually is required for the minor

Total: 15 units

Minor Total: 24 units

## **Worship Arts Minor**

### Lower Division Requirements

- CMI 1055 - Christian Formation and Ministry (3)

- CMU 2001 - Instruments in Worship (2)
- OR**
- CMU 2002 - Multi-Media for Worship Ministry (2)

Total: 5 units

## Upper Division Requirements

- CMI 3045 - Enacting Worship (3)
- CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist (3)

**Choose two (2) course from the following:**

- BIB 3078 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice (3)
- CMI 3000 - Teaching and Preaching the Bible (3)
- CMI 3025 - Christian Care of Souls (3)
- CMU 3014 - Music and Worship (3)
- THE 3030 - Christ and the Church (3)

Total: 12 units

Minor Total: 17 units

## Youth and Family Ministries Minor

### Lower Division Requirements

- CMI 1055 - Christian Formation and Ministry (3)

Total: 3 units

### Upper Division Requirements

- CMI 3000 - Teaching and Preaching the Bible (3)
  - CMI 3025 - Christian Care of Souls (3)
  - CMI 4015 - The Church of the Nazarene: History and Polity (3)
  - CMI 4025 - Youth and Family Ministry (3)
  - CMI 4020 - Compassionate Ministry in Local Context (3)
- 
- CHD 3010 - Early Childhood Education (4)
- OR**
- CHD 3013 - Adolescent Development in the Family Context (2)

Total: 17-19 units

Minor Total: 20-22 units

## **Certificate**

### **Intercultural Ministries Certificate**

Purpose: The Intercultural Ministries Certificate is designed to help students develop a theoretical and practical understanding of ministry in diverse cultural contexts.

Objectives:

- To develop a theological framework of intercultural ministry
- To understand diverse cultures, religions, and people groups.

Students are to complete nine (9) academic units from the course requirements listed below, and engage in 20 hours of approved intercultural ministries experiences offered by the office of spiritual development.

**Required Course (3 units):**

- CMI 1055 - Christian Formation and Ministry (3)

**Choose two (2) of the following courses (6 units):**

- CMI 3050 - Church as a Witness to the World (3)
- CMI 4020 - Compassionate Ministry in Local Context (3)
- SOC 2001 - Cultural Anthropology (GE) (3)
- SOC 3050 - Urban Sociology (3)
- SOC 4044 - Globalization and Culture (3)
- MGT 4070 - Nonprofit Organization Management (3)
- THE 3020 - The World's Faith Traditions (3)
- PHL 3021 - Justice, Politics, and the Social World (3)

**AND**

Complete 20 hours of intercultural service through approved off-campus intercultural service opportunities through Spiritual Development office (Love Works, Ministry with Mexico, Student Ministries).

**Total: 9 Units**

### **Leadership in Ministry Certificate**

Purpose: The Leadership in Ministry Certificate is designed for students to gain knowledge and experience in leading and serving in a variety of ministry contexts.

Objectives:

- To develop of theological framework of Christian leadership.
- To understand leadership theories and approaches and their relationship to complex organizations.

Students are to complete nine (9) academic units from the course requirements listed below, and engage in 20 hours of approved leadership sponsored experiences offered by the Office of Spiritual Development.

**Required Courses (6 units):**

- MGT 2012 - Principles of Management (3)

- CMI 4010 - Leading in Ministry (3)

Choose one of the following courses (3 units):

- COM 3012 - Gender and Communication (WS) (3)
- CMI 3040 - Foundations for the Practice of Youth Ministry (3)
- ECO 4040 - The Economics of Race, Class and Gender (WS) (3)
- MGT 4016 - Perspectives on Leadership (3)
- MGT 4070 - Nonprofit Organization Management (3)
- NSG 4070 - Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice (3)
- POL 1090 - The Politics of Race, Class, and Gender (GE/WS) (4)
- POL 4015 - Women and Politics (WS) (4)
- PSY 3020 - Social Psychology (3)
- PSY 3041 - Group Counseling (1-3)
- SOC 4020 - Social Change (3)

**AND**

Complete 20 hours of approved leadership practicum from the Office of Spiritual Development in the following areas.

Students are to verify service by having the supervisor verify practicum.

PLNU Approved Leadership Practicum Opportunities:

- Alpha Groups Leadership
- D Groups Leadership
- Internship with Center of Pastoral Leadership
- PSY101 Group Leadership
- Resident Directors
- Student Ministries Leadership
- MOSAIC Leadership
- Diversity Leadership Program
- LINK Program

Total: 9 units

## Spiritual Formation Certificate

Purpose: The Spiritual Formation Certificate is designed to help students engage in spiritual formation practices that help them grow in love of God, neighbor, and self.

Objectives:

- To develop a theological framework for spiritual formation.
- To understand inward, outward, and corporate spiritual formation practices.
- To gain an appreciation for setting boundaries and self-care.

Students are to complete nine (9) academic units from the course requirements listed below, and engage in 20 hours of approved leadership sponsored experiences offered by the Office of Spiritual Development.

Required Courses (6 units):

- CMI 1055 - Christian Formation and Ministry (3)
- CMI 3025 - Christian Care of Souls (3)

Choose one of the following courses (3 units):

- BIB 2040 - Reading Scripture Faithfully (3)
- PSY 3030 - Moral Psychology and Cultural Values (4)
- PSY 4010 - Issues in Psychotherapy-Theology Integration (3)
- PSY 4020 - Pursuing Goodness: The Science of Moral Change (Senior Capstone) (4)
- SOC 3020 - Social Psychology (3)
- THE 3025 - The Human Person and Theology and Psychology (3)

**AND**

Complete 20 hours hours of approved spiritual development experiences through Office of Spiritual Development.

- Leading a D Group or Alpha Group
- Participating in a Spiritual Mentoring
- Take CMI 4050 Internship (1-3) to cover 20 hours of experience

Total: 7-9 units

## Special Programs

### Community Classroom Certificate in Intercultural Engagement

#### Certificate

#### Certificate in Intercultural Engagement at Community Classroom

The Certificate in Intercultural Engagement at Community Classroom is designed for students who want part of their academic experience to include a focused engagement in a multicultural setting that will nurture their Christian formation academically and vocationally.

#### Certificate Requirements

Students pursuing the Certificate in Intercultural Engagement at Community Classroom must complete:

- Twenty (20) hours of co-curricular service learning . Ten (10) hours are built into each Community Classroom course.
- Complete six (6) units from the following Community Classroom courses when offered at City Heights. A Minimum of three (3) units must be unique to the certificate.

Choose six (6) units from the following:

- CHU 3095 - The Christian Tradition (GE) (3)
- CMI 1055 - Christian Formation and Ministry (3)
- CMI 3050 - Church as a Witness to the World (3)
- PHL 2011 - Ethics (GE) (3)
- SOC 3060 - Race and Ethnicity (3)
- SPA 1001 - Elementary Spanish I (GE) (4)
- SPA 1002 - Elementary Spanish II (GE) (4)
- THE 3006 - The Life of Holiness (3)

## Humanities Honors Program

## Purpose

Point Loma Nazarene University Humanities Honors Program seeks to foster a community of intellectually dedicated scholars who embody the Christian mission of the university. Students who complete the honors program will be able to:

- Analyze and discuss diverse traditions while examining them in light of Christian faith.
- Interpret written and visual media in light of their contexts, complexity, and aesthetics.
- Articulate life questions within multidisciplinary and theological frameworks.
- Demonstrate an ability to design and participate in discourses in an informed and hospitable manner.
- Participate in acts of devotion and works of mercy through service opportunities, as informed by the Wesleyan tradition.

## Requirements

### Eligibility

- Students must maintain a minimum session and cumulative GPA of 3.000. In rare cases, students may appeal to the Program Director and the Advisory Board.
- Students must maintain a high standard of personal conduct, in accordance with the Undergraduate Student Handbook.

### Curricular

#### Fall Year 1:

- HON 1000 Introduction to Christian Scholarship
- HON 1001 Rhetoric: Critical Communication
- HON 1020 Foundations in Humanities I: Ancient/Medieval

#### Spring Year 1:

- HON 1002 Introduction to Philosophy
- HON 2020 Foundations in Humanities II: Renaissance/Enlightenment

#### Fall Year 2:

- HON 2001 Old Testament History and Religion
- HON 2002 New Testament History and Religion
- HON 3020 Foundations in Humanities III: 19th/20th Centuries

#### Spring Year 2:

- HON 1050 Humanities Honors Abroad
- HON 2010 Politics of Race, Class and Gender
- HON 3010 Christianity in Global Perspective
- HON 3050 Humanities Honors Integrative Seminar

**Total Units: 36**

### Honors Scholar Program [Optional]:

**Fall Year 4:**

HON 4098 Honors Project I

**Spring Year 4:**

HON 4099 Honors Project II

**Requirements**

**Humanities Honors Program General Education**

Students in the Humanities Honors Program must complete all General Education requirements as outlined below. HON 1050 can be replaced with elective units, per Director approval.

**Humanities Honors Program General Education Requirements (36 units)**

**I. Humanities Core [2-3 courses; 2-5 units]**

- HON 1000 - Introduction to Christian Scholarship (GE) **(1)**
- HON 1050 - Humanities Honors Abroad (GE) **(3)** \*
- HON 3050 - Humanities Honors Integrative Seminar (GE) **(1)**

\* HON 1050 is optional and can be replaced with a three (3) unit elective approved by the Director of the Humanities Honors Program.

**II. Responding to the Sacred**

**A. Biblical Foundations [2 courses; 5 units]**

- HON 2001 - Old Testament History and Religion (GE) **(2)**
- HON 2002 - New Testament History and Religion (GE) **(3)**

**B. The Christian Tradition [1 course; 3 units]**

- HON 3010 - Christianity in Global Perspective (GE) **(3)**

**III. Developing Cognitive Abilities**

**A. Personal Development [1 course; 3 units]**

- PSY 1001 - Psychology of Personal Development - First Year Experience (GE) **(3)**

**B. Critical Thinking and Communication [1 course; 4 units]**

- HON 1001 - Rhetoric: Critical Communication (GE) **(4)**

**C. Problem Solving [1 course; 3-4 units]**

- MTH 1044 - Calculus With Applications (GE) (4) **OR**
- MTH 1064 - Calculus I (GE) (3) **OR**
- MTH 1073 - Business Calculus (GE) (3) **OR**
- MTH 3003 - Problem Solving (GE) (3)

#### IV. Exploring an Interdependent World

##### A. The Natural World [2 courses; one from each group, and at least one with a lab; 8-9 units]

###### Biological Science [1 course from this group]

- BIO 1001 - Human Biology and Bioethics (GE) (3)  
**and**
- BIO 1001L - Human Biology and Bioethics Laboratory (GE) (1)
- BIO 1002 - Environment and People (GE) (4)
- BIO 1003 - Introduction to Biology (GE) (3)  
**and**
- BIO 1003L - Introduction to Biology Laboratory (GE) (1)
- BIO 1004 - Biotechnology and Society (GE) (4)
- BIO 1005 - Ecology and Conservation (GE) (3)  
**and**
- BIO 1005L - Ecology and Conservation Laboratory (GE) (1)
- BIO 1030 - Human Anatomy and Physiology I (GE) (3)
- BIO 2010 - Cell Biology and Biochemistry (GE) (3)
- BIO 2011 - Ecological and Evolutionary Systems (GE) (3)

###### Physical Science [ 1 course from this group]

- CHE 1001 - Chemistry and Society (GE) (4)
- CHE 1002 - Chemistry in our Everyday Lives (GE) (3)  
**and**
- CHE 1002L - Chemistry in Our Everyday Lives Lab (GE) (1)
- CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE) (4)  
**and**
- CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE) (1)
- CHE 1052 - General Chemistry I (GE) (4)
- PHY 1044 - General Physics I (GE) (3)
- PHY 2044 - University Physics I (GE) (3)
- PSC 1004 - The Cosmos (GE) (4)

##### B. Physical Fitness and Nutrition [2 courses; 2-4 units]

*One of the following courses is required:*

- PED 1000 - Fitness Through Movement (GE) (2)
- PED 2000 - Optimal Health (GE) (2)
- SWF 3015 - Health and Well-Being (GE) (2)

*Additionally, any one (1) unit activity course numbered PED1002 - PED1084 **OR** one of the following is required:*

- PED 2020 - Team Sports Fundamentals and Strategies (GE) (2)
- PED 2025 - Individual and Dual Sports Fundamentals and Strategies (GE) (2)

### C. The Social World [1 course; 4 units]

- HON 2010 - Politics of Race, Class and Gender (GE) (4)

## V. Seeking Cultural Perspective

### A. Foundations in Humanities [3 courses; 12 units]

- HON 1020 - Foundations in Humanities I: Ancient/Medieval (GE) (4)
- HON 2020 - Foundations in Humanities II: Renaissance/Enlightenment (GE) (4)
- HON 3020 - Foundations in Humanities III: 19th/20th Centuries (GE) (4)

### B. Philosophy [1 course; 3 units]

- HON 1002 - Introduction to Philosophy (GE) (3)

### C. Foreign Language [2 courses; 8-9 units]

- SPA 1001 - Elementary Spanish I (GE) (4)
- SPA 1002 - Elementary Spanish II (GE) (4)
- FRE 1001 - Elementary French I (GE) (4)
- FRE 1002 - Elementary French II (GE) (4)
- GER 1001 - Elementary German I (GE) (4)
- GER 1002 - Elementary German II (GE) (4)
- HEB 2005 - Biblical Hebrew I (GE) (4)
- HEB 2006 - Biblical Hebrew II (GE) (4)
- GRK 2007 - Biblical Greek I (GE) (4)
- GRK 2008 - Biblical Greek II (GE) (4)

## **Associate Degree for Transfer (ADT)**

### **ADT Certification**

Date of completion will be posted on official transcript or verification document needs to be signed by the sending community college.

### **Grade Requirement**

All grades in the ADT (GE and major pre) must be a C or above. Lower grades may be transferred for elective credit only.

### **Unit Guarantee**

The ADT is comprised of a minimum of 60 units at the junior college level. ADT students are guaranteed to complete their bachelor's degree within 68 units (70 maximum) at PLNU.

### **Transfer Evaluation**

With ADT certification, lower division GE will be satisfied (see exceptions below). Transfer equivalencies will be stretched to match IGETC of CSU GE areas.

### **Remaining GE for ADT Students**

Religion: BIB (2-3 units) and Upper Division THE/CHU (3 units)

Upper Division Literature (3 units)

Foreign Language (8 units) \*

\* possible transfer

Total: 16-17 units GE

### **Participating Majors:**

Chemistry, B.S.

Child and Adolescent Development, B.A.

History, B.A.

Literature, B.A.

Multimedia Journalism, B.A.

Mathematics, B.A. for Associate Degree for Transfer (ADT) Students

Music, B.A.

Philosophy, B.A.

Physics, B.A. for Associate Degree Transfer (ADT) Students

Political Science, B.A.

Social Work, B.A.

Sociology, B.A.

Visual Arts, B.A.

## **Course Information**

The faculty annually reviews course offerings and descriptions. A thorough examination by academic departments and schools takes place on a five-year cycle of program review that includes an assessment of student learning outcomes. The following pages contain a complete listing of requirements in the university's various academic programs.

- Course Numbering
- Special Designations
- Remedial Courses

- Alternate-year Offerings
- Prerequisite/Co-requisite
- Quad Courses

## **Accounting**

### **ACC 2000 - Principles of Accounting for Non-Business Majors**

**(3)**

This course presents an introduction to: (1) the theory and practice of financial accounting, including the measuring, recording and reporting of business transactions for external uses, and (2) the study of managerial accounting, including the analysis of accounting information for planning and management decision-making. Topics include the understanding and preparation of financial statements and all related component sections, cost behavior, budgeting, time value of money, and performance measurement and evaluation techniques.

### **ACC 2001 - Principles of Financial Accounting**

**(4)**

The theory and practice of accounting applicable to measuring, recording and reporting business transactions for external users. Topics include generally accepted accounting principles with introductions to business ethics, the accounting process, financial statement preparation, merchandising operations, short-term liquid assets, fixed assets, inventories, current and long-term liabilities, and owner's equity.

Prerequisite(s): All students must have a laptop computer.

Pre or Corequisite: BUS 1000

Recommended: Recommended for sophomores.

### **ACC 2002 - Principles of Managerial Accounting**

**(3)**

A study of accounting information systems used to assist decision makers through identifying, measuring, and processing relevant information and communicating the information through reports. Topics include cost concepts and allocations, cost volume profit analysis, budgeting, performance measurement and evaluation techniques, short run decision analysis, pricing decisions, and capital investment analysis.

Prerequisite(s): ACC 2001

Pre or Corequisite: MTH 1053 or MTH 1073, or consent of instructor for non-majors.

Recommended: Recommended for sophomores.

### **ACC 3050 - Ethics in Accounting**

**(3)**

This course provides students with the theoretical knowledge and practical framework to identify and deal with ethical conflicts that are encountered in the accounting profession. Topics include ethical principles and reasoning, core philosophies, virtues and justice, social responsibility, greed, corruption, collusion, fraud, earnings management, confidentiality, independence, moral seduction and conflicts of interest.

Prerequisite(s): ACC 2002

### **ACC 3070 - Intermediate Accounting I**

**(3)**

This course provides a review of the accounting reporting process with an in-depth study of generally accepted accounting principles as they relate to assets and their related income statement accounts. Topics also include time value concepts and the recognition of revenue.

Prerequisite(s): ACC 2002, MTH 1053 or MTH 1073, or consent of instructor.

### **ACC 3071 - Intermediate Accounting II**

**(3)**

This course provides a review of the accounting reporting process with an in-depth study of generally accepted accounting principles as they relate to liabilities, stockholders' equity and their related income statement accounts. Topics include special accounting problems, accounting for investments, dilutive securities, income taxes, post-retirement benefits, leases, and the statement of cash flows.

Prerequisite(s): ACC 3070

### **ACC 3075 - Managerial Cost Accounting**

**(3)**

A study of basic cost accounting concepts and procedures, with emphasis on the development, interpretation, and application of managerial accounting information for planning, control, and decision-making. Topics include financial statement analysis, break-even analysis, profit planning, product costing theories and systems, pricing and budgeting strategies, and project control tools in commercial and government cost accounting.

Prerequisite(s): ACC 2002

### **ACC 4010 - Federal Tax Accounting I**

**(3)**

A study of the basic Federal income tax laws as they relate primarily to individuals. Topics include gross income inclusions and exclusions, deductions for and from adjusted gross income, depreciation and cost recovery, gains and losses on property transactions, at-risk provisions and passive loss rules, tax determination, credits, exemptions, filing status, and tax planning.

Prerequisite(s): ACC 2002

### **ACC 4011 - Federal Tax Accounting II**

**(3)**

A study of Federal income tax laws as they primarily relate to corporations, and partnerships. Topics include the components of the tax formula for corporations and partnerships, including organization and capital structure,

redemptions, liquidations, and reorganizations. Additional topics include basic components and issues involving gift and estate taxation, multi-state tax allocation and apportionment, tax-exempt entities, tax planning, and tax administration.

Prerequisite(s): ACC 4010

### **ACC 4021 - Advanced Accounting**

**(3)**

This course prepares students in advanced accounting knowledge. Topics include multinational entities, partnerships, government entities and not-for-profit organizations.

Prerequisite(s): ACC 3071

### **ACC 4025 - Financial Statement Analysis and Valuation**

**(3)**

An applications-oriented course designed to develop the tools essential to evaluate the performance and assess the value of companies from a decision maker's perspective. Topics include industry and competitive strategy analysis, accounting analysis, ratio analysis, forecasting, earnings and cash based valuation models, and equity and credit analysis.

Prerequisite(s): FIN 3035 and Senior standing only.  
Also offered as FIN 4025

### **ACC 4060 - Auditing**

**(3)**

A study of the attest functions of independent public accountants with emphasis on the philosophy of auditing. Topics include auditing standards, professional conduct, legal liability, internal control, audit evidence and techniques, and accountants' reporting responsibilities.

Prerequisite(s): ACC 3071 or consent of instructor and Senior Standing only.  
Pre or Corequisite: ACC 4021 or consent of instructor.

### **ACC 4089 - Internship in Accounting**

**(1-3)**

This course requires on-the-job experience in accounting where students exercise decision-making skills, problem-solving skills, communication skills, and accounting knowledge acquired in the student's academic program. In addition, students create a professional online e-portfolio including cover letter, resume, letters of recommendation, personal background, target industry information, work samples, and internship reports/evaluations. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated for a maximum of six units. Graded Credit/No Credit.

Prerequisite(s): BUS 3013, Junior or Senior standing, and consent of instructor.

### **ACC 4090 - Special Topics in Accounting**

**(3)**

Study in a special topic to be determined by the school. Open to juniors and seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **ACC 4091 - Independent Studies in Accounting**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for the study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Art and Design**

### **ART 1000 - Introduction to Art (GE)**

**(2)**

An introductory art orientation course dealing with the philosophy of art, language of design, aesthetics, art criticism, and a basic understanding of the Western and Non-Western artistic heritage. Offered on a Quad basis.

### **ART 1002 - Fundamentals of Art (GE)**

**(3)**

Introductory course in the principles and elements of design as they apply to basic art skills and media, aesthetic awareness, art criticism, and applications in the fine, applied, and multicultural arts. Provides hands-on art experiences. This course does not count toward Visual Arts or Graphic Design majors.

### **ART 1003 - Two-Dimensional Design**

**(3)**

Introduction to two-dimensional design theories and criticism. Exploration of art techniques and media used in two-dimensional compositions. Applications in Non-Western art forms.

### **ART 1004 - Three-Dimensional Design: Composition and Space**

**(3)**

Introduction to the practice of three-dimensional design, theories, and criticism. Emphasis on the formal aspects of design including composition, balance, and space. Applications to sculpture, architecture, and industrial design.

### **ART 1015 - Drawing I**

(3)

Introduction to the materials, techniques, styles, historical influences, and compositional structures of drawing, with an emphasis on perceptual skills.

**ART 2000 - History of Art I (GE)**

(3)

A survey of Western and Non-Western art history and styles through the study and criticism of painting, sculpture, and architecture from ancient civilizations to the Renaissance period.

**ART 2001 - History of Art II (GE)**

(3)

A survey of Western and Non-Western art history and styles, from the Renaissance to the modern period.

**ART 2002 - Introduction to Computer Graphics**

(3)

Introductory experiences in the creation and production of computer-generated images. Includes the use of graphics software to combine image, text and technology; including Adobe Illustrator, Adobe InDesign and Adobe Photoshop.

Prerequisite(s): ART 1003

**ART 2003 - Graphic Design I: Visual Symbolism**

(3)

Introduction to visual form-making in graphic design through use of symbols, type, and imagery. Exploration of design applications, techniques, issues, and media fundamental to the graphic design profession.

Prerequisite(s): ART 1003, ART 1015, ART 2002 or concurrent.

**ART 2006 - Experimental Drawing Studio**

(3)

Emphasizes the technical and expressive qualities of drawing as a finished work of art. Focus is given to aesthetics, composition, historical influences, non-traditional and experimental techniques.

Prerequisite(s): ART 1015 or consent of instructor.

**ART 2010 - Painting: Color and Technique**

(3)

Introduction to the techniques, expressive qualities, and criticism of oil painting media.

Prerequisite(s): ART 1003, ART 1015 or consent of instructor.

### **ART 2021 - Photography: Darkroom and Film**

**(3)**

Introduction to camera and image utilizing traditional film based photochemical processes. Emphasis on camera skills, film formats, lighting, and darkroom based printing.

Prerequisite(s): ART 1002 or ART 1003

### **ART 2022 - Sculpture: Materials and Fabrication**

**(3)**

Beginning sculpture techniques in a variety of media. Emphasis is on contemporary art approaches and issues.

Prerequisite(s): ART 1004 or consent of instructor.

### **ART 2023 - Printmaking I**

**(3)**

Processes and techniques of printmaking. Includes intaglio, relief, or planographic media. Explores Western and Non-Western influences on printmaking imagery and techniques.

Prerequisite(s): ART 1003, ART 1015

### **ART 2026 - Photography: Digital**

**(3)**

Introduction to the camera and image utilizing digital technology. Emphasis on camera skills, digital darkroom techniques, lighting, and digital printing.

Prerequisite(s): ART 1003 or consent of instructor.

### **ART 3003 - Graphic Design II: Typography**

**(3)**

Examination of typography as a design tool. Exploration of visual hierarchy, principles of contrast, verbal messages, and communicative models. Development of computer skills used in the production of graphic forms.

Prerequisite(s): ART 1003, ART 1015, ART 2003, ART 2002

### **ART 3004 - Modern Art History**

**(3)**

Studies of modern art movements from the middle of the 19th century through the middle of the 20th century. Includes applications to art criticism, aesthetics, and Non-Western influences on modern art.

Prerequisite(s): ART 2000 or ART 2001

### **ART 3005 - Contemporary Art History**

**(3)**

Exploration of contemporary art with reference to historical developments from the mid-20th century to the present. Aesthetics, criticism, gender issues, and Non-Western influences are also explored.

Prerequisite(s): ART 2000 or ART 2001

### **ART 3010 - Painting II**

**(3)**

Painting in oil and other media with emphasis on conceptual development and personal expression. May be repeated once for credit.

Prerequisite(s): ART 1003, ART 1015, ART 2010 or consent of instructor.

### **ART 3015 - Introduction to Interactive Web Design**

**(3)**

An introduction to history, theory, coding languages, best practices and industry standard workflow for interactive/web projects. Students apply user-centered design methodologies, design principles, and HTML and CSS programming languages to create web interface for interactive mobile and web publishing.

Prerequisite(s): ART 1003, ART 2002 or consent of instructor.

### **ART 3019 - Visual Arts in the Classroom I**

**(3)**

Theory and practice in the teaching of the visual arts in early education through middle school years. Content is designed to meet expectations of the California Visual and Performing Arts Framework and California Visual Arts Standards.

Prerequisite(s): Junior standing (ART 1000 or ART 1002 recommended).

### **ART 3020 - Contemporary Housing Environments**

**(2)**

Planning the total home environment. Housing and interior design from a non-technical basis. This course offers credit in programs housed in the Department of Sociology, Social Work, and Family Sciences or the Department of Art and Design.

Prerequisite(s): ART 1003 and ART 1004

### **ART 3021 - Photography: Alternative Processes**

**(3)**

Explores alternative processes and techniques in photography such as liquid emulsions, alternative negative creation and alternative cameras. Emphasis on the photograph as contemporary art.

Prerequisite(s): ART 2021 or ART 2026 or consent of instructor.

### **ART 3022 - Sculpture II: Objects and Installation**

**(3)**

Contemporary sculpture techniques using a range of three-dimensional media. May be repeated once for credit.

Prerequisite(s): ART 1003 or ART 1004 or consent of instructor.

### **ART 3023 - Printmaking II**

**(3)**

Technical and conceptual experiences in printmaking techniques that can include drypoint, intaglio, woodblock, collograph, or silk screen. May be repeated once for credit.

Prerequisite(s): ART 1003, ART 1015, ART 2023

### **ART 3025 - Non-Western Art History**

**(3)**

Studies in Non-Western visual art forms. Students explore art works from around the world through classroom activities and fieldwork assignments at local art museums and institutions with Non-Western art collections. Students also participate in 3 hours per week of field work assignments at local art museums and institutions with Non-Western art collections.

### **ART 3026 - Photography II: Contemporary Images**

**(3)**

Explores conceptual applications of technology in photography and the merging of digital and chemical techniques. Emphasis on the photograph as contemporary art.

Prerequisite(s): ART 1003, ART 2002, and ART 2021 or ART 2026 or consent of instructor.

### **ART 3030 - Illustration I**

**(3)**

An introductory course in illustration with an emphasis on concept, individual expression, and the development of technical skills in a variety of media. Students focus on the process of taking a project from thumbnails and roughs, through to finished art. Students are exposed to a variety of areas of illustration: advertising, editorial, institutional, and corporate.

Prerequisite(s): ART 1003, ART 1015 or consent of instructor.

### **ART 3031 - Illustration II**

**(3)**

Illustration designed to increase visual vocabulary, conceptual skills, development of technical abilities in traditional and digital media, and understanding of professional practices. May be repeated once for credit.

Prerequisite(s): ART 2002 and ART 3030

### **ART 3033 - Graphic Design III: Branding and Identity Programs**

**(3)**

An investigation of the strategies for designing a brand identity program across media. Students will use a comprehensive design process including research analysis, development, and organization to create a large-scale brand identity program. All aspects of context, content, design, production, and best practices are addressed in a semester long project.

Prerequisite(s): ART 1003, ART 1015, ART 2003, ART 3003

### **ART 3035 - Design History: Industrial Revolution to Contemporary Design**

**(3)**

An examination of the history, process and practice of design from the late 19th century to the new millennium. Objects, designers, history and culture which led to the birth of the profession of design are addressed along with its sources in art, architecture, science, and industry.

### **ART 3041 - Philosophy of Art**

**(3)**

Classical and recent theories of beauty and art, with selected coverage of such concepts as aesthetics, expression, representation, and criticism.

Prerequisite(s): PHL 2001

### **ART 3045 - Life Drawing**

**(3)**

Advanced procedures applied to drawing the human figure. Emphasis on contemporary and traditional styles, techniques in a variety of media, human anatomy, and historical influences.

Prerequisite(s): ART 1015

### **ART 3090 - Advanced Studio Practice**

**(3)**

Studio practice course for visual art students. Emphasis is placed on contemporary art strategies and theoretical issues. This course is required for all Visual Arts majors. May be repeated once for credit.

Prerequisite(s): One upper division art/design studio course and Junior standing or consent of instructor.

### **ART 4020 - Contemporary Studio Seminar**

**(3)**

An advanced level seminar. Exploration of contemporary art media, critical and theoretical issues, including multi-cultural, and gender influences. Also addresses professional strategies and practices. Required for all Visual Arts majors.

Prerequisite(s): Junior standing.

### **ART 4040 - Independent Studies in Art**

**(1)**

Private art lessons in advanced studio art or graphic design experiences. May be repeated for credit.

Prerequisite(s): Consent of instructor.

### **ART 4050 - Interactive Web Design**

**(3)**

Learn advanced web HTML and CSS programming languages, user-centered experience theories (UX) and methods to inform structure and styling. Emphasis is placed on learning object-oriented approaches to develop dynamic/reusable rich media modules combined with data applications for interactive mobile and web publishing.

Prerequisite(s): ART 3015

### **ART 4055 - Visual Arts in the Classroom II**

**(3)**

Theory and practice in the teaching of the visual arts in the schools. Content is designed to meet expectations of the California Visual Arts Standards and focuses primarily on middle through high school levels. Each student is required to prepare a final portfolio of the semester's work. Students are required to spend a minimum of 16 hours of observation time in a public school art classroom during the semester.

Prerequisite(s): Senior standing, 3 upper-division Art courses.

### **ART 4066 - Senior Studio Exhibition or Research Preparation**

**(3)**

Visual Arts majors in studio areas or art history begin capstone work for a senior art exhibition or art history research project.

Prerequisite(s): Completion of, or concurrent enrollment in ART 3090, ART 4020.

### **ART 4068 - Graphic Design Portfolio Preparation**

**(3)**

Investigate the process of building a comprehensive professional portfolio across media. Human-centered design research methods and processes are introduced and applied. Students design for and with communities to build empathy and understand the people they're serving. They iterate scores of ideas to create innovative design solutions that meet human need and promote positive social engagement.

Prerequisite(s): ART 3033, Senior standing.

### **ART 4070 - Internship**

**(1-3)**

Students observe and participate in art or design-related professional settings under qualified supervisors. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated for a maximum of six (6) units. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor.

### **ART 4071 - Graphic Design Portfolio Review**

**(3)**

Investigate the process of building a comprehensive professional portfolio across media in this advanced level senior capstone course. Learn and practice using human-centered research methods culminating in a portfolio reviewed by faculty and design professionals.

Prerequisite(s): ART 4068

### **ART 4072 - Exhibition or Research Project**

**(3)**

Visual Arts majors complete and present their capstone exhibition or research project in their final semester. Work is completed under faculty supervision and reviewed by a panel of art faculty and professionals.

Prerequisite(s): ART 4066

### **ART 4090 - Special Studies in Art**

**(1-3)**

Studies in selected art topics by advanced art or graphic communications students. Offered in small group seminar format or independent study. May be repeated for a maximum of six units.

Prerequisite(s): Consent of department chair.

## **Athletic Training**

### **ATR 1002 - Risk Management and Emergency Response**

**(1)**

Prevention, recognition, and management of health emergencies.

Corequisite(s): KIN 1001

**ATR 1002L - Risk Management and Emergency Response Laboratory**

**(1)**

Skill acquisition in the techniques required of the emergency medical responder. Laboratory instruction on techniques of first aid, cardiopulmonary resuscitation, oxygen administration and emergency care for illness and spine injured patients. **Required of Athletic Training Majors. Special Fee.**

Corequisite(s): ATR 1002 and KIN 1001

**ATR 2090 - Clinical Internship I**

**(3)**

Instruction, practice, and supervision in the clinical aspects of Athletic Training by a Certified Athletic Trainer/Clinical Instructor in an off campus setting. This is an equipment-intensive course. Special Fee.

Prerequisite(s): Admission to ATEP.

**ATR 2091 - Clinical Internship II**

**(3)**

Instruction and supervision in the clinical aspects of Athletic Training by a Certified Athletic Trainer/Clinical Instructor. This is a lower-extremity focused course. Special Fee.

Prerequisite(s): Admission to ATEP and consent of instructor.

**ATR 3085 - Pathology of Injury and Illness**

**(3)**

An in-depth study of the etiological factors and care of injury and illness. Mechanisms of injury, pathology of illness, topographical appearance, imaging technology for assessment, implications for return to activity and long term health sequelae serve as the matrix for study of pathology. Psychology of injury and illness is studied.

Prerequisite(s): BIO 1040

**ATR 3087 - Assessment of Lower Extremity Pathology**

**(3)**

Through the systematic application of the HIPS method of assessment injuries of the pelvis and lower extremity are studied. Mastering clinical note taking and clinical role playing in lab setting allow students to practice neuromusculoskeletal injury assessment.

### **ATR 3088 - Assessment of Head, Spinal, and Upper Extremity Pathology**

**(3)**

Through the systematic application of the HIPS method of assessment injuries of the axial skeleton, central nervous system, thorax, abdomen, and the upper extremity are studied. Clinical note taking must be mastered. Clinical role playing in lab setting allows students to practice neuromusculoskeletal injury assessment.

### **ATR 3090 - Clinical Practicum I**

**(3)**

Advanced practice and supervision in the clinical aspects of Athletic Training by a Certified Athletic Trainer/Clinical Instructor in a collegiate setting. Special Fee.

Prerequisite(s): ATR 2091

### **ATR 3091 - Clinical Practicum II**

**(3)**

Clinical experience in a collegiate setting under the supervision of a Certified Athletic Trainer/Clinical Instructor. Emphasis is on therapeutic modalities and nutrition. Special Fee.

Prerequisite(s): ATR 3090 and consent of instructor.

### **ATR 4010 - Therapeutic Exercise**

**(3)**

Theory and practice of active therapeutic techniques including manual, William's, and McKensie therapies, proprioceptive neuromuscular facilitation and progressive resistance.

### **ATR 4015 - Therapeutic Modalities and Pharmacology**

**(3)**

This course examines the use, physiological effects and contraindications of thermal, electrical, acoustic, and cryogenic modalities. Lab fee. Special Fee.

### **ATR 4020 - Pharmacology**

**(1)**

Study of drug classifications and medico-legal aspects of therapeutic and pharmacological treatments.

### **ATR 4060 - Management of Allied Health Care**

**(3)**

Leadership theory and practices in allied health care. Trends in national and international health care.

### **ATR 4093 - Clinical Preceptorship I**

**(2)**

Advanced clinical experience in orthopedic surgery and sports medicine clinic under the supervision of an orthopedic surgeon and Certified Athletic Trainer/Clinical Instructors. General medical emphasis.

Prerequisite(s): Admission to the ATEP.

### **ATR 4094 - Clinical Preceptorship II**

**(1)**

Advanced clinical experience in family medicine. Includes capstone clinical experience and mock certification examination. General medical emphasis.

Prerequisite(s): Admission to the ATEP.

### **ATR 5000 - Seminar in Athletic Training**

**(1)**

This course is designed to introduce the athletic training student to the athletic training program and the resources available during their 1st and 2nd year experience. During this course students will be exposed to the resources in the PLNU library as well as professional development tools (Myers Briggs/Strengths Quest.) Selected topics pertinent to the field of athletic training and applicable to all levels of the athletic training major are presented. Course includes student presentations, guest speakers, faculty speakers and topics that are not covered in other courses in the curriculum.

Also offered as ATR 6000

### **ATR 5005 - Research Methods and Statistical Techniques for Clinical Decision Making in Sports Medicine**

**(3)**

This course will explore the variety in research design and statistics commonly used in clinical research, further developing student analytical skills needed to support professional evidence-based practice in athletic training. Students will evaluate the merit and relevance of published research to the practice of athletic training from the perspective of experimental methodology and design. This course also provides an overview of statistics including descriptive and inferential statistics and one-way ANOVA. Students should have a basic understanding of conducting library and Internet information searches prior to taking this course. Students will select a topic of interest related to athletic training, conduct a review of the literature, define a research question, and prepare and present a report to their peers. Students will complete Collaborative Institutional Training Initiative (CITI training).

Also offered as ATR 6005

### **ATR 5087 - Evidence-Based Orthopedic Assessment of Lower Extremity**

**(3)**

This course addresses evaluation techniques and care for musculoskeletal injuries to the lower extremities for graduate-level athletic training students. The student must integrate knowledge of anatomical structures, physiology principles

and evaluative techniques to provide a basis for evidence based critical decision-making in an injury management environment.

Concurrent: ATR 5087L  
Also offered as ATR 6087

### **ATR 5087L - Evidence-Based Orthopedic Assessment of Lower Extremity Laboratory**

**(1)**

This course is designed to provide students with a comprehensive hands on approach to injury evaluation and assessment of lower extremity pathologies. During this lab students will learn and begin to develop a systematic approach to injury evaluation. Students will learn special testing and injury evaluation techniques.

Concurrent: ATR 5087  
Also offered as ATR 6087L

### **ATR 5088 - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity**

**(3)**

This course addresses evaluation techniques and care for musculoskeletal injuries to the upper extremities and spine for graduate-level athletic training students. The student must integrate knowledge of anatomical structures, physiology principles and evaluative techniques to provide a basis for decision-making using the current evidence in an injury management environment.

Concurrent: ATR 5088L  
Also offered as KIN 6088

### **ATR 5088L - Evidence-Based Orthopedic Assessment of the Spine and Upper Extremity Laboratory**

**(1)**

This course is designed to provide students with a comprehensive hands on approach to injury evaluation and assessment of upper extremity and spinal pathologies. During this lab students will learn and begin to develop a systematic approach to injury evaluation. Students will learn special testing and injury evaluation techniques.

Concurrent: ATR 5088  
Also offered as KIN 6088L

### **ATR 5090 - Clinical Internship I**

**(3)**

This course is the first of five required athletic training clinical education courses. Athletic training students will be evaluated on clinical integration proficiency of knowledge, skills, and abilities including: general health and fitness assessment; environmental conditions assessment; recognition of emergencies and acute injury care; and professional communication and documentation strategies. Additionally, students will be expected to build upon their acquired knowledge to actively engage in facilitated integration of skills and abilities covered in the curriculum. Students will be assigned to clinical education experiences under the direct supervision of a preceptor. Students will explore evidence-based practice and reflect upon their clinical experiences to facilitate critical thinking and clinical decision making skills development. Students must complete a minimum 200 and a maximum of 500 clinical hours. "C" Designation is for California Internships. "E" Designation is for Out of State Internships.

Also offered as ATR 6090

### **ATR 5091 - Clinical Internship II**

(3)

This course is the second of five required athletic training clinical education courses. Athletic training students will be evaluated on clinical integration proficiency of knowledge, skills, and abilities including: taping, wrapping, bracing, protective equipment fitting; clinical assessment, diagnosis and therapeutic intervention of the lower extremity and spine; and professional communication and documentation strategies. Additionally, students will be expected to build upon their acquired knowledge to actively engage in facilitated integration of skills and abilities covered in the curriculum. Students will be assigned to clinical education experiences under the direct supervision of a preceptor. Students will explore evidence-based practice and reflect upon their clinical experiences to facilitate critical thinking and clinical decision making skills development. "C" Designation is for California Internships. "E" Designation is for Out of State Internships.

Also offered as ATR 6091

## **Bible**

### **BIB 1001 - Old Testament History and Religion (GE)**

(2)

Within the context of the history of Israel, an overview of the literature of the Old Testament with special attention to its literary history and theological themes.

### **BIB 1002 - New Testament History and Religion (GE)**

(3)

Within the context of Christian origins, an overview of the canonical literature of the New Testament with special attention to its literary history and theological themes.

### **BIB 2040 - Reading Scripture Faithfully**

(3)

An exploration of the methods and approaches for engaging the Bible faithfully in relationship to Christian faith and practice; its nature, context, and origins; and its reception in global contexts, with attention to justice, gender, race, and class.

Prerequisite(s): BIB 1001 or BIB 1002

### **BIB 3035 - New Testament Books and Early Churches: Sermon, Letter, and Apocalypse**

(3)

This course studies the New Testament books about and addressed to the general church - Acts, Hebrews, the Catholic

Epistles, the Johannine Epistles, and/or Revelation - and focuses in on a particular portion of these books. What are the varieties of expressions of faithfulness to God and God's own faithfulness expressed in early Christian churches? How do these foster the diversity of Christian communities today?

Prerequisite(s): BIB 1001 or BIB 1002

**BIB 3078 - Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice**

(3)

A study of the psalms and wisdom literature from their ancient Near Eastern antecedents to second century Judaism and Christianity, with attention to the ongoing realities of grief, suffering, and injustice in the world.

Prerequisite(s): BIB 1001 or BIB 1002

**BIB 4001 - Jesus and the Gospels: Four Portraits of One Christ**

(3)

A study of the content, theological perspectives, relationships, and reception of the canonical Gospels. This class asks the driving questions: Who is Jesus? How do the Gospels reveal the life, ministry, and death of Jesus? The heart of the course is growing in understanding of and reverence for the Christ of history and faith.

Prerequisite(s): BIB 1001 or BIB 1002

**BIB 4002 - The Letters of Paul: Faith, Hope, and Love Across Distance and Difference**

(3)

How do followers of Christ live in step with the Holy Spirit? A study of Paul's letters to far-flung churches around the ancient Mediterranean, most of which he founded and nurtured as a missionary pastor.

Prerequisite(s): BIB 1001 or BIB 1002

**BIB 4010 - Biblical Theology**

(3)

A study of the major theological themes of the Christian Scriptures in relation to Christian faith and practice.

Prerequisite(s): BIB 1001 or BIB 1002

**BIB 4013 - Old Testament Torah and Israel's History: God's Story and God's People**

(3)

An exegetical and theological study of Old Testament narrative and legal materials (Pentateuch, Deuteronomistic History, various writings) that introduces their basic content, movement, context, and significance. Attention also is paid to biblical and archaeological data related to the origins of Israel and its literature.

Prerequisite(s): BIB 1001 or BIB 1002

**BIB 4014 - Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics**

**(3)**

A study of the prophetic phenomena in the Old Testament, setting each book in its historical and canonical context, with attention to how these books speak to ancient and contemporary issues related to power, gender, justice, and economics.

Prerequisite(s): BIB 1001 or BIB 1002

**BIB 4090 - Special Studies in Bible**

**(1-3)**

An investigation of a topic in biblical studies not otherwise covered in the curriculum. May be repeated to a total of six units.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

**BIB 4095 - Seminar in Biblical Literature**

**(3)**

Advanced study in a topic in Bible. May be repeated up to a total of 6 units.

Prerequisite(s): BIB 1001 or BIB 1002 and consent of instructor.

**Biblical Languages**

**GRK 2007 - Biblical Greek I (GE)**

**(4)**

A linguistic approach to the language of the New Testament providing students with sufficient knowledge to read selected passages from the Greek New Testament with the use of a grammar and lexicon.

**GRK 2008 - Biblical Greek II (GE)**

**(4)**

A linguistic approach to the language of the New Testament providing students with sufficient knowledge to read selected passages from the Greek New Testament with the use of a grammar and lexicon.

Prerequisite(s): GRK 2007

**HEB 2005 - Biblical Hebrew I (GE)**

**(4)**

An introductory study of the syntax and vocabulary of biblical Hebrew, with Old Testament readings along with an introduction to the tools and methods of exegesis.

**HEB 2006 - Biblical Hebrew II (GE)**

(4)

An introductory study of the syntax and vocabulary of biblical Hebrew, with Old Testament readings along with an introduction to the tools and methods of exegesis.

Prerequisite(s): HEB 2005

**Biology**

**BIO 1001 - Human Biology and Bioethics (GE)**

(3)

An exploration of assorted topics in human biology as they intersect with bioethical and sustainability issues of current interest in society. Topics include human physiology, health, reproduction, genetics, cell biology/biochemistry, evolution and ecology. Course examines the underlying scientific basis of specific examples and how they relate to everyday life. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts of biology.

Corequisite(s): BIO 1001L

**BIO 1001L - Human Biology and Bioethics Laboratory (GE)**

(1)

An inquiry-based laboratory that is a co-requisite for BIO 1001. Letter graded.

Corequisite(s): BIO 1001

**BIO 1002 - Environment and People (GE)**

(4)

A systematic overview of major topics in global ecology as experienced by people in the developing world, both the problems they face and the successful actions of communities to solve those problems. Introduces creation care and sustainable development as key concepts needed to overcome the challenges and build hope for the future. Includes such topics as population growth, food and agriculture, land degradation, urbanization, sanitation, health care, biodiversity, climate change, consumerism, and the implications for wise resource management, green economics, and governmental policy. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts. Students engage in weekly readings, film discussions, and a term paper project.

**BIO 1003 - Introduction to Biology (GE)**

**(3)**

Designed to meet the requirements for the California Multiple Subject Teaching Credential for teaching grades K-8 (but open to all students). The subject areas include zoology, botany, physiology, cell structure, ecology, genetics, and evolution. Course explores major themes in these subject areas as they relate to everyday life, ethical concerns, conservation issues, and common misunderstandings. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts of biology.

Corequisite(s): BIO 1003L

**BIO 1003L - Introduction to Biology Laboratory (GE)**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 1003. Letter graded.

Corequisite(s): BIO 1003

**BIO 1004 - Biotechnology and Society (GE)**

**(4)**

An examination of current topics in biotechnology as they impact society, bioethics, and sustainable living. Course addresses the questions "What is biotechnology?", "How does it work?", and "How does it affect our lives?" Topics may include genetic engineering, gene amplification, genome projects, gene therapy, DNA fingerprinting, cloning, assisted reproductive technology, genetic screening, recombinant DNA, knock-outs, AIDS research, and GM foods. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts of biology.

**BIO 1005 - Ecology and Conservation (GE)**

**(3)**

A wide-ranging exploration of major topics in ecological science relating to current issues in conservation biology. Drawing from academic and applied fields, the course examines major concepts in conservation biology and their impact on society, public policy, wise management of natural resources, consumerism and ethical choices encountered in everyday life. Focus topics include biodiversity, habitat destruction, exotic species introductions, human harvesting, protected areas, and climate change. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts.

Corequisite(s): BIO 1005L

**BIO 1005L - Ecology and Conservation Laboratory (GE)**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 1005. Letter graded.

Corequisite(s): BIO 1005

**BIO 1006 - Global Health and Pathogens (GE)**

**(4)**

An examination of current topics in global health as they impact society, bioethics, and creation care. The course addresses the topics of the major pathogens that threaten global health, the basic immune response to a pathogen, how vaccines work, and challenges to fighting pathogens on a global level. The course approach emphasizes critical thinking, active learning, social relevancy, and building connections between case studies and general concepts of biology. Online.

**BIO 1030 - Human Anatomy and Physiology I (GE)**

**(3)**

The first course of a two-semester sequence which examines the human body from an integrated perspective. Topics include an introduction to chemistry and cell function, tissue types, skeletal system, muscular system, and nervous system. Does not count for credit in the Biology major.

Pre or Corequisite: CHE 1003 or CHE 1052

Corequisite(s): BIO 1030L

**BIO 1030L - Human Anatomy and Physiology I Laboratory (GE)**

**(1)**

An anatomy and physiology laboratory that is a co-requisite for BIO 1030. Letter graded.

Corequisite(s): BIO 1030

**BIO 1040 - Human Anatomy and Physiology II**

**(3)**

The second semester of a sequence which examines the human body from an integrated perspective emphasizing the interrelationship of structure and function. Topics include sensory and autonomic nervous system, endocrine system and reproduction, cardiovascular system, immune system, respiratory system, digestive system, and urinary system. Does not count for credit toward the Biology major.

Prerequisite(s): BIO 1030 and CHE 1003 or CHE 1052

Corequisite(s): BIO 1040L

**BIO 1040L - Human Anatomy and Physiology II Laboratory**

**(1)**

An anatomy and physiology laboratory that is a co-requisite for BIO 1040. Letter graded.

Corequisite(s): BIO 1040

**BIO 2010 - Cell Biology and Biochemistry (GE)**

**(3)**

An introduction to the principles of cell biology, molecular biology, and biochemistry. Topics include the chemical

basis of life, basic membrane functions and membrane transport, basic metabolic pathways including cellular respiration and photosynthesis, cell division, and expression of the genetic material.

Corequisite(s): BIO 2010L

**BIO 2010L - Cell Biology and Biochemistry Laboratory (GE)**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 2010. Letter graded.

Corequisite(s): BIO 2010

**BIO 2011 - Ecological and Evolutionary Systems (GE)**

**(3)**

An introduction to the principles of ecology, evolutionary biology and sustainability.

Corequisite(s): BIO 2011L

**BIO 2011L - Ecological and Evolutionary Systems Laboratory (GE)**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 2011. Letter graded.

Corequisite(s): BIO 2011

**BIO 2012 - Organismal Biology**

**(3)**

Principles of animal and plant structure, function, and diversity.

Prerequisite(s): BIO 2011

Corequisite(s): BIO 2012L

**BIO 2012L - Organismal Biology Laboratory**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 2012. Letter graded.

Corequisite(s): BIO 2012

**BIO 2020 - Microbiology of Infectious Diseases**

**(3)**

A study of microbial physiology, the diseases associated with infections by certain pathogenic microbes and the vertebrate response to microbial infections.

Prerequisite(s): CHE 1003; BIO 1040 (may be taken concurrently).  
Corequisite(s): BIO 2020L

### **BIO 2020L - Microbiology of Infectious Diseases Laboratory**

(1)

A laboratory that is a co-requisite for BIO 2020. Letter graded.

Corequisite(s): BIO 2020

### **BIO 3012 - Applied Plant Biology**

(2)

A study of plant structure, function and phytochemistry through an examination of economically and culturally important plants, including plants for medicine, food, energy, fiber and building materials. Topics include environmental plant physiology, biotechnology, plant propagation, medicinal botany, and sustainable land use.

Pre or Corequisite: BIO 2012  
Recommended: MTH 2003 or MTH 3063

### **BIO 3015 - Microbiology**

(3)

An in-depth exploration of the world of microscopic organisms, including their diversity, physiology, biochemistry and ecology. Emphasis is on prokaryotes, but also some discussion of microscopic eukaryotes and viruses.

Prerequisite(s): BIO 3045  
Corequisite(s): BIO 3015L

### **BIO 3015L - Microbiology Laboratory**

(1)

An inquiry-based laboratory that is a co-requisite for BIO 3015. Letter graded.

Corequisite(s): BIO 3015

### **BIO 3023 - Introduction to Oceanography**

(3)

An introduction to the interdisciplinary study of the oceans, including survey of geological, chemical, physical and biological oceanography. Includes consideration of current research methods and exploration of marine systems.

Prerequisite(s): BIO 2011  
Corequisite(s): BIO 3023L

### **BIO 3023L - Introduction to Oceanography Laboratory**

**(1)**

A field work-based laboratory that is a co-requisite for BIO 3023. Letter graded.

Corequisite(s): BIO 3023

### **BIO 3033 - Marine Biology**

**(3)**

The study of life in the oceans, including the ecology, structure, function and adaptations of marine organisms to their environment.

Prerequisite(s): BIO 2011

Corequisite(s): BIO 3033L

### **BIO 3033L - Marine Biology Laboratory**

**(1)**

A field work-based laboratory that is a co-requisite for BIO 3033. Letter graded.

Corequisite(s): BIO 3033

### **BIO 3040 - Field Biology: Neotropical Ecology**

**(2)**

A field-oriented course that introduces students to the ecology and conservation biology of the New World Tropics. The course begins during Quad II of the spring semester, and continues with a 10-day field immersion trip to Costa Rica in early May. We visit some of the most intense biodiversity hotspots in Central America. Through readings, lectures, student presentations, and field trips, we explore the plants and animals of the tropics and investigate the ecological and cultural complexities of conserving them. Relevant issues of culture, language, public policy, and stewardship are also covered. Students complete a project paper or presentation based on their independent research.

Prerequisite(s): BIO 2011

### **BIO 3045 - Genetics**

**(3)**

The study of the inheritance, organization, expression and variability of genes.

Prerequisite(s): BIO 2010. A grade of "C" or better in BIO 2010 or instructor consent.

Corequisite(s): BIO 3045L

### **BIO 3045L - Genetics Laboratory**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 3045. Letter graded.

Corequisite(s): BIO 3045

### **BIO 3050 - Advanced Cell Biology**

**(3)**

An in-depth study of the structure and function of eukaryotic cells. Topics include various aspects of subcellular structure, cytoskeleton dynamics and regulation, the mechanism of cell motility and intracellular transport cell adhesion, cellular signal transduction mechanisms, regulation of cell division and cancer. The laboratory provides exposure to important current methodologies.

Prerequisite(s): BIO 3045

Corequisite(s): BIO 3050L

### **BIO 3050L - Advanced Cell Biology Laboratory**

**(1)**

A laboratory that is a co-requisite for BIO 3050. Letter graded.

Corequisite(s): BIO 3050

### **BIO 3052 - Research Methodology**

**(3)**

This course builds upon the basis of the scientific method that students are exposed to as freshmen. It focuses on teaching students how to develop biological questions, search databases to obtain background information, design scientific experiments, and analyze data. The course will focus more specifically on how research data is obtained, how experimental knowledge and data are dispersed amongst the scientific community, and how these data are used as a base for correlating new data and upon which new experimentation is based.

Prerequisite(s): BIO 3045

### **BIO 3063 - Conservation Ecology**

**(3)**

An examination of the key concepts and issues at the intersection of conservation biology and ecology, starting with environmental ethics and the valuation of nature and moving to sustainable development and creation care. Students read journal articles and discuss the medical value of biodiversity, zoonotic disease and public health, trophic cascades, toxicology, endocrine disruption, conservation genetics and extinction vortices, de-extinction and species resurrection, shifting baselines, physiological ecology, road ecology, conservation behavior, and community-based conservation. We also explore innovative technology driving advances in conservation such as biologists, camera traps, and fecal genetic and hormonal analysis. Students complete a team field research project on (or near) the Point Loma campus to apply the concepts of conservation ecology to the local environment.

Prerequisite(s): BIO 2011

Corequisite(s): BIO 3063L

Recommended: BIO 2012

### **BIO 3063L - Conservation Ecology Laboratory**

**(1)**

A field work-based laboratory that is a co-requisite for BIO 3063. Letter graded.

Corequisite(s): BIO 3063

### **BIO 3080 - Molecular Biology**

**(3)**

A study of the regulatory mechanisms that govern gene expression in eukaryotic and prokaryotic cells and their viruses. Alterations of normal eukaryotic genetic regulatory mechanisms resulting from the transformed (cancerous) state also are discussed. Laboratory includes practical experience with the methodologies of modern genetic engineering.

Prerequisite(s): CHE 1052 and BIO 3045

Corequisite(s): BIO 3080L

### **BIO 3080L - Molecular Biology Laboratory**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 3080. Letter graded.

Corequisite(s): BIO 3080

### **BIO 3090 - Immunology**

**(3)**

Introduction to the immune system with an emphasis on mammalian models. The course focuses on the cellular and molecular regulation of the immune system in health and disease. Topics include recognition of antigen, development of lymphocyte repertoires, and innate and adaptive immune responses. Also included are discussions of the immune system's responses to cancer cells, tissue transplants, and allergenic substances.

Prerequisite(s): BIO 3045

Corequisite(s): BIO 3090L

### **BIO 3090L - Immunology Laboratory**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 3090. Letter graded.

Corequisite(s): BIO 3090

### **BIO 4000 - Developmental Biology**

**(3)**

An analysis of mechanisms of early development of invertebrates and vertebrates. Includes a study of the cellular,

molecular, and genetic factors that influence cell differentiation and the determination of the body plan, as well as a study of the morphogenesis of selected organ systems. The implications of development on our understanding of the mechanisms of evolution (evo-devo) are discussed.

Prerequisite(s): BIO 3045

Corequisite(s): BIO 4000L

### **BIO 4000L - Developmental Biology Laboratory**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 4000 and uses a variety of model organisms to study normal and abnormal development. Letter graded.

Corequisite(s): BIO 4000

### **BIO 4010 - Vertebrate Biology**

**(3)**

An exploration of the evolution of morphology, physiology, and behavior of the vertebrate lineage from hagfish to humans. Appropriate emphasis is given to the major evolutionary approaches of form and function, phylogenetic systematics, taxonomy, natural selection, evo-devo, and the study of fossils and molecular genetics. The course works its way from fish to tetrapods, surveying the distinguishing morphology, physiology, ecology, and lifestyle adaptations of each group. Conservation status and current threats from human impacts are covered. Students learn through readings, group activities and discussions, films, and a research project tracing the evolution of a currently threatened vertebrate species or group.

Prerequisite(s): BIO 2011

Corequisite(s): BIO 4010L

### **BIO 4010L - Vertebrate Biology Laboratory**

**(1)**

A laboratory that is a co-requisite for BIO 4010. Lab activities provide hands-on learning through exploration and dissection of specimen vertebrates and field trips to the zoo and aquarium. Letter graded.

Corequisite(s): BIO 4010

### **BIO 4023 - Advanced Human Physiology**

**(3)**

This course examines how different organ systems work and interact with each other to maintain homeostasis in the human body. The course specifically examines metabolism, the digestion, the nervous system, endocrinology, the muscular system, respiration, the cardiovascular system, and the urinary system.

Prerequisite(s): BIO 2012 and CHE 2094, or instructor consent (Cell and Molecular Biology or Organismal minors).

Recommended: MTH 2003 or MTH 3063

### **BIO 4023L - Advanced Human Physiology Laboratory**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 4023. Letter graded.

Corequisite(s): BIO 4023

**BIO 4030 - Animal Behavior**

**(3)**

An exploration of the behavioral biology of animals, building on the foundation of Tinbergen's Four Problems and incorporating the insights of ethology, psychology, behavioral ecology, and cognitive ethology. Topics include proximate and ultimate mechanisms, behavioral genetics, developmental ethology, neurophysiology, learning, communication, reproduction, sexual selection, parasite and predator defense, mating systems, parental behavior, and sociality. The evolutionary basis of behavior is emphasized, including natural selection, developmental genetics, and domestication. Guest lectures and films expand on the reading and lecture content, and conservation issues are explored.

Prerequisite(s): BIO 2011

Corequisite(s): BIO 4030L

**BIO 4030L - Animal Behavior Laboratory**

**(1)**

A laboratory that is a co-requisite for BIO 4030 in which students complete a semester-long team research project at the San Diego Zoo. Letter graded.

Corequisite(s): BIO 4030

**BIO 4050 - Advanced Biochemistry**

**(3)**

Detailed analysis of protein and membrane structure. Includes quantitative approaches to the study of enzymes, catalytic mechanisms of enzymes, and a survey of the major metabolic pathways of carbohydrates, lipids, amino acids and nucleic acids.

Prerequisite(s): BIO 2010 and CHE 2094

Corequisite(s): BIO 4050L

Also offered as CHE 4050

**BIO 4050L - Advanced Biochemistry Lab**

**(1)**

An inquiry-based laboratory that is a co-requisite for BIO 4050. Letter graded.

Corequisite(s): BIO 4050

Also offered as CHE 4050L

**BIO 4063 - Methods of Teaching Secondary Science**

**(3)**

This methodology course is designed to prepare students to teach secondary-level (Grades 7-12) and college-level science. This course includes lesson planning, intentional practice of classroom management, micro-teaching, classroom observation, group and self-evaluation, active and equitable participation for culturally, ethnically, linguistically, and academically diverse learners, and formative assessment to differentiate instruction for all learners. Topics include the following: pedagogical content knowledge, curriculum selection and design, methods and modalities of science teaching, assessment, classroom application of various forms of technology, safe laboratory management and operation, integration of language arts and mathematics in the science curriculum, and professional organizations. Instruction is aligned to the state-adopted Science Common Core Standards (7-12) and the Next Generation English Language Development Standards, and relevance to college course teaching is incorporated. Modifications for diverse learners and learners with exceptionalities are researched. [AC1] Equivalent to EDU 4034 (undergraduate level) or EDU6024 (graduate level). PLNU students who complete BIO4063 are exempt from taking EDU 4034 or EDU6024 for their preliminary single subject credential.

Prerequisite(s): BIO 2010 or GE-BIO and at least Sophomore standing.

### **BIO 4070 - Neuroscience**

**(3)**

A study of the nervous system at the molecular, cellular and intercellular levels with the goal of understanding the generation and control of thoughts and behavior. Laboratory exercises examine sensory transduction, CNS function, synaptic physiology, behavior and neuroanatomy. The relationship of brain and mind are examined in discussions of nervous system development, intelligence, memory, patho-physiology, sexuality and gender identity, and religious faith and ethics.

Prerequisite(s): BIO 1040 or BIO 2012 or BIO 4023, or PSY 3001, or consent of instructor.

### **BIO 4073 - Experimental Marine Ecology**

**(3)**

A field-oriented course that explores aspects of marine ecology within the context of coastal communities, including ecological relationships within the marine environment, factors influencing community structure, and biogeography. A central component of the course will be an independent project with experimental design.

Prerequisite(s): BIO 2011

Corequisite(s): BIO 4073L

### **BIO 4073L - Experimental Marine Ecology Laboratory**

**(1)**

A field work-based laboratory that is a co-requisite for BIO 4073. Letter graded.

Corequisite(s): BIO 4073

### **BIO 4083 - Introduction to Geographic Information Systems (GIS)**

**(3)**

Geographic Information Systems (GIS) involves the analysis and management of geographic information. This course

is designed to introduce the basic principles and techniques of GIS (including spatial data sources, data structures, projections and coordinate systems), the essential skills of operating a functional GIS (including data creation, data editing and geospatial analysis), and the different applications of GIS technology.

### **BIO 4090 - Internship in Biology**

**(1-3)**

Authentic work experience in jobs that are oriented to the field of biology and that include responsibility for decision making, problem solving, and the use of techniques, skills, and knowledge acquired in the classroom. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated to a maximum of three units. Credit/No Credit

Prerequisite(s): Junior or Senior standing. Consent of department chair and faculty advisor.

### **BIO 4095 - Special Studies in Biology**

**(1-3)**

Individual study in depth of a selected biology topic under the direct supervision of a member of the faculty.

Prerequisite(s): Consent of instructor and department chair.

### **BIO 4097 - Biology Seminar**

**(1)**

Examination and discussion of selected biological issues with an emphasis on the relationship between Christian faith and scientific study. Course is to be taken by Biology, Biology-Chemistry and Environmental Science majors during their last semester prior to graduation.

Prerequisite(s): Senior standing as a Biology or Biology-Chemistry major or Environmental Science major.

### **BIO 4099 - Research in Biology**

**(1-3)**

Independent investigation, under the supervision of a member of the biology faculty. May be repeated for a total of six units, but no more three units may count toward upper-division requirements for graduation.

Prerequisite(s): Junior or Senior standing and consent of instructor.

## **Business**

### **BUS 1000 - Introduction to Business and Systems**

**(3)**

This course provides a foundation for making good business decisions from a Christian perspective, focusing on more than the bottom line. Topics include forms of business ownership, management, marketing, accounting, finance, and

information systems. An emphasis is placed on career and calling within business. Note: Students who transfer or change to a business program as juniors or seniors (57 or more units), or students of any class standing who transfer in the lower division economics, accounting, and management course requirements (5 courses) will be required to take 3 units of upper division ACC/BUS/ECO/FIN/MGT/MKT in lieu of the BUS1000 course requirement, excluding courses numbered 4089 and 4091.

Prerequisite(s): Restricted to Freshmen and Sophomores, or consent of instructor.

### **BUS 2001 - Legal Environment of Business**

(3)

This course provides a comprehensive overview of legal issues encountered in business. Topics include the legal system, contracts, torts, product liability, intellectual and property rights, cyber crime, fraud, organizational forms, corporate formation and finance, securities law, business ethics and corporate governance.

### **BUS 3013 - Administrative Communication**

(3)

With an emphasis on speaking and writing in the business field, this course is designed to help students improve and polish their professional communication skills in the workplace. In this course, students learn the skills needed to secure employment and communicate effectively in a professional business setting. Specifically, students learn to create an impressive resume, write and deliver various professional reports, effectively interview for employment, compose professional routine and persuasive letters, conduct informational interviews, and create professional portfolios. Students exit the course with the professional communication skills needed to stand out in the business world and in the job search process.

Prerequisite(s): WRI 1010 or equivalent.

### **BUS 3040 - Real Estate Principles and Practices**

(3)

This course provides an overview of real estate principles and practices. Topics include the economics of the real estate market, ownership and transfer of property, contracts, lessor and lessee relationships, escrow and title insurance, real estate finance, appraisal methodologies, agency, government control, taxes, management and development.

### **BUS 4075 - Sustainability in Action**

(3)

This course explores the principles and practices of sustainability in the home, in organizations, in local communities, and as national and world citizens. Topics include current environmental challenges, a critique of current cultural and societal practices as they impact the environment, the biblical foundation for creation care, and, in particular, practical steps that can be taken as individuals and in association with others that improve our care for creation.

Prerequisite(s): Junior or Senior standing or consent of instructor.

### **BUS 4080 - International Business**

**(3)**

This course provides an overview of business strategies, challenges and opportunities that exist in a global business environment. Students will explore the various economic, political, legal, social, and cultural contexts in which international businesses operate. In addition, students will develop a global business strategy, participate in a cross-cultural experience, and complete an in-depth research project on a specific country. Emphasis will be given to cross-cultural issues in management, marketing, and business ethics in an international setting.

Prerequisite(s): MGT 2012

### **BUS 4089 - Internship in Business**

**(1-3)**

This course requires on-the-job experience in the business field where students exercise decision-making skills, problem-solving skills, communication skills, and business knowledge acquired in the student's academic program. In addition, students create a professional online e-portfolio including cover letter, resume, letters of recommendation, personal background, target industry information, work samples, and internship reports/evaluations. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated for a maximum of six units. Graded Credit/No Credit.

Prerequisite(s): BUS 3013, Junior or Senior standing, and consent of instructor.

### **BUS 4090 - Special Topics in Business Administration**

**(3)**

Study in a special topic to be determined by the school. Open to Juniors and Seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **BUS 4091 - Independent Studies in Business Administration**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for the study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Chemistry**

### **CHE 1001 - Chemistry and Society (GE)**

**(4)**

Designed to introduce non-science students to the major ideas of modern chemistry and their relevance in contemporary society. Chemical principles are examined and applied to areas such as nutrition, medicine, agriculture,

pollution, and energy issues. (Meets a general education requirement; does not count toward any Chemistry Department majors.)

Prerequisite(s): MTH 0099 or equivalent.

**CHE 1002 - Chemistry in our Everyday Lives (GE)**

**(3)**

An introduction to basic principles of chemistry as they apply to our everyday lives. The course will include discussions on the chemistry of one or more major topics chosen by the instructor. (Possible topics include cooking, forensic science, health and nutrition, sustainable energy, or climate and the environment.)

Pre or Corequisite: MTH 0099 or equivalent.

Corequisite(s): CHE 1002L

**CHE 1002L - Chemistry in Our Everyday Lives Lab (GE)**

**(1)**

A lab course designed for a hands-on exploration of basic principles of chemistry as they apply to our everyday lives.

Pre or Corequisite: CHE 1002

**CHE 1003 - Introduction to General, Organic, and Biological Chemistry (GE)**

**(4)**

Examination of those aspects of inorganic and organic chemistry that are pertinent to biology and chemistry. Examines the structures and metabolic reactions of biomolecules. Provides a background for nursing, family and consumer sciences and physical education majors. (Meets a general education requirement; does not count toward any Chemistry Department majors.)

Corequisite(s): CHE 1003L and MTH 0099 or equivalent.

**CHE 1003L - Introduction to General, Organic and Biological Chemistry Lab (GE)**

**(1)**

An inquiry-based laboratory that is a co-requisite for CHE1003.

Pre or Corequisite: CHE 1003

**CHE 1052 - General Chemistry I (GE)**

**(4)**

Study of the basic principles of modern chemistry. Emphasis on atomic and molecular structure, chemical bonding, gas laws, states of matter, and solutions.

Prerequisite(s): Satisfactory high school background or CHE 1003 or PSC 1014.

Corequisite(s): CHE 1052L

### **CHE 1052L - General Chemistry I Lab (GE)**

**(1)**

An inquiry-based laboratory that is a co-requisite for CHE 1052. Letter graded.

Corequisite(s): CHE 1052

### **CHE 1053 - General Chemistry II**

**(3)**

Study of the basic principles of modern chemistry. Emphasis on chemical kinetics and equilibrium, acid base theory, thermodynamics, solubility, metals, and general descriptive chemistry.

Prerequisite(s): CHE 1052

Corequisite(s): CHE 1053L

### **CHE 1053L - General Chemistry II Lab**

**(1)**

An inquiry-based laboratory that is a co-requisite for CHE 1053. Letter graded.

Corequisite(s): CHE 1053

### **CHE 2001 - Serving Through Healing: An Introduction to Health Professions**

**(1)**

Course for students interested in the health professions of medicine, dentistry, optometry, pharmacy, and veterinary medicine. This course will introduce students to the various health professions and provide biblical and historical perspectives on healthcare and healing. This course will provide time for reflection to determine if the health professions are the right career or vocational path and practical application process guidelines and medical skills. Graded Credit/No Credit.

### **CHE 2013 - Analytical Chemistry**

**(3)**

Examination of the theories and techniques of quantitative chemical analysis, with some emphasis on instrumental methods. Classical methods such as gravimetry, titrimetry, spectroscopy, electrochemistry, and chromatography will be discussed and used. Course includes one three-hour laboratory each week.

Prerequisite(s): CHE 1053

### **CHE 2094 - Organic Chemistry I**

**(3)**

Study of organic compounds by functional group families with emphasis on structures, reactions, mechanisms, stereochemistry, and synthesis.

Prerequisite(s): CHE 1053  
Corequisite(s): CHE 2094L

**CHE 2094L - Organic Chemistry I Lab**

(1)

An inquiry-based laboratory that is a co-requisite for CHE 2094. Letter graded.

Corequisite(s): CHE 2094

**CHE 2096 - Organic Chemistry II**

(3)

Examination of basic organic chemistry from a mechanistic perspective and the use of synthetic procedures.

Prerequisite(s): CHE 2094  
Corequisite(s): CHE 2096L

**CHE 2096L - Organic Chemistry II Lab**

(1)

An inquiry-based laboratory that is a co-requisite for CHE 2096. Letter graded.

Corequisite(s): CHE 2096

**CHE 3025 - Physical Chemistry I**

(3)

Study of classical thermodynamics as it is applied to physical and chemical systems. Includes discussion of the three laws and their application to thermochemistry, reaction energetics and chemical equilibrium.

Prerequisite(s): CHE 2013, PHY 1054 or PHY 2054, and MTH 1044 or MTH 1064  
Corequisite(s): CHE 3025L

**CHE 3025L - Physical Chemistry I Lab**

(1)

An inquiry-based laboratory that is a co-requisite for CHE 3025. Letter graded.

Corequisite(s): CHE 3025

**CHE 3026 - Physical Chemistry II**

(3)

Study of reaction dynamics and complex reaction mechanisms and an investigation of matter from a quantum

chemistry perspective with particular emphasis on the theoretical concepts and their implications for molecular spectroscopy.

Prerequisite(s): CHE 2013, PHY 1054 or PHY 2054, and MTH 1044 or MTH 1064

### **CHE 3027 - Physical Chemistry II Laboratory**

(1)

Designed to accompany CHE 3026. Reaction dynamics and molecular structures are investigated using spectroscopic methods including ultraviolet-visible, fluorometry and FT-infrared instrumentation. One four-hour laboratory each week.

Corequisite(s): CHE 3026

### **CHE 3051 - Organic Structure Elucidation**

(2)

Introduction to modern spectrometric techniques for elucidating the structure of organic compounds, including one- and two-dimensional nuclear magnetic resonance spectroscopy, infrared spectroscopy and mass spectrometry. Course includes a weekly laboratory. Offered on a Quad basis.

Prerequisite(s): CHE 2096 and consent of instructor.

### **CHE 3070 - Instrumental Analysis**

(2)

Analytical analysis using instruments such as gas chromatography, high performance liquid chromatography, ultraviolet-visible, FT-infrared and nuclear magnetic resonance spectroscopy, and mass spectrometry. Course includes one four-hour laboratory each week. Offered on a Quad basis.

Prerequisite(s): CHE 2013 and consent of instructor.

### **CHE 4050 - Advanced Biochemistry**

(3)

Detailed analysis of protein and membrane structure. Includes quantitative approaches to the study of enzymes, catalytic mechanisms of enzymes, and a survey of the major metabolic pathways of carbohydrates, lipids, amino acids and nucleic acids.

Prerequisite(s): BIO 2010 and CHE 2094

Corequisite(s): CHE 4050L

Also offered as BIO 4050

### **CHE 4050L - Advanced Biochemistry Lab**

(1)

An inquiry-based laboratory that is a co-requisite for CHE 4050. Letter graded.

Corequisite(s): CHE 4050

**CHE 4053 - Advanced Organic Chemistry**

(2)

Advanced study of organic reaction mechanisms including: the Hammett equation, isotope and substituent effects and orbital symmetry. Modern synthetic reactions are presented. Offered on a Quad basis.

Prerequisite(s): CHE 2096 and consent of instructor.

**CHE 4054 - Advanced Organic Chemistry Laboratory**

(1)

Designed to accompany CHE 4053. Emphasis on modern synthetic methods and purification of complex reaction mixtures. One four-hour laboratory each week. Offered on a Quad basis.

Corequisite(s): CHE 4053

**CHE 4066 - Bioinorganic Chemistry**

(2)

Development of significant topics in bioinorganic chemistry particularly those at the interface of chemistry and biology. Emphasis is placed on understanding the role of metals in biological systems such as enzymes and DNA. Offered on a Quad basis.

Prerequisite(s): CHE 2096 or consent of instructor.

**CHE 4067 - Advanced Inorganic Chemistry Laboratory**

(1)

Designed to accompany CHE 4068. Emphasis on the preparation, purification and characterization of main group and transition metal inorganic and organometallic compounds. One four-hour laboratory each week.

Pre or Corequisite: CHE 4068

**CHE 4068 - Advanced Inorganic Chemistry**

(3)

The principles of inorganic chemistry, including symmetry, atomic and molecular structure, bonding theories, energetics, kinetics, and spectroscopy, are developed and applied to a range of inorganic compounds.

Prerequisite(s): CHE 3026 or consent of instructor.

**CHE 4075 - Special Topics in Chemistry**

(2)

Discussion of chemical topics of special relevance to students and faculty. Possible topics include: statistical thermodynamics, group theory and molecular spectroscopy, enzyme kinetics, photochemistry, organometallic chemistry, organofluorine chemistry, medicinal chemistry, electrophilic and radical additions, and mechanistic aspects of water chlorination. Offered on a Quad basis.

Prerequisite(s): CHE 2096 or consent of instructor.

### **CHE 4090 - Internship in Chemistry**

(1-3)

Authentic work experience in jobs that are oriented to the field of chemistry and that include some responsibility for decision making, problem solving, and the use of techniques, skills, and knowledge acquired in the classroom. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated to a maximum of three units. Graded CR/NC.

Prerequisite(s): Junior or Senior standing. Consent of department chair and faculty advisor.

### **CHE 4095 - Chemistry Seminar**

(1)

Presentation of papers by students and visiting scholars, and attendance at off-campus seminars.

Prerequisite(s): Senior standing and consent of instructor.

### **CHE 4099 - Research in Chemistry**

(1-2)

An independent investigation, under faculty supervision, of a specific problem at the frontier of a chemical field. Includes weekly discussion sessions. May be repeated up to a maximum of four units. Open to juniors and seniors.

Corequisite(s): Consent of instructor.

## **Chinese**

### **CHN 1001 - Elementary Chinese (Mandarin) I (GE)**

(4)

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom.

### **CHN 1002 - Elementary Chinese (Mandarin) II (GE)**

(4)

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted

is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom.

Prerequisite(s): CHN 1001 or consent of the instructor.

## **Christian Ministry**

### **CMI 1055 - Christian Formation and Ministry**

**(3)**

What is ministry? How are all Christians called to discipleship, faith formation, and service? What does the Christian tradition require from those granted authority of oversight in the Church? Students will learn from the various roles and offices of the church, to practice and teach others the classic Christian disciplines as a means of grace, and the importance of theological reflection for ministry.

### **CMI 3000 - Teaching and Preaching the Bible**

**(3)**

Students will examine the teaching and preaching offices of the Church. Students will learn how the essentials of biblical interpretation (hermeneutics and exegetical method), theology, and an understanding of the "social location" of the local congregation for effective teaching and preaching.

Prerequisite(s): CMI 1055

### **CMI 3025 - Christian Care of Souls**

**(3)**

What is Christian Care? What did the early church mean by the "care of souls"? This course will explore the intersection between discipleship and pastoral care and its relation to and divergence from psychological counseling. Emphasis will be given to multi-generational and congregationally-based ways for spiritual nurture and care of individuals and families in need. Special attention will be given to spiritual direction and lay-led ministries.

Prerequisite(s): CMI 1055

### **CMI 3040 - Foundations for the Practice of Youth Ministry**

**(3)**

Students will explore approaches to the discipleship ministries for youth in the local church and parachurch organizations.

### **CMI 3045 - Enacting Worship**

**(3)**

How do good theology, sound scriptural understanding, and sustaining pastoral care become enacted by a local congregation in weekly worship? This course will allow students to design and lead worship following specified

themes and liturgical patterns in a classroom setting with regular feedback.

Prerequisite(s): CMI 1055 and CMI 4000 or consent of instructor.

### **CMI 3050 - Church as a Witness to the World**

**(3)**

What is the nature and mission of the church? The course explores biblical assumptions of missional theology and the social and contextual issues of a local congregation as they relate to evangelism, missions, social witness, and justice making.

Prerequisite(s): CMI 1055

### **CMI 4000 - The Christian Gathering: Scripture, Baptism, and Eucharist**

**(3)**

The most fundamental practice of the Christian tradition, from Jesus and the twelve, involves gathering in a particular spatial location. This course will examine two traditions of gathering: the Ministry of the Word and the Ministry of the Table. The course will examine varied worship traditions arising out of the different understandings and historic periods of the church. The course will emphasize the different manifestations of historical Christian practices like the church year, baptism, funerals, and the Lord's Supper and how to oversee these practices in alternative traditions.

Prerequisite(s): CMI 1055

### **CMI 4010 - Leading in Ministry**

**(3)**

How do Christians lead and equip others to further God's purposes? Attention is given to administration, team building, conflict resolution, and a biblical understanding of gifts, ministry roles and functions. The course also examines the pressures of ministry and the changing structures and forms of the church in American society.

Prerequisite(s): CMI 1055

### **CMI 4015 - The Church of the Nazarene: History and Polity**

**(3)**

Who are the Nazarenes? This course will identify the formative influences of the Methodist societies in 18th Century England and the distinct ways the Methodist way of life was adapted in Colonial America and gave rise to the 19th Century American Holiness Movement and the Church of the Nazarene. Attention will be given to the organization and ministry of the local, district and general church as articulated in the Manual of the Church of the Nazarene.

Prerequisite(s): CMI 1055

### **CMI 4020 - Compassionate Ministry in Local Context**

**(3)**

Students will be immersed and examine how the church worships and engages in works of mercy and devotion in a

community-based intercultural context. Students will learn how to analyze congregational and community demographics, understand sociological dynamics and employ theological reflection in ministry. The course will examine the difference between non-profit ministry structures and congregationally-based, direct-action approaches to local ministry.

Prerequisite(s): CMI 1055

### **CMI 4025 - Youth and Family Ministry**

**(3)**

How do we lead so that children and youth will follow Christ? How are the gifts of the young employed in mission? How does the church equip families to support faith? This course will examine recent sociological studies of emergent adulthood and look at ministry practices designed to sustain the long term witness of the church through intergenerational ministries.

Prerequisite(s): CMI 1055

### **CMI 4050 - Internship**

**(1-3)**

Supervised on-site ministry to help students integrate theory and classroom experience with the practice of ministry. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated up to a total of six units. Graded Credit/No Credit.

Prerequisite(s): BIB 1001 or BIB 1002 and CMI 1055 and consent of instructor.

### **CMI 4090 - Special Studies in Christian Ministry**

**(1-3)**

An investigation of a topic in Christian ministries not otherwise covered in the curriculum. May be repeated to a total of six units.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

## **Church History**

### **CHU 3040 - Women in the Christian Tradition (GE)**

**(3)**

A historical survey addressing the ideas, practices, and institutions of Christianity emphasizing the contribution and challenges of women as disciples, preachers, martyrs, writers and community leaders from the end of the New Testament period to the present with attention to the Wesleyan and American Holiness traditions.

Prerequisite(s): BIB 1001 or BIB 1002

### **CHU 3095 - The Christian Tradition (GE)**

**(3)**

A historical survey of the ideas, practices, and institutions of Christianity from the end of the New Testament period to the present, with attention to the Wesleyan-Arminian tradition.

Prerequisite(s): BIB 1001 or BIB 1002

## **Communication**

### **COM 1000 - Principles of Human Communication (GE)**

**(3)**

A survey of the human communication process. Emphasis is placed on intrapersonal, interpersonal, and public communication. Particular attention is paid to the preparation and presentation of speeches.

### **COM 1050 - Introduction to Media Communication**

**(3)**

Explores the development and influences of mass media (books, newspapers, magazines; film; radio, television, and internet) in contemporary society. Considers the rights and responsibilities of producers and consumers of mass communication.

### **COM 1075 - Scriptwriting for Television and Film**

**(3)**

A survey of the process, forms, and techniques for writing scripts for television and film. This includes advertising and public service announcements (PSAs), documentary, corporate training and promotion, news and sports, interview shows, reality shows, drama, comedy, and short films. This course also includes the laws and ethics of scriptwriting, and preparing for working in the television and film media.

### **COM 1090 - Interpersonal Communication**

**(3)**

Focuses on the social scientific study of dyadic (two-person) communication. Opportunities are given to integrate theory and practice in an effort to stimulate self-awareness and highlight taken-for granted aspects of interpersonal communicative behavior.

### **COM 2010 - Communication Practicum I**

**(1-2)**

Requirements vary according to the activity developed in consultation with the instructor. May be repeated up to a total of eight units. Graded Credit/No Credit.

### **COM 2020 - Small Group Communication**

**(3)**

Analysis of the communicative behavior of group members. Theory, methods, and practical application in developing the art of communicating effectively in a variety of task-oriented groups.

**COM 2031 - Argumentation and Debate (GE)**

**(3)**

A study of the development of argumentation from classical rhetoricians to contemporary research theories. Practical application of this study through participation in debates and other forensic experiences.

**COM 2043 - Introduction to TV and Film Production**

**(3)**

Fundamentals of studio and field TV and film production. This includes basic technical and creative aspects of camera, lighting, sound, graphics, producing, directing, and editing. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the Point TV YouTube channel.

**COM 2050 - Intercultural Communication**

**(3)**

A study of intercultural principles, processes, and topics including: verbal and nonverbal communication, perception, cultural values and expectations, and media impact. Students develop an increased awareness, understanding, and appreciation of other cultures.

**COM 2065 - Introduction to Research in Communication**

**(3)**

This course introduces students to disciplinary expectations for research in communication, including source evaluation and citation, and equips them to review literature, select methods, and propose ethical research in communication from qualitative and quantitative perspectives.

**COM 2075 - Audio Production**

**(2)**

A basic course that provides students with skills in writing and production of audio content for radio (e.g., commercials, promotional announcements, PSAs), and TV and film (multi-track recording, mixing, and sound effects). Course deals with announcing, acoustics, microphones, and remote broadcasts. Required for broadcast journalism majors and other students desiring to work at Point Radio.

**COM 3000 - Narrative and Documentary Film**

**(3)**

A survey of narrative and documentary motion pictures, from Edison and Lumiere to the present. Course covers the historical, structural, technological, and aesthetic trends of motion pictures through the viewing and analysis of selected

classic films that exemplify these trends. Course also includes readings and online discussion about issues of Christian faith and film.

**COM 3010 - Nonverbal Communication**

(3)

Theory and research on nonverbal aspects of speech communication, emphasizing the importance of time, space, body language, touch and vocalics.

**COM 3012 - Gender and Communication (WS)**

(3)

A study of how the self-perception of men and women evolves as a function of cultural influences and the differences and similarities in the way each uses communication patterns.

**COM 3013 - Television News Production**

(3)

Combines principles of journalistic writing and reporting with field production techniques of television news. Students learn the basic concepts of reporting and producing a variety of television news stories, from simple anchor readers to complex packages.

Prerequisite(s): JRN 2050 and COM 2043

Pre or Corequisite: JRN 3012

Corequisite(s): JRN 3012 and COM 3013 are corequisites and must be taken in the same semester.

**COM 3015 - Oral Interpretation**

(3)

Analysis of techniques of oral interpretation to develop reading skills, with intensive practice in various literary forms (prose, drama, and poetry).

**COM 3030 - Persuasion**

(3)

Study of the social scientific theory and practice of persuasion. Persuasion is situated within the broader notion of influence. Topics include persuasion tactics, audience analysis and research, and modern advertising practices.

**COM 3040 - Organizational Communication**

(3)

A study of traditional, modern, and post-modern approaches to organizational communication as well as its functions, forms and consequences. Provides a theoretical overview of management theory and gives practical insights for communicating in a variety of organizations.

**COM 3045 - Leadership Communication**

**(3)**

An examination of contemporary theories and research related to the communication of leadership in organizational settings, including ethical leadership and followership, organizational culture, the nature of power, vision, and creativity in leadership.

**COM 3050 - Electronic Media in Communication**

**(3)**

Critical examination of forces that shape the history and future of electronic media in the United States. Primary attention is given to the role of regulatory law, economics, and technology.

Prerequisite(s): COM 1050

**COM 3060 - Professional Speaking for Career Settings**

**(3)**

Advanced exploration of the theory, preparation, and delivery of presentations for professional arenas, such as business, government, media, education, and ministry. Practical application will also include an emphasis on technology and the stewardship of communication practices.

Prerequisite(s): COM 1000 or COM 2031

**COM 3090 - Introduction to Public Relations**

**(3)**

An introduction to the theory and practice of public relations. This includes public relations roles, publics, research, media relations, special events, and an introduction to cases and campaigns of public relations. This course considers the process of public information dissemination in business, educational, and nonprofit organizational settings.

**COM 3095 - Media Literacy**

**(3)**

A critical approach to interpreting media messages is grounded in the study of how messages are constructed, how media industries function, and how communication theory, research, and media ethics explain media impact on society. Emphasis is placed on making informed choices as a media consumer, and considering the impact of media from a Christian perspective.

**COM 4005 - Public Relations Cases and Campaigns**

**(3)**

This course involves the study and application of organizational policy objectives to public relations program development. It includes case studies from PR history as well as methods of audience research, data analysis and planning of strategic communication objectives. Students plan and execute a public relations program for an established organization.

Prerequisite(s): COM 3090

### **COM 4013 - Advanced Television News Production**

**(3)**

Provides students with the theory and organization of newscasts, as well as skills in conducting live news remotes, coordinating newscasts, supervising news personnel, anchoring, using news production software, and applying advanced reporting skills in various news situations.

Prerequisite(s): COM 3013 and JRN 3012

### **COM 4014 - Long-Form Broadcast News**

**(3)**

Focuses on the development of skills at in-depth storytelling through radio and television news production. Students learn to research, script, and produce stories, while applying aural and visual news presentation techniques.

Prerequisite(s): COM 3013 and JRN 3012

### **COM 4020 - Communication Practicum II**

**(1-2)**

Continued application of communication concepts and skills. Requirements vary according to the activity developed in consultation with the instructor. Credit not applicable toward upper-division requirements in the department. May be repeated for up to a total of eight units. Graded Credit/No Credit.

Prerequisite(s): COM 1075 for Screenwriting; COM 2043 for Production Project. Prior university experience in applied communication activities.

### **COM 4021 - Internship in Communication**

**(3)**

Participation in an internship supervised by departmental faculty. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated up to a total of six units. Graded Credit/No Credit.

Prerequisite(s): Junior or Senior standing.

### **COM 4022 - Portfolio Construction**

**(1)**

Completion of a portfolio and supporting documentation for assessment and preparation for employment. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor.

### **COM 4025 - Advanced Television Workshop**

**(1)**

Planning, production and presentation of television and film programming for multiple audiences. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the Point TV website and YouTube pages. Required of upper division students working as staff for the Point TV leaders. May be repeated up to a total of six units.

Prerequisite(s): COM 2043

### **COM 4035 - Advanced Audio Production**

**(1)**

Students are responsible for a minimum of 30-hours per semester of work, including music programming, news, sports, and station management. Required for students desiring to work for the student radio station. May be repeated up to a total of four units.

Prerequisite(s): COM 2075

### **COM 4042 - Field Television Production**

**(3)**

Film and television production and operations associated with field production including concepts and practices in scripting, producing, editing, and on-location directing with a single-camera format. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the Point TV and YouTube websites.

Prerequisite(s): COM 2043

### **COM 4043 - Studio Television Production**

**(3)**

Film and television production and operations associated with studio production including concepts and practices in scripting, producing, and directing for multi-camera studio production. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the Point TV and YouTube websites.

Prerequisite(s): COM 2043

### **COM 4050 - Communication Training and Development**

**(2)**

This course acquaints the prospective human resources trainer and/or consultant with the skills to design, implement, and assess communication instructional programs. Each participant in this experiential class develops a one-half day training program suitable for a professional audience.

Prerequisite(s): Junior or Senior standing, Organizational Communication major or consent of instructor.

### **COM 4050L - Communication Training and Development Lab**

**(1)**

An optional lab course designed for applied practice and formative assessment of principles of training and

development.

Corequisite(s): COM 4050

### **COM 4060 - Rhetorical Theories and Models**

**(3)**

Development of rhetorical theory and rhetorical criticism, from ancient Greece through the present, as mechanisms for generating and understanding public address.

### **COM 4065 - Communication Theories and Research**

**(3)**

Survey of contemporary approaches to human communication emphasizing theory development, epistemological perspectives, meaning negotiation, and research methodology. Participants complete an original research project that is publicly presented in a poster session.

Prerequisite(s): Junior or Senior standing and COM 2065 OR consent of instructor.

### **COM 4085 - Communication, Values, and Society**

**(2)**

Senior seminar series focused on value-driven approaches to communication, applying a Christian perspective to real world contexts. Required of all majors in the department.

Prerequisite(s): Senior standing.

### **COM 4090 - Special Studies in Communication**

**(1-3)**

Intensive study of a selected problem by an individual or group in the field of communication and theatre under the direction of a member of the department. May be repeated up to a total of six units.

Prerequisite(s): Consent of instructor.

### **COM 4092 - Independent Study**

**(1-3)**

Independent investigation, under the direct supervision of a faculty member, of a specific issue relevant to the study of communication.

## **Computer Science**

### **CSC 1011 - Computer Programming for the Absolute Beginner**

**(1)**

A gentle introduction to computer programming/scripting in the Python language for those with no prior programming experience. Topics include the use/purpose of programming in the context of different academic disciplines along with the basics of writing code. Students will learn to write simple programs using input and output, conditional statements, loops, and graphics. This class is for anyone who wants to join the coding conversation or to gain a background for more rigorous programming courses.

Prerequisite(s): MTH 0099

### **CSC 1043 - Introduction to Computer Programming**

**(2)**

Introduces the syntax of a high level programming language with emphasis on the programming environment and the use of the constructs of the language to write simple application programs. Topics include data types, sequential, conditional, and iterative statements, one and multi-dimensional arrays, simple graphical animation, the use of objects, and I/O. Programming assignments get progressively more complex and designed to demonstrate the use of computing in a variety of disciplines including the natural sciences.

Prerequisite(s): MTH 1013 (or equivalent)

Corequisite(s): CSC 1043L

Also offered as EGR 1043

### **CSC 1043L - Introduction to Computer Programming Lab**

**(1)**

A lab course designed for a hands-on exploration of Introductory Computer Programming. Meets two hours per week. Not repeatable. Letter grading.

Prerequisite(s): MTH 1013 (or equivalent)

Corequisite(s): CSC 1043

Also offered as EGR 1043L

### **CSC 1054 - Objects and Elementary Data Structures**

**(3)**

As a continuation of CSC 1043, this course deals with more advanced computing constructs and ideas, reinforced in weekly labs. Topics include object-oriented design, inheritance, polymorphism, exception handling, and recursion, along with more intentional development and debugging strategies. Linked lists are introduced as a viable option for implementing basic ADT's. Students gain experience in the design of graphical user interfaces, event driven programming, and larger programming projects.

Prerequisite(s): CSC 1043 with a grade of C- or higher.

Corequisite(s): CSC 1054L

Also offered as EGR 1054

### **CSC 1054L - Objects and Elementary Data Structures Lab**

**(1)**

A lab course designed for a hands-on exploration of Objects and Elementary Data Structures. Meets two hours per week. Not repeatable. Letter grading.

Prerequisite(s): CSC 1043 with a grade of C- or higher.

Corequisite(s): CSC 1054

Also offered as EGR 1054L

### **CSC 2052 - Data Structures in C++**

**(1)**

Students transition to the C++ language and are introduced to additional data structures, including queues, stacks, trees, and graphs considering their implementation with both arrays and linked lists. Concepts are reinforced through weekly programming assignments. CSC2052 is the first quad of CSC 2054.

Prerequisite(s): CSC 1054 with a grade of C- or higher.

Corequisite(s): CSC 2052L

### **CSC 2052L - Data Structures in C++ Lab**

**(1)**

A lab course designed for a hands-on exploration of Data Structures in C++. Meets two hours per week. Not repeatable. Letter grading.

Prerequisite(s): CSC 1054 with a grade of C- or higher.

Corequisite(s): CSC 2052

### **CSC 2054 - Data Structures and Algorithms**

**(3)**

Standard data structures, including queues, stacks, trees, and graphs, as objects are defined and illustrated with associated dynamic storage management mechanisms. Introduces formal techniques to support the design and analysis of algorithms, focusing on both the underlying mathematical theory and practical considerations of efficiency. Topics include measuring the complexity of recursive and iterative algorithms, algorithmic strategies, the concept of intractability and the theory of NP. Emphasis is placed on non-numerical algorithms such as sorting, searching, graph and network algorithms both sequential and parallel. Concepts are reinforced through weekly programming assignments.

Prerequisite(s): CSC 1054 with a grade of C- or higher.

Corequisite(s): CSC 2054L

### **CSC 2054L - Data Structures and Algorithms Lab**

**(1)**

A lab course designed for a hands-on exploration of Data Structures and Algorithms. Meets two hours per week. Not repeatable. Letter grading.

Prerequisite(s): CSC 1054 with a grade of C- or higher.

Corequisite(s): CSC 2054

## **CSC 3002 - UNIX and Python Scripting for Computational Science**

**(2)**

An introduction to UNIX and Python scripting in the context of applications to scientific research. Students will become competent users of the UNIX operating system. They will learn to find and manipulate data from various file formats (including text, FASTA, HTML, XML) using regular expressions with UNIX and Python scripts. They will learn to use Python for data analysis and for more specialized purposes using third party modules including NumPy, BioPython, and Tkinter.

Prerequisite(s): CSC 1043 with a grade of C- or better.

## **CSC 3011 - Machine Learning and Multivariate Modeling in R**

**(1)**

Students will learn the fundamentals of modeling complex multivariate data, using both foundational regression and logistic regression techniques, as well as the basics of supervised and unsupervised machine learning approaches. Additionally, students will learn to assess model fit and how to select appropriate modeling tools to identify relationships in complex data sets. Along with hands on instruction, students will work on real applications from industrial applications in business and science.

Prerequisite(s): CSC 1043 with a grade of C- or better.

## **CSC 3012 - Operating Systems for Software Engineering Certificate**

**(2)**

A systems course focusing on structural design and services of operating systems, along with the use of both GUI and command-line interfaces. Special attention is paid to process management and concurrency. Offered on a Quad basis.

Prerequisite(s): CSC 2052 or CSC 2054

## **CSC 3014 - Operating Systems**

**(4)**

A systems course focusing on operating systems, topics include basic operating system design, process management, device management, memory management, and file systems. Students are introduced to the basics of software evolution, reliability, concurrency, security and protection in the context of single-core, multi-core, distributed, and virtual environments. Class members gain experience using both GUI and command-line interfaces. In the course of implementing the CPU scheduling simulation, students understand the importance of thorough system testing and attention to system specs as they try to make parts of their systems work with those designed by their teammates.

Prerequisite(s): CSC 2054 or CSC 2052

## **CSC 3021 - Computational Tools**

**(1)**

A brief introduction to a variety of computing tools for students already competent in computer programming. Students will gain experience in using Excel with VBA, Visual Basic, Microsoft Access, HTML and JavaScript. The goal of this

course is to help expand student awareness of available computing tools and the strengths and weaknesses of each. CSC3021 is the first quad of CSC 3022.

Prerequisite(s): CSC 3002 or consent of instructor.

### **CSC 3022 - Data Management for Computational Science**

(2)

An introduction to data management in the context of scientific research and business applications. Students will explore the data storage and manipulation requirements for these areas and learn to choose the correct data management tool for a given situation. Tools include Microsoft Excel (with VBA), Visual Basic, Microsoft Access, and HTML. Students will learn to design, create, and query relational databases using Database Management System and SQL query language.

Prerequisite(s): CSC 3002 or consent of instructor.

### **CSC 3023 - Software Engineering**

(3)

This course offers an in-depth treatment of the software development process. Software analysis and design study emphasizes an object-oriented approach that is introduced and contrasted with traditional design methodologies. CASE tools are used during the design process.

Corequisite(s): CSC 2054

### **CSC 3031 - Data Visualization and Communication with R**

(1)

Students will learn to create effective static and dynamic graphics for representing complex data sets. Students will learn to apply the principles of effective storytelling with data, and best practices in data design and communication.

Prerequisite(s): CSC 1043 with a grade of C- or higher.

### **CSC 3054 - Design and Analysis of Algorithms**

(4)

Introduces formal techniques to support the design and analysis of algorithms, focusing on both the underlying mathematical theory and practical considerations of efficiency. Topics include measuring the complexity of recursive and iterative algorithms, algorithmic strategies, the concept of intractability and the theory of NP. Emphasis is placed on non-numerical algorithms such as sorting, searching, and graph and network algorithms both sequential and parallel.

Prerequisite(s): CSC 2054 and MTH 3043

### **CSC 3094 - Programming Languages**

(4)

This course in programming languages covers language design issues and language translators. Laboratories give

students a practical understanding of programming language concepts as well as give experience in programming using several programming languages.

Prerequisite(s): CSC 2054 and MTH 3043

### **CSC 4012 - Topics in Computer Science**

**(2)**

Study of an area of computer science not otherwise included in the curriculum. Topics are determined by the needs and interest of the students and faculty involved. May be repeated up to a total of six units. Offered on a Quad basis.

Prerequisite(s): CSC 2054, MTH 1031 and MTH 1044 or MTH 1064 and consent of instructor.

### **CSC 4054 - Computer Architecture and Assembly Language**

**(4)**

This course covers the fundamentals of current pipelined computer designs. Experience with assembly language programming and digital logic and circuit design will be used to motivate the need for certain facets of the more general instruction set architecture. Throughout the course, performance issues, hardware constraints, and memory hierarchy will be shown to inform processor design. Additional topics include integer and floating point arithmetic, I/O and considerations surrounding multi-core architectures.

Prerequisite(s): CSC 1054 with a grade of C- or higher and Junior or Senior standing.

### **CSC 4081 - Senior Seminar in Computer Science**

**(1)**

This one-unit capstone course is a seminar in which students give lectures on topics of general interest in computer science. Issues related to vocation and calling are also discussed. Graded Credit/No Credit.

Prerequisite(s): One of CSC 4102, CSC 4133, HON 4098, ISS 4072, ISS 4102, ISS 4133, MTH 4102, or MTH 4133 and Senior standing (or Junior standing if a December graduate).

### **CSC 4091 - Independent Studies in Computer Science**

**(1-4)**

Study of a selected problem or topic under the direction of an instructor. The instructor and student propose the course of study. Approval by the department chair is required. May be repeated for a total of six units.

Prerequisite(s): Consent of instructor.

### **CSC 4093 - Software Project**

**(3)**

This course presents the student with a strong experience in software engineering. Students, working in teams, investigate, design, implement and present to their classmates a significant software project. The project should solve a significant, complex and generalizable problem, dealing with constraints and trade-offs in the solution. The course

includes study of project management concerns such as planning, scheduling, and assessing progress.

Prerequisite(s): CSC 3023 and Junior or Senior standing.

### **CSC 4102 - Independent Research in Computer Science I**

**(2)**

Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, consent of instructor, and Junior standing.

### **CSC 4121 - Independent Research in Computer Science II**

**(1)**

The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, CSC 4102, and consent of instructor.

### **CSC 4133 - Service Learning in Computer Science**

**(3)**

Students working in teams design and implement a project using a broad spectrum of computer science knowledge to meet the needs of a community organization or the university.

Prerequisite(s): Consent of instructor and Junior standing.

## **Economics**

### **ECO 1000 - Survey of Economics (GE)**

**(3)**

A survey of economics including both macroeconomics and microeconomics for non-majors. A general understanding of economic systems, markets, exchange, consumer and producer behavior, resource efficiency, the role of government, money and banking, economic stabilization, economic opportunity, income inequality and the global economy, with primary focus on economic problems and applications to global, national and personal issues.

Prerequisite(s): MTH 0099 or equivalent.

### **ECO 1001 - Principles of Macroeconomics (GE)**

**(3)**

This course provides an understanding of fundamental principles governing production, distribution, and exchange of wealth with emphasis on current economic problems, for business majors. Topics include national income

determination, fiscal policy, monetary policy, economic stabilization policy, international linkages, balance of payment issues, exchange rate determination and international trade.

Prerequisite(s): MTH 0099 or equivalent.

### **ECO 1002 - Principles of Microeconomics (GE)**

**(3)**

This course provides fundamental principles governing production, distribution, and exchange of wealth with emphasis on current economic problems, for business majors. Topics include consumer choice theory, decision-making of firms based on costs and revenues, income determination and distribution, market structures, market failures, the economic role of government, and globalization.

Prerequisite(s): MTH 0099 or equivalent.

### **ECO 3015 - Theories of Economic Development**

**(3)**

A globally focused course exploring economic development in-depth and considering how the poorest half of the world's population lives. Topics include population growth, healthcare and education services, political organizations, agricultural challenges, business, finance, and core economic theories from historic and modern eras. The topics are considered at different levels, including the family, community, national, regional, and global levels. Considerations of poverty and poverty alleviation approaches are investigated for effectiveness and potential application.

Prerequisite(s): ECO 1001 and ECO 1002 or consent of instructor.

### **ECO 3030 - Intermediate Macroeconomics**

**(3)**

This course will prepare students to gain an understanding of the diverse macroeconomic models at the intermediate level, including the variables that determine national output, income, employment, money, inflation, interest rates, exchange rates capital flows, and international trade. Additional topics included the theory of economic growth, macroeconomic equilibrium analysis, modern macroeconomic models, economic fluctuations, and monetary and fiscal policies in closed and open economies.

Prerequisite(s): ECO 1001 and MTH 1073

### **ECO 3080 - Money and Banking**

**(3)**

This course provides an understanding of the financial system, monetary policy, financial institutions, central banks and financial stability. Topics include an analysis of banking and monetary theory, the function and impact of money, credit, and banking on the economic system, government fiscal policies, and how interest rates are determined.

Prerequisite(s): ECO 1001

### **ECO 4010 - International Economics**

**(3)**

This course presents theories and models of international trade and money, and government policy and macroeconomic stabilization, with a focus on global economic issues and applied economic topics. The economics of global cities, urban problems, poverty, labor, immigration, utilization of resources, environmental stewardship, globalization, gender, crime, and violence will be discussed.

Prerequisite(s): ECO 1001 and ECO 1002  
Also offered as POL 4037

#### **ECO 4040 - The Economics of Race, Class and Gender (WS)**

**(3)**

A study of economic issues pertaining to race, class and gender, including economic status, poverty and inequality. Factors influencing economic status and opportunity, such as culture, family composition, education, work, labor market discrimination, economic value, and macroeconomic variables are considered. Alternative perspectives on causes of poverty and inequality are examined, and feminist economic thought is discussed.

Prerequisite(s): ECO 1000 or ECO 1001 or ECO 1002 or consent of instructor.

#### **ECO 4050 - History of Economic Thought**

**(3)**

A study of the history of the development of major concepts of economic analysis and theory. Emphasis is placed on the role of the economic, political, social, and religious environments in the development of economic thinking and analysis. Consideration is given to the major economic theorists and how biblical concepts influence their thinking.

Prerequisite(s): ECO 1001 and ECO 1002

#### **ECO 4090 - Special Studies in Economics**

**(3)**

Study in a special topic to be determined by the school. Open to Juniors and Seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

#### **ECO 4091 - Independent Studies in Economics**

**(3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Education**

### **EDU 3002 - Foundations of Education and Learning Theory**

(3)

This survey course provides an overview of the major laws and principles regarding the historical and contemporary purposes, roles and functions of education in American society as well as an overview of the major concepts, theories and research related to the cognitive, linguistic, social, emotional and physical development of children and adolescents. Wesleyan perspectives in education are introduced. Effective instructional strategies that ensure active and equitable participation of all learners, as well as modifications for diverse learners with exceptionalities, are observed through fieldwork experiences. Twenty fieldwork hours are required. Candidates are responsible for transportation to and from the school site. Task-stream registration is required.

Also offered as EDU 6000

### **EDU 3006 - Principles of Language Acquisition**

(3)

This course focuses on the principles of language acquisition and effective instructional practices for English learners. It further examines the pedagogy of educational equity to provide English learners access to the core curriculum. Foundational knowledge and classroom instructional practices are linked through the systematic study of phonemic awareness, oral language, and literacy development. Special emphasis is placed on the Structured English Immersion model as practiced in California schools. Effective instructional strategies that ensure active and equitable participation of learners who are culturally, ethnically, and socioeconomically diverse are introduced and applied through fieldwork experiences. This course requires 20 clock hours of observation and participation specific to culturally and linguistically diverse learners in a culturally diverse and inclusive school setting. Candidates are responsible for transportation to and from the school site. Task-stream registration required.

Prerequisite(s): EDU 3002 and EDU 4004

Also offered as EDU 6001

### **EDU 3024 - Differentiated Mathematics Instruction for All Learners**

(3)

This methodology course addresses the planning of content-specific instruction and delivery of content consistent with state adopted (K-8) mathematics standards and the language needs of all learners. The interrelated components of a balanced program of mathematics and the fostering of positive attitudes toward mathematics are stressed. This course includes instruction in how to model concepts and teach learners to solve problems using multiple strategies and to anticipate, recognize and clarify mathematical misunderstandings that are common among K-8 learners. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied through fieldwork experience. Technology for teaching and learning is integrated in the course. This course requires 20 clock hours of observation and participation specific to math instruction in a culturally diverse and inclusive school setting. Candidates are responsible for transportation to and from the school site. Task-stream registration required.

Prerequisite(s): MTH 2023, EDU 3002, EDU 3006 and EDU 4004

Also offered as EDU 6012

### **EDU 4004 - Foundations of Special Education**

**(3)**

This survey course provides an overview of the major educational practices, theories, and research regarding diverse learners with disabilities. Emergent issues and best practices, including differentiated instruction, curricular adaptations and modifications, compliance with laws, ethical concerns, and characteristics and needs of learners with disabilities, will be examined. Principles of effective collaborative and interdisciplinary teaming, positive behavior supports, and inclusive educational programming are addressed. This course meets the special education mainstreaming requirement for all basic teaching credentials. Twenty fieldwork hours are required when taken on the undergraduate campus. Task-stream registration required.

Prerequisite(s): EDU 3002

Also offered as EDU 6002

### **EDU 4010 - Methods of Teaching Reading and Writing**

**(3)**

This methodology course provides intensive instruction grounded in sound research to enable candidates to deliver a comprehensive program of systematic, explicit, and meaningfully-applied instruction in reading, writing, listening, and speaking. Opportunities for candidates to learn, understand, and effectively use materials, methods, and strategies to include culturally diverse literature for all learners are provided. Instruction is aligned to the state adopted English Language Arts Content Standards (K-8) and the English Language Development Standards. This course includes intentional practice of classroom management, active, and equitable participation for culturally, ethnically, linguistically, and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied through field work experience. Technology for teaching and learning is integrated in the course.

Also offered as EDU 6010

### **EDU 4017 - Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education**

**(2)**

This course offers candidates the opportunity to develop knowledge, skills and dispositions related to contemporary issues and challenges in California's teaching/learning systems. Special attention will be given to those issues that impede or aid positive school, classroom and community cultures and students' general academic and social success. Utilizing an interdisciplinary focus grounded in Educational Learning/Teaching Theory and pedagogy, candidates explore personal and professional planning practices of self-assessment, missional or life purpose development. Letter

Prerequisite(s): EDU 3002 and EDU 4004 or consent of instructor.

### **EDU 4032 - Methods of Teaching Secondary Language Arts**

**(3)**

This methodology course is designed to prepare prospective secondary-level (Grades 7- 12) candidates for successful teaching of language arts. Candidates become familiar with a variety of specific methods to use in teaching literature, composition, and language. The topics explored include the following: trends in English curriculum development, the six-trait writing process, assessment, classroom application of various forms of technology, and professional organizations. Instruction is aligned to the state adopted English Language Arts Content Standards (7-12) and the English Language Development Standards. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning,

and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (PLNU students who take EDU 4033 are exempt from taking EDU 6022 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

Also offered as EDU 6022

### **EDU 4033 - Methods for Teaching Secondary Mathematics**

**(3)**

This methodology course is designed to prepare prospective secondary-level (Grades 7- 12) candidates for successful teaching of mathematics content. Topics include: strategies and models for developing mathematical concepts, building skills for understanding and communicating mathematical ideas effectively, and techniques for teaching critical thinking and problem solving. Attention is also given to the following: methods of presentation, awareness of national mathematics organizations, the writing of unit/daily lesson plans, microteaching of a math lesson, selection of materials, inclusionary practices, classroom application of various forms of technology, and techniques for assessment. Instruction is aligned to the state-adopted Mathematics Content Standards (7-12) and the English Language Development Standards. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (PLNU students who take this course are exempt from taking EDU 6023 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

Also offered as EDU 6023

### **EDU 4034 - Methods of Teaching Secondary Science**

**(3)**

This methodology course is designed to prepare prospective secondary-level (Grades 7- 12) candidates for successful teaching of life and physical sciences. Topics include the following: pedagogical content knowledge, curriculum selection and design, safe laboratory management and operation, integration of language arts and mathematics in the science curriculum, methods and modalities of science teaching, assessment, classroom application of various forms of technology, and professional organizations. Micro-teaching, classroom observation and group and self-evaluation are included. Instruction is aligned to the state-adopted Science Content Standards (7-12) and the English Language Development Standards. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically, and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (Equivalent to BIO 4063. PLNU students who complete this course or BIO 4063 are exempt from taking EDU 6024 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

Also offered as EDU 6024

### **EDU 4035 - Methods of Teaching Secondary Social Science**

**(3)**

This methodology course is designed to prepare prospective secondary-level (Grades 7- 12) candidates for successful teaching of both the social and behavioral sciences. Topics include the following: instructional planning, evaluation and questioning techniques, research methods, and professional organizations. Instruction is aligned to the state-adopted

Social Science Content Standards (7-12) and the English Language Development Standards. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (PLNU students who complete this course are exempt from taking EDU 6025 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

Also offered as EDU 6025

### **EDU 4036 - Methods for Teaching Secondary Foreign Language**

**(3)**

This methods course is based on the organizing principles of the California State Framework, the National Standards for the Learning of Foreign Languages in the 21st Century, the American Council on the Teaching of Foreign Guidelines, and current research in methodology in foreign language instruction. Topics include the following: instructional planning, selection and classroom application of various forms of technology, evaluation and questioning techniques, research methods, and professional organizations. Each candidate will develop a unit of instruction suitable for a secondary level classroom. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (PLNU students who complete this course are exempt from taking EDU 6026 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

Also offered as EDU 6026

### **EDU 4037 - Methods for Teaching Secondary Visual Arts**

**(3)**

This methods course introduces the study to the theory and practice of teaching visual arts in secondary schools. Content is designed to address content areas of the California Visual Arts Standards in middle and high schools. Topics include the following: instructional planning and classroom management, selection and classroom application of various forms of technology, evaluation and questioning techniques, state and national content standards and assessments, research methods, professional organizations (National Association of Art Educators), and the inclusive classroom. Each candidate develops a unit of instruction suitable for a secondary level classroom. Each candidate is required to prepare a final portfolio of the work in the course. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (Equivalent to ART 4055. PLNU candidates who complete this course or ART 4055 are exempt from taking EDU 6027 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree.)

Also offered as EDU 6027

### **EDU 4038 - Methods for Teaching Secondary Physical Education**

**(3)**

This methods course introduces the philosophical bases, instructional techniques and procedures, and the various elements involved in teaching physical education at the secondary level. Topics include the following: classroom teaching methods, practical application, and the California State Framework in Physical Education. Each candidate is

required to prepare a final portfolio of the work in the course. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (PLNU candidates who complete this course are exempt from taking EDU 6028 for their preliminary single subject credential program but need to replace it with three hours of a graduate-level elective for the MAT degree).

Also offered as EDU 6028

### **EDU 4039 - Content-Specific Pedagogy for Secondary Teachers**

**(3)**

This methodology course introduces candidates to a variety of assessments, instructional, and management strategies as related to secondary content subject matter. Candidates explore the delivery of instruction in the content areas in which they seek their credential with extensive research, practice, and reflection. Topics include the following: lesson planning and formative assessment. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched. (Equivalent to MUE 4054. PLNU candidates who complete this course or MUE 4054 are exempt from taking EDU 6029 for their preliminary single subject credential program but need to replace it with three hours of a graduate level elective for the MAT degree.)

### **EDU 4090 - Special Studies in Education**

**(1-3)**

Intensive study in a special topic in education under the direction of faculty member. May be repeated for a total of six units.

Prerequisite(s): Consent of instructor.

### **EDU 4099 - Research in Education**

**(1-3)**

Open to candidates of proven ability. May be repeated for a total of six units.

Prerequisite(s): Consent of the dean of the School of Education and of instructor.

## **Engineering**

### **EGR 1012 - Introduction to Engineering I**

**(1)**

An introduction to engineering as a career, including problem solving, engineering disciplines, design, teamwork, and communication. Introduction to multiple tools/techniques used by engineers, including data analysis, numerical methods, error analysis, and the use of computers for solving problems in physics and engineering.

Corequisite(s): MTH 1033 (or equivalent) and EGR 1012L

**EGR 1012L - Introduction to Engineering I Lab**

(1)

Laboratory to compliment EGR 1012. Meets two hours per week.

Corequisite(s): EGR 1012

**EGR 1023 - Introduction to Engineering II**

(2)

An introduction to the engineering design process building on the tools introduced in EGR 1012. In addition to designing a prototype, students learn the engineering aspects of teamwork development, ethics, professionalism, and reporting.

Prerequisite(s): EGR 1012 with a grade of C- or higher.

Corequisite(s): EGR 1023L

**EGR 1023L - Introduction to Engineering II Lab**

(1)

Laboratory to compliment EGR 1023. Meets two hours per week.

Corequisite(s): EGR 1023 with a grade of C- or higher.

**EGR 1043 - Introduction to Computer Programming**

(2)

Introduces the syntax of a high level programming language with emphasis on the programming environment and the use of the constructs of the language to write simple application programs. Topics include data types, sequential, conditional, and iterative statements, one and multi-dimensional arrays, simple graphical animation, the use of objects, and I/O. Programming assignments get progressively more complex and designed to demonstrate the use of computing in a variety of disciplines including the natural sciences.

Prerequisite(s): MTH 1013 (or equivalent)

Corequisite(s): EGR 1043L

Also offered as CSC 1043

**EGR 1043L - Introduction to Computer Programming Lab**

(1)

A lab course designed for a hands-on exploration of Introductory Computer Programming. Meets two hours per week.

Prerequisite(s): MTH 1013 (or equivalent)

Corequisite(s): EGR 1043  
Also offered as CSC 1043L

### **EGR 1054 - Objects and Elementary Data Structures**

**(3)**

As a continuation of EGR 1043, this course deals with more advanced computing constructs and ideas, reinforced in weekly labs. Topics include object-oriented design, inheritance, polymorphism, exception handling, and recursion, along with more intentional development and debugging strategies. Linked lists are introduced as a viable option for implementing basic ADT's. Students gain experience in the design of graphical user interfaces, event driven programming, and larger programming projects.

Prerequisite(s): EGR 1043 with a grade of C- or higher.  
Corequisite(s): EGR 1054L  
Also offered as CSC 1054

### **EGR 1054L - Objects and Elementary Data Structures Lab**

**(1)**

A lab course designed for a hands-on exploration of Objects and Elementary Data Structures. Meets two hours per week.

Prerequisite(s): EGR 1043 with a grade of C- or higher.  
Corequisite(s): EGR 1054  
Also offered as CSC 1054L

### **EGR 2014 - Engineering Mechanics: Statics**

**(3)**

Statics of particles and rigid bodies as applied to engineering design. Topics include vector algebra, forces, moments and couples, conditions of equilibrium, friction, and virtual work.

Prerequisite(s): PHY 2044 with a grade of C- or higher.  
Corequisite(s): EGR 2014L

### **EGR 2014L - Engineering Mechanics: Statics Lab**

**(1)**

A lab course designed for a hands-on exploration of Engineering Mechanics. Meets two hours per week.

Prerequisite(s): PHY 2044 with a grade of C- or higher.  
Corequisite(s): EGR 2014

### **EGR 2024 - Electronics and Circuit Analysis**

**(3)**

Theory and analysis of electrical and electronics circuits. Topics include basic circuit elements, laws of circuit analysis,

Kirchoff's laws, loop and nodal analysis, differential equations for modeling electronic circuits, AC and DC analysis, transient analysis, complex impedance and steady state analysis, Laplace Transforms, and frequency domain analysis.

Prerequisite(s): PHY 2054

Corequisite(s): EGR 2024L

### **EGR 2024L - Electronics and Circuit Analysis Lab**

**(1)**

A lab course designed for a hands-on exploration of Electronics and Circuit Analysis. Meets two hours per week.

Prerequisite(s): PHY 2054 with a grade of C- or higher.

Corequisite(s): EGR 2024

### **EGR 3013 - Nuclear Physics**

**(2)**

A survey of nuclear physics including nuclear models, law of radioactive decay, radiation detection, and applications of nuclear science in engineering and medicine.

Prerequisite(s): PHY 1054 with a grade of C- or higher or PHY 2054 with a grade of C- or higher.

Corequisite(s): EGR 3013L

Also offered as PHY 3013

### **EGR 3013L - Nuclear Physics Lab**

**(1)**

A lab course designed for a hands-on exploration of Nuclear Physics. Meets two hours per week.

Prerequisite(s): PHY 1054 with a grade of C- or higher or PHY 2054 with a grade of C- or higher.

Corequisite(s): EGR 3013

Also offered as PHY 3013L

### **EGR 3014 - Operating Systems**

**(4)**

A systems course focusing on operating systems, topics include basic operating system design, process management, device management, memory management, and file systems. Students are introduced to the basics of software evolution, reliability, concurrency, security and protection in the context of single-core, multi-core, distributed, and virtual environments. Class members gain experience using both GUI and command-line interfaces. In the course of implementing the CPU scheduling simulation, students understand the importance of thorough system testing and attention to system specs as they try to make parts of their systems work with those designed by their teammates.

Prerequisite(s): CSC 2052 with a grade of C- or higher or CSC 2054 with a grade of C- or higher.

Also offered as CSC 3014

### **EGR 3023 - Software Engineering**

**(3)**

This course offers an in-depth treatment of the software development process. Software analysis and design study emphasizes an object-oriented approach that is introduced and contrasted with traditional design methodologies. CASE tools are used during the design process.

Corequisite(s): CSC 2054

Also offered as CSC 3023

### **EGR 3034 - Mechanics of Materials**

**(3)**

Theory and analysis of forces, stress, and strain within engineering structural elements and members. Topics include the theory of stress and strain, elastic and plastic deformation, modes of structural failure, compression and tension, torsion, shear, shafts, beams, posts, transformations of stress and strain.

Prerequisite(s): PHY 2044 with a grade of C- or higher.

Corequisite(s): EGR 3034L

### **EGR 3034L - Mechanics of Materials Lab**

**(1)**

A lab course designed for a hands-on exploration of Mechanics of Materials. Meets two hours per week.

Prerequisite(s): PHY 2044 with a grade of C- or higher.

Corequisite(s): EGR 3034

### **EGR 3043 - Analytical Mechanics: Dynamics**

**(3)**

Newtonian mechanics, dynamics of particles and rigid bodies, oscillatory motion, central forces, inertial tensors, Lagrangian and Hamiltonian formulations.

Prerequisite(s): PHY 2054 with a grade of C- or higher and MTH 2074 with a grade of C- or higher.

Recommended: MTH 3033

Also offered as PHY 3043

### **EGR 3053 - Analog Electronics**

**(2)**

AC/DC circuit analysis, transients, characteristics of equivalent circuits for diodes, transistors, power supplies, transistor/operational amplifiers, and feedback applications.

Prerequisite(s): EGR 2024 with a grade of C- or higher.

Corequisite(s): EGR 3053L

### **EGR 3053L - Analog Electronics Lab**

**(1)**

A lab course designed for a hands-on exploration of Analog Electronics. Meets two hours per week.

Prerequisite(s): EGR 2024 with a grade of C- or higher.

Corequisite(s): EGR 3053

**EGR 3063 - Electricity, Magnetism, and Waves I**

**(3)**

Classical electromagnetism including topics in electrostatics, magnetostatics, fields in matter, electromagnetic induction, and Maxwell's equations.

Prerequisite(s): PHY 2054 with a grade of C- or higher and MTH 2074 with a grade of C- or higher.

Recommended: MTH 3033

Also offered as PHY 3063

**EGR 3073 - Networking and Security**

**(3)**

This course provides an introduction to modern computer network technologies. Students gain an understanding of networking fundamentals including layering and the old OSI model, protocols, standards, and network services. LANS, MANS, WANS, Internet and wireless networks are covered. The class will also cover the basics of network security. The class includes hands-on activities.

Prerequisite(s): CSC 1054 with a grade of C- or higher or EGR 1054 with a grade of C- or higher and Junior standing.

Also offered as ISS 3073

**EGR 3083 - Electricity, Magnetism, and Waves II**

**(3)**

Electrodynamics with an emphasis on application of Maxwell's equations particularly to electromagnetic radiation.

Prerequisite(s): EGR 3063

Also offered as PHY 3083

**EGR 3093 - Digital Electronics**

**(2)**

Boolean algebra, logic gates, combinational logic circuits, state minimization, flip/flops, sequential circuits, asynchronous and synchronous counters. Course emphasizes design aspects using electronic design software.

Prerequisite(s): EGR 2024 with a grade of C- or higher.

Corequisite(s): EGR 3093L

**EGR 3093L - Digital Electronics Lab**

**(1)**

A lab course designed for a hands-on exploration of Digital Electronics. Meets two hours per week.

Prerequisite(s): EGR 2024 with a grade of C- or higher.

Corequisite(s): EGR 3093

### **EGR 4003 - Information and Computer Security**

**(3)**

This course provides an overview of modern topics in information and computer security, including: network security, web security, compliance and operational security, threats and vulnerabilities, privacy and anonymity, application, data and host security, access control and identity management, cryptography. This class includes theoretical analysis and hands-on activities.

Prerequisite(s): CSC 3014 or EGR 3014, and ISS 3073 or EGR 3073

Also offered as ISS 4003

### **EGR 4013 - Thermodynamics**

**(3)**

Fundamental concepts of thermodynamics and statistical mechanics; applications to both classical and quantum systems.

Prerequisite(s): PHY 2054

Recommended: MTH 3033

Also offered as PHY 4013

### **EGR 4042 - Embedded Systems and Robotics**

**(1)**

Embedded systems are everywhere. They are in your watch, your phone, and your TV. Embedded systems are also found in cars, airplanes, and robots. They are a fundamental part of the "internet of things." In this hands-on course you will learn the basics of designing, interfacing, configuring, and programming embedded systems by working with robots.

Prerequisite(s): EGR 2024 with a grade of C- or higher.

Corequisite(s): EGR 4042L

### **EGR 4042L - Embedded Systems and Robotics Lab**

**(1)**

A lab course designed for a hands-on exploration of Embedded Systems and Robotics. Meets two hours per week.

Prerequisite(s): EGR 2024 with a grade of C- or higher.

Corequisite(s): EGR 4042

### **EGR 4054 - Computer Architecture and Assembly Language**

**(4)**

This course covers the fundamentals of current pipelined computer designs. Experience with assembly language programming and digital logic and circuit design will be used to motivate the need for certain facets of the more general instruction set architecture. Throughout the course, performance issues, hardware constraints, and memory hierarchy will be shown to inform processor design. Additional topics include integer and floating point arithmetic, I/O and considerations surrounding multi-core architectures.

Prerequisite(s): CSC 1054 with a grade of C- or higher or EGR 1054 with a grade of C- or higher.

### **EGR 4063 - Solid State Physics**

**(3)**

An introduction to the study of solids, including crystal structure, reciprocal lattices, crystal binding, phonons, and electron band theory.

Prerequisite(s): PHY 2054 with a grade of C- or higher.

Also offered as PHY 4063

### **EGR 4072 - Senior Project I**

**(2)**

This course provides students (teams with) the opportunity to design and build a prototype of a project of their choosing. The students will give an oral presentation of their project in a design review setting. This course will normally be completed in a student's senior year.

Prerequisite(s): Consent of instructor.

### **EGR 4082 - Senior Project II**

**(2)**

This course provides students (teams with) the opportunity to hone and finish building the project design initiated in EGR 4072. The students will give an oral presentation of their project in a design review setting. This course will normally be completed in a student's senior year.

Prerequisite(s): Consent of instructor.

### **EGR 4090 - Special Topics in Engineering**

**(1-4)**

The topics chosen in engineering depend on regular or visiting faculty expertise as well as student demand. May be repeated (with varied topics) up to a total of six units.

Prerequisite(s): Consent of instructor.

### **EGR 4092 - Internship in Engineering**

(2)

A supervised experience in which the student works with industry professionals to gain experience in engineering. May be repeated to a total of four units. This course is graded Credit/No Credit only.

Prerequisite(s): Student must have taken at least two upper-division engineering or physics classes and consent of instructor.

### **EGR 4099 - Independent Studies in Engineering**

(1-4)

Independent investigation, under the supervision of a faculty member, of a specific problem in physics or engineering.

Prerequisite(s): Consent of instructor and department chair.

### **EGR 4103 - Electrical Signals and Systems**

(3)

Advanced techniques for the analysis of analog electrical systems. Topics include: frequency domain analysis, Laplace transforms, Fourier series, Fourier transforms, and continuous versus discrete signal analysis. Frequency response is analyzed using transfer functions, Bode plots, and spectral plots. Digital Signal Processing (DPS) is introduced. Two lectures and one laboratory each week.

Prerequisite(s): EGR 2024 with a grade of C- or higher and MTH 3033 with a grade of C- or higher.

## **Environmental Science**

### **EVS 3096 - Advanced Biology**

(3)

Field-intensive course that explores the field biology of various organisms and ecosystems in order to understand fundamental principles of life. Applies to off-campus field immersion programs such as Au Sable Institute of Environmental Studies, Quetzal Educational Research Center (QERC), Creation Care Study Program (CCSP), and School for Field Studies (SFS).

### **EVS 3097 - Advanced Ecology**

(3)

Field-intensive course that examines the interrelationships between organisms and their biotic and physical environments. Applies to off-campus field immersion programs such as Au Sable Institute of Environmental Studies, Quetzal Educational Research Center (QERC), Creation Care Study Program (CCSP), and School for Field Studies (SFS).

### **EVS 3098 - Advanced Ecological Applications**

(3)

Field-intensive course that applies technological and/or computational tools to increase scientific understanding,

monitor environments, restore damaged ecosystems, and/or solve human and environmental problems. Applies to off-campus field immersion programs such as Au Sable Institute of Environmental Studies, Quetzal Educational Research Center (QERC), Creation Care Study Program (CCSP), and School for Field Studies (SFS).

### **EVS 3099 - Public Policy and Stewardship**

**(3)**

Course that explores public policy, conservation practice, and/or sustainable development under various real-world contexts to manage and/or restore ecosystems and improve human well-being. Applies to off-campus field immersion programs such as Au Sable Institute of Environmental Studies, Quetzal Educational Research Center (QERC), Creation Care Study Program (CCSP), and School for Field Studies (SFS).

## **Environmental Studies**

### **ESI 2050 - Introduction to Environmental Studies**

**(3)**

A general introduction and overview of the discipline of environmental studies (including history and practice) that serves majors, potential majors, and other interested students. Attention will be given to methodology.

Prerequisite(s): Fulfillment of the College Composition requirement. In some cases, concurrent enrollment may be allowed at the consent of the instructor.

### **ESI 4020 - Advanced Environmental Studies**

**(3)**

A senior-level capstone course for Environmental Studies majors and an advanced course for non-majors, incorporating practices and experiences from concentration coursework as well as the internship. Priority is given to students declared in the Environmental Studies major.

Prerequisite(s): ESI 2050 or consent of instructor.

### **ESI 4070 - Internship in Environmental Studies**

**(2)**

A supervised experience in which the student works off campus in an established program, public service, or business that connects to environmental concerns. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated up to a total of four (4) units of credit.

Concurrent: ESI 2050 or consent of instructor.

## **Exercise and Sport Science**

### **EXS 2001 - Fundamentals of Fitness Assessment and Development**

(2)

Fundamental knowledge needed to assess and implement health and fitness programs. Students will assess and develop the five health-related components of physical fitness: body composition, muscular strength, muscular endurance, flexibility and cardiorespiratory fitness.

**EXS 3001 - Fitness Assessment and Exercise Prescription**

(3)

In-depth study of the principles and techniques used to assess health and physical fitness and to design and prescribe exercise programs and physical activities. Students will acquire the knowledge and skills necessary to address the fitness needs of apparently healthy populations, those with medical considerations, and athletic populations. Special fee.

Prerequisite(s): Junior or Senior standing.

Corequisite(s): EXS 3001L

**EXS 3001L - Fitness Assessment and Exercise Prescription Lab**

(1)

Practical laboratory experiences in fitness assessment and exercise prescription. Special fee.

Corequisite(s): EXS 3001

**EXS 3030 - Nutrition for Exercise and Sport Performance**

(3)

This course provides essential knowledge in the roles of nutrients to improve and sustain optimal performance in sport and exercise. Specific emphasis will be placed on understanding the functions of macro and micronutrients in the body which fuel energy systems, prevent injury, enhance recovery and optimize health. Current research and practices will be incorporated that use nutritional intervention to improve performance.

Prerequisite(s): PED 2000 or consent of instructor.

**EXS 3070 - Praxis of Strength Training and Conditioning**

(3)

This course provides an in-depth study of the principles and techniques used to assess health and physical fitness and to design and prescribe exercise programs and physical activities. Students will acquire the knowledge and skills necessary to sit for the NSCA's certification exam or another fitness related certification exam (e.g. ACSM, ACE, NASM).

Prerequisite(s): KIN 3040

**EXS 4080 - Leadership in the Fitness Professions**

(3)

This course surveys general organizational leadership principles and their application to the organization and administration of the health/fitness, coaching and physical education professions. Emphasis is on business management principles and operational concepts, including organizational structure, facility management, industry standards and guidelines, and personnel management practices.

## **Family and Consumer Sciences**

### **CHD 1020 - Child and Adolescent Development**

(4)

The study of physical, social, emotional, cognitive growth and development of the child, from prenatal months through adolescent years. Classroom lecture and course readings are supplemented by laboratory field experience in the Early Childhood Learning Center or other centers designed for children and adolescents, and appropriate projects. Must not be taken concurrent to CHD 1050.

### **CHD 1050 - Human Development**

(3)

A study of the physical, social, emotional, and intellectual development of the individual throughout the lifespan. Observation and field experience required. Must not be taken concurrent to CHD 1020.

### **CHD 3003 - Infant and Toddler Development**

(3)

The study of the process of prenatal, infant and toddler growth and development which will include: exploration of the impact of culture, atypical behavior and development, socialization techniques, interpersonal relationships of infant-toddler and caregivers, suitable environments for health and safety, and legal requirements for infant-toddler care. Classroom lecture and course readings are supplemented by required observation and field experience.

Prerequisite(s): CHD 1020 or CHD 1050

### **CHD 3010 - Early Childhood Education**

(4)

The study of early childhood education theories and philosophies. Practice of principles, curriculum, methods, material and special needs of preschool and children in first through third grade are discussed. Students gain experience in appropriate lesson plan writing with developmentally appropriate practices. A supervised field experience is required.

Prerequisite(s): CHD 1020

### **CHD 3013 - Adolescent Development in the Family Context**

(2)

Developmental changes and challenges of adolescents and their families as they deal with current societal issues, autonomy, peer relationships, sexuality, parent-adolescent communication, values, teen pregnancy, substance abuse,

and adolescents as parents. These major issues affecting adolescents and their families are examined using data from a variety of theoretical, empirical, and clinical viewpoints. Fieldwork is required.

Prerequisite(s): CHD 1020 or CHD 1050

### **CHD 3055 - Development of Special Needs Children**

**(3)**

The study of strategies of guiding children with special needs. The role of the adults influencing the child's social, emotional, cognitive and physical growth and development are investigated. Family systems theories and educational methods, environments and programs are explored as it relates to the special needs child's developmental stages. A wide variety of children's exceptionalities are included giftedness, physical challenges, learning disabilities, and behavior disorders. Observation, field experiences, and visitations to community educational facilities are required. Fifteen hours for field experience.

Prerequisite(s): CHD 1020 or CHD 1050, or consent of instructor.

### **CHD 3085 - Parent Education and Family Development**

**(2)**

This course provides students with a comprehensive study of family development. Students will explore family education models including an understanding of diversity in family systems based on race, culture, ethnicity, socio-economic status, and child-rearing practices. Students will strengthen their ability to meet needs of families by developing a parent education workshop and handbook.

### **CHD 4020 - Child Development in the Family and Community**

**(4)**

A study of the development of the child as influenced by the family, school, and community. Emphasis is placed on analyzing the social influences on family systems, child care, schools, poverty, peer groups, mass media, diverse cultures and community services on children's development. Field experience required.

Prerequisite(s): CHD 1020 or CHD 1050. Junior or Senior standing only.

### **CHD 4025 - Child and Adolescent Nutrition and Health**

**(3)**

A study of the effect of nutrition and health on the development of the child, pre-natal through adolescent. Attention is given to nutrition related health problems and dietary planning. Computer applications required.

Prerequisite(s): NUT 2025 or FCS 3005

### **CHD 4060 - Administration and Supervision in Early Childhood Education**

**(4)**

Application of basic principles in the guidance of young children. To examine the multidimensional roles of the early childhood program director/administrative styles, management tools and interpersonal skills that contribute to effective

leadership. Supervised field experience in an early childhood education setting is required.

Prerequisite(s): CHD 3010

### **CHD 4070 - Practicum in Child Development**

**(3)**

Supervised practicum in laboratory experience in an approved early childhood center. It is designed for students who plan careers in early childhood and family support programs. Students become familiar with observing the development, guiding, and teaching children in a preschool program. This course may be used toward the experience component of the State of California Child Development Site Supervisor Permit.

Prerequisite(s): CHD 1020 and CHD 3010 and consent of instructor.

### **CHD 4075 - Internship in Child Development**

**(2 or 4)**

Career-related work experience in which students observe and actively participate using their acquired skills and knowledge. Students are under the supervision of a department faculty supervisor and a qualified on-site supervisor. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. For 2 units of credit, 80 hours of work experience is required; for four units, 160 hours of work experience is required. May be repeated up to a total of four units. Graded Credit/No Credit.

Prerequisite(s): Senior standing in the Department of Sociology, Social Work, and Family Sciences, CHD 1020, and consent of department chair.

### **CHD 4090 - Special Studies in Child Development**

**(1-4)**

An individualized and detailed research study from selected topics. The research topic must be approved and supervised throughout the semester. May be repeated up to a total of four units.

Prerequisite(s): Senior standing in the Department of Sociology, Social Work, and Family Sciences. Consent of department chair.

### **CHD 4097 - Senior Seminar**

**(2)**

Analysis and discussions of interrelated issues found within the areas of Family Sciences. Topics studied are research, public policy, professionalism, leadership, and historical significance. In this capstone, the student will create a professional eportfolio including introduction, professional statements, personal assessments, achievements, community service, practical application and work samples will be included. Each student will present his or her personal eportfolio to a panel of interested parties for assessment. This capstone gives students the opportunity to develop a professional voice. Required of all seniors graduating in the Department of Sociology, Social Work, and Family Sciences.

Prerequisite(s): SOC 1001 and Senior standing in the Department of Sociology, Social Work, and Family Sciences.

### **FCS 1001 - Introduction to Family and Consumer Sciences**

**(1)**

An introduction to the integration of professional specializations within the Department of Sociology, Social Work, and Family Sciences. A wide array of options in each major and the career paths are presented. Discussion addresses how each specialization enhances the quality of life for individuals, families and communities.

### **FCS 2030 - Personal and Consumer Financial Management**

**(2)**

Relationship of values, standards and goals to the allocation of resources and the personal and consumer decision-making process. Emphasis is placed on the standards for selection of consumer goods, protection of the consumer, and conditions which influence individual and family management.

### **FCS 3000 - Quantity Food Production**

**(3)**

The fundamentals of food preparation, and application of these principles to quantity food production in commercial and non-commercial settings. Emphasis is placed on the use of quantity food preparation equipment, menu planning, and production. Lecture and laboratory.

Prerequisite(s): NUT 1010

### **FCS 3005 - Life Cycle Nutrition**

**(4)**

A study of nutrition specifically applied to the stages of human development and to the current nutritional issues with analysis of personal nutritional needs.

### **SWF 3015 - Health and Well-Being (GE)**

**(2)**

Examines a personal approach to healthful living that encompasses physical, mental, emotional, relational, spiritual, and environmental aspects of wellness and self-care. Course topics to include nutrition and exercise, cultivating joy, stress reduction, and gratitude.

## **Finance**

### **FIN 3035 - Business Finance**

**(3)**

This course provides an introduction to the principles that guide the financial management of a business enterprise, with an emphasis on decision-making and value creation. Topics include financial analysis, time value of money, risk

and return, security valuation, capital budgeting, cost of capital, forecasting and dividend policy.

Prerequisite(s): ECO 1002, MTH 1053 or MTH 1073, MTH 2003 and ACC 2002 or consent of instructor for non-majors.

### **FIN 3085 - Intermediate Finance**

**(3)**

This course provides a study of the major decision-making areas of financial management at an intermediate level, including cost of capital, capital budgeting, dividend policy and forecasting. Advanced topics include business valuation, mergers and acquisitions, bankruptcy and reorganization, securities offerings and finance for emerging businesses. Case studies will be used to apply concepts to business situations.

Prerequisite(s): FIN 3035

### **FIN 4015 - Investments**

**(3)**

A study of the principles and techniques of security and investment analysis. Topics include securities markets, risk and return, modern portfolio theory, investing in common stocks and fixed-income securities, portfolio management and derivative securities, including options and futures.

Prerequisite(s): FIN 3035

### **FIN 4025 - Financial Statement Analysis and Valuation**

**(3)**

An applications-oriented course designed to develop the tools essential to evaluate the performance and assess the value of companies from a decision maker's perspective. Topics include industry and competitive strategy analysis, accounting analysis, ratio analysis, forecasting, earnings and cash based valuation models, and equity and credit analysis.

Prerequisite(s): FIN 3035 and Senior standing only.  
Also offered as ACC 4025

### **FIN 4035 - International Finance**

**(3)**

A study of the principles and practices at the core of multinational finance, including the financial issues faced by corporations operating in an international environment. Topics include the global financial environment, foreign exchange markets and instruments, financing global firms, multinational capital budgeting and international portfolio diversification.

Prerequisite(s): FIN 3035

### **FIN 4090 - Special Topics in Finance**

**(3)**

Study in a special topic to be determined by the school. Open to Juniors and Seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **FIN 4091 - Independent Studies in Finance**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **French**

### **FRE 1001 - Elementary French I (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom.

### **FRE 1002 - Elementary French II (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom.

Prerequisite(s): FRE 1001

### **FRE 2050 - Intermediate French I**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Conducted in French.

Prerequisite(s): FRE 1002 or consent of instructor.

### **FRE 2051 - Intermediate French II**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Conducted in French.

Prerequisite(s): FRE 2050 or consent of instructor.

### **FRE 3003 - French Conversation**

**(3)**

A class concentrating in gaining oral proficiency around a series of different themes and acquiring command of the modern idiom as spoken in France.

Prerequisite(s): FRE 2051 or consent of instructor.

### **FRE 3015 - French Culture and Civilization**

**(3)**

A study of French civilization including a consideration of the present structure of French society and politics and a brief view of the achievements of France from the middle ages to the present.

Prerequisite(s): FRE 2051 or consent of instructor.

### **FRE 3020 - Survey of French Literature**

**(3)**

In this survey of major literary texts from the Middle-Age through modern period, students will recognize characteristic features of the texts and their genres, gain a sense of their historical, cultural, and literary contexts, and develop their own skills on critical reading, thinking, writing, and speaking. This course also introduces the student to the practice of close reading and literary analysis of all the major genres of literature: poetry, prose (fiction and non-fiction), and drama. It requires the study and mastery of literary terms, their definitions, and applications.

Prerequisite(s): FRE 2051 or consent of instructor.

### **FRE 3025 - Francophone Literature**

**(3)**

A study of Francophone texts from Quebec, the Caribbean, the Maghreb, Central Africa, Lebanon and Vietnam. This class addresses issues of national identity, post-colonialism and recent trends toward globalization.

Prerequisite(s): FRE 2051 - Intermediate French II

### **FRE 4020 - Studies in French Literature**

**(3)**

A study of a particular period, a particular genre, or a particular author of French literature. This class also addresses some theoretical perspectives on textual hermeneutics.

Prerequisite(s): FRE 3020

### **FRE 4090 - Special Studies in French**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated for a total of up to six units.

Prerequisite(s): Consent of instructor and department chair.

### **FRE 4095 - Literary Theory Capstone**

**(3)**

This capstone course provides an in-depth study of contemporary critical trends such as Structuralism, New Historicism, Feminism, Deconstruction, Gender Studies, Reader-response, and Psychoanalytic criticism. Students also familiarize themselves with the critical commonplace to which these new approaches are a response as well as with traditional overview of trends and styles from medieval through modern literature. This class also introduces the student to the technical study of literature. Students are expected to engage in some research and in written critical work. Preparation of a portfolio and summative evaluation is an important part of this class.

Prerequisite(s): FRE 3020 and Senior standing.

## **German**

### **GER 1001 - Elementary German I (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom.

### **GER 1002 - Elementary German II (GE)**

**(4)**

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom.

### **GER 2050 - Intermediate German I**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Conducted in German.

Prerequisite(s): GER 1002 or consent of instructor.

### **GER 2051 - Intermediate German II**

**(3)**

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Conducted in German.

Prerequisite(s): GER 1002 or consent of instructor.

### **GER 4090 - Special Studies in German**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated for a total of up to six units.

Prerequisite(s): Consent of instructor and department chair.

## **History**

### **HIS 1010 - World Civilizations I (GE)**

**(3)**

A survey of world societies from the earliest Eurasian civilizations to the era of European expansion in the 16th century.

### **HIS 1011 - World Civilizations II (GE)**

**(3)**

A survey of world societies from the era of European voyages of discovery to the formation of a global civilization in the late 20th century.

### **HIS 1020 - United States History from Early America to the Twentieth Century**

**(3)**

This survey course explores the major themes in American history from the age of European exploration to the turn of the twentieth century. This course begins with the Indigenous Peoples of the Americas, the subsequent colonization by Europeans, and the rise of slavery. It traces the major political, economic, religious, and social developments through the colonial era, the American Revolution, the formation of the U.S. government, the Civil War, and Reconstruction. Throughout the whole course, there will be an emphasis on the role of Native Americans, Black Americans (both slave and free), immigrants, and women.

### **HIS 2070 - Doing History**

**(4)**

An introduction to historical methods and the skills necessary for upper division work in history. While writing several short papers and one major research paper, students practice a wide range of research skills such as analyzing primary and secondary texts, working in archives and libraries, editing and revising, note taking, and documentation. In

addition, class readings on contemporary historiography and new methods such as cultural studies and material culture acquaint students with the wide range of approaches to history. Students also visit local libraries, archives, and museums, and are encouraged to investigate the opportunities available for internships and career development during their student years.

#### **HIS 3008 - Early Modern Europe**

(4)

Political, cultural, and intellectual development in continental Europe from 1648-1789. Emphasis is on the Scientific Revolution and Enlightenment, European expansion, and the social transformation of Europe leading to the French Revolution.

#### **HIS 3011 - European Intellectual History**

(4)

An upper-division seminar on the intellectual history of Europe from the 1780s through the end of the 19th century. Readings analyze the rise of the national intellectual traditions in England and on the Continent, including Rousseau, Kant, Hegel, Schopenhauer, Mill, Nietzsche, Freud, and others. Emphasis on the rise of philosophical irrationalism within the context of post-Enlightenment thought.

#### **HIS 3016 - Colonial and Revolutionary America**

(4)

North American history from initial Indian, Spanish, French, and British attempts to create working relationships to the fracturing of the French and Indian War, Revolutionary War, and War of 1812. The course emphasizes the diverse political experiments and struggles that characterize 17th and 18th-century North America, especially the intellectual roots and contemporary ideas manifested in the United States Constitution.

#### **HIS 3020 - United States History, 1815-1914**

(4)

An analysis of the political leadership of Andrew Jackson and Abraham Lincoln; the ideas of liberalism, nationalism, expansion, and industrialization; the social impact of religious revivals, slavery, and feminism; and the cataclysmic impact of the Mexican, Civil, and Spanish-American wars as the nation hurtled toward world power status after World War I.

#### **HIS 3040 - Russia to 1900**

(4)

A history of Russia from the establishment of Kievan Rus to the end of the 19th century, emphasizing the factors involved in the rise and development of the Russian Empire.

#### **HIS 3042 - Twentieth-Century Russia and the Soviet Union**

(4)

Beginning with the Revolution of 1905, this course examines the cataclysmic changes which have taken place in the Russian Empire and the Soviet Union during the 20th century.

**HIS 3050 - Islamic Civilization**

(4)

This course surveys the history of the Islamic world from the birth of Muhammad to 1800, with special focus on the religion of Islam and its impact on diverse Muslim societies.

**HIS 3055 - Modern Middle East**

(4)

This course is a history of the Middle East since 1800, focusing on European imperialism, colonialism, nationalism, Arab-Israeli conflicts, and Islamic revival movements.

**HIS 3056 - Early East Asia**

(4)

An introduction to the societies and cultures of pre-modern China, Japan, and Korea, three of the countries that make up the geographical and cultural unit of East Asia.

**HIS 3060 - Modern South Asia**

(4)

The Indian subcontinent from the Early Modern period to the present, with emphasis on the interaction between South Asia and the wider world, especially the modern West.

**HIS 3065 - Modern Japan and Korea**

(4)

This course explores the forces of continuity and change in the transformation of Japan and Korea since the mid-16th century; examines each country's role in the other's "modernization;" and explores the region's interaction with the West in the run-up to the "Pacific Century."

**HIS 3068 - Modern China Through Film**

(4)

This is a lecture class on films reflecting critically on historical interpretations of modern China. Emphasis is on the analysis of social and political themes reflected in the historical periods, the explication of cultural aspects, and the discussion of the narrative structure that develops a human tragedy or comedy through modern Chinese history.

**HIS 3069 - China in Revolution**

(4)

China in Revolution introduces the epic sweep of China's modern transformations examining the uneasy relationship

between past and present through major revolutions. The themes of the course are the changing understandings of China's cultural and political pasts and the problems and paradoxes of Chinese modernity.

#### **HIS 3070 - California History**

(4)

A comprehensive survey of California from prehistory through Spanish exploration, Mexican rule, and evolution as an American state since 1850. Emphasis is placed on comparing myth to reality, new directions in interpretation, and demonstrating how past social, economic, and political events have had an impact on the present.

#### **HIS 3072 - Two Years Before the Mast and the History of Coastal California**

(2)

While sailing on the Californian, a replica of an 1847 Revenue Cutter that patrolled the coast of California, this course uses R.H. Dana's *Two Years Before the Mast* as the focal point for studying the multi-cultural history of the California coast before the 1850s.

#### **HIS 3075 - African Cultures and Histories**

(3)

An interdisciplinary examination of the social and cultural histories of Africa with emphasis on the contact between Africans and Europeans since the late Nineteenth Century.

#### **HIS 3080 - America in the 1960's**

(4)

The study of this pivotal decade focuses on many social, economic, political, and military themes, including the Vietnam War, assassinations, Cold War, civil rights, the war against poverty, the space race, women's rights, urban riots, student unrest, music, and other cultural manifestations of alienation from the prevailing American culture.

#### **HIS 3090 - Off-Campus Cooperative Programs**

(3-15)

This course provides history credit for participation in an off-campus studies program approved by the department, such as historical and archaeological programs offered through other colleges and universities or those offered on a special basis by Point Loma. Application for approval is made to the departmental office.

#### **HIS 4013 - Nineteenth-Century Europe**

(4)

A survey of European society and politics from 1789 to 1914. Emphasis is placed on the French Revolution, the industrial revolution, national unification, and the European balance of power until 1914.

#### **HIS 4014 - Twentieth-Century Europe**

(4)

A survey of European history since World War I. Special attention is given to the rise of fascist regimes, the Cold War, and the opening of Eastern Europe since 1989.

**HIS 4015 - Europe and the World**

(4)

European imperialism since 1800 with an emphasis on the British Empire in India and the European scramble for Africa. Lectures and readings compare different national approaches to colonialism and Empire, assess the impact of Empire on the cultural and political developments of the European nations, and consider the legacy of colonialism in the 20th century.

**HIS 4025 - United States Since 1914**

(4)

Beginning with the outbreak of World War I, analyzes in detail the kaleidoscopic nature of contemporary American life. Emphasizes the shift from traditional values to modern relativism and secularism, the benefits and liabilities of being a world power, and the impact of great personalities as the nation threaded its way through depression, wars, scandals, and technological advance.

**HIS 4035 - Asian-American History: 1800 to the Present**

(4)

This course introduces the field of Asian-American history, which examines the experiences of people of Chinese, Japanese, Korean, South Asian, Filipino, and Southeast Asian ancestry in the United States.

**HIS 4036 - America in East Asia: 1800 to the Present**

(4)

This course is designed to acquaint students with the on-going interchange between the U.S. and East Asian countries. Although several units of the course are devoted to China, Japan, and Korea, attention is also given to such Southeast Asian countries as Vietnam and the Philippines. Among the themes explored in the course are tradition and modernization, collisions between East and West, democracy and authoritarianism, imperialism and nationalism, and interdependence and independence.

**HIS 4060 - Internship in History**

(1-4)

A learning experience in a work environment at selected sites. Students are under the supervision of an on-site supervisor and a faculty academic advisor. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. Repeatable for up to 4 units.

Prerequisite(s): Consent of instructor.

**HIS 4070 - Senior Seminar in History**

(4)

A capstone experience that brings together the knowledge and skills developed within the History major. Students will explore the various career paths available to History major graduates and will survey the theoretical and philosophical debates within the discipline of History. All History majors must take this course in the fall semester of their senior year. Not repeatable.

**HIS 4075 - Topics in Women's History (WS)**

(4)

This seminar explores themes in the field of women's history. Women's roles and historical contributions, the context of gender relations, and methodologies of social and intellectual history studied within a specific era or topic in American or world history.

**HIS 4077 - Gender and Law in the U.S. (WS)**

(4)

This seminar examines the relationship between gender and law from the colonial era to the present, with particular emphasis on the court cases and social/political movements that have shaped and continue to shape the legal relationships between women, men, and the nation. Throughout U.S. history, the struggle for women's rights has challenged and changed the legal system, and has helped to define the meanings of citizenship, gender, and sexuality. The readings for this class will historicize several debates that continue to be significant today. Therefore, the course is organized thematically, rather than chronologically, and the weekly class sessions will focus on students' thoughtful discussion and analysis of the reading material.

**HIS 4080 - San Diego Urban History**

(4)

Students will focus on a significant social, economic, or political theme in local urban history. Most of the research uses to best advantage the wide range of primary sources located in San Diego area archives. Working with the professor and fellow students, research papers are prepared to professional standards which may lead to publication in a historical journal.

**HIS 4084 - Ancient and Medieval Christianity**

(3)

A study of Christianity from its birth within a mixture of Jewish, Persian, Greek, and Roman cultures through its influence on the birth and development of Europe before the Reformation. The course emphasizes cultural history rather than theological debates. The major themes are missionary strategies, relationships between church and state, models of holiness and Christianity's vital role in the development of books, libraries, curricula, schools, and universities, including the special emphasis Christianity placed on historical confidence in the Bible. The course involves reading and discussing histories written by Luke, Eusebius, Augustine, Bede, and Bonaventure. The course welcomes non-majors.

**HIS 4086 - Modern Christianity**

(3)

A study of the Christian church since the Protestant Reformation, with consideration of American Christianity from its European background to the present.

#### **HIS 4087 - The Ancient Historians**

**(4)**

An intensive reading seminar using translations of ancient histories, this course focuses on the history of the Fertile Crescent and the Mediterranean from the beginnings of the Persian Empire to the fall of the Western Roman Empire as told by ancient historians. Use of evidence, conceptions of time and purpose, and the responsibilities of the historian are emphasized along with the narrative presented by historians such as Moses, Herodotus, Livy, Plutarch, Luke, Eusebius, and Tacitus.

#### **HIS 4090 - Special Studies in History**

**(1-4)**

An individualized study of a special topic or an internship applying the critical skills of the historian. The project must be approved and supervised by a department faculty member. May be repeated for a maximum of eight units.

Prerequisite(s): Consent of instructor.

### **Honors Scholars Program**

#### **HON 1000 - Introduction to Christian Scholarship (GE)**

**(1)**

This course introduces students to the Humanities Honors Program. Students will be introduced to the history and aspirations of the Christian liberal arts and ways that their education as aspiring scholars is situated within the larger context of God's will and purposes for their lives. Students will also be introduced to and participate in various acts of Christian devotion and works of mercy that are important practices of the Wesleyan tradition.

#### **HON 3099 - Foundations of Independent Research**

**(1-2)**

A course designed to assist students in doing the substantial background work needed to prepare for an honors project. This course is meant to support those students whose majors do not offer other means of preparing the foundation for such projects. This course is not a prerequisite for HON 4098 and may be repeated up to a total of 4 units. Graded Credit/No Credit.

Prerequisite(s): Consent of the director of the Honors Scholars Program and the respective department chair/school dean.

#### **HON 4098 - Honors Project I**

**(2)**

An intensive project to be completed by students who are designated as Point Loma Nazarene University Honors

Scholars. The course includes the first stage of a seminal study within a scholar's major under the supervision of a faculty advisor. In the liberal arts tradition, scholars from different disciplines meet together every week to discuss progress on their projects. The interdisciplinary portion of the course includes a workshop on project preparation and presentation. The experience culminates with the scholar's formal presentation of progress to his/her Advisory Committee not later than December 15. Graded Credit/No Credit.

Prerequisite(s): Normally restricted to students in the senior year with a cumulative grade-point average of 3.500 or higher. Approval of the director of the Honors Scholars program and the department chair/school dean in which the scholar's major is housed.

### **HON 4099 - Honors Project II**

(1)

A continuation of HON 4098. In this course, students meet regularly with their advisor, complete their project, and prepare for two formal presentations: one to their Advisory Committee and a second at the Point Loma Nazarene University Honors Conference held in mid-April. Honors projects are bound and kept as an annual collection in the university's Ryan Library. Graded Credit/No Credit.

Prerequisite(s): HON 4098

## **Humanities Honors Program**

### **HON 1001 - Rhetoric: Critical Communication (GE)**

(4)

This course sharpens students' rhetorical skills through research-based written and oral communication assignments. It also introduces to and equips them for critical analysis of various written, oral, and visual media.

### **HON 1002 - Introduction to Philosophy (GE)**

(3)

This course will help students develop an openness toward the pursuit of wisdom; nurture creative and reflective thinking by reading significant primary texts within the Western philosophical tradition; examine what it means for us to be human; examine the nature of language and meaning formation; examine ethical issues, such as the nature of courage and humility; introduce several philosophical issues found in the Western tradition including human knowledge, the relationship of the soul to the body, and the meaning of human existence; and wrestle with these issues as they relate to their lives.

### **HON 1020 - Foundations in Humanities I: Ancient/Medieval (GE)**

(4)

Designed to integrate knowledge of civilizations from the ancient and medieval worlds, this course will incorporate select primary texts that are foundational to the humanities by exploring how key questions regarding the ultimate nature of reality and truth, and what it means to be human are grappled with during these eras from a Christian perspective. The course will include coverage of historical, political, philosophical and literary works, along with important movements and works of music and art from these eras.

### **HON 1050 - Humanities Honors Abroad (GE)**

(3)

This hybrid course takes place inside and outside the classroom. It allows students to learn through traditional methods of instruction about a foreign culture, ethnic diversity, and differing worldviews and challenges in the contemporary world. It also permits students to travel abroad in May and immerse themselves in the sights, sounds, smells, and customs of a foreign place. Integrating classroom and experiential learning over the course of the Humanities Honors Program is the goal of this course.

**HON 2001 - Old Testament History and Religion (GE)**

(2)

Within the context of the history of Israel, this course provides an overview of the literature of the Old Testament with special attention to its religious and theological meaning. This course (in conjunction with HON 2002 in sequential quad terms) highlights the theological unity of the Christian Scriptures, while exploring the literary diversity of the two-testament canon. Taken in conjunction with HON 2002 in sequential Quad terms.

**HON 2002 - New Testament History and Religion (GE)**

(3)

Within the context of Christian origins, this course provides an overview of the canonical literature of the New Testament with special attention to its literary history and theological themes. This course (in conjunction with HON 2001 in sequential quad terms) highlights the theological unity of the Christian Scriptures, while exploring the literary diversity of the two-testament canon. Taken in conjunction with HON 2001 in sequential Quad terms.

**HON 2010 - Politics of Race, Class and Gender (GE)**

(4)

This course introduces and analyzes the construction of the social categories of race, class and gender through the lens of Christian faith and assesses how these structures have shaped the experiences of people in the United States and globally, placing special emphasis on how these categories interact and create intersecting systems of power, privilege and oppression. Students will examine political, historical, legal, and economic bases for the experiences of race, class and gender, as well as use autobiographical materials to understand how individuals experience their particular situations in this matrix.

**HON 2020 - Foundations in Humanities II: Renaissance/Enlightenment (GE)**

(4)

This course explores the key intellectual, artistic, social, religious, and political transformations in Europe in its efforts to comprehend the significance of the discovery of the New World, new ideas in art science and politics, and Europe's expansion into global trade by 1800. It explores changing ideas about God, humanity, and truth during this period from a Christian perspective. The effects of these European transformations on Europeans' relationships to non-European societies is also considered.

**HON 3010 - Christianity in Global Perspective (GE)**

(3)

This course introduces students to the rich depths and diverse expressions of the Christian tradition. Students will learn

about the historic roots and development of the Christian church and its theology and practices while engaging the variety of historical and contemporary expressions of Christian faith. Students will be challenged to recognize their own cultural biases even as they are encouraged find practical ways to deepen their commitment to and participation in the Body of Christ.

#### **HON 3020 - Foundations in Humanities III: 19th/20th Centuries (GE)**

(4)

In this course, students will assess the key intellectual, artistic, social, religious, and political developments in the Western world during the 19th and 20th Centuries from a Christian perspective. They will explore changing ideas about God, humanity, and truth during this period, as well as the effects of these developments on relations between Western and non-Western societies.

#### **HON 3050 - Humanities Honors Integrative Seminar (GE)**

(1)

This course helps students tie together their various honors experiences and coursework. Through mini-lectures, discussion, and reflective practice, students will consider the major themes of the Humanities Honors program and the relationship between these themes and their personal, spiritual, and intellectual growth. They will also identify possible areas of research interest for development in the Honors Scholars Program (HON 4098/HON 4099) or within their chosen majors.

### **Information Systems**

#### **ISS 3042 - Project Management and Quality Assurance**

(2)

This course discusses the processes, methods, techniques and tools that organizations use to manage their information systems and software development projects. This course covers a systematic methodology for initiating, planning, executing, controlling, and closing projects. It also looks at techniques including unit testing for quality assurance.

Prerequisite(s): CSC 1054 with a grade of C- or higher.

#### **ISS 3073 - Networking and Security**

(3)

This course provides an introduction to modern computer network technologies. Students gain an understanding of networking fundamentals including layering and the old OSI model, protocols, standards, and network services. LANS, MANS, WANS, Internet and wireless networks are covered. The class will also cover the basics of network security. The class includes hands-on activities.

Prerequisite(s): CSC 1054 with a grade of C- or higher and Junior standing.

#### **ISS 3092 - Topics in Cyber Security**

(2)

Study of an area of computer security otherwise included in the curriculum. Topics are determined by the needs and

interest of the students and faculty involved. May be repeated up to a total of four (4) units.

Prerequisite(s): CSC 3014 or consent of instructor.

### **ISS 4003 - Information and Computer Security**

**(3)**

This course provides an overview of modern topics in information and computer security, including: network security, web security, compliance and operational security, threats and vulnerabilities, privacy and anonymity, application, data and host security, access control and identity management, cryptography. This class includes theoretical analysis and hands-on activities.

Prerequisite(s): CSC 3014 and ISS 3073

### **ISS 4012 - Topics in Information Security**

**(2)**

Study of an area of information security otherwise included in the curriculum. Topics are determined by the needs and interest of the students and faculty involved. May be repeated up to a total of four (4) units.

Prerequisite(s): CSC 3014 or consent of instructor.

### **ISS 4014 - Data Base Systems and Web Integration**

**(4)**

An introduction to database management systems covering data models (including relational, network, hierarchical, and object oriented), relational databases, query languages, relational database design, transaction processing, distributed databases, and physical database design. Students will see examples from both business and science. They will become familiar with analysis tools and gain experience accessing databases using Python scripts and web-based gateways. Students will also design web interfaces for data bases.

Prerequisite(s): CSC 1054 with a grade of C- or higher.

### **ISS 4072 - Internship in Information Systems**

**(2)**

A supervised experience in which the student works with industry professionals to gain experience with managing information systems. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated to a total of four units. This course is graded Credit/No Credit only.

Prerequisite(s): Student must have taken at least two upper-division computer science or information systems courses for their major and consent of instructor.

### **ISS 4081 - Senior Seminar in Information Systems**

**(1)**

This one-unit capstone course is a seminar in which students give lectures on topics of general interest in Information

Systems. Issues related to vocation and calling are also discussed. Graded Credit/No Credit.

Prerequisite(s): One of CSC 4102, CSC 4133, HON 4098, ISS 4072, ISS 4102, ISS 4133, MTH 4102, or MTH 4133 and Senior standing (or Junior standing if a December graduate).

### **ISS 4102 - Independent Research in Information Systems I**

(2)

Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, consent of instructor, and Junior standing.

### **ISS 4121 - Independent Research in Information Systems II**

(1)

The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, ISS 4102, and consent of instructor.

### **ISS 4133 - Service Learning in Computer Information Systems**

(3)

Students working in teams design and implement a project using a broad spectrum of information systems knowledge to meet the needs of a community organization or the university.

Prerequisite(s): Consent of instructor and Junior standing.

## **Journalism and Writing**

Students are placed in introductory writing courses according to SAT verbal and ACT exam scores and a writing assessment administered during the first week of classes.

### **JRN 2015 - Newspaper Workshop**

(1)

Writing for publication: techniques and methods of mass communication. Laboratory experience in constructing one or more of the news forms of the weekly student publication: news reporting; feature writing, editorials, photojournalism. Required of staff members of the Point Weekly. JRN2015, WRI 2016, JRN 2017, JRN 2018 and COM 2075 may be repeated up to a combined total of eight units.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **JRN 2017 - Yearbook Workshop**

(1)

Writing for publication. Includes one or more of the following: planning and design, writing and editing, photojournalism, production and distribution. Required of staff members of the Mariner. JRN 2015, WRI 2016, JRN2017, JRN 2018 and COM 2075 may be repeated up to a combined total of eight units.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **JRN 2018 - Multimedia Workshop**

**(1)**

Hands-on production of an online, student-run media outlet providing both a training ground for students interested in gaining experience in various aspects of digital media as well as high quality news source for PLNU. Open to all students. JRN 2015, WRI 2016, JRN 2017, JRN2018 and COM 2075 may be repeated up to a combined total of eight units.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **JRN 2050 - Introduction to Journalism**

**(3)**

The study of the philosophy and practice of journalism with an emphasis on news gathering and writing as a process in traditional and current technological formats. Explores broadcasting, electronic media, and the role of journalists in society.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **JRN 3010 - Advanced Reporting**

**(3)**

Concentrated application of journalism techniques. Stresses off-campus reporting, interviewing and news gathering, journalism responsibility, and ethics. Addresses the news organization as a business and its impact on the reporter.

Prerequisite(s): JRN 2050

### **JRN 3012 - Television News Writing**

**(3)**

This course concentrates on writing news to pictures and sounds. Students do electronic newsgathering (ENG) in the field. Students also write, rewrite, and edit conversational hard news and feature news stories with the distinctive journalistic and production values of television in mind.

Prerequisite(s): JRN 2050, COM 2043

Corequisite(s): COM 3013 or JRN 3014

### **JRN 3013 - Television News Production**

**(3)**

Combines principles of journalistic writing and reporting with field production techniques of television news. Students

learn the basic concepts of reporting and producing a variety of television news stories, from simple anchor readers to complex packages.

Corequisite(s): JRN 3012 and COM/JRN3013 are co-requisites and must be taken in the same semester.  
Also offered as COM 3013

### **JRN 3014 - Computer-Assisted Reporting**

**(3)**

Introduces students to investigative journalism through hands-on laboratory work, including advanced Web research, public records requests, statistical analysis, databases, mapping, visual aids and data interactives.

Prerequisite(s): JRN 2050

### **JRN 3040 - Media Law and Ethics**

**(3)**

The study of major ethical journalistic philosophies, codes, and current practices. Interaction with professionals and discussions of ethical problems. Stresses responsible, fair, accurate journalism.

Prerequisite(s): JRN 2050

### **JRN 3045 - Editing**

**(3)**

Designed to develop the student's ability to improve and clarify all forms of written expression. Genres include newspapers, magazines, books, internet, as well as other forms of storytelling.

Prerequisite(s): JRN 2050

### **JRN 3050 - Special Topics in Journalism**

**(3)**

Focuses on current aspects of journalism with a different concentration each time it is offered. May be repeated for credit as content varies up to six units.

Prerequisite(s): JRN 2050

### **JRN 3055 - Public Relations Writing**

**(3)**

Practice in the planning, research, writing, editing, and evaluation skills needed to craft informative and persuasive messages in various media for various external and internal publics. Formats include print, broadcast, and web-based news releases, features, media kits, public service announcements, radio and video packages, brochures and newsletters, backgrounders and position papers.

Prerequisite(s): JRN 2050

### **JRN 4013 - Advanced Television News Production**

**(3)**

Provides students with the theory and organization of newscasts, as well as skills in conducting live news remotes, coordinating newscasts, supervising news personnel, anchoring, using news production software, and applying advanced reporting skills in various news situations.

Prerequisite(s): COM 3013 or JRN 3014 and JRN 3012  
Also offered as COM 4013

### **JRN 4014 - Long-Form Broadcast News**

**(3)**

Focuses on the development of skills at in-depth storytelling through radio and television news production. Students learn to research, script, and produce stories, while applying aural and visual news presentation techniques.

Prerequisite(s): COM 3013 or JRN 3014 and JRN 3012  
Also offered as COM 4014

### **JRN 4025 - Advanced Television Workshop**

**(1)**

Planning, production and presentation of television programming for multiple audiences. Group projects are viewed and critiqued by peers and the instructor for consideration of being included on the campus cable TV channel. Required of DRAFT upper division students working as staff for campus television channel. May be repeated up to a total of six units.

Prerequisite(s): COM 2043  
Also offered as COM 4025

### **JRN 4030 - Multimedia Journalism**

**(3)**

Students will build a portfolio website and produce advanced multimedia elements for it, blending text, audio, video, photos, data visualizations, and interactivity.

Prerequisite(s): COM 2043 and JRN 2050

### **JRN 4040 - Magazine Editing and Concepts**

**(3)**

The study of American magazines, including their planning, editing, and designing. The class project involves completing a prospectus and publishing a county-wide magazine.

Prerequisite(s): JRN 2050

### **JRN 4070 - Internship in Journalism**

(2)

A supervised experience in which the student works off campus in an established media business or public service media company. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated up to a total of four units of credit.

Prerequisite(s): JRN 2050, JRN 3040, and JRN 3050, or consent of instructor.

### **JRN 4095 - Senior Seminar in Multimedia Journalism**

(3)

Students create a multifaceted assignment that serves as a culminating academic and intellectual experience in the program. Using a variety of contents (text, audio, video, photo, data visualization) students apply the knowledge and skills gained in other journalism courses.

Prerequisite(s): Senior standing or consent of instructor.

### **WRI 0097 - Writing Skills Tutorial**

(0)

An intensive one-on-one tutorial required of those enrolled in College Composition courses designated as WRI 1010, WRI 1015, or WRI 1016 whose SAT or ACT scores qualify them, or who demonstrate on the assessment exam the need for extra instruction and support regarding the process of writing thesis-based manuscripts. Attention is given to grammatical correctness, sentence-level conventions, thesis construction, and coherence among well-developed paragraphs. Includes a laboratory fee.

### **WRI 1001 - Writing Across the University**

(3)

A first-semester integrative composition experience that serves the PLNU LEAP program. The course emphasizes critical thinking and idea development, and it encourages reflection on a wide array of topics and issues related to writing in the disciplines, all drawn from the first-year experience.

### **WRI 1010 - College Composition: Writing and Research - First Year Experience (GE)**

(4)

A comprehensive first-year composition experience in reading, writing, and critical thinking, centered on essay and research writing. The course emphasizes the processes of writing thesis-based manuscripts as an evolving product, with attention to sentence-level conventions and coherence among well-developed paragraphs. Library research and writing the source-based essay are major components of the course.

Prerequisite(s): A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 0097.

### **WRI 1015 - College Composition: Writing - First Year Experience (GE)**

(3)

A first-year composition experience in reading, writing, and critical thinking, centered on the essay. The course emphasizes the processes of writing thesis-based manuscripts as an evolving product, with attention to sentence-level conventions and coherence among well-developed paragraphs. Must take WRI 1016 to complete the required composition sequence.

Prerequisite(s): A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 0097. WRI1015 is a pre-requisite for WRI 1016.

### **WRI 1016 - College Composition: Research - First Year Experience (GE)**

(2)

A first-year composition experience in reading, writing, and critical thinking, centered on the research essay. The course emphasizes the process of writing as well as the manuscript as an evolving product. Library research and writing the source-based essay are the major components of the course.

Prerequisite(s): WRI 1015. A diagnostic exam given in the beginning of the semester will determine if the student needs to co-enroll in WRI 0097.

### **WRI 2016 - Literary Magazine Workshop**

(1)

Hands-on production of PLNU's literary magazine, from theme to finished product. Open to all students. JRN 2015, WRI2016, JRN 2017, JRN 2018 and COM 2075 may be repeated up to a combined total of eight units.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 2020 - Introduction to Creative Writing**

(3)

A general introduction and overview of creative writing (including practice in poetry, fiction, drama, and creative nonfiction) that serves majors, potential major, and other interested students. Attention will be given to methodology in teaching creative writing. Non-majors are strongly encouraged to complete Writing 2020 before taking WRI 3021, WRI 3022 or WRI 3023.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 3015 - Advanced English Composition**

(3)

A hands-on study of both rhetorical theory and professional writing techniques, with application to the student's own writing and to the teaching of writing.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 3021 - Creative Writing: Poetry**

(3)

Comprehensive instruction and guided workshop in writing poetry. Attention is also given to methodology in teaching poetry writing and to finding publication. May be repeated once for **major** credit with instructor's consent.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 3022 - Creative Writing: Fiction**

**(3)**

Comprehensive instruction and guided workshop in writing fiction. Attention is also given to methodology in teaching fiction writing and to finding publication. May be repeated once for **major** credit with instructor's consent.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 3023 - Creative Writing: Creative Nonfiction**

**(3)**

Comprehensive instruction and guided workshop in creative nonfiction writing, including personal essays and memoirs. Attention is also given to methodology in teaching nonfiction writing and to finding publication. May be repeated once for **major** credit with instructor's consent.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 3065 - Writing for Professional Careers**

**(3)**

Strategies for success in business and professional writing, incorporating psychology, theory, and method. Topics include reports, proposals, instructions, resumes, memos, and letters.

Prerequisite(s): Fulfillment of the College Composition requirement.

### **WRI 3070 - Writing Theory and Pedagogy**

**(2)**

A course designed to educate students in the individualized instruction of writing. The course concentrates on theory and pedagogy and on ways to respond effectively to student writing, in the classroom as well as in a writing center. Particular attention is given to the concrete application of writing theories to student work.

Prerequisite(s): Fulfillment of the College Composition requirement and LIN 3065.

### **WRI 4020 - Advanced Writing Workshop**

**(3)**

A senior-level capstone course for Writing majors and an advanced course for non-majors providing guided workshops, advanced practice, and advanced instruction in writing techniques and publication strategies used by professional writers. May be repeated once for **elective** credit with instructor's consent.

Prerequisite(s): WRI 3021, WRI 3022, or WRI 3023

### **WRI 4070 - Internship in Writing**

**(2)**

A supervised experience in which the student works off campus in an established media business or public service media company. Two units. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated up to a total of four units of credit.

Prerequisite(s): JRN 2050, JRN 3010, and JRN 3040, or consent of instructor.

### **WRI 4090 - Special Studies in Writing/Journalism**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated to a total of six units.

Prerequisite(s): Consent of instructor and department chair.

### **WRI 4099 - Research in Writing/Journalism**

**(1-3)**

Independent research under the guidance of a faculty member.

Prerequisite(s): Consent of instructor and department chair and Senior standing.

## **Kinesiology**

### **KIN 1001 - Orientation to Kinesiology**

**(1)**

An introductory course dealing with the expectations, opportunities, and the nature of the professions for which students of the department might prepare. Topics addressed include essential computer skills, library and internet search techniques, ethics, issues for women and men in the work place, trends in sport coaching, officiating, sports medicine and physical education, professional organizations, and personal accountability.

### **KIN 1002 - Emergency Medical Technician - Basic**

**(4)**

Introduces techniques of emergency care as outlined by the Emergency Medical Services Education Standards (NAEMSES). Provides the theoretical portion of the EMS standards, designed to prepare graduates to work in prehospital care (ambulance, firefighter) and emergency departments at EMT basic level.

### **KIN 1003 - Emergency Medical Technician Laboratory - Basic**

(4)

Provides lecture and laboratory activities to attain competency at the EMT-Basic level. Includes competency-based skills training, community experience to observe and assess patients in a hospital emergency department (ED) and ride-along experiences with a Basic Life Support (BLS) ambulance crew.

Pre or Corequisite: KIN 1002

**KIN 2030 - Lifestyle as Medicine (GE)**

(2)

This course empowers students to optimize health and well-being through the power of their own lifestyle behaviors. With a whole person approach to wellness and a focus on the six pillars of lifestyle medicine - regular physical activity, plant-predominant diet, stress management, restorative sleep, avoidance of risky substance use and cultivating positive social connection - students will be equipped with evidence-based approaches to prevent and manage chronic diseases in their families, communities, and their own lives.

**KIN 2080 - Care and Prevention of Athletic Injuries**

(2)

Recognition and initial care of commonly occurring injuries to active people. Objective methods of determining if a person is able to continue to play following injury or if referral to medical care is required. Special fee.

**KIN 2080L - Care and Prevention of Athletic Injuries Lab**

(1)

Skill acquisition in the techniques and procedures required of the Athletic Training clinician. Laboratory instruction on techniques of strapping, binding, and wound management. Required of Athletic Training majors. Special fee.

Corequisite(s): KIN 2080

**KIN 3012 - Motor Learning and Motor Development**

(3)

Motor Development: A study of motor, physical, and neuromuscular development from prenatal periods to old age. Motor Learning: A study of factors involved in the learning and performance of motor skills. Laboratory experiences included.

Prerequisite(s): Junior or Senior standing.

**KIN 3025 - Structural Kinesiology**

(2)

In-depth study of the structure and function of neuro-musculo-skeletal components of the human body in motion. Laboratory experiences included. Offered on a Quad basis.

Prerequisite(s): BIO 1030 or consent of instructor.

### **KIN 3027 - Applied Biomechanics**

**(2)**

Quantitative and qualitative assessments of human movement through the use of kinematic and kinetic means. Students apply the physics of motion to the understanding and teaching of movement in the physical activity and rehabilitative contexts. Offered on a Quad basis.

Corequisite(s): KIN 3025

### **KIN 3027L - Biomechanics Laboratory**

**(1)**

This class is designed to allow students to analyze human movement using laboratory and clinically based measures. This course will focus on the development of techniques of human movement analysis from structural and functional points of view. It will incorporate principles of mechanics as they apply to the analysis of human motion based on the anatomical, neuromuscular and mechanical principles learned in biomechanics class.

Pre or Corequisite: KIN 3027

### **KIN 3040 - Physiology of Exercise**

**(3)**

A study of the effects of vigorous physical activity upon the systems of the body; development of an understanding of factors which constitute training of the human body for high levels of health and physical performance. Laboratory experiences included. Special fee.

Prerequisite(s): BIO 1040 or consent of instructor.

### **KIN 3040L - Physiology of Exercise Lab**

**(1)**

Practical experiences in assessing human physiological responses to exercise and training.

Corequisite(s): KIN 3040

### **KIN 3075 - Movement Interventions and Corrective Exercise**

**(2)**

This course will provide an integrated approach to restoring and maximizing the human movement system. This course is designed to prepare the student to help clients/patients improve quality of movement. Through a practical and hands on approach students will learn how to analyze the functional aspect of human movement and identify impairments in the human movement system (postural abnormalities and muscular imbalances). Students will also learn how to prescribe functional exercises to correct faulty movement patterns in order to prevent client/patient injuries and improve performance.

Prerequisite(s): BIO 1030, BIO 1040 and KIN 3027

**KIN 4030 - Clinical Exercise Physiology**

**(3)**

Detailed analysis of the effects of exercise on the organ systems of the body. Lecture and laboratory experiences relating to apparently healthy populations as well as those with obesity, diabetes, and metabolic syndrome. Special fee.

Prerequisite(s): KIN 3040

**KIN 4040 - Measurement, Statistics, and Evaluation of Human Performance**

**(3)**

Study of measurement techniques and instruments, descriptive and inferential statistics and evaluation procedures in human performance. Assessment of cognitive, physical, and motor domains through test construction, administration, and interpretation are the central content areas of the course. An original research proposal including statistical design is required.

**KIN 4075 - Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities**

**(3)**

An intensive study of human neuromusculoskeletal structures through cadaveric dissection. Intended for students in advanced standing so that applied biomechanical functions and clinical ramifications can be examined critically and prospectively.

Prerequisite(s): Consent of instructor.

Also offered as KIN 6075

**KIN 4084 - Practicum in Kinesiology**

**(1-3)**

An on-campus experience in which the student works with a faculty member to gain experience in the field of Kinesiology. May be repeated for up to a total of six units.

Prerequisite(s): Consent of instructor.

**KIN 4088 - Internship in Kinesiology**

**(1-3)**

An off-campus experience under supervision of a faculty member in which the student gains experience in the field of kinesiology. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated for up to a total of six units.

Prerequisite(s): Consent of instructor.

**KIN 4090 - Special Studies in Kinesiology**

**(1-3)**

An intensive study by an individual or group under the direction of a faculty member of a topic in kinesiology not otherwise studied in the curriculum. Intended for junior or senior students in strong academic standing. May be repeated up to a total of six units.

Prerequisite(s): Consent of instructor and departmental chair.

### **KIN 4091 - Research in Kinesiology**

**(1-3)**

Independent investigation under faculty supervision of a specific problem in the field of kinesiology. Intended for junior or senior students in strong academic standing. May be repeated for up to a total of six units.

Prerequisite(s): Consent of department chair.

### **KIN 4095 - Kinesiology Capstone**

**(1)**

This course provides a culminating experience for students in their final year to connect their foundational knowledge in Kinesiology with their deeper vocation and calling. Students will learn to integrate the Christian faith into their professional lives, continue to discern their career calling, and prepare for graduate school or to enter the professional setting by developing cover letter and resume, engaging in networking and mock interviews, presenting a culminating senior project, and becoming professionally socialized.

Prerequisite(s): Senior standing only.

### **KIN 5010 - Evidence-Based Practice and Decision Making in Kinesiology**

**(3)**

This course will enable students to practice the judicious use of current best evidence in making decisions about the care of individual patients and clients. Students will learn to integrate the best external evidence with their clinical expertise and patient concerns to: ask a focused question to satisfy the health needs of a specific patient; find the best evidence by searching the literature; critically appraise the literature; apply the results in clinical practice; and evaluate the outcomes in patients. This course is offered online.

Also offered as KIN 6010

## **Learning Experiences for Academic Progress (LEAP)**

### **FST 1000 - Freshman Studies Seminar I**

**(1)**

A comprehensive introduction to topics within higher education relevant to beginning college students, designed to equip students for long-term collegiate persistence. In this course, emphasis is placed on study skills, critical thought, vocation exploration, and broadly applicable strategies for academic success.

### **FST 1001 - Freshman Studies Seminar II**

(2)

A continuation of the study of topics within higher education designed to further develop student capacities toward long-term collegiate persistence. In this course, students will gain additional experience in the areas of study skills, critical thought, vocation exploration, and broadly applicable strategies for academic success.

## **Linguistics**

### **LIN 3012 - Introduction to Linguistics**

(3)

The nature and structure of language (universals) via the science of linguistics, emphasizing the core areas of phonology, morphology, syntax, and semantics. Also introducing sociolinguistics, language acquisition and development, historical comparative methods, and neurolinguistics.

### **LIN 3065 - English Grammar and Usage**

(3)

A descriptive study of English morphology and syntax, focusing mainly on sentence parts and types. Also a study of the rules of standard American usage, which are prescribed by the literate society, and an introduction to text grammar.

### **LIN 4090 - Special Studies in Linguistics**

(1-3)

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated up to a total of six units.

Prerequisite(s): Consent of instructor and department chair.

## **Literature**

### **LIT 2000 - Literature and Culture (GE)**

(2)

A study of representative works of literature and cultural contexts.

### **LIT 2052 - World Literatures: Ancient and Medieval Literatures**

(3)

A study of the literary classics of the ancient and medieval periods, including various genres, particularly epic and drama. Focuses on major works of world literatures within their historical/cultural contexts, from the *Epic of Gilgamesh* to Dante's *Divine Comedy*.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 2054 - British Writers I**

(3)

Discussion and analysis of major movements, genres, authors, and works within their cultural contexts from 700 to 1798. Includes Beowulf and work by authors such as Chaucer, Julian of Norwich, Malory, Spenser, Lanyer, Marlowe, Shakespeare, Webster, Milton, Behn, Cavendish, Swift, and Pope.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 2055 - British Writers II**

(3)

Discussion and analysis of major movements, genres, authors, and works from the 1780s to the present. Includes works by authors such as Wollstonecraft, Blake, the Wordsworths, Coleridge, the Shelleys, Keats, Dickens, the Rossettis, the Brownings, Shaw, Wilde, Eliot, Woolf, Stoppard, and Friel.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 2056 - American Writers I**

(3)

A study of American writers from the colonial period to the mid-19th century. Representative writers are Bradstreet, Taylor, Franklin, Poe, Emerson, Thoreau, Douglas, Hawthorne, Melville, Wheatley, Stowe, and Whitman.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 2057 - American Writers II**

(3)

A study of American writers from the mid-19th century to the present. Representative writers are Clemens, Crane, Chopin, Frost, Eliot, Hurston, Hemingway, Faulkner, O'Connor, and Morrison.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 3000 - Literary Analysis**

(3)

This course introduces the student to the technical study of literature with a threefold emphasis. One, it instructs students in the practice of close reading and literary analysis of all the major genres of literature: poetry, prose (fiction and nonfiction), and drama, giving special attention to close reading and literary analysis of poetry. Two, it requires the study and mastery of literary terms, their definitions and applications. Three, it introduces students to historical literary periods and major schools of literary criticism and their approaches. A more extensive study of literary criticism is completed in LIT 4095. Students should use and master more fully Literature 3000 course content in subsequent literature courses.

Prerequisite(s): Fulfillment of the College Composition requirement.

**LIT 3025 - Children's Literature**

**(3)**

Consideration of the major classics and modern works recommended for children, including folk and fairy tales, animal stories, limericks and poetry, fantasy, and realistic stories for older children.

**LIT 3050 - World Literature (GE)**

**(3)**

An advanced study of works, primarily in translation. The course focuses on selected themes, topics, and/or eras and places the works in their cultural contexts.

Prerequisite(s): Fulfillment of the College Composition requirement, LIT 2000, and Junior or Senior standing.

**LIT 3051 - World Cinema (GE)**

**(3)**

An advanced study of representative works of world cinema. Class inquiry focuses on film narrative, art, and theory. Includes a variety of eras and genres, placing the works within their cultural contexts.

Prerequisite(s): Fulfillment of the College Composition requirement, LIT 2000, and Junior or Senior standing.

**LIT 3052 - Diverse Voices in American Literature (GE)**

**(3)**

An advanced study of selected works written by Americans who have lived on and written from the margins of American society.

Prerequisite(s): Fulfillment of the College Composition requirement, LIT 2000, and Junior or Senior standing.

**LIT 3053 - Women Writers (GE)**

**(3)**

An advanced study of selected works written by women; themes and genres studied may vary. The course focuses on questions related to gender, class, and race.

Prerequisite(s): Fulfillment of the College Composition requirement, LIT 2000, and Junior and Senior standing.

**LIT 4000 - American Literature to 1900**

**(3)**

An advanced study of selected authors and movements in American literature from its origins until 1900. The course will offer students the opportunity to study a limited number of texts in greater depth than is possible in a survey

course.

Recommended: Completion of LIT 2056 and LIT 3000.

### **LIT 4020 - American Literature Since 1900**

**(3)**

An advanced study of selected authors and movements in American literature since 1900. The course will offer students the opportunity to study a limited number of texts in greater depth than is possible in a survey course.

Recommended: Completion of LIT 2057 and LIT 3000.

### **LIT 4044 - Medieval Literature**

**(3)**

A study of British literature from 1100 through 1500, including Chaucer, Langland, the Gawain Poet, Marie de France, Julian of Norwich, and Mallory, and covering medieval drama, poetry, prose, romance, and tale. Students learn to read Middle English as well as the historical, religious, and social contexts of the literature.

Prerequisite(s): LIT 2054

Recommended: LIT 3000

### **LIT 4045 - 17th Century English Literature**

**(3)**

A study of British literature primarily from 1603 to 1688, focusing on the Scientific Revolution, the beginnings of modernism, the rise of women writers and discussions concerning gender, major religious movements, and the English Civil War.

Recommended: LIT 3000

### **LIT 4046 - Romantic Literature**

**(3)**

A study of the poetry, fiction, non-fiction prose, and drama of the Romantic Age (1780-1830), focusing on issues of the French Revolution, the rights of women, the abolition of the slave trade and slavery, the rise of democracy, industrialization and science, the philosophy of art, and the rise of new literary forms such as the Greater Romantic lyric and the gothic.

Recommended: LIT 2055 and LIT 3000

### **LIT 4047 - Victorian Literature**

**(3)**

A study of the fiction, non-fiction prose, poetry, and drama of the Victorian age (1837-1901), focusing on the period's dominant issues of Industrialization, Imperialism, the Woman Question and Sexuality, the Crisis of Faith and Science, and Aesthetics and Art's role in society.

Recommended: LIT 2055 and LIT 3000

**LIT 4048 - Postcolonial Classics and Theory**

**(3)**

An advanced study of selected post-colonial literature and post-colonial theory from the turn of the 19th century through 21st century. Class inquiry focuses on the effects of empire, colonization, neocolonialism, and globalization presented in these texts.

Recommended: Completion of LIT 2055 and LIT 3000.

**LIT 4050 - The Novel**

**(3)**

An advanced study of representative examples of the novel. Selected novels may include both novels written in English and novels translated into English.

Recommended: Completion of LIT 3000.

**LIT 4061 - Shakespeare**

**(3)**

A study of Shakespeare's comedies, histories, and tragedies within their cultural contexts, with special attention paid to rhetorical analysis and theatricality, as well as coverage of the political, philosophical, and religious implications of the plays.

Recommended: Completion of the general education literature requirement and LIT 3000.

**LIT 4090 - Special Studies in Literature**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated to a total of six units.

Prerequisite(s): Consent of instructor and department chair.

**LIT 4095 - Literary Theory and Scholarship**

**(3)**

This capstone course provides an in-depth study of contemporary critical trends such as Structuralism, New Historicism, Feminism, Deconstruction, Gender Studies, Reader-Response and Psychoanalytic criticism. Students also familiarize themselves with the critical commonplaces to which these new approaches are a response as well as with a traditional overview of trends and styles from medieval through modern literature. Students are expected to engage in some research and in written critical work. Preparation of a portfolio and summative evaluation is an important part of this class.

Prerequisite(s): LIT 3000 and Senior standing.

### **LIT 4099 - Research in English**

**(1-3)**

Independent research under the guidance of a faculty member.

Prerequisite(s): Consent of instructor and department chair and Senior standing.

## **Los Angeles Film Studies Center Courses**

The Los Angeles Film Studies Center (LAFSC) is a selective, off-campus cooperative program sponsored by the Council for Christian Colleges and Universities (CCCU) in partnership with Point Loma Nazarene University. Students must meet academic requirements and exhibit Christian commitment in order to be recommended to the program by PLNU, and the final selection is made by LAFSC. The program is open to students from any field of study and credits may be counted toward completion of the Media Communication major.

The following courses are offered at LAFSC only and are available to full-time students who have been accepted into the off-campus program:

### **COM 3071 - Professional Acting for the Camera (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC)**

**(3)**

An advanced workshop in the practice and process of acting for the camera aimed at students who have a desire to pursue acting as a career. Instruction includes an overview of current camera acting techniques and thorough discussion of the art of acting. The class primarily consists of acting scene work with all scenes being filmed and critiqued on the big screen. Students will also be required to pursue roles in student and independent films. Several class sessions throughout the course will be devoted to the business of acting for film and television in the Hollywood entertainment industry with an emphasis given to developing the materials and relationships necessary for a successful career.

### **COM 4070 - Hollywood Production Workshop (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC)**

**(4)**

A series of lecture/discussions focused on the development and integration of a Christian world-view as it relates to the Hollywood entertainment industry.

### **COM 4071 - Faith and Artistic Development in Film (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC)**

**(3)**

A study of the relationship between film and popular culture, with emphasis on Christianity's role in these arenas. The course examines how faith, film, and culture mutually influence one another.

**COM 4072 - Internship: Inside Hollywood (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC)**

**(6)**

Students participate in an internship experience in some aspect of the Hollywood film or television industry. These are non-paying positions primarily in an office setting such as development companies, agencies, personal management companies, production offices, etc. Orientation to the internship includes an overview of the creative and operational aspects of the Hollywood entertainment business, including the role of the Christian in entertainment.

Prerequisite(s): Consent of instructor.

**COM 4073 - Narrative Storytelling (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC)**

**(3)**

An introduction to the theory and practice of motion picture filmmaking. Topics include familiarity with filmmaking equipment; basic motion picture techniques; converting idea to image; the use of lighting, editing and sound in film; and the role of acting, directing, and good storytelling in the filmmaking process.

**COM 4074 - Professional Screenwriting (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC)**

**(3)**

An introduction to contemporary screenwriting, including an understanding of dramatic structure, character and dialogue development, and the writing process. Students complete a full-length screenplay for a feature film or "movie-of-the-week." Emphasis is given to the role of Christian faith and values as they relate to script content.

**COM 4080 - Independent Study (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC)**

**(3)**

This course may be setup by special request and arrangement. In order to be considered students may submit a portfolio and a project proposal. Students with approved projects will be appointed a mentor who is a professional in the Hollywood industry to supervise the project. Projects could include further development of a portfolio or reel, critical research, or a senior thesis project. The independent study option is not guaranteed and is intended for students with experience in a specific area of cinema or those needing to complete a senior project for graduation. The number of independent studies offered each semester is determined by Los Angeles Film Studies Center (LAFSC) faculty, the availability of a suitable mentor, and approval from the department chair.

## **Management**

**MGT 2012 - Principles of Management**

**(3)**

A study of the manager's role in the organization, including the tasks of planning, organizing, leading, and controlling.

Topics include an introduction to change and innovation, corporate culture, global business, ethics, corporate social responsibility, organizational structure, decision-making, human resources and leadership.

Prerequisite(s): BUS 1000

### **MGT 3020 - Organizational Behavior**

**(3)**

This course is a study of human behavior in social organizations, with a focus on the environment, structure, and human behavior at the individual, group, and organizational level. Emphasis is on acquiring skills and analytical concepts to improve organizational relationships and effectiveness.

Prerequisite(s): MGT 2012

### **MGT 3050 - Enactus Practicum**

**(0.5/1.0)**

This course provides students with practical experience in integrating entrepreneurial action and business knowledge through sustainable, service-oriented projects. Students will collaborate with faculty and local organizations and participate in regional and national competitions under the guidance of a faculty advisor. Credit determined by level of participation. May be repeated for up to six units. Enrollment by application. Sophomore, Junior, or Senior standing only.

### **MGT 3074 - Human Resource Management**

**(3)**

This course provides an overview of the human resources function in organizations, and related elements and activities. Topics include talent acquisition, compensation, performance appraisal, employment law, training and development, labor relations, and industrial organizational psychology.

Prerequisite(s): MGT 2012

### **MGT 3081 - Creativity and Innovation**

**(3)**

This course provides an understanding of the critical role of creativity and innovation in the development of new products or services. Students will explore how to develop an entrepreneurial mindset and an innovative culture within an organizational structure. The overall impact of ideation and how to implement and/or commercialize an innovative idea will also be addressed.

Prerequisite(s): MGT 2012

### **MGT 3082 - Applied Entrepreneurship**

**(3)**

This course provides an understanding and application of the fundamentals of entrepreneurship and the entrepreneurial mindset. Students will learn the series of steps required to take an original idea to a sustainable business concept. In

addition, students using an intrapreneurial mindset will collaborate with a local business to add value to their existing business strategy. Students will apply factors that are involved in a startup environment including opportunity recognition, competitive forces, venture context, risk and the importance of human capital for entrepreneurial success.

Prerequisite(s): MGT 3081 or consent of instructor.

### **MGT 4012 - Leadership Theory and Practice**

**(3)**

This course provides an investigation and review of a wide variety of leadership concepts, practices and theories. Topics include the role of leadership in organizations, the historical examination of various leadership models, the contributions of leaders to a modern society, and an examination of biblical leadership. Emphasis will be placed on practical applications of leadership.

Pre or Corequisite: MGT 3020

### **MGT 4016 - Perspectives on Leadership**

**(3)**

This course investigates and presents various perspectives and strategies associated with leadership. It focuses on the integration of faith, ethics, and character in the practice of effective leadership in business and other organizational settings. This course will include the reflection, analysis and discussion of various readings on leadership, faith and ethics, and the perspective on leadership from a wide range of special guest speakers.

### **MGT 4070 - Nonprofit Organization Management**

**(3)**

This course applies management principles to nonprofit organizations. Topics include managing volunteers, advising board of directors, accounting, investment, financial management, marketing, fund raising, ethics and responsibility to society and donors.

Prerequisite(s): MGT 2012 or consent of instructor. Senior standing only.

### **MGT 4084 - Operations Management**

**(3)**

This course provides an analysis of the information support systems which aid the manager in the decision-making process. Topics include supply chain, project and operations management, allocation of resources, planning and financial analysis.

Prerequisite(s): MTH 2003 or consent of instructor. Senior standing only.

Pre or Corequisite: MGT 3020 and MGT 3074

### **MGT 4088 - Strategic Management**

**(3)**

This course serves as a capstone experience for business students. It seeks to integrate the diverse areas of business

study through formal instruction, a competitive business simulation, case analysis and in-depth analysis of current problems facing businesses. Consideration is also given to the policy development process, corporate social responsibility, and the highest purposes of business.

Pre or Corequisite: FIN 3035, MGT 4088L and Senior standing.

### **MGT 4088L - Strategic Management Lab**

**(0)**

This lab is a required companion to the MGT4088 capstone course for seniors in the Fermanian School of Business. The lab consists of a comprehensive exam assessing knowledge in business disciplines. Students must pass the exam in order to graduate. Students who do not pass the exam will be required to complete a comprehensive project under the supervision of the Dean of the Fermanian School of Business (or the Dean's designee).

Pre or Corequisite: MGT 4088

### **MGT 4090 - Special Topics in Management**

**(3)**

Study in a special topic to be determined by the school. Open to juniors and seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **MGT 4091 - Independent Studies in Management**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Marketing**

### **MKT 3032 - Principles of Marketing**

**(3)**

A study of the role of marketing in the organization, in society, and in a global economy. Topics include market analysis, consumer and business marketing, product planning, pricing, distribution, promotion, and ethical issues. Special emphasis will be given to marketing strategy formulation.

### **MKT 3033 - Consumer and Organizational Buying Behavior**

**(3)**

A study of how individuals process information and make purchase decisions. Topics include internal influences such as consumer psychology and personality, and external influences such as social environment and situational influences. A qualitative research study will provide special emphasis on understanding buying behavior to develop a marketing strategy.

Prerequisite(s): MKT 3032

### **MKT 3036 - Integrated Marketing and Sales Communications**

**(3)**

A study of the marketing and sales communications functions. Topics include creative strategy and content, advertising media strategy and selection, public relations, sales promotions, personal selling theory, and ethics in marketing communication. Special emphasis will be given to developing an integrated marketing communications plan and a corresponding sales presentation to a client.

Prerequisite(s): MKT 3032

### **MKT 3050 - Digital Marketing Essentials**

**(3)**

A study of digital marketing theory, issues, strategies, practical uses and channels. Topics include the various digital elements of marketing variables, e-consumer behavior, website development design and implementation, analytics measurement, search engine marketing, mobile marketing and social media platforms to develop customer relationships.

Prerequisite(s): MKT 3032

### **MKT 4032 - Marketing Research and Analytics**

**(3)**

A study of various methods for gathering, analyzing, and reporting data to support data-driven marketing decisions. Topics include qualitative and quantitative research methods, data sources and collection methods to gain insights, interpret data and convert data into marketing decisions. Students will learn to evaluate different analytics approaches and will gain hands-on practice gathering and analyzing digital data sets containing both structured and unstructured data.

Prerequisite(s): MTH 2003 or consent of instructor and MKT 3032

### **MKT 4050 - Digital Marketing Content**

**(3)**

A study of digital marketing content issues relevant to marketers. Topics include content development and campaign execution for digital marketing channels, driving online traffic, generating leads and converting leads into customers.

Prerequisite(s): MKT 3032 and MKT 3050

### **MKT 4060 - Marketing Strategy**

**(3)**

This course is designed as a capstone course in the Marketing major to develop skills in strategic marketing management. Various "lab" experiences and client work provides practical ability to uncover of market/societal problem and need, connect insights to achieve a marketing objective, activation of appropriate marketing strategy and tactics, and the measurement of results. Special emphasis will be given to market analysis and marketing strategy formulation, marketing ethics and social responsibility, and career development in marketing.

Prerequisite(s): MKT 3032, MKT 3033, MKT 3036, MKT 3050, MKT 4032, and MKT 4050; Senior standing only.

### **MKT 4090 - Special Topics in Marketing**

**(3)**

Study in a special topic to be determined by the school. Open to juniors and seniors only. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

### **MKT 4091 - Independent Studies in Marketing**

**(1-3)**

An intensive study of a selected topic under the direction of an instructor. Qualified students as well as the proposal for study must be approved by the departmental instructor(s) and the school dean. Course is open to upper-division students. May be repeated for a maximum of six units.

Prerequisite(s): Consent of instructor.

## **Mathematics**

### **MTH 0099 - Elementary Algebra**

**(3)**

An introduction to algebra, including a study of the real number system, solutions of linear and quadratic equations, polynomials, factoring, systems of equations, graphing, inequalities, and radicals. Note: This course does not count toward the minimum 128 units required for graduation.

### **MTH 1013 - College Algebra**

**(3)**

A review and extension of elementary algebra, solutions of linear and quadratic equations, radicals, inequalities, linear and quadratic functions, polynomial functions, exponential and logarithmic functions, conic sections, sequences and series and graphing.

Prerequisite(s): MTH 0099 (or equivalent).

### **MTH 1021 - Calculus and Modeling**

**(1)**

An introduction to mathematical modeling using mathematical concepts from Calculus I. Graded Credit/No Credit.

Prerequisite(s): A score of 3 or more on AP 114 or AP 115 or credit for a calculus course from another institution.

**MTH 1031 - Computer Aided Calculus**

**(1)**

Introduction to the use of a computer algebra system to complement the knowledge of calculus.

Prerequisite(s): MTH 1044 or a score of 3 or higher on AP 114 or AP 115.

**MTH 1033 - Pre-Calculus**

**(3)**

An introduction to the functions necessary for the study of calculus with an emphasis on numericals and graphical notions of continuity, limits and derivatives. The following function types are used as examples for the study of the concepts: polynomial, rational, exponential, logarithmic, and trigonometric functions.

Prerequisite(s): MTH 1013 or equivalent.

**MTH 1044 - Calculus With Applications (GE)**

**(4)**

Differential and integral calculus of the elementary functions of one variable. Limits, continuity, derivatives, integrals, and applications.

Prerequisite(s): MTH 1033 or equivalent.

**MTH 1053 - Mathematical Analysis for Business and Economics**

**(3)**

This course focuses on learning and using basic mathematical tools that are fundamental to business applications. Applications of these tools include: supply and demand, optimization, cost-benefit analysis, equilibrium (systems of equations), interest, and loan amortization.

Prerequisite(s): MTH 1013 or equivalent.

**MTH 1064 - Calculus I (GE)**

**(3)**

Calculus of the elementary functions of one variable. Limits, continuity, derivatives, methods of integration and applications.

Prerequisite(s): MTH 1033 or equivalent.

Corequisite(s): MTH 1064L

**MTH 1064L - Calculus I Lab (GE)**

**(1)**

An introduction to mathematical modeling using mathematical concepts from Calculus I.

Corequisite(s): MTH 1064

**MTH 1073 - Business Calculus (GE)**

**(3)**

A calculus course intended for those studying business economics, or other related business majors. This course covers differential and integral calculus of elementary functions with an emphasis on business applications. This is a brief calculus course and not appropriate for students majoring in science, computer science or mathematics.

Prerequisite(s): MTH 1013 or equivalent.

**MTH 1074 - Calculus II**

**(3)**

A continuation of Calculus I supported by the use of computer graphics and a symbolic computer algebra system. Methods of integration, sequences, series, elementary differential equations, polar coordinates and parametric equations.

Prerequisite(s): MTH 1044 with a grade of C- or higher or MTH 1064 with a grade of C- or higher.

Corequisite(s): MTH 1074L

**MTH 1074L - Calculus II Lab**

**(1)**

Introduction to the use of a computer algebra system to complement the knowledge of calculus.

Corequisite(s): MTH 1074

**MTH 2003 - Introduction to Statistics**

**(3)**

A first course in statistics for the general student. Description of sample data, probability theory, theoretical frequency distributions, sampling, estimation, and hypothesis testing. Not applicable toward a major in Mathematics.

Prerequisite(s): MTH 0099 or equivalent.

**MTH 2013 - Fundamentals of Elementary Mathematics I**

**(3)**

A comprehensive approach to the mathematical knowledge necessary for a California multiple subject teaching credential (K-8). Topics covered in this course include whole numbers, numeration systems, fractions, decimals, ratios,

proportions and an introduction to number theory. The integers, rational numbers, irrational numbers and real numbers are studied along with algebraic expressions, inequalities, graphs and polynomials. This class is highly interactive and emphasizes group work and cooperative learning. Not applicable toward a major in Mathematics. Passing an 8th grade mathematics proficiency test is a requirement for the completion of this course.

Prerequisite(s): MTH 1013 or equivalent.

### **MTH 2023 - Fundamentals of Elementary Mathematics II**

**(3)**

A continuation of Mathematics 213 focusing on additional knowledge necessary for a California multiple-subject teaching credential (K-8). Topics covered in this course include data analysis and statistics, probability, combinations and permutations, simulations as well as standard and non-standard measurement. Planar and three dimensional geometry and geometric constructions are studied, including an algebraic approach to geometry. This class is highly interactive and emphasizes group work and cooperative learning.

Prerequisite(s): MTH 2013

### **MTH 2033 - Linear Algebra**

**(3)**

A computational introduction to linear algebra with applications. A study of linear equations, matrix algebra, Euclidean spaces and subspaces, vector spaces, linear transformations, eigenvalues, eigenvectors, and inner products.

Prerequisite(s): MTH 1044 with a grade of C- or higher or MTH 1064 with a grade of C- or higher.

### **MTH 2074 - Calculus III**

**(4)**

Conceptual development of the calculus of functions of more than one variable supported by the use of a symbolic computer algebra system. Limits and continuity, partial derivatives, chain rule, extreme values, Taylor's theorem, multiple integrals, line and surface integrals, Green's Theorem and Stokes' Theorem.

Prerequisite(s): MTH 1074 with a grade of C- or higher.

### **MTH 2092 - Applied Project for Data Science**

**(2)**

This course introduces students to the complete data science process. Students will work in teams to scope a real-world problem, gather data to answer the question, wrangle the data, model it, validate the models, draw conclusions and communicate results. The course includes study of the principles of data science and technical communication. This course will integrate prior cross-disciplinary coursework and introduce students to the basics of scripting and integrating tools into full-stack solutions.

Prerequisite(s): MTH 2074 with a grade of C- or higher.

### **MTH 3003 - Problem Solving (GE)**

(3)

A general education course whose major goal is to develop the ability to solve non-routine problems through dynamic processes of inquiry and exploration, logical reasoning, making and testing conjectures and investigating implications of conclusions. A study of quantitative reasoning with emphasis on active problem solving and developing connections with other disciplines. Not applicable toward a major in Mathematics.

Prerequisite(s): MTH 0099 or equivalent and Junior or Senior standing.

### **MTH 3012 - Number Theory with Proofs**

(2)

An introduction to proofs using the study of natural numbers, integers, prime factorization, divisibility, congruences, multiplicative functions, continued fractions, quadratic residues. Methods used include investigation, conjecture, inductive and deductive proofs. Offered on a Quad basis.

Prerequisite(s): MTH 1074 with a grade of C- or higher.

### **MTH 3033 - Differential Equations**

(3)

Ordinary differential equations, solutions by analytical and numerical methods in the context of real world applications. A brief introduction to partial differential equations and Fourier series.

Prerequisite(s): MTH 2074 with a grade of C- or higher.

### **MTH 3043 - Discrete Mathematics**

(3)

Sets, functions, propositional logic and switching theory, graphs including trees, matrices, induction and proof by contradiction, combinatorics, and probability. Selected applications from computer science included.

Prerequisite(s): MTH 1044 with a grade of C- or higher or MTH 1064 with a grade of C- or higher.

### **MTH 3052 - History of Mathematics**

(2)

Development of mathematics from pre-Greek to recent times. Perspectives and contributions of persons from diverse cultural, ethnic, and gender groups. Impact of culture on mathematical progress.

Prerequisite(s): MTH 1044 with a grade of C- or higher or MTH 1064 with a grade of C- or higher.

### **MTH 3063 - Calculus Based Statistics With R**

(3)

A first course in descriptive and inferential statistics for general students who have taken calculus. Topics include experimental design, sampling and sampling distributions, estimation and hypothesis testing. This course also provides

a basic introduction to statistical analysis in the statistical software package R. Not applicable toward a major in Mathematics.

Prerequisite(s): MTH 1044 with a grade of C- or higher or MTH 1064 with a grade of C- or higher or equivalent.

### **MTH 3073 - Mathematical Modeling**

**(3)**

A problem based course that explores mathematical modeling techniques using a variety of computational methods. Also examines how mathematics can be applied to answer specific questions. Includes problems from biology, chemistry, physics, business and other non-mathematical disciplines. Written report and oral presentation are required.

Prerequisite(s): MTH 2074 and MTH 3083

### **MTH 3083 - Mathematical Probability and Statistics**

**(3)**

A first course in probability and statistics for students with sophisticated mathematics exposure. Topics include axioms of probability, random variables, discrete and continuous distributions, mathematical expectation, and limit theorems. Introduction into descriptive and inferential statistics, including the topics of sampling distributions, point estimation and hypothesis testing. Topics are supported by the use of statistical software.

Prerequisite(s): MTH 2074 with a grade of C- or higher.

### **MTH 4002 - Topics in Geometry**

**(2)**

A study of the foundations of geometry, Affine, non-Euclidean and projective geometries. A synthetic development of advanced Euclidean geometry including geometric transformations, convexity, and constructions.

Prerequisite(s): MTH 1044 or MTH 1064

### **MTH 4013 - Complex Analysis**

**(3)**

Complex numbers, analytic functions, integration, series, contour integration, residues and conformal maps.

Corequisite(s): MTH 2074

### **MTH 4024 - Real Analysis**

**(4)**

Real numbers, topology of Euclidean n-space, continuity, differentiation and integration theory.

Corequisite(s): MTH 2033 and MTH 3012 and Junior standing.

### **MTH 4044 - Abstract Algebra**

(4)

A study of groups, rings, fields and related structures with selected applications.

Corequisite(s): MTH 2033 and MTH 3012 and Junior standing.

**MTH 4053 - Advanced Applied Statistics**

(3)

This course is a continuation of MTH 3083 including the topics of random sampling and experimental design, sampling distributions, methods of estimation and the properties of estimators, least square estimates of parameter, linear regression, hypothesis testing, and confidence intervals, testing of models, data analysis and appropriateness of models. Topics are supported by the use of statistical software.

Prerequisite(s): MTH 3083

**MTH 4062 - Research in Data Science**

(2)

Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. This course is graded Credit/No Credit only.

Prerequisite(s): MTH 2092, MTH 3083, approval of the department chair, consent of instructor, and Junior standing.

**MTH 4071 - History of Mathematics Study Tour**

(1)

This course is conducted as a European trip (countries vary). The course uses specific museums, library collections and historic sites to investigate the development of mathematics in relation to specific problems. Lectures and meetings are held during the semester and a series of lectures by the professor and others are presented on location.

Prerequisite(s): Consent of the instructor.

**MTH 4072 - Internship in Data Science**

(2)

A supervised experience in which the student works with industry professionals to gain experience in data science. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated to a total of four (4) units. This course is graded Credit/No Credit only.

Prerequisite(s): MTH 2092, MTH 3083 and consent of instructor.

**MTH 4081 - Senior Seminar in Mathematics**

(1)

This one-unit capstone course is a seminar in which students give lectures on topics of general interest in mathematics. Issues related to vocation and calling are also discussed. Graded Credit/No Credit.

Prerequisite(s): One of CSC 4102, CSC 4133, HON 4098, ISS 4072, ISS 4102, ISS 4133, MTH 4102, or MTH 4133 and Senior standing (or Junior standing if a December graduate).

#### **MTH 4091 - Independent Study in Mathematics**

**(1-4)**

Study of a selected problem or topic under the direction of an instructor. The instructor and student propose the course of study. Approval by the department chair is required. May be repeated for a total of six units.

Prerequisite(s): Consent of instructor.

#### **MTH 4092 - Special Topics in Mathematics**

**(2)**

Study of an area of mathematics not otherwise included in the curriculum. The needs and interests of students and faculty involved determine the topics. May be repeated for a total of six units.

Prerequisite(s): Consent of instructor.

#### **MTH 4102 - Independent Research in Mathematics I**

**(2)**

Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, consent of instructor, and Junior standing.

#### **MTH 4121 - Independent Research in Mathematics II**

**(1)**

The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. Graded Credit/No Credit.

Prerequisite(s): Approval of the department chair, MTH 4102 and consent of instructor.

#### **MTH 4133 - Service Learning in Mathematics**

**(3)**

Students working in teams design and implement a project using a broad spectrum of mathematical knowledge to meet the needs of a community organization or the university.

Prerequisite(s): Consent of instructor and Junior standing.

### **Multiple Subject Preliminary Credential**

### **EDU 40CP1 - Elementary Clinical Practice Seminar I**

**(1)**

This seminar course supports the Clinical Practice I experience through classroom inquiry and reflection of the principles of effective classroom management, teaching methods, differentiation of instruction, lesson planning and delivery, and parent communication. Emphasis is placed on the modification of lessons and instructional support of English learners, diverse learners, and learners with exceptionalities. Candidates explore school and community demographics and consider methods for teaching diverse populations. It is through this course that each candidate completes the Cal TPA task "Assessing Learning" as a performance-based measure of the knowledge and skills taught in this course.

Corequisite(s): EDU 4040

Also offered as EDU6CP1

### **EDU 40CP2 - Elementary Clinical Practice Seminar II**

**(1)**

This seminar course supports the Student Teaching II experience through classroom inquiry and reflection of the principles of effective classroom management, teaching methods, differentiation of instruction, lesson planning and delivery, and parent communication. Emphasis is placed on further development of skills in the modification of lessons and instructional support of English learners, diverse learners, and learners with exceptionalities. Candidates continue to explore school and community demographics and consider methods for teaching diverse populations. Credit/No Credit. It is through this course that each candidate completes the CalTPA task "Culminating Teaching Experience" as a performance-based measure of the knowledge and skills taught in this course.

Corequisite(s): EDU 4060

Also offered as EDU6CP2

### **EDU 4009 - Classroom Assessment and Research Practices**

**(3)**

This methodology course analyzes assessment types, practices, and instruments used to evaluate student academic achievement utilizing formative, summative, formal, informal, as well as classroom-based and standardized measures. Candidates apply the knowledge and skills to design both whole class and differentiated instruction and assessments based on learner profiles. The relationship between theory and practice provides the basis for reflection to encourage application of research-based assessment strategies in the classroom. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse leaders, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied. Technology for teaching and learning is integrated in the course.

Also offered as EDU 6003

### **EDU 4022 - Interdisciplinary Approaches to Teaching in the Content Areas**

**(3)**

This methodology course emphasizes a cross-curricular approach to content-based instruction through critical thinking skills, basic analysis skills, study skills and specific teaching strategies and methodology for active forms of learning. The process of interrelation of ideas and information within and across science, social studies, health and physical

education utilizing the academic content standards is emphasized. Included in this course is the integration of reading, writing, listening, and speaking across content areas. Instruction is aligned to the state adopted content standards (K-8) and the language needs of all learners. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied. Technology for teaching and learning is integrated in the course.

Also offered as EDU 6011

### **EDU 4040 - Elementary Clinical Practice I**

**(4)**

This Clinical Practice experience provides the candidate with an opportunity to work directly with learners in a university-assigned elementary classroom with a Cooperating Teacher. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver instruction in the elementary classroom. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communication. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. This course is graded Credit/No Credit. The Clinical Practice experience contributes to the candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion.

Prerequisite(s): Approval to student teach and completion of all Teacher Education admission requirements EDU 3002, EDU 3006, EDU 3024, EDU 4004, EDU 4020, and EDU 4022

Corequisite(s): EDU 40CP1

Also offered as EDU 6030

### **EDU 4060 - Elementary Clinical Practice II**

**(4)**

This course is the second Clinical Practice teaching experience. Student Teachers are assigned to a different content area and/or grade level in an elementary classroom than in the first Clinical Practice experience with an approved Cooperating Teacher. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver instruction in this new elementary classroom setting. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communication. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. Credit/No Credit. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion.

Prerequisite(s): Successful completion of Clinical Practice I and completion of all Teacher Education admission requirements.

Corequisite(s): EDU 40CP2

Also offered as EDU 6034

## **Music Applied Instruction**

### **MUA 1001 - Recital Attendance - 4 semesters**

**(0)**

All Music majors are required to attend 12 department-sponsored or approved concerts/recitals each semester. Credit/No-Credit.

**MUA 1031 - Class Voice**

**(1)**

Class instruction in singing for the student without prior study; development of specific vocal and musical abilities; selected and graded songs suited to vocal goals. Class voice can be repeated.

**MUA 1041 - Class Piano I**

**(1)**

Class instruction for the student without prior study; emphasizes functional keyboard skills such as sight reading, harmonization, improvisation, and solo and ensemble playing. Appropriate for Music majors who must prepare for the proficiency exam.

**MUA 1042 - Class Piano II**

**(1)**

Class instruction for the student without prior study; emphasizes functional keyboard skills such as sight reading, harmonization, improvisation, and solo and ensemble playing. Appropriate for Music majors who must prepare for the proficiency exam.

**MUA 1043 - Piano Proficiency Skills**

**(1)**

Class instruction in piano. Emphasizes harmonization, hymn and open score reading, solo and congregational style hymn playing and rudimentary melodic improvisation. Appropriate for Music majors preparing for piano proficiency examination. May be repeated up to a total of 2 units.

Prerequisite(s): MUA 1042 or consent of instructor.

**MUA 1055 - Private Voice**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 1056 - Private Piano**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be

achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

#### **MUA 1057 - Private Organ**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 1058 - Private Harpsichord**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 1059 - Private Violin**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

#### **MUA 1060 - Private Viola**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 1061 - Private Violoncello**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 1062 - Private String Bass**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

#### **MUA 1063 - Private Guitar**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 1064 - Private Harp**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 1065 - Private Flute**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 1066 - Private Oboe**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 1067 - Private Clarinet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 1068 - Private Saxophone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 1069 - Private Bassoon**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 1070 - Private Trumpet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 1071 - Private Trombone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 1072 - Private French Horn**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 1073 - Private Euphonium**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 1074 - Private Tuba**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 1075 - Private Percussion**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

### **MUA 2001 - Piano Proficiency Exam**

**(0)**

All Music majors are required to pass a proficiency examination in piano skills, preferably by the end of the sophomore year. It must be completed prior to graduation. A complete description of the exam contents is listed in the current edition of the Music Student Handbook, available upon request in the department office. Credit/No-Credit.

### **MUA 2012 - Beginning Conducting**

**(2)**

Introduction to basic conducting techniques, such as score reading, metric patterns, cues and cutoffs.

### **MUA 2050 - Diction for Singers I**

**(1)**

An intensive study of English, Italian, German, and French diction as it applies to singers, utilizing the International Phonetic Alphabet to transfer foreign texts to vocalized symbols.

### **MUA 2051 - Diction for Singers II**

**(1)**

An intensive study of English, Italian, German, and French diction as it applies to singers, utilizing the International Phonetic Alphabet to transfer foreign texts to vocalized symbols.

### **MUA 2055 - Private Voice**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be

achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 2056 - Private Piano**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 2057 - Private Organ**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2058 - Private Harpsichord**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2059 - Private Violin**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 2060 - Private Viola**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2061 - Private Violoncello**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2062 - Private String Bass**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 2063 - Private Guitar**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 2064 - Private Harp**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2065 - Private Flute**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2066 - Private Oboe**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2067 - Private Clarinet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2068 - Private Saxophone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 2069 - Private Bassoon**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2070 - Private Trumpet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 2071 - Private Trombone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 2072 - Private French Horn**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 2073 - Private Euphonium**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 2074 - Private Tuba**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 2075 - Private Percussion**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

### **MUA 3012 - Choral Conducting and Literature**

**(2)**

Application of conducting principles and techniques to choral music. Includes an overview of choral literature.

Prerequisite(s): MUT 1021

Corequisite(s): MUE 3003 (Music Education majors)

### **MUA 3013 - Instrumental Conducting**

**(2)**

Application of conducting principles and techniques to instrumental music, especially music for orchestra and concert band.

Prerequisite(s): MUT 1021

### **MUA 3031 - Acting for Singers**

**(1)**

Open to advanced voice students by audition. Scenes from operas and/or musical theatre are performed with staging and costumes. May be repeated up to a total of 2 units.

### **MUA 3032 - Musical Theatre Production**

**(1-2)**

Performance experience in musical theatre, open to all students by audition.

### **MUA 3055 - Private Voice**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

### **MUA 3056 - Private Piano**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

### **MUA 3057 - Private Organ**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 3058 - Private Harpsichord**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 3059 - Private Violin**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 3060 - Private Viola**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 3061 - Private Violoncello**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 3062 - Private String Bass**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 3063 - Private Guitar**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 3064 - Private Harp**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 3065 - Private Flute**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 3066 - Private Oboe**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 3067 - Private Clarinet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 3068 - Private Saxophone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 3069 - Private Bassoon**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 3070 - Private Trumpet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

### **MUA 3071 - Private Trombone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be

achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 3072 - Private French Horn**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 3073 - Private Euphonium**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 3074 - Private Tuba**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 3075 - Private Percussion**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

#### **MUA 3076 - Junior Recital**

**(0)**

A public recital, approximately thirty minutes in length, given in the student's major performing area comprised predominantly of solo repertoire but also includes a work for small ensemble.

Prerequisite(s): 3000 level in performing area.

#### **MUA 4055 - Private Voice**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 4056 - Private Piano**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 4057 - Private Organ**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 4058 - Private Harpsichord**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 4059 - Private Violin**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 4060 - Private Viola**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 4061 - Private Violoncello**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 4062 - Private String Bass**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 4063 - Private Guitar**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

**MUA 4064 - Private Harp**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 4065 - Private Flute**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

**MUA 4066 - Private Oboe**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 4067 - Private Clarinet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 4068 - Private Saxophone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 4069 - Private Bassoon**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 4070 - Private Trumpet**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

### **MUA 4071 - Private Trombone**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

### **MUA 4072 - Private French Horn**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be

achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 4073 - Private Euphonium**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 4074 - Private Tuba**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level.

#### **MUA 4075 - Private Percussion**

**(1-2)**

Private, applied instruction in a performing area is a vital part of the development of Music majors, as well as an appropriate elective for many non-majors. Each level of study has defined materials and technical masteries to be achieved. (See Music Student Handbook in the Department of Music office). Students are assigned to a level according to their proficiency and mastery of materials listed for a given level. "C" Designation is for Commercial Music.

#### **MUA 4076 - Senior Recital**

**(0)**

A public solo recital, approximately one hour in length, given in the student's major performing area.

Prerequisite(s): MUA 3076

### **Music - Church Music**

#### **CMU 2001 - Instruments in Worship**

**(2)**

An introduction to the use of musical instruments in support of worship music. Topics covered include basic rehearsal techniques, transposition of parts, and basic instrumental arranging skills.

#### **CMU 2002 - Multi-Media for Worship Ministry**

**(2)**

A practical introduction to media technology resources for music ministry. The course includes training in the use of audio and visual media such as lighting, sound reinforcement, and presentation software.

**CMU 3014 - Music and Worship**

**(3)**

A study of the nature of worship and the function of music as an aid to worship. A survey of the history and practice of church music; consideration of the role of music in worship and Christian education. A study of problems peculiar to the music program of the small and medium-size church.

**CMU 3015 - Church Music Administration and Materials**

**(2)**

Development of the church-wide program of music ministries; principles and administration of the music ministry in relation to other church departments. Study of materials and equipment for the program; organization of choirs and other music ministries.

Prerequisite(s): CMU 3014

**CMU 4033 - Hymnology**

**(3)**

A survey of Christian hymnody, its historical patterns, covering the broad scope of hymnic literature, its environment, and the significant individuals contributing. Practical and critical classroom study and participation.

**CMU 4051 - Internship in Church Music**

**(2)**

Supervised internship in a church situation. "C" Designation is for California Internships. "E" Designation is for Out of State Internships.

Prerequisite(s): Consent of instructor.

**CMU 4090 - Special Studies in Church Music**

**(1-2)**

Intensive study of a selected problem, under the direction of a department faculty advisor.

Prerequisite(s): Consent of department chair.

**CMU 4095 - Church Music Seminar**

**(1-2)**

Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in class schedule.

## **Music - Commercial Music**

### **MCM 3024 - Songwriting**

**(2)**

This course focuses on the practical application and technique of the working songwriter, examining melody, lyrics, "hooks," points of view, song logic and personal style and apply all of these to our writing. Participants will work individually and in small groups in order to produce a substantial body of songs by semester's end. All students should be able play an instrument on which they can accompany themselves (generally piano and/or guitar) and have a working knowledge of a DAW such as Logic.

### **MCM 3025 - Style and Improvisation**

**(2)**

A systematic approach to improvisation, making music without recourse to written music for all performers. Focus is on developing and organizing solos through a step-by-step approach that applies to all styles and any instrument. The course begins with 12-bar blues form and the pentatonic scale, and adds complexities gradually by studying rhythmic, melodic, and harmonic patterns along with arpeggios and more complex scales. Students will also transcribe, record, and submit for instructor review excerpts of solos from legendary players from many different genres. May be repeated up to a total of 4 units.

Prerequisite(s): MUT 1020

### **MCM 3035 - Arranging I**

**(2)**

Arranging I is the first of a pair of courses that explore the world of commercial arranging. Our emphasis this semester is gaining fundamental skills needed by the arranger, starting from small ensembles with vocals and rhythm section, up to choir and brass and strings. Our goal is arranging for studio and live applications, including applications for live concerts, schools, and church settings.

Prerequisite(s): MUT 2020

### **MCM 4035 - Arranging II**

**(2)**

A continuation of Arranging I with an emphasis on arranging for media-TV, film, gaming and online applications, including working with producers, directors and artistic teams to deliver music for visual media.

Prerequisite(s): MCM 3035

### **MCM 4076 - Senior Project**

**(1)**

A public performance, approximately forty-five minutes in length, given in the student's major performing area

Prerequisite(s): Senior standing.

## **Music Composition**

### **MUC 2052 - Private Composition**

**(1-2)**

Introductory lessons in music composition. Develops basic concepts of melodic writing and the manipulation of diverse harmonic, textural and rhythmic materials. May be repeated up to a total of 4 units. "C" Designation is for Commercial Music.

### **MUC 3052 - Private Composition**

**(1-2)**

Continued study of compositional processes through the exploration of nontraditional tonal materials; includes introductory compositional experiences that utilize electronic media. May be repeated up to a total of 4 units. "C" Designation is for Commercial Music.

Prerequisite(s): MUC 2052

### **MUC 4052 - Private Composition**

**(1-2)**

Development of compositional skills through handling extended forms and larger performance forces, such as choir, band or orchestra. May be repeated up to a total of 4 units. "C" Designation is for Commercial Music.

Prerequisite(s): MUC 3052

### **MUC 4077 - Senior Recital in Composition**

**(0)**

A public recital of original compositions, forty-five minutes in length.

Prerequisite(s): MUC 4052

### **MUC 4095 - Seminar in Composition**

**(1-2)**

Provides for special courses offered as an adjunct to the curricula.

## **Music Education**

### **MUE 2001 - Woodwind Instruments**

**(1)**

A laboratory class in playing the woodwind instruments with emphasis on teaching and basic repair techniques.

**MUE 2002 - Brass Instruments**

**(1)**

A laboratory class in playing brass instruments with emphasis on teaching and basic repair techniques.

**MUE 2003 - Percussion Instruments**

**(1)**

A laboratory class in playing the percussion instruments with emphasis on teaching and basic repair techniques.

**MUE 2004 - String Instruments**

**(1)**

A laboratory class in playing the string instruments (violin, viola, cello, bass) with emphasis on teaching and basic repair techniques.

**MUE 3003 - Choral and Vocal Techniques**

**(2)**

Includes a study of choral rehearsal procedures and programming, the development of tone and classification of voice types. Contents include developing vocal technique and vocal health.

Corequisite(s): Music Education majors must register for MUA 3012.

**MUE 3010 - Vocal Pedagogy**

**(2)**

Develops conceptual understanding and methodology for the teaching of singing. The course includes an anatomical study of the vocal mechanism with emphasis upon the development of breath support and vocal resonance.

**MUE 3011 - Piano Pedagogy I**

**(2)**

A survey of the methods and materials used in teaching the piano, with special emphasis upon teaching elementary students and the adult beginner. Includes observation of private and class piano teaching.

**MUE 3041 - Music Skills for the Elementary Classroom Teacher**

**(3)**

Methods and materials for teaching music for the elementary classroom teacher. Elementary music theory: notation, meter, rhythm, scales, intervals, triads. Introduction to playing skills on classroom instruments such as piano, autoharp,

recorder. Introduction to teaching strategies of Orff, Kodaly, Dalcroze, and Suzuki. Strategies for incorporating music into the everyday classroom are taught. Designed primarily for the elementary school teacher. Not for Music majors.

**MUE 4041 - Elementary School Music Methods**

**(3)**

Methods of teaching public school music in the elementary grades.

Prerequisite(s): MUT 1021

**MUE 4051 - Internship in Music**

**(2)**

Supervised internship in the student's major concentration. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated up to a total of 4 units.

Prerequisite(s): Consent of instructor.

**MUE 4054 - Secondary School Music Methods**

**(3)**

Methods of teaching public school music in the junior and senior high school and the California Framework in Visual and Performing Arts are explored.

Prerequisite(s): MUA 3012

**MUE 4090 - Special Studies in Music Education**

**(1-2)**

Intensive study of a selected problem, under the direction of a department faculty advisor.

Prerequisite(s): Consent of department chair.

**MUE 4095 - Seminar in Music Education**

**(1-2)**

Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in class schedule. Repeatable up to 8 units (can be taken once a semester).

**Music Ensembles**

**MUP 3032 - Chamber Orchestra**

**(1)**

Open to community and all students by audition; campus appearances; may accompany large choral works. Participation required of all Music majors with string instrument concentration. May be repeated each semester.

**MUP 3033 - Concert Band**

**(1)**

Open to all students by audition; participation required of all music majors with a concentration in a wind or percussion instrument; varied repertoire represents the best literature; local and off-campus concerts. May be repeated each semester.

**MUP 3034 - Choral Union**

**(1/2)**

Open without audition to the university community; a mixed choir which performs choral works of all types; required, without registration or credit, of all members of the Concert Choir and the Point Loma Singers. May be repeated each semester.

**MUP 3036 - Chorale**

**(1/2 - 1)**

Membership by audition. A mixed chorus open to any student. Music majors must register for one unit. One-unit registration includes participation in Choral Union. Local performances scheduled. May be repeated each semester.

**MUP 3037 - Concert Choir**

**(1)**

With membership by audition, Concert Choir is a mixed chorus open to any student. Includes participation in Choral Union. An annual tour and local public performances are scheduled. May be repeated each semester.

**MUP 3038 - Point Loma Singers**

**(1)**

With membership by audition, Point Loma Singers is a chamber choir of sixteen mixed voices open to all students. Includes participation in Choral Union. Local performances scheduled. May be repeated each semester.

**MUP 3039 - Small Ensemble**

**(1/2)**

With membership by audition, this group studies select literature that is determined by the size and type of ensemble. May be repeated each semester.

**MUP 3040 - Commercial Music Ensembles**

**(1/2)**

Contemporary music ensembles including Rock, Jazz, Bluegrass, Praise and Worship and similar. Open to all students by audition. Participation required of all Commercial Music majors. May be repeated each semester.

**MUP 3041 - Jazz Band**

**(1/2)**

With membership by audition, the Jazz Band studies standard jazz literature selected and performed in concerts. May be repeated each semester.

**MUP 3043 - String Quartet**

**(1/2)**

With membership by audition the String Quartet performs standard string quartet literature as well as selected chamber music. Local performances. May be repeated each semester.

**MUP 3044 - Vocal Jazz**

**(1/2)**

A small vocal ensemble (membership by audition) focusing on jazz literature. May be repeated each semester.

## **Music History**

**MUH 1000 - Introduction to Music (GE)**

**(2)**

Treats the development and significance of music in the Western world with emphasis on outstanding works by the world's great composers of music.

**MUH 1001 - Introduction to Listening (GE)**

**(2)**

This introductory course is required of all freshman Music majors and presents a general survey of music history, genres, styles, and media. The course focuses on analytical listening and developing aesthetic awareness. It includes an introduction to library research tools in music, and examination of the interrelationship of music studies and general education, and the integration of faith and learning with the study of music.

Prerequisite(s): Freshman standing or consent of instructor.

**MUH 3009 - Vocal Literature I**

**(2)**

A survey of both sacred and secular solo vocal performance repertoire, with an emphasis upon art song repertoire in English and Italian.

Prerequisite(s): MUH 1001 or consent of instructor.  
Corequisite(s): MUA 2050

**MUH 3011 - Piano Literature**

**(3)**

A survey of solo repertoire for the piano and its historical antecedents, principally the harpsichord and fortepiano. The course focuses upon keyboard masterworks from the Baroque period through the present.

Prerequisite(s): MUH 1001 or consent of instructor.

**MUH 3031 - Music History and Literature I**

**(2)**

Study of Western music development, focusing on principal trends of the Medieval and Renaissance periods, approximately 500-1600 A.D.; regular listening to recorded examples, with some score analysis and individual research.

Prerequisite(s): MUT 1021 and MUH 1001 or consent of instructor.

**MUH 3032 - Music History and Literature II**

**(2)**

A continued study of Western music development, focusing on principal trends of the Baroque and Classical periods, approximately 1600-1820 A.D.; regular listening to recorded examples, with some score analysis and individual research.

Prerequisite(s): MUH 1001 and MUT 1021 or consent of instructor.

**MUH 3033 - Music History and Literature III**

**(2)**

A continued study of Western music development, focusing on principal trends of the Romantic, 20th century periods, and subsequent contemporary trends, approximately 1820 to the present; regular listening to recorded examples, with some score analysis and individual research.

Prerequisite(s): MUH 1001 and MUT 1020 or consent of instructor.

**MUH 3034 - World Music**

**(2)**

An introduction to listening and study of indigenous music from multiple geographic areas and cultures, including Africa, Asia, and North and South America. The course also includes a presentation of jazz as a distinctly American cultural synthesis.

Prerequisite(s): MUH 1001 and MUT 1020 or consent of instructor.

### **MUH 3035 - History of Popular Music**

**(3)**

An examination of the historical significance of popular music in the United States from the late nineteenth century to the present with an emphasis on its commercial development and growth. The course examines the cultural, social, political, and economic dimensions (the "context") of genres ranging from Tin Pan Alley, blues and jazz, to folk, soul, rock, and hip hop.

Prerequisite(s): MUH 1001 and MUT 1021 or consent of instructor.

### **MUH 4031 - Faith, Life, and Music**

**(2)**

A capstone course required of all Music majors. The course examines source readings concerning the integration of faith and various aspects of music. Students are challenged to evaluate the influence of the Christian faith upon their own individual music discipline. Class content also includes an overview of diverse musical professions and the ways in which faith and music intersect in the pursuit of calling. The course culminates with the writing of an essay outlining the ways in which students believe their faith shapes their lives as both disciples and musicians.

Prerequisite(s): Senior standing or consent of instructor.

### **MUH 4095 - Music History Seminar**

**(1-2)**

Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in the class schedule.

## **Music Technology**

### **MTC 3027 - Digital Audio I**

**(2)**

An introductory course to Avid's Pro Tools digital audio workstation. This is the first course offering leading to ProTools Certification. The course assumes no prior knowledge of Pro Tools but does assume that all students have some familiarity with basic DAW functions and digital audio principles.

Prerequisite(s): MUT 1020

### **MTC 3028 - Digital Audio II**

**(2)**

A continuation of MTC 3027 examining more complex topics such as indexing, optimizing, custom I/O and workflows, mixing, mastering and similar topics. This course leads to the Pro Tools Certified Operator-Music certification.

Prerequisite(s): MTC 3027

### **MTC 3033 - Studio Recording**

(2)

An introduction to the writing and recording process from the standpoint of the engineer, producer, mixdown and mastering engineer. Pro Tools 12 is used by students to assemble and record several finished master-quality recordings by students in other courses. Concepts include signal flow, mic placement, console automation, the recording process from basic tracks to mixing and mastering, loop creation and editing, soft sampler and MIDI control, RTAS and TDM plug-in instantiation, and building a project studio.

Prerequisite(s): MTC 3028

### **MTC 4095 - Production Techniques**

(2)

The intent of this class is to work in production teams to produce a musical recording project. Topics include session and arrangement planning, budgeting, contracting, preproduction techniques, recording of acoustic and electronic instruments, work process and synchronization, final mix and mastering, concert performance and delivering the product to a professional as a demo. Students are given a budget and use realistic figures for studio time, musicians, marketing and similar. This is meant to be a shared project, with each student contributing particular skills and orientation to the final product, which can be used as a demonstration of the student's abilities and capacity for working in a production team.

Prerequisite(s): MTC 3033

## **Music Theory**

### **MUT 1000 - Basic Music Theory**

(2)

An introduction to the fundamentals of music: key signatures, scales, intervals, notation, rhythm, meter, chords, harmony, and melodic form. Emphasis upon written skills with requirements in ear training/sight singing, improvisation and beginning composition.

Corequisite(s): MUA 1041 (may be waived by proficiency examination)

### **MUT 1020 - Music Theory I**

(4)

Study of the notation, sound, and syntax of fundamental musical materials such as scales, intervals, and diatonic harmony. Includes laboratory experience in ear training and sight singing.

Prerequisite(s): MUT 1000 or consent of instructor.

### **MUT 1021 - Music Theory II**

**(4)**

Continued study of harmonic procedures in homophonic and polyphonic settings with emphasis upon seventh chords, secondary dominants, and modulation. Includes laboratory in keyboard harmony, ear training, and sight singing.

Prerequisite(s): MUT 1020 or consent of instructor.

**MUT 2020 - Music Theory III**

**(3)**

Study of musical structures from late Renaissance polyphony to, and including, the present. Study of seventh, ninth, eleventh, Neapolitan sixth, Augmented sixth, and other altered chords. Continuation of the development of analytical tools and aural skills; ear training, sight singing, and keyboard harmony.

Prerequisite(s): MUT 1021 or consent of instructor.

**MUT 3001 - Counterpoint**

**(3)**

Analysis and composition of two, three, and four voice counterpoint as practiced in the 18th century, with special emphasis on the style of J. S. Bach.

**MUT 3002 - Analysis of Form and Texture in Music**

**(3)**

Emphasis upon the stylistic analysis of musical form and texture; study of the evolution of the standard musical forms.

**MUT 4010 - Post-Tonal Theory**

**(3)**

Study of music after Debussy, focusing on analytical methods such as serialism, static diatonicism and pitch-class set theory as these apply to the music of Stravinsky, Schoenberg, Crumb, and other composers of the past century.

Prerequisite(s): MUT 2020 or consent of instructor.

**MUT 4032 - Orchestration**

**(3)**

Ranges, tonal possibilities, technical limitations of standard band and orchestral instruments; analysis of standard compositions; scoring short pieces for various instrumental groups.

Prerequisite(s): MUT 2020

**MUT 4090 - Special Studies in Music Theory**

**(1-2)**

Intensive study of a selected problem, under the direction of a department faculty advisor.

Prerequisite(s): Consent of department chair.

## **Nursing**

### **NSG 1050 - Caring Faithfully: An Introduction to Nursing**

**(2)**

The role of the nurse is introduced within the context of Christian service and caring. Major nursing concepts include: therapeutic communication, clinical practice (i.e. California Nurse Practice Act), nursing as a vocational calling and service to others. Minimum grade of "B" required.

Prerequisite(s): Minimum grade of "C" in BIO 1030 and CHE 1003 and 1003L.

Corequisite(s): BIO 1040, NSG 2050 (for transfer students)

### **NSG 2046 - Transition to Nursing**

**(2)**

Transition course for advanced placement of the Licensed Vocational Nurse (LVN) into the professional nursing role. Introduction and application of scholarly writing in nursing is emphasized. Professional nursing perspectives including holistic care, historical, social, and political aspects will be explored.

Prerequisite(s): California LVN licensure and completion of national advanced placement exam(s) and acceptance into the Nursing major.

Corequisite(s): NSG 4041 (2): Assessment.

### **NSG 2050 - Nursing of Individuals: Adult Health I**

**(3)**

The nursing process is studied and applied. Major concepts in nursing theory are considered and illustrated in the areas of basic needs, acute, and chronic illness, rehabilitation, and the aging process. Examination of clients emphasizing skills in history taking, physical, psychological, cultural, and spiritual assessments.

Prerequisite(s): Admission to the Nursing program and NSG 1050.

Concurrent: NSG 2051. Transfer students: NSG 1050.

Corequisite(s): BIO 2020

### **NSG 2051 - Nursing of Individuals: Clinical Practicum I**

**(3)**

Includes application of nursing theory to practice in major areas of nursing in a variety of hospitals and health agencies within the San Diego community. Learning laboratory experiences are provided concomitantly to increase competency

in nursing practice. Graded Credit/No Credit.

Concurrent: NSG 2050

### **NSG 2055 - Changing Minds, Changing Lives**

(1)

The development of resilience is studied and applied. Evidence-based concepts exploring strategies important in adapting to adversity using a strengths based model are explored and employed.

Concurrent: NSG 2050 and NSG 2051

### **NSG 2060 - Nursing of Individuals: Adult Health II**

(4)

The nursing process is applied to adults with a variety of health care problems. Emphasis is placed on the teaching/ learning process with comprehensive application to client care.

Prerequisite(s): NSG 2050 and NSG 2051 and BIO 2020

Concurrent: NSG 2061 and NSG 2070

Corequisite(s): NUT 2025 and CHD 1050 (or NSG 4042)

### **NSG 2061 - Nursing of Individuals: Clinical Practicum II**

(3)

Includes application of nursing theory to practice in major areas of nursing in a variety of hospitals and health agencies within the San Diego community. Learning laboratory experiences are provided concomitantly to increase competency in nursing practice. Graded Credit/No Credit.

Concurrent: NSG 2060

### **NSG 2070 - Pharmacology in Nursing**

(2)

Comprehensive examination of basic theoretical foundations for drug therapy by exploring the pharmacodynamics of commonly used drugs along with the nursing implications and interventions necessary for safe therapy.

Prerequisite(s): Sophomore standing in Nursing.

Concurrent: NSG 2060 or consent of instructor.

### **NSG 3000 - Health Assessment**

(1)

Comprehensive approach to examining the client and the family, focusing on developing knowledge and skills in history taking, assessments and ability to communicate this information appropriately. Assessments include physical, psychological, cultural, and spiritual.

Concurrent: NSG 3001 and consent of instructor.

**NSG 3001 - Health Assessment Clinical**

(1)

Application of physical, psychological, cultural, and spiritual assessments of the individual and the family. A clinical course which includes laboratory activities and independent practice. Graded Credit/No Credit.

Prerequisite(s): Advanced placement and consent of instructor.

Concurrent: NSG 3000

**NSG 3010 - Nursing of Families: Child/Adolescent Focus**

(2)

Focuses on nursing theory as it relates to families with children who have alterations in their health status.

Prerequisite(s): CHD 1050 and Junior standing in Nursing program.

Concurrent: NSG 3011

**NSG 3011 - Nursing of Families: Child/Adolescent Clinical Practicum**

(3)

Consists of opportunities for application of nursing theory and child development as it relates to the child, adolescent clients and their families. Graded Credit/No Credit.

Concurrent: NSG 3010

**NSG 3030 - Nursing of Families: The Childbearing Process**

(2)

Focuses on nursing theory as it relates to families in the childbearing years.

Prerequisite(s): Junior standing in Nursing Program.

Concurrent: NSG 3031

**NSG 3031 - Nursing of Families: The Childbearing Process Clinical Practicum**

(3)

Consists of opportunities for application of nursing theory as it relates to families throughout pregnancy, labor, delivery, and the postpartum period, including the care of the new born. Graded Credit/No Credit.

Concurrent: NSG 3030

**NSG 3040 - Nursing of Families: Adult Health III**

(2)

Focuses on nursing theory in the care of clients who have complex health alterations and includes collaboration with their families. Advanced concepts of adult health and critical care nursing are the basis for the course.

Prerequisite(s): Junior standing in Nursing program.

Concurrent: NSG 3041

### **NSG 3041 - Nursing of Families: Adult Health III Clinical Practicum**

(3)

Nursing process is applied to adults experiencing multi-system failure. Emphasis is placed on assessment of individual and family needs in critical illness. Graded Credit/No Credit.

Concurrent: NSG 3040

### **NSG 3045 - Transition to Professional Nursing**

(3)

Transitional course for advanced placement of the Associate Degree Nurse (ADN) into the professional nursing role. Nursing concepts such as holistic care and adaptation will be emphasized along with analysis of contemporary issues and trends. Professional nursing perspectives of health care ethics, theories, historical, social, and political aspects will be explored. Examination of clients emphasizing skills in health history, physical, psychosocial, cultural, environmental, and spiritual assessment.

Prerequisite(s): California RN licensure and acceptance into the Nursing major.

### **NSG 3095 - Clinical Nursing Internship**

(1-3)

Opportunity to gain clinical experience at a designated student nurse level in selected health care agencies, working as an employee under direct supervision of designated preceptor. Twelve to sixteen hours of experience per week. Seminars with faculty member are required. Any combination of the above levels not to exceed a total of nine units. New internships are considered for summer (between junior and senior year). A student in good standing (GPA  $\geq$  3.00) may apply for summer session only. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. Graded Credit/No Credit.

Prerequisite(s): Satisfactory standing in the Nursing program. A cumulative GPA of 3.000 is required for enrollment. Consent of junior team Nursing faculty.

### **NSG 3099 - Nursing Research**

(2)

A study of activities and processes involved in investigating a selected nursing problem. Includes individual or small group work in the use of beginning level research methods. Quantitative and qualitative methods are examined.

Prerequisite(s): WRI 1010 (or WRI 1015 /WRI 1016), MTH 2003 and Junior standing in Nursing program.

Concurrent: NSG 3040 and NSG 3041

### **NSG 4041 - Topics in Nursing**

**(1-3)**

Offers concentrations of study in selected areas of nursing practice. Topics include a theory component and may include a clinical component. May be repeated for a total of nine units.

Prerequisite(s): Consent of instructor.

### **NSG 4042 - Health Promotion in Adult Development**

**(2)**

Explores development of the individual from early adulthood to death. Biophysical and psychosocial issues are explored as they apply to early adulthood, middle adulthood and old age. Specific developmental tasks are identified in each age group. Gender role development is also explored. Ethical, social, spiritual, and moral issues are introduced as they apply to the aging process. All of these topics are discussed within the framework of professional nursing practice, and health promotion.

Prerequisite(s): Child Development (3 units of transfer credits)

### **NSG 4046 - Health of Women in a Multicultural World (WS)**

**(3)**

Explores the relationship between society, culture, environment, the health of women, and the health care services of women. The approach is global or international in perspective. Participants are expected to research their own cultural heritage and describe what impact this heritage has on personal health expectations and use of health care in American Society.

### **NSG 4047 - Family Violence**

**(3)**

Examines the incidence of a broad range of abuse and neglect in society. The course covers both physical and sexual abuse as well as neglect of children from birth to adolescence, date rape, spousal abuse, and abuse of elderly. This course examines causes, assessment criteria, current treatment approaches, requirement for reporting, and long-term effects on children, families, and society.

### **NSG 4050 - Nursing of Communities: Mental Health Focus**

**(3)**

Focuses on the holistic understanding of the sociocultural, psychological, and situational aspects of life that impact the mental health of families and communities. Health and illness are seen from a complex, multidimensional, meaning-centered, and critical perspective with an emphasis on the promotion of mental health and wellness. Includes perspectives on group dynamics and socio-political systems as they impact mental health.

Prerequisite(s): Senior standing in Nursing program and PSY 3021.

Concurrent: NSG 4051, NSG 4060 and NSG 4061

### **NSG 4051 - Nursing of Communities: Mental Health Clinical Practicum**

**(3)**

Application of a unique clinical process based upon a critical synthesis of concepts from nursing and social sciences. Emphasis is on delivering care to communities and groups with a focus on wellness and mental health promotion. Students apply theory in both inpatient and community agencies. Graded Credit/No Credit.

Concurrent: NSG 4050, NSG 4060 and NSG 4061

**NSG 4060 - Nursing of Communities: Community Health Focus**

**(3)**

The focus is on the health of populations with emphasis on epidemiology, health promotion, health protection, disease prevention, health policy, health care delivery systems, and cultural competency. A community assessment and community teaching project is required.

Prerequisite(s): Senior standing in Nursing program and completion of SOC 3060.

Concurrent: NSG 4061, NSG 4050 and NSG 4051

**NSG 4061 - Nursing of Communities: Community Health Focus Clinical Practicum**

**(1)**

Application of the nursing process to individuals, families, and communities using the concepts studied in NSG 4060 Community Health Focus. Students work with families in a variety of community based settings including a health department. Graded Credit/No Credit.

Concurrent: NSG 4060

**NSG 4070 - Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice**

**(3)**

Nursing theory as it is related to trends and issues in healthcare management including analysis and synthesis of the professional nurse role. Focus is on leadership theories and styles within multiple healthcare environments. Content includes nursing theory as it relates to leadership/management principles, career development, communication, leading change, problem solving/decision making, coordinating client care, conflict management, interdisciplinary team approaches, cultural diversity, managing personal and organizational resources, legal, ethical and political influences on transition to the professional nurse role.

Prerequisite(s): Senior standing in Nursing program.

Corequisite(s): NSG 4080 and NSG 4081

**NSG 4080 - Nursing Capstone**

**(1)**

Analysis and synthesis of transitional concepts, topics, and issues for students assuming a professional nursing role.

Prerequisite(s): Senior standing in Nursing program.

Corequisite(s): NSG 4081 and NSG 4070

### **NSG 4081 - Nursing Capstone Practicum**

**(3)**

Application of nursing skills in client care settings with opportunity to provide nursing care to persons with complex health problems. Emphasis is on critical thinking, clinical decision making, and independent judgment in areas of client nursing care as well as management of nursing services. Includes collaboration with health team member and implementation of organizational skills.

Corequisite(s): NSG 4080 and 4070

### **NSG 4090 - Special Studies in Nursing**

**(1-2)**

Concentrated study and experience in a selected area of nursing not otherwise available to nursing majors in the program. The student prepares, in consultation with the course coordinator, an appropriate design for the study, taking into consideration interest, relevancy to nursing, and availability of resources. May be repeated to a total of six units.

Prerequisite(s): NSG 2060, NSG 2061 and NSG 2070, GPA of 3.000 in Nursing, and consent of instructor.

### **NSG 4091 - Directed Clinical Studies in Nursing**

**(1-3)**

Concentrated clinical experience in a selected area of nursing not otherwise available. The student prepares, in consultation with the course coordinator, an appropriate design for the study, taking into consideration interest, relevancy to nursing, and availability of resources. May be repeated to a total of six units. Graded Credit/No Credit.

Prerequisite(s): Senior standing in Nursing program and consent of instructor. A cumulative GPA of 3.000 is required for enrollment.

### **NSG 4095 - Internship in Clinical Nursing**

**(1-3)**

See NSG 3095 for description. "C" Designation is for California Internships. "E" Designation is for Out of State Internships.

Prerequisite(s): Senior standing in Nursing program. Consent of junior or senior team Nursing faculty. A cumulative GPA of 3.000 is required for enrollment. Application must be made by March 15 for summer and fall registration, and by October 15 for spring registration.

## **Nutrition**

### **NUT 1001 - Introduction to Nutrition**

**(2)**

Introduction to the role of nutrition in human health with respect to essential nutrients, factors that affect eating habits, nutrition research and social media, and establishing a healthy lifestyle. Letter grade.

### **NUT 1010 - Fundamentals of Food**

**(2)**

Development of technique and application of fundamental scientific principles of food preparation. Establishment of quality standards for food products and food safety. Lecture and food preparation laboratory.

### **NUT 2025 - Fundamentals of Nutrition**

**(3)**

A study of the principles of nutrition science and their evidence-based application of nutrition to health/homeostasis, disease prevention and disease treatment.

Prerequisite(s): CHE 1003, CHE 1052 or equivalent.

### **NUT 3000 - Quantity Food Production**

**(3)**

The fundamentals of food preparation, and application of these principles to quantity food production in commercial and non-commercial settings. Emphasis is placed on the use of quantity food preparation equipment, menu planning, and production. Lecture and laboratory.

Prerequisite(s): NUT 1010

### **NUT 3003 - Cultural Foods**

**(2)**

The influence of world cultures and ethnic food habits on food patterns. Lecture, computer applications and food preparation laboratory.

Prerequisite(s): NUT 1010 and consent of instructor.

### **NUT 3020 - Nutrition Assessment**

**(2)**

Introduction to the purpose, methods, and scientific basis for assessment of nutritional status in total health care for individuals and groups. Includes anthropometric, biochemical, clinical and dietary methods for assessing nutritional status.

Pre or Corequisite: NUT 3065 and BIO 1040

### **NUT 3030 - Community Nutrition**

**(3)**

A study of the delivery of nutrition services in the community setting, with an emphasis on disease prevention and health promotion in vulnerable populations. Topics discussed include nutrition epidemiology, food policy, cultural competence in nutrition education, food insecurity, and socioeconomic factors affecting food consumption, nutrition

status and health. Lecture, computer applications, laboratory and field experiences.

Prerequisite(s): NUT 2025

Corequisite(s): NUT 3031 (required)

### **NUT 3031 - Community Nutrition Practicum**

(1)

Application of principles of community nutrition programming, including field experience and observation of nutrition services provided by community-based organizations and governmental entities.

Prerequisite(s): NUT 2025

Concurrent: Must enroll concurrently NUT 3030.

Corequisite(s): NUT 3030 (required)

### **NUT 3035 - Nutrition Research Through the Life Cycle**

(2)

A study of nutrition specifically applied to the stages of human development and the life cycle. Current scientific literature is reviewed and applicable research methodologies are discussed. The role of statistics in scientific research is reviewed. Computer applications and laboratory.

Prerequisite(s): NUT 2025

### **NUT 3040 - Nutrition in Women's Wellbeing (WS)**

(2)

A survey of current evidence-based nutrition principles and guidelines corresponding to gender differences in health. Topics include dietary prevention of cardiovascular disease, diabetes, cancers, and osteoporosis in women as well as special needs in pregnancy/lactation, menopause and weight management. Computer applications.

### **NUT 3065 - Advanced Nutrition**

(3)

Theories integrated from physiology, biochemistry and nutrition. An in-depth study of nutrients and their role in human metabolism. Current research on human metabolic processes is analyzed. Laboratory applications.

Prerequisite(s): NUT 2025, BIO 1030, and CHE 2094

### **NUT 4014 - Practices in Nutrition Education and Dietary Counseling**

(2)

Practical experience in techniques that will enhance patient/client communication for nutrition education. Discussion and application of counseling methods, adult learning, motivation theory, lesson planning, group communication techniques, medical charting techniques and the general nutrition care process.

Prerequisite(s): NUT 2025

### **NUT 4015 - Medical Nutrition Therapy**

**(3)**

A study of nutrition status and assessments; nutrition care strategies; and the modification of normal food intake with emphasis on dietary adjustments necessitated by certain disease and disorder processes and conditions focusing on the hospitalized and/or ambulatory patient.

Prerequisite(s): NUT 3065 and BIO 1040

Corequisite(s): NUT 4017 (Required)

### **NUT 4017 - Medical Nutrition Therapy Practicum**

**(1)**

Case studies, medical chart notation practice, opportunity to interact with dietetic professionals working in clinical fields.

Prerequisite(s): NUT 3065 and BIO 1040

Concurrent: Must enroll concurrently in NUT 4015.

Corequisite(s): NUT 4015 (Required)

### **NUT 4035 - Food Service Management**

**(2)**

Application of the principles of successful organization and management for effective food service operations. Topics include responsibilities of food service manager and administrative responsibilities of a food manager. Lecture.

Prerequisite(s): NUT 1010

### **NUT 4045 - Catering**

**(2)**

A study of specialized food production techniques and operation principles for home-based or small catering services. Recipe and menu development, cost marketing and implementing a catering operation will be discussed. Lecture, laboratory experience, field experiences, and computer applications required.

Prerequisite(s): NUT 1010

### **NUT 4055 - Food Science**

**(3)**

Analysis of the composition and chemical structure of food that affect the color, flavor, texture, aroma, and nutritive quality. The application of this information for careers in the food industry. Current research in food technology and food consumption patterns is investigated. Computer applications and laboratory required.

Prerequisite(s): NUT 1010 and CHE 2094

### **NUT 4080 - Internship in Nutrition**

**(2 or 4)**

Career-related work experience in which students observe and actively participate using their acquired skills and knowledge. Students are under the supervision of a department faculty supervisor and a qualified on-site supervisor. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. For 2 units of credit, 80 hours of work experience is required; for four units, 160 hours of work experience is required. May be repeated up to a total of four units. Graded Credit/No Credit.

Prerequisite(s): Senior standing in the Department of Sociology, Social Work, and Family Sciences. Consent of department chair.

### **NUT 4090 - Special Studies in Nutrition**

**(1-4)**

An individualized and detailed research study from selected topics. The research topic must be approved and supervised throughout the semester. May be repeated up to a total of four units.

Prerequisite(s): Senior standing in the Department of Sociology, Social Work, and Family Sciences. Consent of department chair.

### **NUT 4097 - Senior Seminar**

**(2)**

Analysis and discussions of interrelated issues found within the areas of Family Sciences. Topics studied are research, public policy, professionalism, leadership, and historical significance. In this capstone, the student will create a professional eportfolio including introduction, professional statements, personal assessments, achievements, community service, practical application and work samples will be included. Each student will present his or her personal eportfolio to a panel of interested parties for assessment. This capstone gives students the opportunity to develop a professional voice. Required of all seniors graduating in the Department of Sociology, Social Work, and Family Sciences.

Prerequisite(s): SOC 1001 and senior standing in the Department of Sociology, Social Work, and Family Sciences.

## **Off-Campus Program**

### **OCP 0000 - Off-Campus Program**

**(12-17)**

Students taking courses through a cooperative agreement with another credit granting institution register for this course. "D" designation is for study abroad taken in the U.S.. "P" designation is for approved partner programs.

## **Philosophy**

### **PHL 2001 - Introduction to Philosophy (GE)**

(3)

A historical survey of selected philosophical ideas, systems, and methods, especially as these have developed in Western civilization.

**PHL 2011 - Ethics (GE)**

(3)

The study of right and wrong in principle, character, and conduct; practical moral issues analyzed from the basis of sound moral theory; characteristics of an adequate, consistent code of ethics.

**PHL 2050 - God and Philosophy**

(3)

This course provides an exploration of issues related to theological discourse, especially language about God. The class engages significant figures and ideas throughout the Western philosophical tradition. There will be a focus on Medieval Christian philosophers including St. Augustine, St. Anselm, and St. Aquinas. There will also be a focus on justice issues related to gender, racial, and economic circumstances.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 2077 - Logic**

(3)

A study of the logical appraisal of arguments with attention given to formal and informal fallacies.

**PHL 3001 - Plato and Aristotle**

(3)

This course is designed to examine developments in Western philosophy with an emphasis on ancient Greek philosophers utilizing readings from significant and representative texts of the historical eras.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 3002 - Descartes through Hegel**

(3)

This course examines developments in Western philosophy with an emphasis on modern philosophy from Descartes through Hegel utilizing readings from significant and representative texts of the modern historical period.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 3021 - Justice, Politics, and the Social World**

(3)

This course traces the emergence and development of political and social philosophy, with special consideration given

to Plato's notion of justice, Social Contract Theory, Marxism, racial justice, feminism and poststructuralism.

Prerequisite(s): PHL 2001 or PHL 2011

Also offered as SOC 3021

**PHL 3031 - Existential Philosophy and Literature**

(3)

A philosophical and historical examination of themes within existentialist literature and philosophy. This course includes such figures as Kierkegaard, Heidegger, Sartre, de Beauvoir, Dostoevsky, and Camus.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 3041 - Philosophy and Art**

(3)

Classical and recent theories of beauty, the sublime, and art, with selected coverage of such concepts as aesthetics, expression, mimesis, criticism and the relationship between art, the art-world, and society.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 3060 - Philosophy and the Sciences**

(3)

A philosophical and historical examination of the nature and epistemological foundations of science, the scientific method, and the relationship between science and such areas as religion, morality, and culture.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 3071 - Education and the Ethical Life**

(3)

An examination of significant works in the philosophical tradition from ancient Greek to contemporary texts that deal explicitly with the topics of education and pedagogy.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 3080 - Alienation, Transformation, and Reconciliation in Film**

(3)

A philosophical exploration of the themes of alienation, transformation, and reconciliation through the interpretation of film. Possible foci include apocalyptic, post-apocalyptic, and dystopic genres.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 3081 - Ethics, Responsibility, and Love**

**(3)**

This course examines the ethical implications of love. The course includes such figures as Plato, St. Augustine, Kierkegaard, Buber, Levinas, and Irigaray.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 4001 - Contemporary Voices in Philosophy, Theology, and Ethics**

**(3)**

This course will study 20th century Western philosophy and critically reflect upon those trajectories of thought that arise out of and respond to the philosophical work of the Western philosophical tradition as a whole.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 4011 - The Search for Meaning: Goodness, Being, and Truth**

**(3)**

An examination of the nature of reality, meaning, and knowledge, and what constitutes each. Possible topics include realism, nominalism, freedom and responsibility, God, space, time, causation, skepticism, belief, truth, and justification.

Prerequisite(s): PHL 2001 or PHL 2011

**PHL 4090 - Special Studies in Philosophy**

**(1-3)**

An investigation of a topic in philosophy not otherwise covered in the curriculum. May be repeated to a total of six units.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

**Physical Education**

**PED 1000 - Fitness Through Movement (GE)**

**(2)**

Development of personal fitness through assessment, theory, and practice; introduces principles of conditioning, nutrition, and stress management leading to a lifetime of fitness and desirable health attitudes and practices.

**PED 1002 - Selected Activities in Physical Education (GE)**

**(1)**

Development of fundamental skills through participation in selected activities. (Activity not offered in other courses; to be announced in the schedule.) May be repeated up to a total of 2 units. May have a special fee.

**PED 1010 - Martial Arts and Self Defense (GE)**

**(1)**

An introductory course for the general student covering mixed martial arts (karate/tae kwon do, jujitsu/aikido) and self defense.

**PED 1011 - Beginning Soccer (GE)**

**(1)**

This course will cover the basic beginning concepts of soccer. It will also enhance the importance of healthy stewardship of personal health.

**PED 1012 - Yoga Sculpt (GE)**

**(1)**

Development of personal fitness through a variety of activities including yoga, pilates, core stability ball, light weights, resistance bands, and mat work.

**PED 1013 - Yoga (GE)**

**(1)**

This course explores fundamental yoga and mindfulness practices suitable for all-levels of experience. Students will be guided through physical yoga postures from various styles of yoga practice to improve flexibility, strength, and balance. Additionally, students will explore mindful breathing techniques and meditation practices to reduce stress and enhance overall health and well-being.

**PED 1014 - Cheerleading (GE)**

**(1)**

Repeatable up to 4 units.

Prerequisite(s): Consent of instructor.

**PED 1015 - Adapted Physical Activity (GE)**

**(1)**

Individually-tailored exercise program for those students physically unable to enroll in the regular physical activity courses. Introduces concepts of physical fitness, basic physiology, nutrition, and proper body mechanics. May be repeated up to a total of 2 units.

Prerequisite(s): Physician's referral and with the approval of the department chair.

**PED 1016 - High Intensity Functional Training (GE)**

**(1)**

Development of skills and knowledge pertaining to strength, endurance, and flexibility while participating in higher-intensity functional movements through the use of body weight exercises, weights, medicine balls, and more.

**PED 1017 - Contemporary Dance (GE)**

**(1)**

This course is designed to give students exposure to multiple forms of contemporary dance. Forms that may be explored include: hip hop, zumba, bollywood, salsa, and others depending on instructor expertise.

**PED 1018 - Southern California Hiking (GE)**

**(1)**

Course is designed to give lifetime fitness opportunities to university students. Students will meet the 10,000 steps/week goal via trail and road walking during class time and weekend hikes. Fitness concepts including nutrition, long term goal setting, mindfulness, and mental health issues will be addressed. Spiritual aspects to mind-body overall health focus will be emphasized.

**PED 1019 - Core and Cardio Training (GE)**

**(1)**

This class is a variety of workouts aimed at combining core strengthening and cardiovascular endurance activities that will help increase one's stamina, heart health, and boost metabolism. Meets in Golden Gym.

**PED 1020 - Beginning Tennis (GE)**

**(1)**

Fundamental techniques, rules, court play, and etiquette.

**PED 1021 - Advanced Tennis (GE)**

**(1)**

Development of the advanced skills of the approach shot, net play, varied serves, and spins. Participation in singles and doubles strategies and competition.

Prerequisite(s): Consent of instructor.

**PED 1030 - Beginning Volleyball (GE)**

**(1)**

An introduction to the fundamental skills for effective play and an understanding of the rules of the game.

**PED 1035 - Badminton (GE)**

**(1)**

An introduction to the basic techniques, strategies, and rules for singles and doubles play.

**PED 1040 - Beginning Swimming (GE)**

**(1)**

Fundamental swim strokes, skills, and safety techniques geared toward developing fitness. Special fee.

**PED 1041 - Advanced Swimming (GE)**

**(1)**

Training techniques in competitive swimming. Starts, turns, conditioning, stroke mechanics. Special fee.

Prerequisite(s): PED 1040 or consent of instructor.

**PED 1044 - Beginning Surfing (GE)**

**(1)**

Instruction and participation in the basic skills of surfing and rough water safety. Offered on a Quad basis.

**PED 1048 - Boot Camp Fitness (Aerobics) (GE)**

**(1)**

Boot Camp Fitness class combines the cardiovascular, musculoskeletal and neuromuscular systems that will include workouts such as: circuit, HIIT, Tabata, Medicine ball, some choreography aerobic dance, functional training using dumb bells, resistance bands, stability balls, ViPre, sand bags and more all set to inspirational music. Meets in Golden Gym.

**PED 1055 - Weight Training (GE)**

**(1)**

Development of skills and knowledge pertaining to building strength, endurance, and flexibility through the use of weights.

**PED 1060 - Golf (GE)**

**(1)**

An introduction to basic skill techniques, rules, safety, and etiquette leading to a practical golf course experience. Special fee.

**PED 1068 - Outdoor Adventures (GE)**

**(1)**

Instruction in the necessary skills and use of proper equipment for safe, enjoyable wilderness outings. Concepts of survival, route-finding, leadership and trip planning for backpacking, rock climbing, and whitewater rafting are part of the student's experience. Offered on a Quad basis. Special fee for transportation and food.

**PED 1070 - Varsity Basketball: Men (GE)**

**(1)**

Repeatable up to 4 units.

**PED 1071 - Varsity Basketball: Women (GE)**

**(1)**

Repeatable up to 4 units.

**PED 1072 - Varsity Tennis: Men (GE)**

**(1)**

Repeatable up to 4 units.

**PED 1073 - Varsity Tennis: Women (GE)**

**(1)**

Repeatable up to 4 units.

**PED 1075 - Varsity Track and Field: Women (GE)**

**(1)**

Repeatable up to 4 units.

**PED 1076 - Varsity Golf (GE)**

**(1)**

Repeatable up to 4 units.

**PED 1077 - Varsity Baseball (GE)**

**(1)**

Repeatable up to 4 units.

**PED 1078 - Varsity Softball (GE)**

**(1)**

Repeatable up to 4 units.

**PED 1080 - Varsity Soccer: Men (GE)**

**(1)**

Repeatable up to 4 units.

**PED 1081 - Varsity Volleyball (GE)**

(1)

Repeatable up to 4 units.

**PED 1083 - Varsity Cross Country: Women (GE)**

(1)

Repeatable up to 4 units.

**PED 1084 - Varsity Soccer: Women (GE)**

(1)

Repeatable up to 4 units.

**PED 2000 - Optimal Health (GE)**

(2)

Students are encouraged to take charge of their own lives in terms of attitude, exercise, and nutrition-fostering new habits in these areas and developing an understanding of health as more than the absence of disease.

**PED 2020 - Team Sports Fundamentals and Strategies (GE)**

(2)

Development and practical application of skills, play, and strategy of team sports from a participation and coaching perspective. Content includes baseball/softball, basketball, football, soccer, and volleyball. In addition to play, students will develop and manage an athletic team, including tactical and technical instruction, game management, and understanding game officiating.

**PED 2025 - Individual and Dual Sports Fundamentals and Strategies (GE)**

(2)

An introduction to the knowledge, skills, and progressions involved in teaching and participating in functional fitness activities. Emphasis will be placed on teaching and assessing movement progressions involved with individual and dual sports.

**PED 3008 - Methods of Teaching Physical Education**

(3)

Development of competencies in teaching motor skills, social skills, and fitness through games, sports, and movement experiences. Organization of teaching units, classroom management, and selection of methods and materials for preschool and elementary grades. Includes outside observation hours.

Prerequisite(s): PED 1000 or PED 2000 or SWF 3015

### **PED 3050 - Foundations and Techniques of Coaching**

**(3)**

An overview of coaching aspects including psychology of coaching, administrative coaching skills, and technical strategies of team sports. Includes sport-specific training in: basketball, softball/baseball, and volleyball.

Prerequisite(s): PED 2020 or consent of instructor.

### **PED 4084 - Practicum in Coaching**

**(1-3)**

An on-campus experience involving observation and/or active coaching experiences under the direction of a PLNU athletic coach. May be repeated for a maximum of six units.

Prerequisite(s): PED 3050 or consent of instructor.

### **PED 4088 - Internship in Coaching**

**(1-3)**

An off-campus experience involving observation and/or active coaching with a local athletic team or fitness center. May be repeated for a maximum of six units.

Prerequisite(s): PED 3050 or consent of instructor.

## **Physical Science**

### **PSC 1004 - The Cosmos (GE)**

**(4)**

An introduction to our place in the universe emphasizing religious, cultural and historic perspectives including modern developments in physics and astronomy. (Meets a general education requirement; does not count toward any Chemistry or Physics majors.)

Prerequisite(s): MTH 0099 or equivalent.

### **PSC 1014 - Physical Science for Teachers (GE)**

**(4)**

An introductory survey of selected principles in physics and chemistry with a discussion of related societal and environmental issues. This course focuses on topics necessary for the California multiple subject teaching credential (K-8). This class is highly interactive and will make use of many hands on activities. Meets a general education requirement; does not count toward the Chemistry or Physics major.

Pre or Corequisite: MTH 1013 or equivalent.

### **PSC 1023 - Earth and Space Science for Teachers**

**(3)**

An introductory survey of the disciplines of geology, oceanography, meteorology, and astronomy with discussion of philosophical and societal issues. This course focuses on topics necessary for the California multiple subject teaching credential (K-8).

Prerequisite(s): PSC 1014

## **Physics**

### **PHY 1034 - The Physics of Sound and Music (GE)**

**(3)**

An introduction to the science of sound, hearing and music. The course will focus on concepts of sound production, propagation, and perception including topics such as musical scales, instruments, and acoustics.

Pre or Corequisite: MTH 0099 or equivalent.

Corequisite(s): PHY 1034L

### **PHY 1034L - The Physics of Sound and Music Lab (GE)**

**(1)**

A lab course designed for a hands-on exploration of the physics of sound. Meets two hours per week.

Corequisite(s): PHY 1034

### **PHY 1044 - General Physics I (GE)**

**(3)**

A general introduction to physics including mechanics, thermodynamics, waves and sound. The course is taught primarily at the algebra/trigonometry level but does require limited use of calculus. Meets the professional requirements of life and medical science majors.

Prerequisite(s): MTH 1033 or consent of instructor.

Corequisite(s): PHY 1044L

### **PHY 1044L - General Physics I Lab (GE)**

**(1)**

A lab course designed for a hands-on exploration of General Physics I. Meets two hours per week.

Prerequisite(s): MTH 1033 or consent of instructor.

Corequisite(s): PHY 1044

### **PHY 1054 - General Physics II (GE)**

**(3)**

A general introduction to physics including electricity and magnetism, optics, and modern physics. The course is taught primarily at the algebra/trigonometry level but does require limited use of calculus. Meets the professional requirements of life and medical science majors.

Prerequisite(s): PHY 1044 with a grade of C- or higher or consent of instructor.

Corequisite(s): PHY 1054L

**PHY 1054L - General Physics II Lab (GE)**

**(1)**

A lab course designed for a hands-on exploration of General Physics II. Meets two hours per week.

Prerequisite(s): PHY 1044 with a grade of C- or higher or consent of instructor.

Corequisite(s): PHY 1054

**PHY 2044 - University Physics I (GE)**

**(3)**

An analytic, calculus-based study of classical physics appropriate for science and engineering majors. Includes mechanics, waves, and thermodynamics.

Corequisite(s): PHY 2044L and MTH 1044 or MTH 1064 or consent of instructor.

**PHY 2044L - University Physics I Lab (GE)**

**(1)**

A lab course designed for a hands-on exploration of University Physics I. Meets two hours per week.

Corequisite(s): PHY 2044 and MTH 1044 or MTH 1064 or consent of instructor.

**PHY 2054 - University Physics II**

**(3)**

An analytic, calculus-based study of classical physics appropriate for science and engineering majors with an emphasis on electromagnetism, circuits, and optics.

Prerequisite(s): PHY 2044 with a grade of C- or higher.

Corequisite(s): PHY 2054L and MTH 1074 or consent of instructor.

**PHY 2054L - University Physics II Lab**

**(1)**

A lab course designed for a hands-on exploration of University Physics II. Meets two hours per week.

Prerequisite(s): PHY 2044 with a grade of C- or higher.  
Corequisite(s): PHY 2054 and MTH 1074 or consent of instructor.

**PHY 3004 - Modern Physics**

(3)

An introduction to concepts of modern physics including relativity, quantum theory, atomic physics, and high energy physics.

Prerequisite(s): PHY 1054 with a grade of C- or higher or PHY 2054 with a grade of C- or higher.  
Corequisite(s): PHY 3004L

**PHY 3004L - Modern Physics Lab**

(1)

A lab course designed for a hands-on exploration of Modern Physics. Meets two hours per week.

Prerequisite(s): PHY 1054 with a grade of C- or higher or PHY 2054 with a grade of C- or higher.  
Corequisite(s): PHY 3004

**PHY 3013 - Nuclear Physics**

(2)

A survey of nuclear physics including nuclear models, laws of radioactive decay, radiation detection, and applications of nuclear science in engineering and medicine.

Prerequisite(s): PHY 1054 with a grade of C- or higher or PHY 2054 with a grade of C- or higher.  
Corequisite(s): PHY 3013L

**PHY 3013L - Nuclear Physics Lab**

(1)

A lab course designed for a hands-on exploration of Nuclear Physics. Meets two hours per week.

Prerequisite(s): PHY 1054 or PHY 2054  
Corequisite(s): PHY 3013

**PHY 3043 - Analytical Mechanics: Dynamics**

(3)

Newtonian mechanics, dynamics of particles and rigid bodies, oscillatory motion, central forces, inertial tensors, Lagrangian and Hamiltonian formulations.

Prerequisite(s): PHY 2054 with a grade of C- or higher and MTH 2074 with a grade of C- or higher.  
Recommended: MTH 3033

**PHY 3063 - Electricity, Magnetism, and Waves I**

**(3)**

Classical electromagnetism including topics in electrostatics, magnetostatics, fields in matter, electromagnetic induction, and Maxwell's equations.

Prerequisite(s): PHY 2054 with a grade of C- or higher and MTH 2074 with a grade of C- or higher.

Recommended: MTH 3033

**PHY 3083 - Electricity, Magnetism, and Waves II**

**(3)**

Electrodynamics with an emphasis on application of Maxwell's equations particularly to electromagnetic radiation.

Prerequisite(s): PHY 3063

**PHY 4013 - Thermodynamics**

**(3)**

Fundamental concepts of thermodynamics and statistical mechanics; applications to both classical and quantum systems.

Prerequisite(s): PHY 2054

Corequisite(s): MTH 3033

**PHY 4053 - Quantum Mechanics**

**(3)**

A rigorous introduction to quantum physics including Schroedinger's equation, matrix mechanics, perturbation theory, and applications in atomic and molecular physics.

Prerequisite(s): MTH 2074 with a grade of C- or higher and PHY 3004.

Recommended: MTH 3033

**PHY 4063 - Solid State Physics**

**(3)**

An introduction to the study of solids, including crystal structure, reciprocal lattices, crystal binding, phonons, and electron band theory.

Prerequisite(s): PHY 2054 with a grade of C- or higher.

**PHY 4072 - Senior Project**

**(2)**

This course provides students the opportunity to prepare a technical paper on scientific or engineering research and to make an oral presentation of their results of this research. Initially topics investigated will draw on learning from the core curriculum, including topics in an advanced laboratory setting in mechanics, quantum mechanics, statistical

mechanics, and electricity and magnetism. Students will then develop and explore a project of their choosing. This course will normally be completed in a student's senior year.

Prerequisite(s): Consent of instructor.

### **PHY 4090 - Special Topics in Physics**

**(1-3)**

The topics in physics chosen depend on regular or visiting faculty expertise as well as student demand. May be repeated as topics vary up to a total of six units.

Prerequisite(s): Consent of instructor.

### **PHY 4092 - Internship in Physics**

**(2)**

A supervised experience in which the student works with industry professionals to gain experience in physics or engineering. May be repeated to a total of four units. This course is graded Credit/No Credit only.

Prerequisite(s): Student must have taken at least two upper-division engineering or physics classes and consent of instructor.

### **PHY 4099 - Independent Studies in Physics**

**(1-4)**

Independent investigation, under the supervision of a faculty member, of a specific problem in physics or engineering.

Prerequisite(s): Consent of instructor and department chair.

## **Political Science**

### **POL 1001 - Introduction to Political Science (GE)**

**(3)**

A survey of the major dynamics within the political world. The course focuses on political behavior, structures of government, the people and processes of politics, and the challenges currently facing countries around the world. In this course, we will explore a variety of contemporary issues, including inequality, poverty, nationalism, democratization, political violence, and development.

### **POL 1065 - American Government**

**(4)**

A study of American political ideas, governmental institutions, and political processes at the national, state, and local levels. The study also describes and evaluates the major policy commitments of the national government. Meets the United States Constitution requirement to obtain a California teaching credential.

**POL 1090 - The Politics of Race, Class, and Gender (GE/WS)**

(4)

An introduction to politics, using an interdisciplinary approach to contemporary controversies surrounding issues of ethnicity, socioeconomic class, and gender. The course includes historical, legal, and political perspectives.

**POL 2030 - Introduction to International Relations**

(4)

An investigation of the structures of international relations with reference to conflict and cooperation. Topics include the national interest, alliances, the causes of war, conflict resolution, diplomacy, and international law.

**POL 2070 - Scope and Methods of Political Science**

(4)

An examination of the scope of the discipline of political science and the research methods used in the study of political phenomena.

**POL 2090 - World Regional Geography**

(3)

A survey of the six major geographical regions of the world, and the interaction between the geological and geographical environments and the social and cultural structures of the peoples of those regions.

**POL 3001 - Transitions to Democracy**

(4)

This course explores the democratization process from start to finish, including all phases from cracks in the authoritarian regime to consolidation and issues of transitional justice. The course also deconstructs the process in stages so as to provide an overview of conditions that might help or hinder the process. Particular attention is given to "third wave" transitions (1974-1991), such as Portugal, Chile, Argentina, Germany, and the former Soviet Union. Current-day examples of transitions to and away from democracy are included as well.

**POL 3020 - U.S. Constitution and Civil Liberties Law**

(4)

A survey of the basic tenets of constitutional law with an emphasis on civil liberties embodied in the Bill of Rights and major Supreme Court decisions.

**POL 3021 - Western Political Thought**

(4)

Study of canonical texts by important political thinkers throughout the history of Western civilization, such as Plato, Aristotle, Hobbes, Locke, Marx, and Foucault. Issues of enduring interest to political philosophers, such as freedom, justice, and authority are discussed.

**POL 3025 - American Political Thought**

(4)

Foundations of democratic theory and the development of political thought in the American experience, from its Enlightenment roots to post-modern challenges.

**POL 3030 - The Development of Feminist Thought (WS)**

(4)

A survey of the development of various strands of feminist thought and engagement in current conversations within and about feminism.

**POL 3041 - Campaigns and Elections**

(4)

This course analyzes the American electoral process with regard to the history of the political party system, recent trends in partisanship and vote choice, basic techniques of political advertising, and the role of television news, the Internet, and other electronic media in campaigns.

**POL 3051 - War and Peace Studies**

(4)

The first part of this course explores traditional theories and modern scientific studies of war. The course then moves to an analysis of the Vienna and Versailles peace conferences, alternative peace paradigms, and then methods of peace research and avenues of policy action.

**POL 3060 - Urban Politics**

(4)

The course introduces students to urban politics in a discussion of the history of American cities, primarily through the lens of race and class. The course also includes the most significant political and policy problems affecting American urban areas, including violence, education, housing, and employment.

**POL 3070 - Comparative Politics**

(4)

An introduction to the political processes and institutions within countries, with a focus on comparing these across regions. Topics include political socialization, political participation, policymaking, and the way in which policy decisions end up affecting society. These issues will be explored in two ways: comparisons across countries and an in-depth country analysis of eight specific countries.

**POL 3080 - Congress and the Presidency**

(4)

A study of the legislative and executive branches of American government. Topics include the structure and functions

of the United States Congress and the presidency, relations between the branches, and the role of interest groups in influencing legislators and executives.

**POL 3090 - American Capitals Program**

(9)

This three-course sequence of classes in political issues and governmental processes is taken in either Sacramento, California, or Washington, D.C. the sequence is taken in conjunction with POL 4060 and together the courses provide students with politically contextualized study and experience in government. Available only through the Sacramento Semester Program in Sacramento, or the American Studies or Washington Semester Program in Washington, D.C.

**POL 3091 - Off-Campus Political Studies Program**

(3-12)

This sequence of classes in political issues and governmental processes is taken while the student is studying abroad in a state capital, Washington, D.C., or another country. The sequence provides students with the opportunity for contextualized study and experience.

**POL 4015 - Women and Politics (WS)**

(4)

An examination of women's role in political life. The content includes analysis of gender as a legitimate category of political inquiry, gender-based social movements, women's political participation, and the impact of political systems and public policy on women.

**POL 4020 - United States Foreign Policy**

(4)

A study of the policy-making process, including the roles of public opinion and the president, the United States Congress, and the bureaucracy. The course also investigates the challenges and opportunities facing the United States in the new post-Cold War world of economic competition.

**POL 4035 - Global Governance**

(4)

This course reviews and evaluates the evolving mechanisms for global order and justice. Primary attention is given to the United Nations system, international law, and the expansion of international regimes.

**POL 4037 - International Economics**

(4)

This course presents theories and models of international trade and money, and government policy and macroeconomic stabilization, with a focus on global economic issues and applied economic topics. The economics of global cities, urban problems, poverty, labor, immigration, utilization of resources, environmental stewardship, globalization, gender, crime, and violence will be discussed.

Prerequisite(s): ECO 1001 and ECO 1002 or consent of instructor.  
Also offered as ECO 4010

**POL 4038 - International Law**

(4)

This course introduces advanced undergraduate students to the development and content of international law, in particular its role in the current practice of international relations. Topics include laws of war, use of force, minority rights, environmental law, and the future of international law.

**POL 4041 - Issues in Public Policy**

(4)

A study of the policymaking process in the United States, illustrated by an in-depth study of three contemporary public policy issues. We will discuss theories and policies, as well as critiques of them, in terms of equality, democracy, and citizenship. Students will then become a "policymaker" and a "policy analyst."

**POL 4042 - Contemporary Issues in World Politics**

(4)

An in-depth study of selected issues in contemporary world politics, such as arms control issues, environmental issues, convergence issues, and virtual diplomacy.

**POL 4044 - Contemporary Political Ideologies**

(4)

This course examines political ideologies that shape beliefs, values, and actions of political movements and regimes. Topics include totalitarianism, authoritarianism, socialism, and democracy. Includes an in-depth study of democratic theory and practice globally.

**POL 4050 - Issues of Global Human Rights**

(2)

This course reviews the causes of such gross violations of human rights as genocide, torture, and "ethnic cleansing," the corpus of international human rights law, and emerging areas of human rights concern.

**POL 4055 - Protest and Social Movements in World Politics**

(4)

This course looks at the theories and concepts behind studies of social movements and seeks to answer such questions as "Why do they happen?" and "Are they effective?" In addition to theory, the course utilizes case studies of particular social movements in world politics, such as urban protests, civil rights movements, environmental causes, democratization efforts, religious movements, and gender-related movements.

**POL 4060 - Internship in Political Science**

**(2-4)**

A learning experience in a work environment at a selected governmental or public advocacy site. Students are under the supervision of an on-site supervisor and an academic advisor. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. Repeatable for up to 4 units.

Prerequisite(s): Consent of instructor.

### **POL 4073 - Senior Seminar in Political Science and International Studies**

**(3)**

The Senior Seminar is the capstone experience for all Political Science and International Studies majors, representing the culmination of the knowledge and skills students have developed throughout their previous courses. All Political Science and International Studies majors must take this course in their senior year.

Pre or Corequisite: POL 2070 or equivalent; Senior standing.

### **POL 4090 - Special Studies in Political Science**

**(1-4)**

An individualized study of a topic applying the special skills of a political scientist. The project must be approved and supervised by an academic advisor. May be repeated up to a total of eight units.

Prerequisite(s): Consent of instructor.

## **Psychology**

### **PSY 1001 - Psychology of Personal Development - First Year Experience (GE)**

**(3)**

A first-year introduction to issues and various theories in psychology which allow students to reflect on their personal social, mental, and spiritual development. The course emphasizes various attitudes and skills which contribute to academic success as well as providing a better understanding of the specific religious and social culture of Point Loma Nazarene University. Discussions, lectures, and small group experiences are the major components of this course. Required for all first-time freshman up through age 20, as well as transfer students with fewer than 24 transferrable units. All other transfer students are required to take PSY 1003. Letter Graded.

### **PSY 1003 - General Psychology (GE)**

**(3)**

A survey of psychology as an empirical/behavioral science. Topics include biological correlates of behavior, learning, cognition, emotion, motivation, personality, assessment, development, psychopathology, psychotherapy, and social psychology. Students should take PSY 1003 if they do not meet the criteria for PSY 1001.

Prerequisite(s): PSY 1001 (may be taken concurrently).

### **PSY 2070 - Career Exploration**

**(2-4)**

Students are placed in local mental health or social service agencies to obtain direct exposure in the field. The goal is to help them evaluate their career options and direction. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated up to a total of six units. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor and approval of departmental faculty.

### **PSY 3000 - Personality and Adult Development**

**(4)**

An introductory survey of classic theories and contemporary empirical research in the fields of personality and adult development psychology. Distinct domains of knowledge regarding human nature, individual differences, and adult development and aging are covered. Emphasis is placed on developing a greater capacity for self-awareness and critical thinking.

### **PSY 3001 - Physiological and Neuropsychology**

**(4)**

A study of the anatomical and physiological bases of mental events and behavior.

Prerequisite(s): PSY 1003 and PSY 3090 or consent of instructor.

### **PSY 3008 - Developmental Psychology - Birth Through Adolescence**

**(4)**

A systematic study of the physical, cognitive, social, and emotional development of the individual from birth through adolescence.

### **PSY 3015 - Positive Psychology**

**(3)**

An examination of the scientific study of optimal functioning. Emphasis is placed on leading a meaningful and fulfilling life that benefits both person and society. Small group activities and daily assignments are required. Not Repeatable. Letter Graded.

Pre or Corequisite: PSY 1003 or consent of instructor.

### **PSY 3020 - Social Psychology**

**(3)**

A study of the theories and methods of social interactions in the development of personal and group behavior. Topics include attitudes, communication, and pro-social and anti-social behaviors.

Also offered as SOC 3020

### **PSY 3021 - Abnormal Psychology**

**(3)**

Study of etiology, assessment, diagnosis, and treatment of various forms of abnormal behavior from various psychological perspectives.

Prerequisite(s): One of PSY 1003, PSY 3008, CHD 1050 or consent of instructor.

### **PSY 3025 - Clinical and Community Interventions**

**(4)**

This course provides an overview of the fields of clinical and community psychology. It focuses on individual, family and systems, social-community, bio-psycho-social, and health interventions. Career directions within the mental health professions are introduced. Theories and interventions include cognitive-behavioral, humanistic-existential, psychodynamic-psychoanalytic, and systems. Focus is on how therapists apply therapeutic knowledge in a variety of settings.

### **PSY 3030 - Moral Psychology and Cultural Values**

**(4)**

Introduction to the psychological study of morality, prosocial behavior, and character development, including a survey of historical and contemporary theories of morality. Includes a particular emphasis on the role of cultural norms and values, as well as an analysis of the ways in which such values are developed and transmitted in contemporary culture (e.g., media, academics, family, etc.). Small group activities are included.

Prerequisite(s): PSY 1001

### **PSY 3041 - Group Counseling**

**(1-3)**

A group method experience which introduces theories used to modify, ameliorate, or change personal behavior. Each student is required to lead discussions with a group of up to ten freshmen students in order to discuss and explore various topics pertaining but not limited to social, mental, and spiritual development as they transition to college. May be repeated once for up to six (6) units total.

Prerequisite(s): Consent of instructor.

### **PSY 3045 - Group Dynamics**

**(3)**

A laboratory learning experience in the formation and development of small group processes with emphasis upon understanding the effects of individual dynamics on the group.

Prerequisite(s): PSY 3041 and consent of instructor.

### **PSY 3049 - Intimate Couples**

(3)

A laboratory learning experience in building intimate and long-lasting marriage relationships. The course utilizes research based interventions that have effectively decreased the risk of divorce. This course must be taken with your spouse or fiancé. Letter

Prerequisite(s): Consent of instructor.

**PSY 3050 - Clinical and Research Assessment**

(3)

A detailed study of selected psychological assessment instruments used in clinical and research settings. Emphasis is placed on reliability and validity, as well as selection of tests for diagnosis, treatment planning, and research.

Prerequisite(s): PSY 3090

**PSY 3060 - Human Sexuality**

(3)

Survey of behavioral, personality, and psycho-biological components of human sexuality, with emphasis upon delineation of facts from sexual myths, social context, and values. Open to students who are not Psychology majors.

**PSY 3080 - Family Development and Family Therapies**

(3)

Introduction to the normative stages and crises affecting families over the life span, and to the major theories of family and marital psychotherapy. Emphasis on how various models work with relational systems to facilitate development through times of crisis and developmental transition. Also focuses on therapeutic issues of substance abuse, and on legal issues involved in child, spousal, and elder abuse. Family developmental theories are applied to community organizations in order to assist students in understanding how system principles are used in community consultation.

Prerequisite(s): PSY 3021 or consent of instructor.

**PSY 3090 - Research Methods and Statistics I**

(4)

Students gain experience in methods of design, data collection, management, and analysis. Students begin a significant research project. This course must be taken in the semester immediately preceding PSY 3091.

Prerequisite(s): PSY 1003

**PSY 3091 - Research Methods and Statistics II**

(4)

Study of design and of research in psychology and the use of statistics. Practice in the integration of design and statistics is included. Students finish a significant research project. This course must be taken in the semester immediately following PSY 3090

Prerequisite(s): PSY 1003 and PSY 3090 or consent of instructor.

**PSY 4000 - History and Contemporary Issues in Psychology**

(2)

A study of important ideas and debates in the history of psychology as they reappear in contemporary theory and research (e.g., the mind-body problem; nature-nurture). This course also provides a comprehensive review of important theories and findings in psychology in preparation for the GRE Subject Exam. An overview of the graduate school application process is offered.

Prerequisite(s): Psychology Major (or Minor) of senior standing or spring semester of the junior year, if applying to graduate school in the fall of the senior year.

**PSY 4009 - Psychology of Cognition and Learning**

(4)

A study of the major theories and empirical findings in the fields of cognition and learning, as well as practical applications to human behavior. Laboratory activities may be included.

Prerequisite(s): PSY 1003 and PSY 3090 or consent of instructor.

**PSY 4010 - Issues in Psychotherapy-Theology Integration**

(3)

More detailed study of issues involved in the integration of theological insights and psychotherapy approaches within the therapeutic setting. Includes an overview of the historical relationship between religion and psychotherapy, differing models of the therapeutic relationship, and various models for integrating psychotherapeutic theory with theological world views. Introduces specific issues that arise in conducting therapy with religious persons, including criteria for evaluating healthy and unhealthy forms of religious belief.

Prerequisite(s): PSY 3025 or PSY 3080 or consent of instructor.

**PSY 4020 - Pursuing Goodness: The Science of Moral Change (Senior Capstone)**

(4)

This course surveys some of the latest research in positive and moral psychology that concerns how we live a good life in a world with others. It addresses three perennial questions about personal and social well-being: What makes a good life *good*? What makes a good relationship good? And, how do persons change for good? It examines theory and research in three new psychological literatures: the science of a flourishing life, the science of love and virtue, and the practical neuroscience of moral change. Students will participate in experimental exercises that this new science suggests will enhance our motivation and capacity for moral goodness.

Prerequisite(s): PSY 1001 or PSY 1003 and BIB 1001 or BIB 1002. Senior standing or consent of instructor.

**PSY 4040 - Psychology of Religion**

**(4)**

An introduction to selected topics in this sub-division of psychology, including religious conversion and spiritual development (especially Christian); dynamics of religious experience; the nature of altruism and love; and the impact of spiritual practices on character development, psychological well-being, and health. The course prepares students for graduate study in topics related to the integration of psychology and Christian (especially Wesleyan) practical theology.

Prerequisite(s): PSY 1001 or PSY 1003. PSY 3030 *is strongly recommended*.

### **PSY 4070 - Fieldwork in Psychology**

**(2-4)**

Students are placed in local mental health or social service agencies to obtain training in specific psychological skills. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated up to a total of twelve (12) units. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor and approval of department faculty.

### **PSY 4090 - Special Studies in Psychology**

**(1-4)**

Detailed study of selected individual topics in psychology. Designed for advanced students to go deeply into an area not included in the curriculum. May be repeated up to a total of eight (8) units.

Prerequisite(s): Consent of instructor.

### **PSY 4099 - Research in Psychology**

**(1-4)**

Open to students of proven ability. Designed for students to undertake a significant self-initiated research project. May be repeated up to a total of twelve units.

Prerequisite(s): Consent of instructor and approval of department faculty.

## **Single Subject Teaching Credential**

### **EDU 40CP3 - Secondary Clinical Practice Seminar I**

**(1)**

This seminar course supports the Clinical Practice II experience through classroom inquiry and reflection of the principles of effective classroom management, teaching methods, differentiation of instruction, lesson planning and delivery, and parent communication. Emphasis is placed on the modification of lessons and instructional support of English learners, diverse learners, and learners with exceptionalities. Candidates explore school and community demographics and consider methods for teaching diverse populations. Credit/No Credit. It is through this course that each candidate completes the CalTPA task "Assessing Learning" as a performance-based measure of the knowledge and skills taught in this course.

Corequisite(s): EDU 4050  
Also offered as EDU6CP2

#### **EDU 40CP4 - Secondary Clinical Practice Seminar II**

(1)

This seminar course supports the Clinical Practice II experience through classroom inquiry and reflection of the principles of effective classroom management, teaching methods, differentiation of instruction, lesson planning and delivery, and parent communication. Emphasis is placed on further development of skills in the modification of lessons and instructional support of English learners, diverse learners, and learners with exceptionalities. Candidates continue to explore school and community demographics and consider methods for teaching diverse populations. Graded Credit/No Credit. It is through this course that each candidate completes the CalTPA task "Culminating Teaching Experience" as a performance-based measure of the knowledge and skills taught in this course.

Corequisite(s): EDU 4055  
Also offered as EDU6CP2

#### **EDU 4020 - Literacy Instruction for Secondary Teachers**

(3)

This methodology course teaches the knowledge and skills necessary to support the literacy development of secondary learners, including English learners, across the content areas. The core areas of reading, writing, listening, and speaking, as outlined in the English Language Arts (7-12) Common Core standards, and the English Language Development standards, serve as the foundation and the focus. The development of reading comprehension skills, vocabulary development, and literary response and analysis and culturally diverse literature are emphasized. Instruction also emphasizes reading and writing across the curriculum to support content area knowledge. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied through field work experience.

Also offered as EDU 6020

#### **EDU 4021 - General Methods for Secondary Teachers**

(3)

This methodology course explores current pedagogy and its research underpinnings with the goal of implementing specific strategies, techniques, and practice of the methods presented. Candidates demonstrate mastery of specific competencies including literacy and language development in detailed lesson plans to make content accessible to all learners through developmentally appropriate pedagogy, effective questioning techniques, and use of appropriate resources. Candidates' demonstration lessons provide opportunity for reflection on attempted practices. This course includes intentional practice of classroom management, active and equitable participation for culturally, ethnically, linguistically and academically diverse learners, lesson planning, and formative assessment to differentiate instruction for all learners. Modifications for diverse learners and learners with exceptionalities are researched and applied through field work experience. Technology for teaching and learning is integrated in the course. It is through this course that each candidate completes the CalTPA task "Designing Instruction" as a performance-based measure of the knowledge and skills taught in this course.

Also offered as EDU 6021

### **EDU 4050 - Secondary Clinical Practice I**

**(4)**

This Clinical Practice experience provides the candidate with an opportunity to work directly with learners in a university assigned secondary classroom with a Cooperating Teacher. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver instruction in the secondary classroom. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communications. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. Credit/No Credit. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion.

Corequisite(s): EDU 40CP3

Also offered as EDU 6040

### **EDU 4055 - Secondary Clinical Practice II**

**(4)**

This course is the second Clinical Practice teaching experience. Student Teachers are assigned to a different content area and/or grade level in a secondary classroom than in the first Clinical Practice experience with an approved Cooperating Teacher. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver instruction in this new secondary classroom setting. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communication. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. Credit/No Credit. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion.

Corequisite(s): EDU 40CP4

Also offered as EDU 6044

## **Sociology**

### **SOC 1001 - Introduction to Sociology (GE)**

**(3)**

An introduction to sociology, basic concepts, theories, development as a discipline, and the tools of social investigation.

### **SOC 2001 - Cultural Anthropology (GE)**

**(3)**

An introduction to the basic concepts, methods and findings of cultural anthropology. Emphasis is on the comparative study of contemporary cultures to develop an understanding of the cultural diversity that confronts society and the common threads that bind people together.

### **SOC 2009 - Introduction to Criminal Justice**

**(3)**

An introduction to and comparative examination of the components of the justice process dealing with delinquent and criminal behavior. Examines criminally deviant behavior in a complex society.

### **SOC 2022 - Exploring Diversity Through Intergroup Dialogue**

**(1)**

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill in, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships.

### **SOC 2050 - Sociology of the Family**

**(3)**

A study of the changing nature and function of the family as a basic institution of society with emphasis upon variety related to culture, class, and ethnicity.

### **SOC 3003 - Urban Issues**

**(3)**

An interdisciplinary exploration of life as it is experienced in the urban environment. Students are exposed to broad issues of global urban life with particular focus on the San Diego/Tijuana metroplex. Special attention is given to the variety of ways people create meaningful lives for themselves in multicultural, urban environments and to the social organization that supports the life of the poor.

Prerequisite(s): Consent of instructor.

### **SOC 3005 - Social Stratification**

**(3)**

Social stratification as part of social organization. A review of the major theories, methods of studying stratification and evidence relating to the origin, nature and functioning of systems of social inequality bases of stratification; relationships among class, status and power. Class consciousness and conflict; technological change and social mobility.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of the instructor.

### **SOC 3010 - Criminology**

**(3)**

The study of crime and criminal behavior, the role of law, efforts at prevention and control.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of the instructor.

### **SOC 3014 - Juvenile Delinquency**

**(3)**

A study of the youthful offender including theories of cause, the role of law and authority, and current trends.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of instructor.

### **SOC 3016 - Sociology of Aging**

**(3)**

Analysis of aging within social contexts: the aging process, death, and dying, and the impact of psychological, economic, physiological, and social factors.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of the instructor.

### **SOC 3020 - Social Psychology**

**(3)**

A study of the theories and methods of social interactions in the development of personal and group behavior. Topics include attitudes, communication, pro-social, and anti-social behaviors.

Also offered as PSY 3020

### **SOC 3021 - Justice, Politics, and the Social World**

**(3)**

This course traces the emergence and development of political and social philosophy, with special consideration given to Plato's notion of justice, Social Contract Theory, Marxism, racial justice, feminism and Poststructuralism.

Prerequisite(s): PHL 2001 or PHL 2011

Also offered as PHL 3021

### **SOC 3030 - The Development of Feminist Thought (WS)**

**(4)**

A survey of the development of various strands of feminist thought, and engagement in current conversations within and about feminism.

### **SOC 3050 - Urban Sociology**

**(3)**

A study of urbanization as a social process, comparing urban, suburban, and metropolitan phenomena. Attention is given to institutions in changing urban settings, i.e., religion, family as it is applied to ministry.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of the instructor.

### **SOC 3060 - Race and Ethnicity**

**(3)**

An analysis of historical and current social factors relating to various ethnic, racial, and status groups. Focus is upon issues of discrimination and oppression.

### **SOC 3075 - African Cultures and Histories**

**(3)**

An interdisciplinary examination of the social and cultural histories of Africa with emphasis on the contact between Africans and Europeans since the late 19th century.

Also offered as HIS 3075

### **SOC 4009 - Criminal Law**

**(3)**

To understand the role of the state in criminal law, this course studies the nature, origins and general principles of criminal law, including causation, defenses of justification and excuse, and criminal liability. Cases highlight and illustrate the general principles and doctrines in the context of real life. Crimes against persons, habitation, property and public order, and morals.

Prerequisite(s): SOC 1001 or SOC 2001 and SOC 2009 or consent of instructor.

### **SOC 4010 - Constitutional Foundations of Criminal Justice**

**(3)**

Examination of the federal constitutional provisions which impact the criminal justice system with an emphasis on the amendments in the Bill of Rights dealing with searches and seizures by law enforcement officers, the exclusionary rule, the privilege against self-incrimination, the rights to due process and the assistance of counsel, the death penalty, and constraints on the correctional system.

Prerequisite(s): SOC 1001 and SOC 2009 or consent of the instructor.

### **SOC 4015 - Social Theory**

**(3)**

Investigation and analysis of 19th century and more recent sociological thought, and philosophical and social issues surrounding it. The relation of sociological theory and Christian thought is considered.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of the instructor.

### **SOC 4020 - Social Change**

**(3)**

Study of social changes in modern societies; the source of change, processes such as social change movements by

which change occurs, and the meanings of change for individuals and institutions.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of instructor.

**SOC 4030 - Sociology of Religion**

**(3)**

Comparative and analytical study of religion as a social institution; the relation of religion to social stratification, economy, state; religion as an agent of social change and stability.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of the instructor.

**SOC 4044 - Globalization and Culture**

**(3)**

An exploration of the history, nature and trajectories of globalization with particular attention to people groups on the margins. Rooted in ethnographic accounts of how the dominant political and economic systems affect those that have least access to power and wealth, this course critically examines the cultural patterns and social structures associated with globalization and the creative resistance that follows.

**SOC 4060 - Applied Research Methods and Design**

**(3)**

A study and application of the methods of social research, completion of a design, collection and analysis of data, and development of a final report.

Prerequisite(s): SWF 1000, or SOC 1001 or SOC 2001 or consent of instructor.

**SOC 4070 - Medical Sociology**

**(3)**

An introduction the field of medical sociology and to a perspective on health and illness and the health care system. The course examines social and cultural factors related to health and nonhealth, including the nature of the problems addressed by health care institutions, societal responses to disease and sickness, and the institutional and organizational settings of health care.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of instructor.

**SOC 4071 - Internship in Sociology**

**(2-4)**

Designed to provide experience in applied settings. A minimum of three hours per week for a full semester is required for each unit of credit. Placement and plan for internship are developed in consultation by instructor, student, and agency. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated for up to a total of six units of credit. Students may receive credit for a maximum of six units for internship whether Sociology 4071 or SOC 4072. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor.

**SOC 4072 - Internship in Criminal Justice**

**(2-4)**

Intended for Sociology majors with a concentration in Criminal Justice. This course allows students to gain experience in a criminal justice setting. Students are required to complete a minimum of 12 hours per week in an approved setting in the criminal justice system. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated for up to a total of six units of credit. Students may receive credit for a maximum of six units for internship whether SOC 4071 or Sociology 4072. Graded Credit/No Credit.

Prerequisite(s): Consent of instructor.

**SOC 4075 - Sociology of Education**

**(3)**

A study of the social foundations of the American education system and the various community settings where education takes place. Emphasis upon current educational dynamics.

Prerequisite(s): SOC 1001 or SOC 2001 or consent of instructor.

**SOC 4076 - Senior Seminar in Sociology**

**(3)**

Intended for Sociology majors, including those with concentration in Criminal Justice. Course provides opportunity to integrate material learned in other sociology courses as well as opportunity to integrate academic learning with personal experiences. During the course, students will write a senior thesis.

Prerequisite(s): Senior standing and major in Sociology.

**SOC 4080 - Restorative Justice**

**(3)**

This course will provide a critical introduction to the fundamental principles and practices of restorative justice. The course explores the needs and roles of key "stakeholders" (victims, offenders, communities, justice systems), outlines the basic principles and values of restorative justice, and introduces some of the primary models of practice. It also addresses challenges to restorative justice - the dangers, the pitfalls - as well as possible strategies to help prevent restorative justice from failing to live to its promise.

**SOC 4090 - Special Topics in Sociology**

**(1-4)**

Selected topics of current interest in depth. Application through travel or special projects may be an essential part of the course. May be repeated for up to a total of six units. Students wishing to earn more than six units must have consent of the department chair and the Vice Provost for Academic Administration.

Prerequisite(s): Consent of instructor.

### **SOC 4091 - Independent Studies in Sociology**

**(1-4)**

An intensive study of selected issues. A plan for the study must be approved by instructor and department chair. May be repeated for up to a total of six units.

Prerequisite(s): Consent of instructor.

### **SWF 1000 - Living Justly in Contemporary Society (GE)**

**(3)**

This is a general education course aimed at helping students understand and engage human society and the social world, while providing vocational direction for those interested in cultivating a more just and caring society. The course will seek to introduce basic sociological theories used to frame social life; present methodological tools used to view, assess, and understand how social processes influence individuals, families, and society; and provide examples of the practical vocational application of the theories and methods used to live more justly in our contemporary society.

### **SWF 3006 - Research Basics**

**(3)**

Learn the basics behind the design and development of a research project. From conception to feasibility to proposal. Even if you do not intend to pursue graduate work in the social sciences, understanding social research methodology is vital for almost any career or service position that interacts with statistics, studies, reports, etc. Developing these skills will serve you in becoming a more discriminating consumer of media as well, as media outlets report on studies, polls, and more. At its essence, a methodology course is a sub-division of epistemology ("how do we know what we know"), methodology seeks to answer the related question, "how do we find out?" Students will design and write a research proposal.

## **Social Work**

### **SWK 3003 - Introduction to Social Work**

**(3)**

An historical and contemporary view of the profession of social work within the field of social welfare: the values, the ethical standards, the knowledge base, and the social welfare programs and services where social workers practice.

### **SWK 3030 - Social Welfare Policy**

**(3)**

A study of private and public programs and services that make up the American welfare system. A study of policy analysis and development with focus on the needs of special populations.

Prerequisite(s): SWK 3003 or consent of instructor.

**SWK 3040 - Child Welfare**

**(3)**

Analysis of the effects of family breakdown with special emphasis on children of divorce, single parent families, HIV and drug-exposed children, children of minorities, and children of poverty.

**SWK 3065 - Human Behavior in the Social Environment**

**(3)**

As generalists in the practice of social work the entry-level professional social worker is assisted in the organization of knowledge by a social systems approach. Systems examined include individual development across the life span, families, large and small groups, neighborhoods, communities, and organizations.

**SWK 3070 - Social Work Practice I**

**(3)**

A study of the theories and methods of professional social work practice. Focus is upon generalist practice with individuals, families, and small groups.

Prerequisite(s): SWK 3003

**SWK 3071 - Social Work Practice II**

**(3)**

A study of the theories and methods of professional social work practice with large groups, organizations, neighborhoods, communities, and governments.

Prerequisite(s): SWK 3070 or consent of instructor.

**SWK 4070 - Social Work Practicum**

**(2-5)**

Intended for seniors in social work only. The student completes direct practice in an approved, supervised field setting, supervised by professional social workers. One (1) unit of credit is given for each 40 hours of approved practice. Course is repeated until a minimum total of 400 hours (10 units) is completed.

Prerequisite(s): SWK 3070 and SWK 3071 or consent of the Director of Social Work.  
Also offered as SWK 4071

**SWK 4071 - Social Work Practicum**

**(2-5)**

Intended for seniors in social work only. The student completes direct practice in an approved, supervised field setting,

supervised by professional social workers. One (1) unit of credit is given for each 40 hours of approved practice. Course is repeated until a minimum total of 400 hours (10 units) is completed.

Prerequisite(s): SWK 3070 and SWK 3071 or consent of the Director of Social Work.  
Also offered as SWK 4070

### **SWK 4072 - Seminar in Social Work I**

(2)

Seminar for social work majors which integrates a liberal arts perspective with the professional social work foundation of knowledge, skills, and values. Students share field practicum experiences from the beginning phases of the social work process as a method of reinforcing their understanding of the professional social worker engaged in generalist practice.

Prerequisite(s): Prior or concurrent enrollment in SWK 4070.

### **SWK 4073 - Seminar in Social Work II**

(2)

Continuing seminar for social work majors only; continues the sharing of the practicum experience and concentrates on the later phases of the social work process.

Prerequisite(s): Prior or concurrent enrollment in SWK 4071.

### **SWK 4090 - Selected Topics in Social Work**

(1-4)

Selected topics of current interest in depth. May be repeated for up to a total of six units. Students wishing to earn more than six units must have consent of the department chair and the Vice Provost for Academic Administration.

Prerequisite(s): Consent of instructor.

### **SWK 4091 - Independent Studies in Social Work**

(1-4)

An intensive study of selected issues. A plan for the study must be approved by the instructor and department chair. May be repeated for up to a total of six units.

Prerequisite(s): Consent of instructor.

## **Spanish**

### **SPA 1001 - Elementary Spanish I (GE)**

(4)

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom.

**SPA 1002 - Elementary Spanish II (GE)**

(4)

An introductory course emphasizing four basic skills: aural comprehension, speaking, reading, and writing. Also noted is the cultural and historical background of the areas where the language is spoken. Participation and active use of the language is emphasized in the classroom.

**SPA 2050 - Intermediate Spanish Conversation I**

(3)

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Language lab practice is continued. Conducted in Spanish.

Prerequisite(s): SPA 1002 or consent of instructor.

**SPA 2051 - Intermediate Spanish Conversation II**

(3)

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through first-hand exposure and through the use of cultural and literary materials. Language lab practice is continued. Conducted in Spanish.

Prerequisite(s): SPA 2050 or consent of instructor.

**SPA 3000 - Civic Engagement: Conversation, Culture and Community**

(3)

A course designed to refine the skills of advanced communication through the study of basic phonetics, continuation of grammar review, writing, and the study of semantics. Conducted in Spanish.

Prerequisite(s): SPA 2051 or consent of instructor.

**SPA 3002 - Advanced Grammar and Reading**

(3)

An in-depth study of the grammatical structure of Spanish with emphasis on syntax, stylistics, and lexical problems as encountered in reading. Conducted in Spanish.

Prerequisite(s): SPA 2051 or consent of instructor.

**SPA 3010 - Latin American Culture and Civilization**

**(3)**

The history and civilization of Latin America including indigenous and Hispanic cultures of Mexico, Central, and South America from pre-colonial times to the present. Conducted in Spanish.

Prerequisite(s): SPA 2051 or consent of instructor.

**SPA 3015 - Culture and Civilization of Spain**

**(3)**

The history of the Iberian peninsula from prehistoric times to the present. The life, through art and literature, of the various peoples who integrated the Spanish nation. Conducted in Spanish.

Prerequisite(s): SPA 2051 or consent of instructor.

Recommended: SPA 3002, SPA 3003

**SPA 3020 - Mexican American Literature and Culture**

**(3)**

A survey of major 20th century Mexican American writers and their cultural heritage in the United States. Genres for consideration include short story, poetry, novel, and drama. Conducted in Spanish.

Prerequisite(s): SPA 3002 and SPA 3000 or consent of instructor.

**SPA 3080 - Genre/period Studies in Hispanic Literature or Film**

**(3)**

A study of a literary genre or period of Hispanic literature or film. Conducted in Spanish.

Prerequisite(s): SPA 3002 and SPA 3000 (SPA 3000 may be concurrent).

**SPA 3090 - Current Spanish Linguistics**

**(3)**

A descriptive study of the Spanish language including phonology, morphology, syntax, lexicon, and semantics. Conducted in Spanish.

Prerequisite(s): SPA 3002

**SPA 4000 - Peninsular Literature Before 1800**

**(3)**

Analysis and discussion of representative works from the medieval era to the 18th century. Conducted in Spanish.

Prerequisite(s): SPA 3002 and SPA 3000 or consent of instructor.

**SPA 4002 - Peninsular Literature Since 1800**

**(3)**

Analysis and discussion of representative works from the 19th century to the present. Conducted in Spanish.

Prerequisite(s): SPA 3002 and SPA 3000 or consent of instructor.

**SPA 4037 - Latin American Literature Before 1910**

**(3)**

A study of the development of literary genres featuring representative works from Mexican, Central, and South American writers from the pre-Columbian period to the Mexican revolution. Conducted in Spanish.

Prerequisite(s): SPA 3002 and SPA 3000 or consent of instructor.

**SPA 4039 - Latin American Literature Since 1910**

**(3)**

A study of the Latin American narrative from the Mexican revolution to the present day. Conducted in Spanish.

Prerequisite(s): SPA 3002 and SPA 3000 or consent of instructor.

**SPA 4085 - Senior Seminar in Spanish**

**(3)**

A course designed to reflect upon and to integrate issues of culture, civilization, language, and literatures of the Spanish-speaking world. Research is conducted to see how areas such as cultural contrasts, linguistic and lexical variations, and political and artistic realities have influenced modern literary pieces. Completion of a portfolio and a summative evaluation of language skills required.

Prerequisite(s): SPA 3002, SPA 3000 and Senior standing.

**SPA 4090 - Special Studies in Spanish**

**(1-3)**

An intensive study of a selected problem by an individual or group under the direction of a member of the faculty. May be repeated to a total of six units.

Prerequisite(s): Consent of instructor and department chair.

**SPA 4099 - Research in Spanish**

**(1-3)**

Independent research under the guidance of a faculty member.

Prerequisite(s): Consent of instructor and department chair and Senior standing.

**Special Education**

### **EDU 4053 - Organization and Management for Success in the Moderate/Severe Classroom**

**(3)**

This methodology course focuses on issues of managing the learning environment to promote success in inclusive settings for learners with moderate to severe disabilities. Techniques in training support personnel to actively use appropriate monitoring systems for support in classroom settings and natural environments are studied. Strategies related to positive behavior supports across all learning environments are emphasized.

### **EDU 4054 - Methods of Teaching Candidates with Moderate/Severe Disabilities**

**(3)**

This methodology course examines curriculum and instruction appropriate for individualized services including supplementary aids, services, and technology. Curricular issues addressed include modification of the curriculum within inclusive settings and natural environments, selecting appropriate curricula materials, developing and modifying appropriate curricula, and developing individual instructional plans based on formative assessment.

### **EDU 4070M - Special Education Mild/Moderate Clinical Practice I**

**(4)**

This Clinical Practice experience provides the candidate with an opportunity to work directly with learners in a university assigned classroom setting with a Cooperating Teacher and focus on the general education curriculum and California standards. The candidate is placed in an inclusive classroom that serves general education students as well as students with disabilities. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver the general education curriculum and California standards. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communication. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.

Prerequisite(s): Approval to student teach and completion of all Teacher Education admission requirements.

### **EDU 4070S - Special Education Moderate/Severe Clinical Practice I**

This Clinical Practice experience provides the candidate with an opportunity to work directly with learners in a university assigned classroom setting with a Cooperating Teacher and focus on the general education curriculum and California standards. The candidate is placed in an inclusive classroom that serves general education students as well as students with disabilities. Candidates observe and apply instructional strategies under the leadership of the Cooperating Teacher to learn to manage and deliver the general education curriculum and California standards. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology and parent communication. Throughout the student teaching experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion.

Prerequisite(s): Approval to student teach and completion of all Teacher Education admission requirements.

### **EDU 4074M - Special Education Mild/Moderate Clinical Practice II**

(4)

This Clinical Practice experience provides the Mild/Moderate Education Specialist candidate an opportunity to focus on instructional strategies appropriate for learners with disabilities. Student teachers are assigned to a different content area, grade level, or special education service area other than that in the first Clinical Practice experience with an approved Cooperating Teacher. Candidates observe and apply instructional strategies appropriate for learners with disabilities under the leadership of the Cooperating Teacher to learn to manage and deliver instruction. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology, and parent communication. Throughout the Clinical Practice experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.

Prerequisite(s): Successful completion of Clinical Practice I and completion of all Teacher Education admission requirements.

#### **EDU 4074S - Special Education Moderate/Severe Clinical Practice II**

This Clinical Practice experience provides the Moderate/Severe Education Specialist candidate an opportunity to focus on instructional strategies appropriate for learners with disabilities. Student teachers are assigned to a different content area, grade level, or special education service area other than that in the first Clinical Practice experience with an approved Cooperating Teacher. Candidates observe and apply instructional strategies appropriate for learners with disabilities under the leadership of the Cooperating Teacher to learn to manage and deliver instruction. The Cooperating Teacher models appropriate teaching methods, lesson planning and delivery, classroom management, use of technology, and parent communication. Throughout the Clinical Practice experience, the teaching responsibility gradually shifts from the Cooperating Teacher to the candidate, with careful consideration as to when the candidate is ready to assume the full-day teaching experience. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.

Prerequisite(s): Successful completion of Clinical Practice I and completion of all Teacher Education admission requirements.

#### **EDU 4092 - Assessment and Services for Students with Disabilities**

(3)

This methodology course explores current knowledge and best practice in the screening, referral, assessment, and placement procedures necessary to identify and qualify learners with disabilities for special education services. The significant issues of learners with disabilities is reviewed through discussions of the developmental, academic, behavioral, social, communication, vocational, and community life skill needs of individual learners in order to develop and implement effective programs. Strategies in consultation and coordination of the assessment process are addressed. Letter Grade.

Also offered as EDU6050

#### **EDU 4093 - Curricular and Instructional Adaptations for Students with Mild/Moderate Disabilities**

(3)

This methodology course provides current knowledge in the major educational practices of special education, including emergent issues, theories, and research as they relate to curricular and instructional decision-making for learners with

mild/moderate disabilities. This course provides the necessary knowledge regarding curriculum, instruction, and technology, learning methodology and skill acquisition necessary to provide special education services.

Also offered as EDU6051

### **EDU 4094 - Collaboration and Consultation for IEP Implementation, Evaluation, and Program Improvement**

**(3)**

This methodology course provides expanded knowledge regarding the synthesis of all aspects of educating learners with disabilities. The candidate is given the opportunity to synthesize information related to the assessment of standards, short-range and long-range planning for learners, transition services language, and the effective use of consultation and collaboration skills. An emphasis of this course is training for collaboration with learners, parents, family members, school personnel, and agency representatives to build teams to ensure effective transitions across the lifespan of all learners.

Also offered as EDU6052

### **EDU 4096 - Principles of Language Acquisition for Students with Moderate/Severe Disabilities**

**(3)**

This theory course specifically examines issues of language acquisition as related to learners with moderate/severe disabilities. Areas examined include assessment, behavior management, and communication styles that impact learning. The development of appropriate IEP goals, assistive technology, augmentative communication, and social skills instruction are emphasized. This course focuses on the principles of language acquisition and effective instructional practices for English learners. It further examines the pedagogy of educational equity to provide English learners access to the core curriculum. Foundational knowledge and classroom instructional practices are linked through the systematic study of phonemic awareness, oral language, and literacy development. Special emphasis is placed on the Structured English Immersion model as practiced in California schools. Effective instructional strategies that ensure active and equitable participation of learners who are culturally, ethnically, and socio-economically diverse are introduced and applied through 15 hours of fieldwork experiences.

Prerequisite(s): Consent of Program required.

## **Theatre**

### **TRE 1001 - Introduction to Theatre (GE)**

**(2)**

Introductory theatre appreciation course. Historical and stylistic developments are studied as well as the elements of theatre. Includes basic terminology and instruction for aesthetic understanding of western theatre form.

### **TRE 2010 - Theatre Practicum I**

**(1-2)**

Requirements vary according to the activity developed in consultation with the instructor. May be repeated up to a total of three units. Graded Credit/No Credit.

### **TRE 2050 - Voice and Diction**

**(2)**

Practical training in developing the speaking voice, articulation, and pronunciation through a variety of applications including stage, film, and broadcasting.

### **TRE 2070 - Acting**

**(3)**

Development of basic acting techniques and vocabulary through exercises, character analysis, monologues, and scene work.

### **TRE 3050 - Musical Theatre**

**(3)**

Exploration of the historical and theoretical approaches for this unique genre, as well as development of practical performances skills. Acting, directing, and choreographing is explored in workshop performances from representative musicals, in addition to attending and analyzing area productions.

### **TRE 3054 - Movement**

**(3)**

Introduction to the Laban "effort shaping" method. Essential for the study of mime, mask, and advanced stage movement techniques.

### **TRE 3071 - Playwriting**

**(3)**

Students will begin with a number of preliminary exercises, then move on to writing scenarios, and finally each will write a one act play to be performed at the One Act Festival.

### **TRE 3085 - Directing**

**(2)**

Consideration of aesthetic and technical aspects of stage directing. Focuses on script analysis and interpretation, conceptualization, and theatrical communication.

Prerequisite(s): TRE 2070 and TRE 3054

### **TRE 4020 - Theatre Practicum II**

**(1-2)**

Prior university experience in applied theatre activities is required. Continued application of communication concepts and skills. Requirements vary according to the activity developed in consultation with the instructor. Credit not

applicable toward upper-division requirements in the department. May be repeated for up to a total of eight units.  
Graded Credit/No Credit.

### **TRE 4021 - Internship in Theatre**

**(3)**

Participation in an internship supervised by departmental faculty. "C" Designation is for California Internships. "E" Designation is for Out of State Internships. May be repeated up to a total of six units. Graded Credit/No Credit.

Prerequisite(s): Senior standing or consent of instructor.

### **TRE 4052 - Improvisation and Devising**

**(3)**

This course entails creating a play improvisationally that will be performed at the end of the semester. Students will explore a variety of ways of using improvisation to create scripted theatre.

### **TRE 4090 - Special Studies in Theatre**

**(1-3)**

Intensive study of a selected problem by an individual or group in the field of theatre under the direction of a member of the department. May be repeated up to a total of six units.

Prerequisite(s): Consent of instructor.

## **Theology**

### **THE 2050 - Introduction to Christian Theology**

**(3)**

This course introduces students to the study of Christian theology and to the body of Christian doctrines. It approaches Christian theology from the perspective of the Wesleyan theological tradition.

Prerequisite(s): BIB 1001 or BIB 1002

### **THE 3005 - Christian Faith and the Natural Sciences (GE)**

**(3)**

This course explores central Christian convictions, e.g., the doctrines of creation, providence, the incarnation and the resurrection of the body, in careful and respectful dialogue with the natural sciences, especially cosmology and biological evolution.

Prerequisite(s): BIB 1001 or BIB 1002

### **THE 3006 - The Life of Holiness**

**(3)**

A study of the biblical foundations of the Holiness message, Wesleyan theological perspectives set in the context of the history of the Church, and the classic disciplines of spiritual formation.

Prerequisite(s): BIB 1001 or BIB 1002

### **THE 3015 - Christian and Religious Themes in Literature**

**(3)**

This course explores theological themes, beliefs, and practices, as well as literary images of God, evil, and redemption in short stories, novels and poems.

Prerequisite(s): BIB 1001 or BIB 1002

### **THE 3020 - The World's Faith Traditions**

**(3)**

This course introduces students to the convictions, writings, and practices of people in the Abrahamic (Jewish, Islamic, Sikh) and Asian (Hindu, Buddhist, Taoist, Confucian) traditions from a Wesleyan theological perspective.

Prerequisite(s): BIB 1001 or BIB 1002

### **THE 3025 - The Human Person and Theology and Psychology**

**(3)**

This course surveys views of human nature and personhood in the Christian tradition and also in leading psychological theories. It also examines the relationship between theological discourse and the discipline of psychology.

Prerequisite(s): BIB 1001 or BIB 1002

### **THE 3030 - Christ and the Church**

**(3)**

This course will examine the relationship between the Church's teachings on the identity and ministry of Jesus Christ (Christology) and the ongoing life of Christ's community of disciples, including worship, evangelism, the sacraments, the presence of the Holy Spirit, and eschatology.

Prerequisite(s): BIB 1001, BIB 1002 and THE 2050

### **THE 3035 - Christian Ethics**

**(3)**

This course studies major Christian ethical theories and views of the moral life. It also explores the Christian use of the leading philosophical theories of ethics. Finally, it examines contemporary moral issues such as justice, war and peace,

work, and family.

Prerequisite(s): BIB 1001 or BIB 1002

**THE 3060 - Christian Life as Vocation (GE)**

**(3)**

A study of the theology and practice of vocation as they have developed in the biblical and Christian traditions. Students will be led to reflect on career and professional life in a Christian way. The course will also study Christian ethical ways of living in the world.

Prerequisite(s): BIB 1001 or BIB 1002

**THE 3070 - Global Christianity (GE)**

**(3)**

This survey course covers Christianity's two-thousand-year history looking at its origins and history in the Middle East, Africa, and Asia. The great expansion of Christianity into Europe and the West will be highlighted while the primary focus will be on more Christian movements and theology from the Global South.

Prerequisite(s): BIB 1001 or BIB 1002

**THE 4010 - The Ministry and Sermons of John Wesley**

**(3)**

This course introduces students to the life, ministry, and preaching of the co-founder of Methodism as a model for contemporary Christian formation, service, and theological reflection.

Prerequisite(s): BIB 1001, BIB 1002 and THE 2050

**THE 4015 - Three Traditions of Protestant Theology**

**(3)**

This course will study traditions of Protestant theology in their historical origins, classic expressions, and contemporary manifestations. Offered alternate years.

**THE 4090 - Special Studies in Theology**

**(1-3)**

An examination of a topic in theology not otherwise studied in the curriculum. May be repeated for a total of six units.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

**THE 4095 - Justice in the Church: Gender, Households, and Unity in the Body of Christ**

**(3)**

The course will give special attention to the thought and practices of Christian righteousness in light of dynamics of inequity that have long faced Christian communities. Students will engage Christian tradition and contemporary life on the issues of the subjugation of women, economic alienation, slavery, racism and other structures of power. Approaches to these issues will be multi-disciplinary - underscoring the integration of biblical, theological, historical, and philosophical perspectives - and culminate in concrete practices of ministry.

Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

## **Women's Studies**

### **WS 1090 - The Politics of Race, Class, and Gender**

(4)

An introduction to politics, using an interdisciplinary approach to contemporary controversies surrounding issues of ethnicity, socioeconomic class and gender. This course includes historical, legal, and political perspectives.

### **WS 3010 - Women in Christianity**

(3)

A study of issues related to women in the Bible and Christianity, including women's spiritual biographies, the use of gender-inclusive language, the ordination of women into ministry, women in the Wesleyan/holiness tradition, and feminist and liberation theologies.

### **WS 3012 - Gender and Communication**

(3)

A study of how the self-perception of men and women evolves as a function of cultural influences and the differences and similarities in the way each uses communication patterns.

### **WS 3030 - Development of Feminist Thought**

(4)

A survey of the development of various strands of feminist thought, and engagement in current conversations within and about feminism.

### **WS 3040 - Nutrition of Women's Well-being**

(2)

A survey of current evidence-based nutrition principles and guidelines corresponding to gender differences in health. Topics discussed include prevention of cardiovascular disease, diabetes, cancers, and osteoporosis in women as well as special needs in pregnancy/lactation, menopause and weight management. Computer applications.

### **WS 4015 - Women and Politics**

(4)

An examination of women's role in political life. The content includes analysis of gender as a legitimate category of political inquiry, gender-based social movements, women's political participation, and the impact of political systems and public policy on women.

**WS 4037 - Women Writers**

(3)

Considers women writers from a specific chronological period from the Middle Ages up through the 20th century. The time period, themes and genres considered vary from year to year. The course focuses on questions related to gender, class, and race.

Recommended: LIT 3000

**WS 4040 - Racial and Gender Issues in Economics and Education**

(2)

A study of social issues pertaining to race and gender in economics and education. The economic status of different races and genders is examined, and the impact of educational opportunity on races, genders and economic status are discussed. The extent to which discrimination inhibits educational opportunity and economic status is considered.

Prerequisite(s): Junior or Senior standing.

Recommended: ECO 1002 or Education 3000

**WS 4046 - Health of Women in a Multicultural World**

(3)

Explores the relationships between society, culture, environment, the health of women and the health care services women receive. The approach is global or international in perspective. Participants are expected to research their own cultural heritage and describe what impact this heritage has on personal health expectations and use of health care services in American society.

**WS 4047 - Family Violence**

(3)

A course examining the incidence of a broad range of abuse and neglect in society. The course covers both physical and sexual abuse as well as neglect in children from birth to adolescence, date rape, spousal abuse, and abuse of the elderly. The course examines causes, assessment criteria, current treatment approaches, requirements for reporting, and long-term effects on children, families, and society.

**WS 4075 - Topics in Women's History**

(4)

This seminar explores themes in the field of women's history. Women's roles and historical contributions, the context of gender relations, and methodologies of social and intellectual history are studied within a specific era or topic in American or World history.

## Index of Offerings

The following pages offer a complete summary of teaching/learning content areas with department/school general information, degree requirements (including majors and minors offered), and course descriptions. They are in the order listed below.

## Course Numbering

Each course is assigned a number. The letters represent the department or discipline; the four digits designate the course and indicate its level as follows:

Course Number	Classification	Level
0097-0099	Remedial	Pre-university
1000-1099	Freshman	Lower-division
2000-2099	Sophomore	Lower-division
3000-3099	Junior	Upper-division
4000-4099	Senior	Upper-division
5000-5099	Post-baccalaureate*	Post-baccalaureate

*\*Courses applicable to an undergraduate degree, master's degree program, credential, or certificate.*

## Prerequisite/Co-requisite

Some courses listed in this Catalog stipulate either a prerequisite or a corequisite. A prerequisite is a condition or requirement that must be fulfilled prior to enrolling in a course, such as a specific student classification, consent of the instructor, or another course. A co-requisite refers to a condition or a requirement that must be met prior to or concurrent with enrollment in a course.

## Alternate-year Offerings

Many of the courses listed in this Catalog, particularly those at the upper-division level, are offered on alternate years. The university reserves the right to withdraw courses and to make changes in its class schedule and academic program as necessary. Students should contact individual departments and schools to be certain when courses are offered.

## Quad Courses

A limited number of concentrated offerings are available, offered in Quad pairs. Quad classes are offered in two consecutive sessions of eight weeks in length, two times during each of the sixteen-week fall and spring semesters.

## Remedial Courses

Remedial courses are those pertaining to skills that the university may reasonably expect a general student to possess upon entry to the university, or courses pertaining to those skills that are required for university-level work. These courses do not apply to total units required for graduation.

## **Special Designations**

Courses marked GE meet requirements in general education. Those marked WS are offered in the Women's Studies minor.

## **Co-Curricular Programs**

An education at Point Loma Nazarene University is characterized by the intentional interrelationship of the life of the mind, the development of character and personal wholeness, and spiritual formation facilitating a life of service. Thus, university life includes an array of activities and experiences designed deliberately to be seamless. Academic study becomes an act of one's "reasonable spiritual worship," community life and social relationships move in the context of a family that is intent on loving God with all one's "heart, soul, mind, and strength." Faith is seen not as a compartmentalized activity but as a way of life that embraces love for humanity and life-long learning.

Realizing that students spend more time out of class and formal academic settings than in class, the university provides a wide variety of opportunities for undergraduates in co-curricular programming. These include activities directly or indirectly related to academic programs, spiritual life options, and student leadership programs that emanate from the university's mission and sponsoring denominational relationships.

## **Academic Affairs**

Co-curricular activities in the area of Academic Affairs include, but are not limited to, the following: a nationally ranked forensic team; the annual Sunset Cliffs National Forensics Tournament hosted by the university; California Board of Registered Nursing-approved continuing education courses; the Phi Alpha Theta society for pre-law students; the Point Loma String Project; a wide variety of activities directed by the Center for Justice and Reconciliation, Center for Women's Studies, Wesleyan Center, and the Fermanian School of Business; and student summer research in biology, chemistry, mathematics, kinesiology, computer information systems, and computer sciences.

Other opportunities directly or indirectly related to specific majors and programs include a host of ensembles in the Department of Music such as Chorale, Concert Choir, Point Loma Singers, Choral Union, Chamber Orchestra, Concert Band, and Jazz Band; Urban Term, an intentional living community studying local urban issues in the context of ethnic diversity and low-income environments; radio station KPLR and the university television station, supported by the Department of Communication Studies; international study trips sponsored by the Center for International Development; summer marketing research, an honors program in the Fermanian School of Business; and an annual series of literary teas, Poetry Day, and a writer's symposium featuring nationally known personalities, sponsored by the Department of Literature, Journalism, and Modern Languages.

## **Study Abroad Opportunities**

The Office of Global Studies creates and provides programs that directly serve the mission of the university, primarily at international sites. Specifically, these study abroad programs provide students with the opportunity to expand their understanding of global and societal issues through direct study in a culture distinct from their own. Participation in these programs amplifies and extends the "teaching, shaping, and sending" emphasis of the university mission by helping students encounter and understand changes confronting our world in the context of global community and world citizenship. Further information may be found in Study Abroad Programs.

## **Study Abroad Programs**

## **Off Campus Programs**

In support of its core values regarding developing a global perspective and promoting ethnic and cultural diversity, Point Loma Nazarene University actively encourages all students to spend a full semester studying outside the United States or with a designated domestic program. In an ever-expanding global community, the university recognizes the value of providing for students the opportunity to live and learn in another culture. Such an experience allows students to expand their understanding of other world cultures and reflect upon their own.

In addition to the programs listed below, which have been approved to offer PLNU course credit, the Study Abroad Office offers a wide range of programs through affiliated universities and program providers. Students applying to study abroad enroll by registering with the Study Abroad Office. All students must determine, in advance, with the approval of their faculty advisors and the Director of Study Abroad, how courses taken through these programs will be applied to their specific graduation requirements. Furthermore, students must consider the implications of studying abroad on university-funded scholarships. Program information and application materials may be obtained online at [www.pointloma.edu/studyabroad](http://www.pointloma.edu/studyabroad), via e-mail at [studyabroad@pointloma.edu](mailto:studyabroad@pointloma.edu), by telephone at 619-849-2972, or by visiting the office.

Students who are on academic or disciplinary probation, or those who are not cleared by the Dean of Students, are not eligible to participate in Study Abroad programs.

Programs designated with [CCCU] are sponsored by the Council for Christian Colleges and Universities.

## Study Abroad

- OCP 0000 - Off-Campus Program (12-17)

## Spiritual Development

The mission of the Office of Spiritual Development is to faithfully call the Point Loma Nazarene University community to spiritual vitality centered on the Lordship of Jesus Christ. The Office of Spiritual Development, through relationships and programming, seeks to join the larger university in its mission to teach, shape, and send.

Specifically, the Office of Spiritual Development desires to invite the university community into a deeper experience of God's love and to support students in their spiritual journey by creating opportunities for growth through reflection, discovery, and practice of our faith in Christ. It is the office's goal and prayer for the PLNU community to love God, love others, and love the world with body, mind, and spirit.

## Corporate Worship

### Chapel

Chapel is offered four times a week. We have morning gatherings on Monday, Wednesday, and Friday at 9:45 a.m. On Monday and Wednesday, Chapel is offered at the Point Loma campus *and* the Liberty Station campus. We also have an evening gathering, called Timeout Chapel, every Wednesday night at 9:30 p.m. where students gather in an informal worship setting designed to encourage greater intimacy with God, with each other and our calling to minister in our greater community. Chapels engage a diverse number of voices from outside the PLNU community as well as PLNU faculty, staff and students. Wednesdays are usually our Community Chapel days, when the Chapel preaching team will teach from Scripture in connection with the Chapel theme for the year. It is the university's belief that Chapel has an important role in Christian liberal arts education and, as such, is required for all undergraduate students.

## **Spiritual Care**

I Thessalonians 2:8 expresses the heart of the work in the Office of Spiritual Development: "We loved you so much that we were delighted to share with you not only the Gospel of God but our lives as well, because you had become so dear to us." Spiritual care offered in the context of loving relationships is at the center of the Office of Spiritual Development.

## **Spiritual Direction and Pastoral Care**

Encouraging a personal relationship with Jesus Christ is the university's highest priority. The prayer for every student is that, in their time at Point Loma Nazarene University, God's voice will be heard, God's will discovered, and God's mission embraced. The office staff is available to all members of the university community for prayer support, spiritual guidance, pastoral counseling, and pastoral care.

## **Worship Arts**

Worship Arts creates opportunities for students to assist in leading people in praise, worship, and response to God's voice. The team seeks to partner with and develop students who are pursuing integrity in their relationship with God and neighbor and who demonstrate ability in their area of art or technology.

## **Chapel Worship Leaders and Bands**

In the spring semester, students interested in becoming Worship Leaders on campus for the following academic year are interviewed and auditioned. Those selected begin an internship in Spiritual Development in the fall, providing leadership in various worship gatherings on campus, primarily in Chapel. In the fall, PLNU students interested in serving and growing within Worship Arts are invited to attend an informational meeting, followed by an audition and interview. From this process, a network of students is created from which the student Worship Leaders and the director of Worship Arts can draw, as they lead throughout the year. In addition, one band is created from students new to PLNU. This band works closely with the director of Worship Arts, rehearsing on a weekly basis and joining the worship leading rotation.

## **Summer Ministry Teams**

In the spring, one or two paid teams of 7-9 students are selected and trained to travel during the summer throughout the Southwest Educational Region of the Church of the Nazarene, ministering at churches, youth and family camps, conventions, and retreats. Their primary ministry vehicle is music, but it is a highly relational ministry. These students are selected through an interview and audition process.

## **Song-Writing**

Students interested in writing songs, primarily for use in corporate worship, are invited to gather on a bi-monthly basis to provide encouragement and constructive criticism to one another. Staff partner with various professors to help provide further feedback in a song's theology and music. From this program the office hopes to develop ability and confidence in song-writers as they hone their skills, writing songs that are both theologically sound and musically accessible for corporate worship.

## **Discipleship Ministries**

Discipleship Ministries create opportunities to seek and discover ways of living that reflect the life of Christ. When people engage in faithful ways of learning in order to live out what it means to love God, neighbor, and self, practices become a sacred obligation that express joy, hope, and discernment. Programs in Discipleship Ministries invite the student to engage in rhythms that include faithful reflection, spiritual nourishment and friendship, study of the Word, discussions on relevant issues in the culture and world, and the worship of God expressed in creative ways.

## **Alpha Groups**

Alpha Groups provide an intentional, embedded, and directed small group experience in every on-campus freshman dorm for the fall semester. Each hall is connected with two leaders who meet weekly to go through a unified curriculum that aims to grow student knowledge of their faith, community, and self.

## **Discipleship Groups**

By participating in a D group, students enter into a weekly rhythm of creating a time for rest, encouragement, learning, and spiritual friendship. D groups encourage participating in ways that make an impact on the world in which students live.

## **Spiritual Mentoring**

Students are invited to participate in intentional one-on-one relationships with someone slightly further along in their faith. Senior students volunteer to mentor their sophomore peers while staff, faculty, and friends of the university volunteer to mentor juniors and seniors. These relationships provide mutual growth for both participants.

## **Created Space**

Created space offers several workshops each semester to a limited group of students who engage in prayer and worship through various forms of creative expression: art journaling, drawing, painting, sculpturing, etc. Each semester, a large prayer and worship event provides space for the student body to outwardly express spiritual growth and formation through creativity.

## **Retreats**

Spiritual Development also partners with other departments to offer spiritual formation retreats, men's retreat, and a women's retreat for the PLNU community. These weekend retreats offer opportunities for students, faculty, and staff to come together and build relationships with one another outside the normal university setting. Retreats focus on Christian formation through fellowship, worship, discussion, and sharing about personal life journeys.

## **Student Ministries**

Student Ministries provides opportunities to serve with and alongside our neighbors throughout the greater San Diego area. Student groups connect weekly with established nonprofit organizations serving many diverse populations including: homeless individuals and families; adults and children with special needs; seniors living in assisted care facilities; kids and teens in tutoring programs; and many others. Every PLNU student can find a place to serve. No special skills or abilities are required, just a desire to give, receive, and be blessed by the rich relationships formed in Christian ministry. Seasoned student leaders oversee each ministry and transportation is provided to ongoing ministry opportunities as well as special events.

## **International Ministries**

International Ministries offers opportunities to those who want to partner with, fellowship with, and learn from Christian brothers and sisters around the world. International Ministries participants are privileged to come alongside church leaders, missionaries, and international development professionals and support on-going ministry in a variety of places around the world. While each location, culture, and ministry is unique, all programs genuinely value devoted Christian service with an attitude of humility, hospitality, and intercultural understanding.

## **LoveWorks Short-Term Missions**

The LoveWorks short-term mission program is a resource to church leaders, missionaries, pastors, and congregations serving Christ in various places around the world. Through the LoveWorks program, over 3,000 students, faculty, staff, and alumni have served and built relationships in Christ's name. LoveWorks has a reputation for sending well-trained, respectful, and energetic teams who have been a blessing to the church on every continent. Participant preparation, safety, and well-being are taken into account at all times. All team members are required to participate in weekly training sessions conducted by the Office of International Ministries.

## **Ministry with México**

Ministry with México offers the opportunity to serve in Northwest Baja (Tijuana, Tecate, and Rosarito) with student-led groups that partner with the Church of the Nazarene, orphanages, and government agencies. We offer three Saturday trips a month and all trips are accompanied by a faculty/staff/alumni sponsor.

## **Border Pilgrimage**

The Border Pilgrimage is a partnership between International Ministries and the Center for Justice and Reconciliation. One weekend each semester, we explore the border and learn about the complexities of this fascinating region. The experience includes expert presentations, travel to and across the border, and worshipping with a sister church in Tijuana.

## **Spring Break Build**

Over spring break 50 staff, faculty, alumni, and students work together to build a new sanctuary building with one of the Nazarene churches on the Northwest Baja district. Lazarian World Homes is an organization that has developed a sustainable building model using foam blocks. We use their technique and partner with their staff to accomplish this huge task. The evenings are spent in fellowship, worship services, and preparation for the next day's work.

## **Student Development**

Student Development at Point Loma Nazarene University is dedicated to engaging students in the active and energizing process of learning. The Office of Student Development coordinates a multitude of co-curricular programs in the areas of Athletics, Residential Life, Student Life, and Student Success and Wellness.

Point Loma Nazarene University believes that the most complete education prepares a person to live a full life. This quality education incorporates intelligence and reason as well as character, integrity, commitment, and faith. With this in mind, PLNU strives to educate the whole student to learn, grow, and serve.

## **Academic Support**

Student Success and Wellness at Point Loma Nazarene University provides academic support and academic enrichment services that focus on assisting students to achieve their educational and personal goals.

## Disability Resource Center

PLNU is committed to providing reasonable services and accommodations to meet the needs of qualified students with disabilities to facilitate their academic goals, according to Section 504 of the Rehabilitation Act of 1973 and the Amended Americans with Disabilities Act of 2008.

The Disability Resource Center (DRC) at PLNU is located in the Bond Academic Center (619-849-2533) and is the first point of contact for students who have documented disabilities. The DRC (<https://www.pointloma.edu/offices/disability-resource-center>) determines, provides, and coordinates disability-related accommodations to ensure access for all PLNU students with disabilities. Students with varying disabilities - including those with mobility, visual, hearing, learning, and chronic and mental health conditions - may be eligible for disability-related accommodations, academic adjustments, and auxiliary services through this resource center.

Students with disabilities may qualify for reasonable accommodations based on disability-related needs. Staff assists students from the point of their admission to PLNU through graduation. Services may include testing accommodations, priority registration, document conversion, adaptive equipment, assistive technology, notes, interpreters, real time captioning, liaisons with faculty and campus departments, and information regarding disability advocacy in the university setting. The DRC provides assistive/adaptive computer technology and training. There is no cost to the student for the services or accommodations provided by the DRC. Students are responsible for acquainting themselves with the procedures for use of accommodations. These procedures are available on the Disability Resource Center website (<https://www.pointloma.edu/offices/disability-resource-center>).

Students must provide appropriate documentation about their disabilities to the Disability Resource Center. Documentation provided to the DRC is confidential. It is the responsibility of the applicant or student to provide this documentation and, if necessary, to cover the cost for such documentation. This includes the cost for learning disability and attention deficit disorder assessments and mental health evaluations. Contact the DRC or visit the website for more information about disability documentation requirements or to download documentation forms. In most cases there is need for recent documentation about the disability and/or periodic documentation updates. PLNU reserves the right to determine the most effective and timely accommodations after consultation with the student about the disability and previous use of accommodations. The provision or use of a disability accommodation does not guarantee or ensure a certain level of achievement for the student. Students with disabilities must meet the same academic standards as all other students.

*Accommodation Appeals.* Point Loma Nazarene University prohibits discrimination on the basis of disability. PLNU has adopted an internal grievance procedure providing for prompt and equitable resolution of complaints by any member of the PLNU community alleging any action prohibited by Section 504 of the Rehabilitation Act of 1973 (§29 U.S.C. 794) of the U.S. Department of Education regulations implementing the Act, and the Americans With Disabilities Act, 1990 Title II & III (§42 U.S.C. 126). Section 504 and the ADA, Sections Title II & Title III prohibits discrimination on the basis of disability in any program or activity receiving Federal financial assistance.

Any participant who believes she or he has been subjected to discrimination on the basis of disability, or is unsatisfied with accommodation/academic adjustment plans provided by the Disability Resource Center may file a grievance under the Grievance and Appeal Procedures subsection of the Disability and Reasonable Accommodation Policy for Current and Prospective Students.

## Tutorial Services

The Tutorial Center provides a variety of free tutoring and academic enrichment services to assist undergraduate students in managing course requirements, such as:

- Academic coaching (time management, test-taking strategies, etc.)
- Review sessions
- Individual or small group tutoring (available for most courses)

- Paper editing services

Students are encouraged to visit or contact the Tutorial Center (619-849-2593 or <https://www.pointloma.edu/offices/tutorial-services>) to schedule an appointment.

## **Athletics**

### **Intercollegiate**

Point Loma Nazarene University is a member of the National Collegiate Athletic Association, Division II and participates in intercollegiate competition in the Pacific West Conference (PacWest). Intercollegiate sports for women include basketball, volleyball, cross-country, soccer, tennis, golf and track and field. Intercollegiate sports for men include basketball, soccer, tennis, and baseball.

#### **Mission Statement**

PLNU champions a Christ-centered environment where student-athletes experience holistic growth while pursuing academic and athletic distinction.

#### **PLNU Athletic Goals**

The following goals guide the course of intercollegiate athletics at PLNU:

- Student-athletes will develop the individual and team skills necessary to compete at the conference and regional levels. PLNU also welcomes the opportunity to compete nationally.
- PLNU will clearly communicate its Christ-centered mission to all competitors and will affiliate with regional and national conferences that respect its mission and provide a reasonable level of competition.
- PLNU maintains high academic standards for all students, including student-athletes. Scheduling of competition and travel will minimize academic disruption.
- PLNU's athletic teams and spectators will cultivate a competitive environment of good sportsmanship, reflecting fairness in competition, humility in victory, and dignity in defeat.
- Intercollegiate Athletics will provide opportunities for fan engagement and the cultivation of school spirit.
- The Athletics Department will align its fundraising and promotional efforts with the efforts of the offices of University Advancement and Admissions.
- Consistent with the history of the Church of the Nazarene and her affirmation of leadership by both women and men, Intercollegiate Athletics offers competitive opportunities to both women and men and fully complies with federal regulations related to gender equity.
- PLNU hires and develops coaches who are committed to Christ, possess university level coaching knowledge and skills, maintain a high standard of personal conduct, and are committed to the character development of their athletes.
- PLNU recruits student-athletes who understand and support the university mission. Each student-athlete will pursue a course of study designed to culminate in graduation from the university.
- Athletic Programs will be sponsored based on: adequate facilities in proximate distance of campus, adequate economic support, adequate student interest, adequate opportunities for competition within regional and national conference affiliation, and within the context of capped enrollment.

### **Intramural**

The intramural program is designed to enhance and extend the student's opportunities for wholesome and beneficial physical activities through recreational and competitive on-campus programs.

A vigorous intramural sports program is under the guidance of the intramural coordinator through the Department of Athletics. On-campus leagues are scheduled each semester and include: basketball, volleyball, softball, tennis, soccer, ultimate frisbee and others. Activities such as group aerobics are also offered.

## Residential Life

Approximately two-thirds of undergraduates live in university provided residence halls. The primary goal of The Office of Residential Life is to foster an environment in which vital Christianity is encouraged, experienced, and modeled. Residential life is an integral part of the co-curricular experience and encourages the academic, spiritual, and social growth of students. In addition, residential living provides students with an opportunity to meet students from a diverse variety of backgrounds.

Application for admission to the university and application for on-campus housing are two separate steps. Students may refer to admission procedures for further information regarding housing. Residential housing options include eight traditional residence halls and two apartment buildings. The university does not guarantee housing for all four years.

## Off-Campus Housing

All single undergraduate students under the age of twenty-three (23) years of age are required to live in university housing. Exceptions to this policy are married students, students living with parents, or students residing in a live-in work situation. Seniors can choose to live on or off campus, and do so during the spring housing selection. The choice to live on campus is for the full academic year. Occasionally, due to high housing demand, some junior students are permitted to live off campus. Campus housing is guaranteed to freshmen, sophomores, and juniors. PLNU cannot guarantee housing for senior students but works to facilitate as many students who desire to live on-campus as possible.

Students requesting to live off campus must indicate their desire to do so on the housing application within established deadlines, through the Office of Residential Life. Each petition is carefully verified.

Any change of residence or phone number must be changed on the student portal immediately.

## Residential Housing

**Application for Housing.** Students planning to live in a residence hall must file a Residence Hall Application and Contract as well as a housing deposit. For returning students, once registration for the fall semester is completed (which constitutes a reservation for the fall semester), the housing deposit is non-refundable. For new students, the deposit is refunded consistent with the dates published in admission materials. Refunds of board charges are made for any student who moves out of the residence hall during the course of a semester according to the schedule printed in the Catalog. Residence halls are officially closed during Christmas Recess and Spring Break. The right of occupancy does not include these periods.

**Residential Housing Assignments.** Residential housing assignments for new students are made after the housing staff considers such factors as classification and date of a paid housing contract. An attempt is made to make roommate assignments that are compatible and beneficial to all concerned. Specific roommate requests must be mutual and accompany the paid housing contract. New and transferring students receive their residence hall assignments as they become available through the on-line student portal. The university does not consider roommate change requests based upon actual or perceived race, ethnicity, national origin, age, disability, or perceptions based on personal profiles and/or information found on the Internet.

**Furnishings.** Residence hall rooms are furnished with window coverings, and each student is provided with an extra-long single bed, dresser, study table and chair. Students must provide their own bed linens and towels. While most cooking appliances are prohibited, a compact refrigerator (maximum 4.4 cu. ft.) and a small microwave (maximum of 800 watts) are allowed.

## Student Lifestyle

A major purpose of the university is to assist students in their preparation for daily living. The totality of the university environment is intended to be a learning experience. Some of the most significant learning occurs in the context of everyday experiences.

Students are expected to exercise self-discipline and sound judgment and to manage their conduct both on and off the main campus in a manner consistent with agreements made upon application and with the university Catalog and the Student Handbook. In addition, an accepted application for admission and subsequent registration is considered an agreement that the student acknowledges and will abide by all expectations laid out in the Student Handbook.

## **Student Life**

The offices within Student Life strive to provide place, voice, and connection for each PLNU student. A PLACE...to belong, to grow; a place safe enough to take risks, try new ways of doing and being; a VOICE...to question and explore, to declare oneself; a voice for the present and the future; a CONNECTION...of faith, of reason, of friendship, of community. These opportunities exist through the numerous resources and co-curricular programs provided by the offices within Student Life. Student Life includes the following offices and services: Offices of Strengths and Vocation (career / vocational counseling, student employment, internships, strengths utilization), Community Life (student leadership, student government, student organizations, student activities, student media), Commuter Student Services, Multicultural and International Student Services, Nicholson Commons (student center, student activities), Student Leadership and Outdoor Recreation, and Transfer Student Services. In addition to these services, Student Life, through the Offices of Strengths and Vocation, utilizes a strengths development program for college students that provides opportunities to develop strengths by building on their greatest talents. Finally, Student Life provides Chapel Attendance operational assistance for students.

## **Community Life**

The Office of Community Life seeks to assist students in their personal growth and in leadership development. Experiential leadership opportunities are designed as a developmental offering and range from leadership in a club, serving on the Board of Directors, and planning student activities. Student activity programs offered through Student Government provide quality and affordable activities throughout the academic year.

## **Student Government (ASB)**

The Associated Student Body of Point Loma Nazarene University (ASB) is a constitutional organization of the entire student body created for the purpose of (a) providing meaningful, student-sponsored educational, social, cultural, religious, and service opportunities for member students; (b) fostering constructive communication and interaction between the members and the administration and faculty; (c) fostering good relations between ASB members and the university's surrounding community; (d) establishing rapport with other student associations with similar objectives; and (e) providing opportunities for members to develop leadership qualities. The affairs of the ASB are managed by a student board of directors elected and appointed by the student body. The Director of Community Life serves as advisor to the student government program.

## **Student Organizations**

Students may join or affiliate with many student led organizations that are chartered or recognized by PLNU. A student may contact the ASB Director of Student Relations, 619-849-2406, for more information.

**Phi Delta Lambda** is the national honor society for all educational institutions of the Church of the Nazarene, for undergraduate students who are academically ranked in the upper-fifteen percent of the graduating class; these students are recognized during the undergraduate commencement ceremonies.

## Student Media

**Student Newspaper.** The official publication of the student body is The Point. The editor is appointed by the Media Board, subject to certain scholastic and residence requirements. The staff, recommended by the editor and approved by the Media Board, affords interested students an opportunity for practical training in journalism. The subscription price for the paper is included in the general fee.

**Other Publications.** The **Student Handbook** is published electronically each year; it clarifies community standards that guide the conduct of students and contains PLNU's student conduct processes. It is available on the PLNU website by searching "Student Handbook." **The Driftwood** is the annual student literary magazine published by the Department of Literature, Journalism, and Modern Languages. Students from all majors, faculty, and staff are encouraged to submit features, photographs, designs, and business ideas. Students from all majors may join the staff.

**Radio Station.** KPLR, the university radio station, provides professional training for students developing a career in broadcasting. The station serves the main campus and Internet listeners with a contemporary Christian format.

**Television Station.** PointTV, the university's cable broadcast medium, allows students to write and produce original programming that is aimed at educating and entertaining the on-campus community. PointTV strives to follow current industry standards in all areas of station operation. Staff positions are filled annually, and students from all majors are encouraged to participate.

## Commuter Student Services

Commuter Student Services is committed to providing services and programs for students who do not live in university residential housing. The current programmed activities are designed to stimulate social interaction among commuters while providing ample space for students to relax and gather while on campus. Many of our commuters are veterans or military and a unique space has been designed and dedicated for these students to have a place of their own on campus. The Commuter and Veterans Commons (CVC) is located on the first floor of Nicholson Commons adjacent to the bookstore and is a central location for Commuter Student Services. We are here to serve as a primary point of contact for commuters and as an on-campus advocate for their unique needs. For more information about the kinds of events and services offered, students may visit [www.pointloma.edu/commuter](http://www.pointloma.edu/commuter).

## Multicultural and International Student Services

The Office of Multicultural & International Student Services is committed to value all as individuals-first! Much of what the office does is created in the spirit of building a community among all multicultural, multiethnic, bi-racial students, multi-racial students, and international students, and to secure academic and social group success. This office seeks to build cross-cultural understanding, appreciation, and unity in the university community, accomplished by supporting students of multi-ethnic backgrounds as individuals and as part of student organizations.

### Multicultural Student Services

The department provides multicultural activity programming, supervises ethnic/culturally diverse student leadership groups, and helps coordinate interaction among alumni, current students, and prospective students of color. Connections are built primarily under the banner of MOSAIC (Multicultural Opportunities for Students Actively Involved in Community). This includes the Asian Student Union (ASU), Association of Latin American Students (ALAS), Black Student Union (BSU), B.R.E.A.K. (Beauty, Revival, Equity, Action, and Knowledge), Delta Alpha Phi (DAPi), Hui O' Hawai'i, Middle Eastern Student Union (MESU), U.N.I.T.E. (Uniting National and International students Through Education), and the Team Barnabas Mentoring Program. These clubs and services are also supported by the student led MOSAIC Activities Council. <http://www.pointloma.edu/Multicultural>

## **International Student Services**

International Student Services provides and organizes professional services for international students in the areas of admissions counseling, advising, encouragement, transition, and assistance in complying with U.S. government regulations. The department serves as the university liaison to United States Citizenship Immigration Services (USCIS), Department of Homeland Security, assisting with visa procurement and I-20 documentation, and advises F-1 visa students effectively, assuring institutional adherence to those immigration regulations and procedures-interpreting U.S. immigration policy to the university community. <http://www.pointloma.edu/InternationalStudents.htm>

## **Nicholson Commons**

Nicholson Commons provides activities and programs that enrich the university community academically, socially, physically, emotionally and spiritually. This social center for the university supports faculty, staff, and students in their desire to stimulate learning through positive, informal, collegial contact. The facility houses study areas, lounges, the ARC (Activity and Recreation Center), Common Knowledge Bookstore, Re-store Market, dining rooms, conference rooms, MOSAIC/Commuter Lounge, Commuter Student Services, Point Break Cafe, Bobby B's Coffee Co., Outdoor Leadership Programs and offices for ASB, Nicholson Commons staff, clubs, organizations, the offices of Spiritual Development and Student Development, and the Wellness Center. [www.pointloma.edu/nicholsoncommons](http://www.pointloma.edu/nicholsoncommons).

Meals are served regularly in the Dining Room of Nicholson Commons and conform to regulations of the City and County of San Diego and the State of California. Residential students are required to subscribe to a meal plan. Other students, faculty, staff, and guests may purchase meals on an individual basis. A snack bar, Point Break Cafe, is available for short orders.

## **Offices of Strengths and Vocation (OSV)**

The OSV is home to Strengths Coaching, Corporate and Business External Relations, Career Counseling Services, Student Employment, and Student Internships. Its mission is to assist each PLNU undergraduate student in developing a deep understanding of individual strengths and to holistically apply this knowledge to discover a student's purpose or calling in life.

The office has a wide variety of resources available to students including: career and strengths counseling, resume helps, student employment, internship opportunities, assessment testing, and events such as dinners, expos, and professional networking opportunities. For more information, visit the Office of Strengths and Vocation on the third floor of the Ryan Learning Center or online at [www.pointloma.edu/life/offices-strengths-vocation](http://www.pointloma.edu/life/offices-strengths-vocation).

## **Career Counseling Services**

The Career Counseling Services furnishes one-on-one counseling in assessments, career planning, job search techniques, resume development, and arrangements for off-campus job interviews. In addition, seminars are coordinated with professional speakers on current career trend subjects, employment readiness, and networking techniques. Along with Internship Networking Connecting (INC) events, Expos Days, Networking with Nurses, and summer camps fair, students are also able to attend a Graduate School Fair and a Seminary/Religious Studies Fair to help them choose an appropriate graduate experience. More information is available at Office of Strengths and Vocation.

## **Strengths**

The co-curricular Strengths Programs works collaboratively with the university community to incorporate a strengths approach to virtually all areas of campus life. Strengths-based programs offered by the Office of Strengths and Vocation include:

- StrengthsQuest Leaders are students who volunteer to undergo in-depth strengths training and take their strengths knowledge into the residence halls.
- Strengths Coaching by a Gallup certified coach, available at no charge to any student, faculty, or staff member.
- Strengths Training sessions offered annually for faculty and staff More information is available at Office of Strengths and Vocation.

## Student Leadership & Outdoor Recreation

The office of Student Leadership and Outdoor Recreation, located on the first floor of Nicholson Commons, exists to provide Point Loma Nazarene students with opportunities to develop and enhance a personal philosophy of leadership that includes a deeper understanding of self, others, community, and creation through adventure-based, experiential education. Our program develops and delivers fully customizable leadership training offerings for individuals and various groups across campus throughout the year. For more information, visit: <http://www.pointloma.edu/offices/outdoor-leadership>.

If students are looking for a weekend adventure, *Loma Outside* outfits multiple student-led trips across the Southwestern States throughout the year, including *LOMAD*, a first-year orientation trip for all incoming students. For those who are looking to adventure out on their own, **Loma Rentals** provides access to an expansive supply of rental gear. Whether a student is looking to surf the jetty or summit Mt. Whitney, we've got them covered. For more information and to see what gear we have available for rent and purchase, visit: <https://lomaoutside.com>.

## Transfer Student Services

Transfer Student Services serves as a central point of information for resources, services, and opportunities designed specifically for transfer students. The office provides students with assistance, support and connections to campus resources to facilitate a smooth transition to the PLNU community. Transfer Student Services is located within the Commuter Student Services office on the first floor of Nicholson Commons. For more information, students may visit [www.pointloma.edu/transferstudentservices](http://www.pointloma.edu/transferstudentservices).

## Wellness Center

The Wellness Center, located in Nicholson Commons on the first floor, is home to the student health clinic, counseling center, and health outreach. The Wellness Center is staffed with a physician, registered nurse, consulting psychiatrist, licensed therapists, and registered dietitian. Working as a team, the wellness staff provides a seamless continuum of programs and services for assisting students toward academic achievement and holistic growth.

The Wellness Center provides free, confidential, limited primary medical care, nutritional consultation, and counseling services for main campus undergraduate students. <https://www.pointloma.edu/offices/wellness-center/medical-services>. Our health and medical services include: free self-care, over-the-counter medications assessment and treatment of injuries and illnesses, TB testing, immunizations, travel and prescription medications, consultation on health and nutrition issues, physicals, and assistance with student health insurance processes and insurance-based referrals to local healthcare providers. There are charges for medications, injections, strep and other tests, labs, and physicals. Fees for labs or other tests are billed to the student's account and the student receives a copy of the charges at the time of visit. Our counseling services are provided at no charge, for main campus undergraduate students. Confidential individual counseling is offered at no charge and is based on a brief therapy model, designed to help students manage immediate problems and provide short-term therapy for 6 to 8 sessions. For ongoing difficulties, it is likely that recommendations will be provided for establishing a relationship with a therapist in the community to ensure access to mental health treatment that is not limited. Visit the counseling services webpage for more information: <https://www.pointloma.edu/offices/wellness-center/counseling-services>.

The Wellness Center is located in Nicholson Commons, 1st floor. <https://www.pointloma.edu/offices/wellness-center>. Hours of operation are Monday-Friday, 8 am to 4:30 pm; evening appointments are available for counseling. Visit the

Wellness Center for walk-in medical appointments, or call the Wellness Center (619-849-2574) to schedule a medical, counseling, or nutritional consultation appointment.

## **Emergency Services**

Professional staff is on-call for emergencies after hours and can be accessed through the Department of Public Safety. In case of any emergency, PLNU Public Safety are to be notified at extension 2525 (on campus) or 619-849-2525 (if utilizing a cell or off-campus phone).

PLNU Public Safety personnel will coordinate with emergency personnel and assist as needed. All Community Service Officers and Public Safety Staff Officers are trained in First-Aid, CPR and AED and can render first response until emergency services arrive. No one should attempt to move an injured person until Public Safety personnel arrive.

For additional information on emergency situations, students may visit the website at Public Safety Information.

## **Health Insurance**

PLNU is committed to maintaining an environment where students are safe and healthy. For the safety of the community and the well-being of our students, it is vital that individuals living on campus have access to quality health care in the event of illness or accident.

Considering this commitment to a healthy community, main campus undergraduate students must have valid comprehensive health insurance coverage. For each year of enrollment, students must have proof of active health insurance on the student portal, even if they are studying abroad and regardless of the number of units enrolled.

The University highly recommends that students validate their health insurance on the portal prior to New Student Orientation and the start of classes. If you are a new or readmitted student, you can send a copy of the front and back of your insurance card in PDF form to [sdwellnesscenter@pointloma.edu](mailto:sdwellnesscenter@pointloma.edu).

### **International Student Health Insurance**

To assist with health insurance coverage that satisfies the requirements of the Affordable Care Act for all international students, the University provides a competitive, affordable international student health insurance plan. International students (undergraduate, graduates, and student-athletes) are automatically enrolled into the program for each semester of study at PLNU.

### **Mandatory Student Accident (MSA) Plan**

Point Loma Nazarene University is pleased to provide a Mandatory Student Accident plan (MSA). MSA insurance is supplemental coverage for medical expenses incurred for accidental injury for all main campus undergraduate students and graduate student-athletes. The plan provides annual coverage whether or not college is in session, 24 hours a day, seven days a week. The mandatory annual cost of the plan is included in the tuition billing statement. The MSA does not provide coverage for general health, preventative services, or sickness-related costs. To download a plan brochure, benefit snapshot, claims form and more, visit <https://4studenthealth.relationinsurance.com/plan/mandatory-student-accident-plan-2018-2019-866/>.

## **Office of Records**

The Office of Records is a place where students, faculty, staff, and others can expect prompt, courteous, and helpful service. Some of the services we provide involve student registration, sending of Point Loma Nazarene University

transcripts and verifications, providing and assimilating graduation applications (grad checks), evaluation of transfer work, commencement and diplomas.

## **Personnel**

### **Officers and Administrative Staff**

#### **Office of the President**

Bob Brower  
**President**

Sharon Ayala  
**Associate Vice President for Marketing**

Ron Benefiel  
**Lead Consultant for Mission Resources & Pastoral Relations**

John Calhoun  
**Director, Center for Pastoral Leadership**

Jeffrey Carr, Sr.  
**Chief Diversity Officer**

Jill Monroe  
**Director of Public Affairs**

Scott Shoemaker  
**Associate Vice President for Enrollment and Retention**

#### **Academic Affairs**

Kerry Fulcher  
**Provost and Chief Academic Officer**

#### **Vice Provosts**

Jim Daichendt  
*Vice Provost of Graduate and Professional Studies*  
*Vice Provost of Traditional Undergraduate Studies*

Holly Irwin  
**Vice Provost for Academic Administration**

#### **College Deans**

Jim Daichendt  
**Dean of the Colleges**

Nick Pertler  
*Dean, College of Extended Learning*

## University Services

Jeff Bolster

*Vice President for University Services*

Corey Fling

**Chief Information Officer**

Kim Riddle

*Director of Auxiliary Services and University Event Coordinator*

Mark Ryan

**Director, Public Safety**

Dan Toro

**Director, Campus Facilities and Sustainability**

## University Advancement

Kelly Smith

**Vice President for University Advancement**

William Burfitt

*Executive Director of Annual Giving*

Christina Gardner

*Executive Director, University Advancement Operations*

Kendall Lucas

**Director, Alumni Relations**

## Finance and Administrative Services

Joe LaLuzerne

**Senior Vice President for Finance**

Janet Caprario

**Associate Vice President for Accounting and Finance**

Cindy Chappell

*Associate Vice President for Graduate and Professional Services*

Jeffrey Herman

**Associate Vice President for Human Resources**

Taylor Shoemaker

*Director, Liberty Station Conference Center*

## Spiritual Development

Mary Paul

**Vice President for Spiritual Development**

Brian Becker  
**Director, International Ministries**

Dana Hojsack  
**Director, Community Ministries**

Liliana Reza  
*Associate Director, International Ministries*

Esteban Trujillo  
**University Chaplain/Director of Chapel Programming**

George Williamson  
**Director, Worship Arts**

Melanie Wolf  
**Director, Discipleship Ministries**

## **Student Development**

Caye Smith  
**Vice President for Student Development**  
**Title IX Coordinator**

Kimberly Bogan  
**Associate Dean for Student Success & Wellness**

Jeffrey Carr, Sr.  
**Associate Vice President for Student Development**

Jake Gilbertson  
**Dean of Students, Director of Residential Life**

Ethan Hamilton  
**Director, Athletics**

## **Centers and Institutes**

Kim Berry Jones, Director  
**Center for Justice and Reconciliation**

John Calhoun, Director  
**Center for Pastoral Leadership**

Jo Clemmons, Director  
**Center for Teaching and Learning**

Robert Gailey, Executive Director  
**Center for International Development**

Lindsey Lupo  
*Institute for Politics and Public Service*

Kelli McCoy, Co-Director; Kara Lyons-Pardue, Co-Director  
**Margaret Stevenson Center for Women's Studies**

Sam Powell, Director  
**Wesleyan Center for 21st Century Studies**

Susan Rogers, Academic Director  
**Early Childhood Learning Center**

Mary Margaret Rowe, Director  
**Health Promotion Center (School of Nursing)**

## **Office of Academic Affairs**

### **Provost**

Kerry Fulcher, Ph.D.  
Office: Mieras Hall, Room 201  
Telephone: (619) 849-2651  
Fax: (619) 849-2579  
E-mail: [kerryfulcher@pointloma.edu](mailto:kerryfulcher@pointloma.edu)  
Administrative Assistant: Mary Lynn Hewett

### **Academic Administration**

Vice Provost: Holly Irwin, Ph.D.  
Office: Mieras Hall, Room 203  
Telephone: (619) 849-2706  
E-mail: [hollyirwin@pointloma.edu](mailto:hollyirwin@pointloma.edu)  
Administrative Assistant: Shelley Fruchey

### **Assessment and Institutional Effectiveness**

Vice Provost: TBD  
Office: Taylor Hall, Room 205  
Telephone: (619) 849-2535  
E-mail: [karenlee@pointloma.edu](mailto:karenlee@pointloma.edu)  
Administrative Assistant: Amy Garcia

### **Graduate and Professional Studies**

Vice Provost: Holly Orozco, Ph.D.  
Office: Mission Valley Building, First Floor  
Telephone: (619) 849-3009  
Email: [hollyorozco@pointloma.edu](mailto:hollyorozco@pointloma.edu)  
Administrative Assistant: Jane Palencia

### **Traditional Undergraduate Studies**

Vice Provost: Jim Daichendt, Ph.D.  
Office: Academic Deans Center, Room 01  
Telephone: (619) 849-2412  
Email: jimdaichendt@pointloma.edu  
Administrative Assistant: Kami Leone

## **Board of Trustees**

The Board of Trustees serves as the governing board of the University. Numbering 23 persons, the Board is composed of lay and clergy representatives from the twelve districts of the sponsoring denomination's Southwest Educational Region. The president of the University is a member ex-officio. The Board meets semiannually, in the fall of the year and again in the spring. Members of the Board who have received a degree from the university are noted by year.

## **Officers of the Corporation**

Rev. Doug Pierce (2012)

**Chair**

*Chandler, Arizona*

Mr. Rick Power

*Vice Chair*

*Honolulu, Hawaii*

Mr. Ken Baruth

**Secretary**

*Olathe, Kansas*

## **Members of the Board**

Dr. Rick Bravo

*San Luis Obispo, California*

Dr. Bob Brower

*San Diego, California*

Rev. Moisés Champo

*San Fernando, California*

Rev. Dan Chung

*San Francisco, California*

Mr. Larry Fry (1980)

*Roswell, New Mexico*

Mr. Jose Hernandez

*Chandler, Arizona*

Dr. Larry Lacher

*Capitan, New Mexico*

Dr. Mark Lehman

*Sutter Creek, California*

Mrs. Mary Leland  
*Keller, Texas*

Rev. John Nells  
*Winslow, Arizona*

Mr. Daryl Nicholson (1968)  
*Porterville, California*

Dr. Donald Schengel (1978)  
*Visalia, California*

Rev. Steve Scott (1977)  
*Stockton, California*

Mr. Gary Smee (1976)  
*Porterville, California*

Rev. Rob Songer (1976)  
*Bakersfield, California*

Dr. Daniel Spaite (1979)  
*Chandler, Arizona*

Ms. Jan Stone (1968)  
*Whittier, California*

Ms. Joye Straub (1982)  
*Oceanside, California*

Mr. Steve Swartz  
*Murrieta, California*

Dr. Nell Becker Sweeden  
*Lenexa, Kansas*

Mr. Mendell Thompson (1976)  
*Glendora, California*

Ms. Carol VanBuskirk (1979)  
*Saratoga, California*

## **Foundation Board**

The Foundation Board is elected by the Board of Trustees. The purpose of the Foundation is to provide major gift fundraising for Point Loma Nazarene University (PLNU) through excellence in strategic development, major donor engagement, and oversight of foundation assets. Members of the Foundation Board who have received a degree from the university are noted by year.

## **Officers of the Board**

Mr. Gary Smee (1972)  
*President*  
*Porterville, California*

Mr. Scott McGuckin (1996)  
**Vice President**  
*Granite Bay, California*

Mr. Gilbert Wai (2013)  
*Secretary*  
*Hillsborough, California*

Mr. Joseph LaLuzerne (2019)  
**Treasurer**  
*San Diego, California*

## **Members of the Board**

Mr. W. Thomas Battin (1959)  
*Ruidoso, New Mexico*

Dr. Bob Brower (1998)  
*San Diego, California*

Dr. Carolyn Downey (1961)  
*La Jolla, California*

Mr. Michael Gebhart (2004)  
*Rancho Murrieta, California*

Dr. Daryl C. Nicholson (1968)  
*Porterville, California*

Rev. Doug Pierce (2012)  
*Chandler, Arizona*

Mrs. Kelly Smith (2018)  
*San Diego, California*

Mr. Rudy Thomas (1968)  
*Omaha, Nebraska*

Mr. Mendell L. Thompson (1976)  
*Glendora, California*

## **Point Loma Nazarene University Alumni Association**

### **Mission Statement**

The Point Loma Nazarene University Alumni Association exists to provide opportunities for alumni to stay involved with the university, support the university, connect with other alumni and interact with our students. The association facilitates ongoing dialogue between the alumni and the university.

### **Officers of the Board**

**President**

Joy Straub (1982)  
*Oceanside, California*

**Vice President**

Shannon Fox (2007)  
*Fairfax, Virginia*

**Incoming President**

Matt Robertson (1992)  
*Rocklin, California*

**Secretary**

Erin McCann (2010)  
*Lakewood, Colorado*

**Area Directors**

**Arizona**

Katy Gent (1993)  
*Gilbert, Arizona*

**Hawaii**

Joy Yoshida (2003)  
*Kaneohe, Hawaii*

**Orange County**

Forrest Case (2019)  
*Villa Park, California*

Marcelo Siniscalchi (MBA 2018)  
*Dana Point, California*

**Sacramento**

Garrett Kiesz (2010)  
*Sacramento, California*

**Seattle**

Jesse Herzog (2005)  
*Kirkland, Washington*

**So Cal - Co-Directors:**

Anna Viettry (2017)  
*San Diego, California*

Carrie Jaquess-Gutman (1982)  
*San Diego, California*

**Directors at-Large**

**ASB President**

Nash Manker (2021)  
*Elk Grove, California*

**Class Representative Co-Leaders**

Connor Brandenburg (2018)  
*San Diego, California*

Tess Murray (2018)  
*San Diego, California*

**Auxiliary Representatives****Business Alumni**

Derek Legg (2016)  
*San Diego, California*

**Education Associates**

Joy Toro (1991)  
*San Diego, California*

**MOSAIC Alumni - Co-Chairs:**

Kelby Sarti (2010)  
*San Diego, California*

Christina Marcial (2014)  
*Los Angeles, California*

**MUSICAlumni**

Scott Stevens (2011)  
*San Diego, California*

**Nursing Alumni**

Debbie Holly (1978)  
*San Diego, California*

**Research Associates**

Rick Bravo (1979)  
*San Luis Obispo, California*

**Rugby Associates**

Karl Sator (2005)  
*Orange, California*

**Women's Auxiliary and Friends**

Jennie Vance (1988)  
*Carlsbad, California*

## **Faculty**

### **President**

**Bob Brower**, Ph.D., *1998-present*

### **President Emeritus**

**Jim Bond**, D.Min., L.H.D., *1997*

### **Professors Emeriti**

*(Including date of election to emeritus status)*

**Senyo Adjibolosoo**, Ph.D., *2020*  
*Professor Emeritus of Economics*

**Laura Amstead**, Ed.D., *2015*  
*Professor Emerita of Education*

**Kenneth Aring**, Ph.D., *2006*  
*Professor Emeritus of Physics*

**Paul Bassett**, M.F.A., J.D., *2015*  
*Professor Emeritus of Communication and Theatre*

**Carol Blessing**, Ph.D., *2020*  
*Professor Emerita of Literature*

**Philip Bowles**, Ph.D., *2016*  
*Professor Emeritus of Literature, Journalism and Modern Languages*

**Frank Carver**, Ph.D., *1996*  
*Professor Emeritus of Religion*

**Val Christensen**, Ph.D., *1994*  
*Professor Emeritus of Chemistry*

**Mary Conklin**, Ph.D., *2016*  
*Professor Emerita of Sociology*

**Diana Cordileone**, Ph.D., *2017*  
*Professor Emerita of History*

**James Crakes**, Ph.D., *1994*  
*Professor Emeritus of Physical Education*

**Daniel Croy**, Ed.D., *2017*  
*Professor Emeritus of Management*

**Dorothy Crummy, Ph.D., 2006**  
*Professor Emerita of Nursing*

**William DeSaegher, Ph.D., 2004**  
*Professor Emeritus of Literature*

**Beryl Dillman, Ed.D., 1990**  
*Professor Emeritus of Education*

**Darrel Falk, Ph.D., 2014**  
*Professor Emeritus of Biology*

**Clifford Fisher, D.Min., 1992**  
*Professor Emeritus of Religion*

**Ben Foster, M.A., 2013**  
*Associate Professor Emeritus of Kinesiology*

**Sandra Foster, M.S., 2008**  
*Associate Professor Emerita of Family and Consumer Sciences*

**Douglas Fruehling, M.L.S., 2019**  
*Associate Professor Emeritus of Library Sciences*

**Ruth Grendell, D.N.Sc., 2000**  
*Professor Emerita of Nursing*

**Nancy Hardison, Ph.D., 1998**  
*Professor Emerita of Business*

**Victor Heasley, Ph.D., 2012**  
*Professor Emeritus of Chemistry*

**Eugene Harris, M.A., 2018**  
*Professor Emeritus of Art*

**Richard Hill, Ph.D., 2019**  
*Professor Emeritus of Writing*

**Billy Hobbs, Ph.D., 1996**  
*Professor Emeritus of Mathematics*

**Keith Holly, Ed.D., 2001**  
*Professor Emeritus of Psychology*

**Sheila Holly, M.A., 2001**  
*Assistant Professor Emerita of Education*

**Alan Hueth, Ph.D., 2020**  
*Professor Emeritus of Communication*

**James Jackson Sr., Ph.D., 1990**  
*Professor Emeritus of Speech*

**James Johnson, Ed.D., 2018**  
*Professor Emeritus of Education*

**David Kerk, Ph.D., 2010**  
*Professor Emeritus of Biology*

**Leon Kugler, Ph.D., 2018**  
*Professor Emeritus of Kinesiology*

**Carroll Land, Ph.D., 2009**  
*Professor Emeritus of Kinesiology*

**Gerald Lashley, Ed.D., 2000**  
*Professor Emeritus of Mathematics and Computer Science*

**Dwayne Little, Ph.D., 2010**  
*Professor Emeritus of History*

**Patsy Livingston, M.A., 2005**  
*Associate Professor Emerita of Kinesiology*

**Dean Marsh, D.A., 2004**  
*Professor Emeritus of Computer Science and Business*

**Ken Martin, Ph.D., 2016**  
*Professor Emeritus of Chemistry*

**Kathryn McConnell, Ph.D., 2015**  
*Professor Emerita of Spanish*

**Michael McConnell, Ph.D., 2014**  
*Professor Emeritus of Biology*

**James McEliece, Ph.D., 2010**  
*Professor Emeritus of Economics*

**Jeanie Milliken, Ph.D., 2003**  
*Professor Emerita of Education*

**Robert Morwood, Ed.D., 2013**  
*Professor Emeritus of Education*

**Nancy K. Murray, Ph.D., 2016**  
*Professor Emerita of Family and Consumer Sciences*

**James Newburg, M.S.L.S., 2006**  
*Librarian Emeritus*

**Deana Noble, M.S.N., 2013**  
*Associate Professor Emerita of Nursing*

**Keith Pagan, D.Mus.Ed., 1998**  
*Professor Emeritus of Music*

**John Pearson, C.P.A., M.A., 2003**  
*Associate Professor Emeritus of Business*

**Herbert Prince, M.Div., D.D., 2005**  
*Associate Professor Emeritus of Philosophy and Religion*

**Dee Puntteney**, Ph.D., 2012  
*Professor Emeritus of Physics*

**Reuben Rodeheaver**, D.Mus.Ed., 2001  
*Professor Emeritus of Music*

**Ann Ruppert**, M.L.S., 2004  
*Librarian Emerita*

**Karen Sangren**, Ph.D., 2017  
*Professor Emerita of Art*

**Esther Saxon**, D.M.A., 1996  
*Professor Emerita of Music*

**Bruce Schooling**, Ph.D., 2018  
*Professor Emeritus of Management*

**Arthur Seamans**, Ph.D., 2000  
*Professor Emeritus of Literature*

**Gene Shea**, C.P.A., M.A., 2004  
*Associate Professor Emeritus of Accounting*

**Dale Shellhamer**, Ph.D., 2012  
*Professor Emeritus of Chemistry*

**Norman Shoemaker**, D. Min., 2014  
*Professor Emeritus of Christian Ministry*

**Sheldon Sickler**, Ph.D., 2009  
*Professor Emeritus of Mathematics and Computer Science*

**James Skalman**, M.F.A., 2019  
*Professor Emeritus of Art*

**Robert Smith**, D.Min., 2018  
*Professor Emeritus of Scripture and Preaching*

**Margaret Stevenson**, Ed.D., 1999  
*Professor Emerita of Nursing*

**David Strawn**, Ph.D., 2008  
*Professor Emeritus of Mathematics*

**Keith Walker**, Ph.D. 2007  
*Professor Emeritus of Physics*

**Maxine Walker**, Ph.D., 2008  
*Professor Emerita of Literature*

**Harry Watkins**, Ph.D., 2019  
*Professor Emeritus of Marketing*

**Reuben Welch**, B.D., D.D., 1990  
*Associate Professor Emeritus of Religion*

**David Whitelaw**, D.Th., 2000  
*Professor Emeritus of Religion*

**Kay Wilder**, Ed.D., 2013  
*Professor Emerita of Family and Consumer Sciences*

**Carl Winderl**, Ph.D., 2018  
*Professor Emeritus of Writing*

**Ronda Winderl**, Ph.D., 2018  
*Professor Emerita of Communication and Theatre*

**Hadley Wood**, Ph.D., 2013  
*Professor Emerita of French and Literature*

**Galen Yorba-Gray**, Ph.D., 2017  
*Professor Emeritus of Spanish*

## **Full-Time Faculty and Academic Administrators**

With the exception of the President, the names of the faculty are arranged alphabetically. The year of the first appointment appears after each name. The appointments and academic rank indicated are for the current academic year.

**Bob Brower**, Ph.D. (1998)

**President**

**Professor of Communication**

B.A., Trevecca Nazarene College;

M.A., University of Cincinnati;

Ph.D., University of Kansas.

**Micki Abercrombie-Donahue**, Ed.D. (2011)

**Assistant Professor of Education**

B.A., The Master's College;

M.A., Ed.D., Montana State University.

**Mary Adams**, Ph.D. (2015)

**Associate Professor of Nursing**

B.S.N., Loyola University;

M.S.N., Lewis University;

Ph.D., Loyola University, Chicago.

**David Adey**, M.F.A. (2003)

**Professor of Art and Design**

B.A., Point Loma Nazarene University;

M.F.A., Cranbrook Academy of Art.

**Arnel Aguinaldo**, Ph.D. (2018)

*Assistant Professor of Kinesiology*

B.S., University of California, San Diego;

M.A., San Diego State University;

Ph.D., Concordia University.

**Angelica Almonte**, Ph.D. (2012)

**Professor of Nursing**

B.S.N., University of Maryland;  
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